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Ren Thomas and Luca Bertolini

Policy transfer among planners in transit-oriented development

This article describes and assesses the process of transferring policy ideas on transit-oriented development (TOD) to Dutch land-use and transportation planners. The Netherlands illustrates a planning context typical of countries where the concept of (TOD) has been transferred, but perhaps in an incomplete form; considerable barriers remain in implementing TOD beyond disconnected projects. The policy ideas were 16 critical success factors in TOD obtained through a meta-analysis of international case studies developed in the first phase of this study (Thomas and Bertolini, 2014). Through two exercises, local planners learned about the processes and types of policy transfer, identified the strengths and weaknesses in TOD implementation in their regions and discussed ways in which to strengthen weaknesses. Pre- and post-workshop surveys of the participants indicate that the workshops were an effective way to transfer policy ideas and lessons from international cases to the local planning context and 'recontextualise' them to their own region.

Keywords: transit-oriented development, policy transfer, case study, meta-analysis

Introduction

Policy transfer and lesson-drawing represent a more coherent framework for thinking about what is an old practice. (Stone, 1999, 58)

Policy transfer can be described as the processes in which knowledge about policies, administrative arrangements, institutions and ideas in one political setting are used in the development of policies, administrative arrangements, institutions and ideas in another political setting (Dolowitz and Marsh, 2000). This transferable knowledge includes policy goals, content, instruments and programs; institutions, ideologies and attitudes; and even negative lessons. Among the actors who can be involved in policy transfer are bureaucrats, politicians and political parties, central government departments, agencies, government task forces, commissions of inquiry, international organisations (e.g. Organisation for Economic Co-operation and Development, European Union), media, corporations, think tanks, activists, research institutes and individual academic entrepreneurs. Policy transfer is increasingly common in planning: planners from the

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US and Canada learn from Europe and Asia, and vice versa. Stone (1999) writes that policy transfer is considered to be increasing in the era of globalisation.

This paper examines whether 16 critical success factors (e.g. Nijkamp et al., 2002; Van Egmond et al., 2003) in TOD implementation could be transferred to The Netherlands through the use of workshops. Two earlier papers (Thomas and Bertolini, 2014; Thomas and Bertolini, in press) detailed the meta-analysis of 11 international case studies to determine the practices, policies, and governance models that have helped other city-regions overcome barriers to implementation. This study aimed to determine whether these lessons from other cities, if removed from their political, geographical and social contexts, could be seen as learning opportunities during a policy transfer exercise.

We begin with a description of the reasons behind policy transfer, types of policy transfer and concerns about the process. We then outline the methodology: which policies could be transferred, how, and to whom? The results of the study indicate that key lessons in TOD can in fact be transferred to land-use and transportation planners, who intend to share these ideas with others in their organisations and integrate them into their daily practice. However, a country's historical, cultural or legal contexts may present barriers to policy transfer or implementation.

Policy transfer in the literature

This paper cannot do justice to the extensive literature on policy transfer; rather, this review focuses on the aspects of policy transfer most relevant to planning, specifically land-use and transportation planning. There has been little research on policy transfer in planning (Spaans and Louw, 2009), let alone in transportation planning (Marsden and Stead, 2011). The examination of the literature is critical in understanding how TOD policy ideas have already been transferred to the local planning culture, and in understanding the process of policy transfer that occurred in the workshops.

Reasons for policy transfer

There are a number of reasons why policy transfer occurs. Municipalities may search for examples of how to improve their image or compete with others nationally or internationally. Policy-makers, politicians or civil servants may be dissatisfied with current policies (Marsden and Stead, 2011); additionally, they may not have any local examples of solutions to planning problems, so they feel the need to look elsewhere for solutions. Uncertainty is also a powerful force that encourages imitation (DiMaggio and Powell, 1983); conditions of uncertainty include absence of a scientific consensus, lack of information, new problems, policy disasters, crisis and political conflict (Stone, 1999). In some cases, countries may be encouraged to adopt policies from other places as a condition for a loan or business development.

The actors involved in policy transfer can draw lessons from other political systems or units within their own country (e.g. applying national lessons to the local level, broadening provincial solutions to the national level) or from the international level (Dolowitz and Marsh, 2000; Spaans and Louw, 2009). Marsden and Stead (2011) note that local actors tend to look within their own region or country, while national actors tend to look internationally. In Stone's study on global public policy networks, 'trans-national networks are identified as an important vehicle for the spread of policy not only cross-nationally but in emergent venues of global governance' (2004, 546). Stone (1999) points out that there are prejudices towards certain jurisdictions depending on their economic ties (e.g. countries within the EU or OECD may be more likely to look to each other) and that countries fall in and out of favour (e.g. Korea, Malaysia and Japan before and after the 1997 economic crisis). Policies are much more likely to be transferred between countries that are 'psychologically proximate' (Stone, 2004): those that are geographically, ideologically or culturally similar. This concept generally holds true in planning, where policies are often rejected because the originating context is too dissimilar to the borrowing country, region, or city (Thomas and Bertolini, 2014).

Stone (2004) contends that governments and international organisations no longer have the ability to design and/or implement effective public policies, and that global public policy networks can help. Spaans and Louw (2009) write that governments are no longer capable of directing planning in the same manner as before: long drawn-out procedures and long-term visions with a fixed final view no longer seem appropriate given the faster pace of changes in society. Marsden and Stead (2011) write that policy transfer is becoming more prevalent because of the increased networking opportunities between policy-makers and politicians and the pressures of increased accountability.

When considering transit-oriented development, a number of these reasons can be demonstrated. TOD includes high-density, mixed-use developments oriented around public transportation infrastructure. Among the reported benefits of TOD are an increase in the percentage of trips commuters make by transit; increased competition of transit with the car as a viable transportation alternative; decreased greenhouse gas emissions resulting from decreased car use; more compact urban development at densities supporting public transit; small-scale improvements in the built environment through better cycling and walking infrastructure in proximity to transportation infrastructure; and decreased parking needs for cars (e.g. Cervero, 2008). While TOD began as a rail-based concept with development focused around station areas, it has now evolved to include small-scale developments such as walking paths, cycling parking and trails, and public spaces supporting not just high-capacity metropolitan railway use, but also local buses, streetcars and non-motorised travel modes (TransLink, 2012). TOD involves complex planning and implementation processes involving urban planners, engineers, political representatives, private sector developers and funders, and multiple levels of government.

Although many regions have embraced TOD as a key planning strategy to accommodate future growth and sustainability goals, many countries (e.g. Australia, The Netherlands and Canada) have only a few examples of TOD, leading their governments and civil servants to look internationally. International exchanges between planners and civil servants are common and TOD ‘best practices’ show a consistent track record of benchmarking against foreign examples (Tan et al., 2014b). Participants in these exchanges are interested in which policies and practices have been successful, which actors have been involved, what some of the challenges have been and how things could have been done differently. As a complex, lengthy process involving land use planners, transportation planners, traffic engineers, business interests and the public, many countries have not been able to implement TOD. Local experts may be dissatisfied with their own policies, and looking for ways to overcome barriers to implementation.

The Netherlands is an illustrative example: the concept of transit-oriented development in The Netherlands has reached the point where Dutch transportation planners accept the ideas behind TOD, but have not been able to implement it beyond scattered railway station projects. TOD remains a transportation policy concept and has not been transferred to other fields such as public health, or to other stakeholders such as political representatives or property developers. Some railway station areas have been redeveloped through the National Key Projects and policies have attempted to concentrate growth around rail stations. But Dutch cities and regions have not yet implemented TOD at the regional scale, which involves a metropolitan-wide network of local developments connected by public transportation (e.g. Knowles, 2012; TransLink, 2012). The complexity of TOD planning and implementation processes may contribute to difficulties in policy transfer.

Types of policy transfer

Dolowitz and Marsh (2000) identified four different types of policy transfer: copying (direct and complete transfer), emulation (transfer of the ideas behind the policy or programme), combinations (mixtures of different policies) and inspiration (policy in another jurisdiction may inspire a policy change, but the final outcome does not actually draw upon the original). As Spaans and Louw point out, complex policy problems demand more from legislation, instruments and planning practice than before, which are ‘often translated on a tailor-made basis into planning practice by the different countries’ (2009, 1). They describe different ‘intensities of transfer’ including inspiration, learning and transplantation. It is possible to learn from more than one jurisdiction at a time and take away a few lessons, which can lead to hybrids and adaptive innovation to fit the local context (Stone, 2004).

Rose (2005) states that learning is not only about best, but also worst practices; others write of the value of negative lessons (Maxwell, 2004; Stone, 2004; Thomas

and Bertolini, 2015). Policy learning can occur when policy-makers adjust their understanding of policy development and modify policy with knowledge gained from past policy experiences (Stone, 2004). Stone (2004) distinguishes ‘softer’ policy aspects like ideas, paradigms, interpretations and problem definitions from ‘harder’ instruments, legislation, techniques and policies. She points out that lessons would be realised in different stages of the policy process depending on how they were transferred: through ideational or institutional mechanisms of transfer, or through networks (2004, 562–564). For example, lessons might be realised in the problem definition and agenda-setting stage if the transfer mechanism were ideational, or in decision-making, resource allocation and implementation if the transfer mechanism were institutional. An ideational transfer of lessons might create change through embedded consensual knowledge or paradigm shift, while transferring lessons through networks might create change through obliged anarchy, fluidity and flexibility, or trial and error. Grin (2010) writes that instances of learning may contribute to profound structural change, the type of changes that are needed to break through barriers to implementation.

Concerns about policy transfer

The underlying assumption of policy transfer is that what worked in one place will work in another, but this is not always the case. Uninformed, incomplete or inappropriate transfer (Dolowitz and Marsh, 2000) may occur, where the borrowing country may have insufficient information about the policy/institution and how it works, crucial elements are not transferred or insufficient attention was paid to the differences between economic, social, political and ideological contexts in the transferring and borrowing countries.

While transfer may shape policy change, it may also lead to implementation failure. This means that, even if we can regard policy transfer as a key explanatory variable in the development of many policies, we must also recognise that it is important to follow each policy through to see whether uninformed, incomplete or inappropriate transfer leads to policy failure. (Dolowitz and Marsh, 2000, 20)

This may provide some insight into how incomplete transfer in the case of complex policy ideas could occur, e.g. focusing on the technical aspects of TOD rather than the political or governance aspects that favoured implementation. Incomplete transfer could, thus, contribute to policy failure. Much of the policy transfer literature focuses on the decision-making process in choosing policy ideas and their adoption and/or modification by decision-makers (Stone, 2004). Spaans and Louw (2009) caution that planning problems may manifest themselves in the same way in another country, but the solutions may be restricted to the originating country. The issue may be a problem in one country, but not perceived this way in another.

Policy transfer in planning

Spaans and Louw (2009, 7), in their review of the literature on policy transfer in planning, conclude that,

...compared to the abundant amount of planning literature on international comparative research, there is only a small amount of research on policy transfer and hardly any research on the transfer of planning practices.

In their assessment of the scope for policy transfer between English and Dutch planning and development practices, Spaans and Louw found that the Dutch municipal governance is less fragmented, local governments have greater autonomy and have more resources at their disposal. Government authorities can act as private actors (e.g. acquiring land proactively or joining PPPs). In The Netherlands, land use plans are legally-binding and are decided on by elected local councils after public hearings. This means that there is much more negotiation between local government and private parties (Langendijk and Boertjes, 2012) and more formal procedures for developers. This contrasts with the English system where the development sector takes the initiative, submitting development plans which are tested against the spatial planning policy. For example, Spaans and Louw (2009) concluded that it would require a cultural adaptation for Dutch developers to become more involved in the decision-making processes of public authorities, and to take a more strategic and long-range view on development. More generally, they state that,

Institutional and cultural differences between countries act as a kind of system border which is difficult to cross... [between countries within different social models] only the simplest form of transfer, namely inspiration, is likely to occur, while more 'robust' forms of transfer are far less likely to occur. In situations where no system borders have to be crossed, transfer is more likely to take the form of learning or even transplantation. (Spaans and Louw, 2009, 18)

However, Stone (2004, 548) notes that, 'Path dependencies may be overcome, in some instances, by powerful transnational forces'. Planners involved in TOD in The Netherlands refer to 'the believers', those individuals who believe strongly in the implementation of TOD and advocate it to all who will listen. These individuals, working in municipal or regional government bodies or as private consultants, have been instrumental in organising and attending international TOD conferences and exchanges between cities. However, transfer of policy ideas such as the need for collaboration of land use and transportation planners in TOD processes, or for interdisciplinary teams in TOD implementation, seems to be minimal (Tan et al., 2014a).

As Marsden and Stead (2011) found in their review of the literature, there has also been little attention paid to policy transfer in transportation. In their study of urban transportation policy transfer in Wroclaw, Poland and Riga, Latvia, Stead et al. (2008) found that political and administrative stability, the presence of forward-looking

policy-makers and civil servants, and a small, tight network of participating actors were important factors for successful transfer.

The review of the literature has shown that there are important paths that policy transfer can take, including emulation, inspiration and learning. However, problems related to downplaying cultural, economic or other differences between the originating and borrowing countries, or to incomplete knowledge of the policy itself, are also evident. There is little research examining policy transfer or methods of transfer in the discipline of planning (e.g. whether 'hard' or 'soft' policy ideas can be transferred, whether policy learning can occur). In this research, we focused on whether policy transfer could occur among land use and transportation planners in The Netherlands, but also how it could occur. We adopted an experiential research approach (Straatemeier et al., 2010) where participants use exercises or tools (e.g. workshops, planning support systems, Group Decision Room, serious gaming) in a context-specific setting. We wanted to determine whether policy ideas learned through the use of meta-analysis (Thomas and Bertolini, 2014; Thomas and Bertolini, 2015), 'decontextualised' from their political, geographical and social settings, could be transferred. Using workshops, participants would learn by 'recontextualising' the policy ideas to their own city-regions.

Methodology

In the first stage of this study, a meta-analysis of 11 case studies in TOD implementation, we identified 16 critical success factors (CSFs) in TOD implementation through the use of a meta-matrix (Thomas and Bertolini, 2014) and a set of rules that showed the relationship between these factors (Thomas and Bertolini, 2014). In the second stage, we wanted to see whether these CSFs, or lessons, could be transferred to The Netherlands and what the results of this transfer might be. The policy ideas to be transferred, then, were the findings from the first stage of our research: lessons learned from international city-regions who have been attempting TOD for over 20 years. The cases, showing different degrees of success, were: Tokyo, Perth, Melbourne, Montreal, Vancouver, Toronto, Naples, Copenhagen, Amsterdam-Utrecht, Rotterdam-Den Haag and Arnhem-Nijmegen. A detailed explanation on case selection has been given in Thomas and Bertolini (2014).

Our approach to policy transfer was designed after Grin (2010), who writes that first-order learning includes helping actors reflect on their own daily actions within the cognitive space of their basic convictions. Second-order learning takes actors beyond these convictions, engaging them in a practice confronting new views not normally expressed in that practice; actors may scrutinise their own beliefs without risking giving up the 'old' way back or other constraints on their actions. He contends that radical change needs second order learning, or conversely that second order learning may be promoted by structural change.

Following Grin's discussion of second-order learning, we wanted to determine whether this type of workshop was a useful way of transferring policy ideas. We designed two workshops with Dutch planners to determine whether, how and why policy ideas from international cases could be transferred to The Netherlands. The workshops were designed to have four parts (see Figure 1):

1. An introduction to the critical success factors in TOD from the meta-analysis of international cases.
2. An application of the CSFs to identify strengths and weaknesses in the Dutch planning context.
3. An application of the CSFs with the most relevance to identify solutions in the Dutch planning context.
4. A discussion about the possibilities for policy transfer to The Netherlands.

The workshops were held in January 2014 in two locations, Amsterdam and The Hague, corresponding with the administration of the Randstad, the polycentric region encompassing Amsterdam and Utrecht (the 'North Wing' of the Randstad) and Rotterdam and The Hague (the 'South Wing'). Grin (2010) writes that planning practices need to involve a variety of involved actors as well as some outsiders to promote learning. The workshops included a total of 12 practitioners working in the areas of land use and transportation planning; they self-identified as urban planners (8), transportation planners (5), architects (2) and project managers (1); some

Figure 1 The model of second-order learning used in the workshops.

identified with multiple roles. To include outsiders, the 12 TOD practitioners in the workshops were supplemented with six researchers in land use and transportation planning from the University of Amsterdam, Delft University of Technology and Radboud University. Participants selected the location they preferred, according to their agency/organisation and expertise; they worked for a range of public organisations, for private companies and as freelance consultants. The participants were sent materials beforehand, including the list of critical success factors, the relationships between these factors found through rough set analysis (Thomas and Bertolini, 2015), explanations of these findings from the two earlier stages of our research and a description of the two exercises that would occur during the workshops.

In the first exercise, we asked the participants to indicate the strengths and weaknesses in their region according to the list of CSFs (see Table 1). Each workshop used a large poster of the list and participants placed stickers in each column (green for strengths and red for weaknesses).

Table 1 Critical success factors in TOD implementation

Critical Success Factor		Strength	Weakness
Plans and Policies			
1	Policy Consistency	Very consistent over time in planning policy supporting TOD, e.g. specific station areas, transit corridors and other transit-supportive and non-motorised-supportive land use planning	Very inconsistent planning policy supporting TOD, major changes over time
	Case Example	Policy on concentrating growth around public transportation infrastructure has been consistent for several decades; urban growth follows a rail-based pattern	
2	Vision Stability	Very stable vision, e.g. city-regional vision for land use-transport planning or urban sustainability	Very unstable vision, major changes over time
	Case Example	The city-region developed a vision for regional urban growth that has remained the same for several decades. The vision is well-known among local citizens, politicians and internationally	
3	Government Support	Very good support of higher levels of government, e.g. provincial tax on gasoline to support public transit, national station location or regeneration policy, provincial funding for cycling infrastructure	No support of higher levels of government, no policies or funding
	Case Example	Higher-level government support has enabled the city-region to build TOD projects and improve urban structure	

4	Political Stability (National)	Very stable national political agenda supporting TOD	Very unstable national political agenda supporting TOD, major changes over time
	Case Example	A high degree of national political stability has resulted in support for concentrated land use-transportation over several decades; this policy goal does not change with political parties	
5	Political Stability (Local)	Very stable local (municipal or regional) political agenda supporting TOD	Very unstable local (municipal or regional) political agenda supporting TOD, major changes over time
	Case Example	There has been a very stable local regional agenda supporting TOD, regardless of the political party in power	
Actors			
6	Actor Relationships	Very good relationships between municipal actors at a regional scale, e.g. communication, overlap in goals and vision, roles	Poor or no relationships between municipal actors at a regional scale
	Case Example	The actors involved in TOD at a regional scale know each other well, understand each other's goals and methods, and collaborate on a regional TOD strategy	
7	Regional Land Use-Transportation Body	Presence of a regulatory regional land use-transport planning body	No regional land use-transport planning body (advisory or regulatory)
	Case Example	An advisory regional land use-transport planning body has the ability to plan projects that achieve concentrated growth integrating land use and transportation	
8	Inter-Municipal Competition	No competition among municipalities for new developments/funding	Very intense competition among municipalities for new developments/funding
	Case Example	Municipalities do not compete for new developments/funding; there is agreement on where new TOD projects will go in the region	
9	Multi-disciplinary Implementation Teams	Widespread presence of multi-disciplinary teams implementing TOD	Sector-specific teams (e.g. solely planners or engineers) implementing TOD
	Case Example	Multi-disciplinary teams implement TOD projects, so that they integrate urban design, land use planning, and transportation engineering methods and designs	
10	Public Participation	Very high public participation in land use-transport planning processes	No public participation, public not engaged or interested
	Case Example	The public is very engaged in land use-transport planning processes through neighbourhood plans and area visions. They understand the main issues such as density, public transit ridership and sustainability	

11	Public Acceptance	Very high public acceptance of high densities and public transit	No public acceptance of high densities and public transit
	Case Example	The public has a good acceptance of high densities and public transit, and plays a role in deciding where these will be located in each neighbourhood	
12	Key Visionaries	Many influential key visionaries over time, e.g. elected, citizen or business leaders	No key visionaries over time
	Case Example	The mayor and other politicians had a major influence on advancing the vision of rapid transit and getting funding to build new infrastructure	
Implementation			
13	Site-Specific Planning Tools	Widespread use of site-specific planning tools, e.g. FAR bonuses, leasing of air rights, density targets	No use of site-specific tools
	Case Example	The various municipalities in the urban area make widespread use of FAR bonuses, FAR transfers and density targets to achieve concentrated growth around rail lines	
14	Regional-Level TOD Planning	Corridor-level planning, e.g. coordination of land use and transport in widespread transit corridors	No corridor-level or station-area planning
	Case Example	Land use and transportation planning organisations designate key corridors within the region as transit corridors, and make long-term plans for them	
15	Certainty for Developers	High degree of certainty for developers, e.g. plans and policies supporting higher densities, tools to enable mixed uses at station areas, designation of areas for development/transit corridors	Uncertainty; developers are unaware of policies, tools and sites encouraging TOD
	Case Example	It's very easy for developers to understand which sites will be targeted for future growth because plans and policies support higher densities, tools enable mixed uses at station areas and key areas are designated for development	
16	Willingness to Experiment	Actors are very willing to experiment with new policies, practices and tools	Actors are unwilling to experiment with new policies, practices and tools
	Case Example	Actors across the region are very willing to experiment with new policies, practices and tools, even if they fail. They are reflective about their failures and learn from them how to improve	

In the second exercise, the participants were asked to focus on six CSFs:

- political stability (national);
- regional land use/transportation body;
- actor relationships;
- public participation;
- interdisciplinary implementation teams;
- certainty for developers.

These six factors were identified from the rough set analysis, and presented a small enough set of CSFs to be used during the workshops (Thomas and Bertolini, 2015). As TOD actors, institutions and policies are complex, it was necessary to narrow the focus for policy transfer. Groups were asked to discuss ways in which they would strengthen key weaknesses in these six factors in their region in order to overcome barriers to TOD implementation. Following each small group exercise, a discussion was held with all workshop participants. Both small group discussions and larger workshop discussions were digitally recorded, transcribed and analysed for relevant themes.

Participants in each workshop were also asked to complete pre- and post-workshop surveys so that it would be possible to determine their level of knowledge on policy transfer, and whether their perceptions had changed after the workshop. Questions included whether they would use insights from the workshop in their daily planning practice, whether their organisation has the ability to use solutions from other planning contexts, and whether policies and ideas from other planning contexts are useful for identifying weaknesses in transportation and land use planning in the region.

Research results

Strengths and weaknesses in the Amsterdam-Utrecht and Rotterdam-The Hague regions

In Exercise 1, participants in the workshops indicated several key weaknesses in the implementation of TOD in The Netherlands, most importantly:

- Weak actor relationships, particularly with the national government, but also with professionals outside of the discipline of planning.
- An unwillingness to experiment.
- A lack of engagement with the public, contributing to little knowledge about planning ideas.

Actor relationships

It's not very effective for implementing TOD, the relationships we have. [*Urban/transportation planner, Amsterdam*]

Weak actor relationships in the Amsterdam region were also identified in the first

phase of this study (Thomas and Bertolini, 2014), while relationships were notably stronger in the Arnhem-Nijmegen and Rotterdam-The Hague regions. There is a very small group of TOD practitioners in The Netherlands and most of them are versed in technical issues such as infrastructure planning. This small group of planners meets fairly regularly and organises events and conferences, but as one architect put it, 'We've been talking about this for... 30 years now. We should know what to do now'. Informal networks between planners exist, but a few participants felt that they were not very strong.

I think there's a lack of trust in the parties that are involved in development and implementation. [*Urban planner, Amsterdam*]

In The Hague workshop, participants drew attention to Stedenbaan, an initiative that has resulted in signed agreements between municipalities, regions and the National Railways on strategic transportation and land use planning in the Rotterdam-The Hague region. Stedenbaan is considered by many to be a turning point in TOD for involving stakeholders across sectors at the regional scale, with coordinators for each station ensuring progress and responsibility. One participant mentioned that Rotterdam and The Hague had to work together because they are located in the same province, and the political support base was split between the two. But even here, participants noted that there was too much talk with too little action, and that consistent policy supporting TOD did not exist at the local level. Competition still prevents cooperation, and often the smaller towns are the ones that lose out, something that was also noted in the Amsterdam workshop.

There's a lot of competition as well, between them. Because of that there's no one focus between them. [*Transportation planner, Amsterdam*]

There seems to be less of a multidisciplinary approach beyond land use and transport planners in The Netherlands: economists, sociologists, developers, and ecologists are not included in the policy development or implementation phases of land use or transportation planning. Several participants mentioned this as a key weakness in both Amsterdam and The Hague.

When I look broader, I find the multidisciplinary... I find it's only partial... in the way that infrastructure planners and urban planners are getting together. It's always a little bit technocratic... the behaviour, or experiences, of people are not really integrated into this type of work. [*Transportation planner, Amsterdam*]

The lack of uptake among other stakeholders suggests that TOD concepts such as interdisciplinary collaboration or informal governance bodies (e.g. TOD committees) have not yet made their way to The Netherlands. Several participants mentioned the 'silos' that planners work in: land use planning is still very separate from

transportation planning, and finance, implementation and urban development groups are fragmented. There also seems to be little relationship between planners and developers, and lack of coordination on the development of policies that would indicate the type of development that could/should happen at which locations in the region. Public-private partnerships are not common, even though a framework for PPPs was outlined in the Fourth National Report on Spatial Planning Policy (1988). There does not seem to be an awareness of the need for transportation planners and engineers to work with funders, developers and other stakeholders (e.g. key landholders in urban areas) to identify sites or target key areas, minimising inter-municipal competition for TOD projects.

However, a few participants felt that the informal relationships among planners were improving.

We're shifting from talking about these issues to actually implementing it, and you also see a shift in the organisations. Different organisations with different responsibilities are talking to each other. [*Transportation planner, Amsterdam*]

In particular, participants in both The Hague and Amsterdam indicated that there was a recent shift towards coordination during the economic crisis. Since municipalities are no longer able to build a project on their own, they may cooperate with a neighbouring municipality so that both parties can achieve their separate goals. One example given was a new bus line approved by two mid-sized municipalities (Nijmegen and Arnhem) and the smaller towns nearby.

The role of the national government in TOD

Although the presence of national planning legislation on both land use and transportation planning was considered a strength for Dutch city-regions (Thomas and Bertolini, 2014), many participants indicated that they did not have good relationships with the national government on the subject of TOD implementation.

It's very unclear to us what they want. They have some kind of implementation plan for public transportation, but nobody knows. They keep it to themselves. So we don't know what it is or how to use it. Because we ask about it and they say well, there's still discussion between the Minister... they don't want to share. [*Urban/transportation planner, Amsterdam*]

While several participants indicated that the national government was necessary to finance TOD, to outline legal regulations and develop incentives for local development, they struggled to depict what an ideal relationship with this particular actor might be like. In The Hague workshop, one participant suggested that municipalities either need central funding that is directed to local actors, or very strong national policy.

Several participants indicated that national priorities included the National Key

Projects, major renovations to the main railway stations National Key Projects that were finalised in policy in the 1980s and 1990s, and are now in the implementation phase. While a long-term agenda for improving transportation at the national (and even international) level exists through the improvement of priority stations for the establishment of high-speed rail, there are no mid-term initiatives. Participants in both workshops noted that the national government had some consistent policy supporting TOD, but that they were unstable when it came to implementation, such as the ABC Location Policy of 1988 that attempted to direct growth to railway station areas (Schwanen et al., 2004).

The national government is also uninterested in planning transportation nodes that they consider less of a national priority, such as the 33 infrastructure projects prioritised under Randstad Urgent (2007), one of which was the Stedenbaan initiative. Sites outside of the major railway station areas and city centres are considered lower priority for improved transportation projects. Municipalities struggle to define their own prioritised list of projects, although one participant in The Hague workshop noted that the economic crisis had forced the city-region to prioritise some station areas for improvement.

...when we [municipalities] have conversations about TOD we almost always focus at the urban nodes or the car-pool level at the most. So it's all about local and regional scale. Everyone at the Ministry is telling me, that's not of national importance. So we leave it to you. [*Urban planner, Amsterdam*]

For example, the University of Delft is one of the major global, top 20 universities every year. But the national government leaves it to the City of Delft to get a tram line financed. They won't help, whatever. [*Transportation planner, Amsterdam*]

The limited focus on the main railway station areas, and the unwillingness to designate smaller-scale initiatives such as BRT or LRT lines, suggests that the economic development aspects of TOD have been more easily absorbed by national government planners and engineers than the public health or sustainability aspects that have become typical of TOD in other countries.

Willingness to experiment

Compared to the other city-regions in our international study, Dutch city-regions were identified as having a low willingness to experiment with new TOD policies, practices, and tools (Thomas and Bertolini, 2014).

I think that we want to experiment, but we don't take any risk with implementation. So what does it mean to experiment? [*Urban planner, Amsterdam*]

While one transportation planner indicated that some municipalities in the north of the Amsterdam region are in the study phase for future projects, others expressed thoughts on the stagnation that came along with the prolonged effects of the economic crisis. One planner in The Hague workshop noted, however, that some municipalities have begun to take risks:

In Arnhem-Nijmegen we had some really good city planners, really visionary, and they started a new plan to revitalise old railway stations, 11 of them. So I see even in the smaller towns... now they are starting to see that they can connect these areas, develop on the other side of the station. So if I really saw something in the past seven years it's that we've trained them, they have learned, and now they are proud to do it themselves. *[Transportation planner, The Hague]*

Public participation

Public participation was an interesting, and somewhat controversial issue. It was also identified as a weakness when Dutch city-regions were compared to others in our study (Thomas and Bertolini, 2014), although Arnhem-Nijmegen and Rotterdam-The Hague were considered to be stronger than Amsterdam. Overall, public participation in planning in The Netherlands is mostly limited to getting public feedback on final plans or projects. The public tends to be consulted only on small-scale projects.

With our way of public participation, all the reactions of people are written down, and after each reaction the government will have to say whether this direction is good or not and whether the plan will change after it. And if you think the direction is insufficient, then you go to a judge and say that isn't enough. That's the whole process of our participation. *[Transportation planner, The Hague]*

The fact that Dutch planners may not need to convince their public of the need for higher densities and public transportation might also play a role in public participation in TOD planning processes. One participant noted that if he were to ask people what TOD was, they would have no idea, but they do seem to support new transit infrastructure.

...the railway station, they use it. Last year, with the amount of people who took the tram, it's growing by 2.5 to 4 per cent... so TOD as a concept, the implementation and the areas where we do something, they are fond of it. *[Land use/transportation planner, The Hague]*

...what I miss sometimes is from the beginning... we make a plan and we participate and everyone gets a reaction. But to really understand what people want, to do a major investigation, I don't know if it's possible. But we don't do much on that. *[Transportation planner, The Hague]*

A participant in The Hague workshop noted that people were not very interested in the regional infrastructure component of transportation planning, but they would likely become more involved in the local and land use aspects such as walking and cycling paths, and the creation of nice spaces near stations. It was felt that the public would not be interested in participating in the development of larger-scale plans or policies. In Amsterdam, one participant noted that there was no emphasis on place-making in the National Key Projects. These comments suggest that the TOD policy ideas of integrating land use and design aspects, common at the smaller scale (e.g. pedestrian access to stations, design qualities that might encourage people to meet near transportation infrastructure) have perhaps been more difficult to transfer to The Netherlands.

Strengthening the weaknesses: possible solutions

In Exercise 2, participants discussed ways in which key weaknesses in their region could be strengthened to overcome barriers in implementation in the future.

Actor relationships

Participants in the Amsterdam workshop felt that the region needed to develop a common ‘story’ that could be used to align the goals of the various actors in TOD; what is really lacking in the region is a common focus on TOD as a means of realising multiple goals.

I think there have been some attempts. Three years ago there was this investigation in Amsterdam... I think the problem is the implementation from strategic goals. Maybe we had it a few years ago but we didn’t do something with it. *[Architect, Amsterdam]*

One of the small groups developed this idea further. While the Randstad as a whole is known for being a polycentric region, the reality of the four cities connected by rail could be one element of the story. The story should not be limited to transportation issues, but should include land use and other issues. It would be spread through repeating it to co-workers within planning organisations, to members of other professions and to the public.

Many participants suggested that more professionals outside of transportation/land use planners and traffic engineers need to get involved in the TOD process: in The Hague workshop, anthropologists, sociologists, visionaries, marketing/communications experts and lobbyists were mentioned. Participants in Amsterdam suggested the need to understand the behaviour side of transportation, such as why people would use a station or how they meet in public spaces, through sociologists. The participants were evidently reflecting on the policy lessons from other city-regions, e.g. developing

a vision for the region, involving the public in large-scale planning processes.

New ways of thinking are needed to break through the closed circle of planners and engineers who currently work on TOD. One participant gave this example:

So what we did, and that was total public participation, is we went to a village, sat down for two days – it's still possible there because it's an agricultural area and they had their time off in the winter – so you give them also some drinks at the end. But you start drawing with them what would be their ideal of the village. So you really can work on that. I'm really convinced that there is another way of working that we can do with new techniques. [*Transportation planner, The Hague*]

There was some discussion of a regional transportation and land use authority, which as yet does not exist in Amsterdam or The Hague.

To be more effective you need both informal and formal relationships. But you need the power. Because some other formal actors will only listen to you if you have some form of power, a form of decision-making. That's when they get more serious. [*Transportation planner, Amsterdam*]

You don't have to formalise to be more effective... I think we need a transport authority on a regional level – that you have to formalise to collaborate with the national government. [*Urban planner, Amsterdam*]

One participant mentioned, however, that it would be at least 'ten years' before such an organisation existed in Amsterdam – in the meantime agreements among municipalities should be used. In The Hague workshop, one participant mentioned that municipalities within a region should agree on land use goals such as where new office space should go, in order to be consistent and avoid pitfalls (e.g. in the early 2000s too much office space was built within municipalities, leading to high vacancy rates compounded by the current economic crisis).

The role of the national government in TOD

In terms of relationships with the national government, most participants suggested that lower levels of government (municipalities and regions) should have greater responsibilities and also the ability to fund transportation improvements, either through the ability to raise revenue through taxes or through earmarked funds.

Public participation

One participant in The Hague suggested that it might be possible to involve the public in the development of larger-scale plans if scenarios were created that people could

vote for. However, he still felt that only planners, with their expert knowledge, should make the major decisions and develop the scenarios. Online surveys are not typically done to gather feedback from the public in The Netherlands, but one participant mentioned mail-in survey cards that had been used to gather responses in a particular neighbourhood. Several participants mentioned the potential of using games to create a way for people to understand trade-offs between various transportation decisions or scenarios.

A few participants suggested that more marketing and communications are needed to get the public and other planning actors to understand how TOD could be the means to an end, rather than an end in itself.

So we've been thinking about maybe making a movie or video clip or whatever, to show that we're talking about this because we really feel that we should do it. But as soon as you go to any partner and ask them for a bit of means, or a bit of time, or... something like that, no one is interested. [*Transportation planner, Amsterdam*]

Of course we live now in a very strange time where everything has been made political and we like to shout at everything. But in the end I still think if we really start to explain what we do, to get the people really involved from the beginning... we speak of ivory towers in universities, but I think there's an ivory tower of public organisations. [*Transportation planner, The Hague*]

Another participant suggested that it should be possible to align the different goals and agendas by finding common methods to achieve the different goals, and that this could be more important than developing a collective goal. It would allow progress, rather than spending all the time developing something in common.

Conclusions

Were policies, ideas and/or lessons transferred?

Here we turn to the pre- and post-workshop surveys, which asked the 12 participants to answer on a five-point scale indicating whether they strongly disagreed, disagreed, neither agreed nor disagreed, agreed or strongly agreed with the statements. As Table 2 shows, the results of these surveys indicated a positive shift from participants' pre-workshop expectations. For example, more participants indicated that they 'will use insights from the workshop in their daily planning practice' in the post-workshop survey than the pre-workshop survey. The exercises helped them understand possible solutions to barriers in TOD implementation and reach a shared vision on the possible solutions. For the statement, 'It is difficult to apply policies and ideas from other contexts to the Dutch planning context', responses shifted so that more disagreed with the statement

after the workshop. After the workshop, more agreed with the statements that policies and ideas from other planning contexts are useful for identifying weaknesses in transportation and land use planning in their region, and would be useful in selecting TOD strategies/options for their region. Most agreed that their organisation has the ability to use solutions (policies and ideas) from other planning contexts.

On a number of questions, participants' opinions did not change. They were just as likely to say they would communicate the results of the workshop to other members of their organisations before and after the workshop. Participants' opinions that the culture of the organisation where they work does not enable the use of policies and ideas from other planning contexts were also unchanged. For the statement, 'Conflicting policies between agencies inhibits the use of solutions (policies and ideas) from other planning contexts', post-workshop responses were much more divided.

In response to an open question on the post-workshop survey, participants indicated the most important lesson or insight that they took from the workshop. Responses indicated that 'TOD has to come out of the technocratic corner. It is a possibility to address bigger problems in society', that 'we need to broaden the story and simplify at the same time'. Three responses indicated that better communication strategies are needed.

Discussion

If the goal is inspiration and learning rather than transplantation, it is important to be able to position the cases in the planning and development framework of the country concerned. (Spaans and Louw, 2009, 6)

As a means of transferring policy ideas to a group of practitioners, we conclude that policy transfer workshops involving a combination of practitioners and academics was useful. As this is a small sample size limited to a particular country, further research could test this policy transfer approach to a broader group of participants or to different political, historical and social contexts. Future research could also go further into the policy transfer mechanisms, e.g. determining at what point in the policy development process transfer occurs, through ideational or institutional mechanisms (Stone, 2004). The fact that we focused on only six of the 16 policy lessons is also an indication of how difficult it is to transfer policy ideas from a complex policy concept such as TOD; other sub-groups of the policy lessons could be used to conduct further workshops.

The participants in the Amsterdam and The Hague workshops seemed to get ideas from the international cases that could be used in their own organisations and in their daily planning practice. It was clear that they did not intend to adopt any of the policies, ideas or institutions completely; however, emulation and inspiration were

Table 2 Pre-workshop and post-workshop survey responses

QUESTIONS ABOUT THE SESSION		Strongly disagree		Disagree		Neither agree nor disagree		Agree		Strongly agree	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	I think a workshop on TOD implementation will be useful for me					1		11	8		4
2	I think that the process will help me interact with other participants and understand their ideas about the problem							10	10	2	2
3	I think that exercises will help me understand the barriers in TOD implementation					1	6	10	6	1	
4	The exercises will help me understand possible solutions to barriers in TOD implementation					3	1	9	11		
5	In the workshop, we will reach a shared vision of the problem in this region				1	8	4	3	7	1	
6	In the workshop, we will reach a shared vision on the goals for TOD				1	7	5	5	6		
7	In the workshop, we will reach a shared vision on the possible solutions			1	1	5	2	6	8		1
8	We will have enough time to complete the exercises	1	1	3	1	4		4	10		
9	I will likely use insights from the workshop in my daily planning practice					5	1	6	11	1	
10	I will likely communicate the results of the workshop to other members of my organisation			1				1	8	3	3
QUESTIONS ABOUT THE CRITICAL SUCCESS FACTORS AND POLICY TRANSFER											
11	I have a good understanding of different types of policy transfer (copying, emulation, combinations, inspiration)					4	6	6	6	2	
12	I have some insight into the processes that play a role in the problem					1	5	8	7	3	
13	It is difficult to apply policies and ideas from other contexts to the Dutch planning context**			2	5	3	5	3	1	4	
14	Policies and ideas from other contexts offer new insights to planning problems							1	8	10	4
15	My organisation has the ability to use solutions (policies and ideas) from other planning contexts*			1		4	2	6	10		
16	Conflicting policies between agencies inhibits the use of solutions (policies and ideas) from other planning contexts**			1	1	2	4	8	6		1
17	Policies and ideas from other planning contexts would not likely be used in long-term planning decisions as my organisation is not familiar with them			4	6	3	4	4	2	1	
18	The results that arose from the use of CSFs and RSA rules are in line with the political commitment of my organisation*						6		6		
19	The culture of the organisation where I work does not enable the use of policies and ideas from other planning contexts	1		6	7	2	2	3	3		
20	The absence of formal/informal incentives for cooperation between agencies on TOD is a barrier to implementation			1	1	3	3	6	3	2	5
21	Policies and ideas from other planning contexts are useful for identifying weaknesses in transportation and land use planning in the region							11	5	1	6
22	Policies and ideas from other planning contexts would be useful in selecting TOD strategies/options for this region			1		1	1	8	4	2	7

Notes: * Question 18 could not be asked pre-workshop. **Eleven of the twelve participants responded to Questions 13, 15, and 16.

possible. In this sense, the meta-analysis was a good starting point to develop a list of transferable lessons which had worked in other city-regions around the world, even though their contexts were quite different. During earlier attempts at policy transfer from contexts such as Japan (Chorus, 2012), North America and Australia (Tan et al., 2014b), local planners considered the contexts too dissimilar to The Netherlands. A specific contribution to the literature in this study, then, is the finding that the use of the ‘decontextualised’ lessons, which participants then ‘recontextualised’ to their own city-regions, worked as a policy-learning mechanism. At no point in the workshops did any participant raise a concern that the policy ideas would not work in The Netherlands, which can be considered a significant achievement in the context-specific discipline of planning.

However, the participants indicated that a number of institutional and cultural barriers to TOD implementation remain in The Netherlands – an acknowledgement which in itself can also be seen as a worthwhile outcome of a policy transfer exercise. First, although Dutch planners interested in TOD seem to have reached a consensus that TOD is desirable in both the North and South Wings of the Randstad, they are still unsure of how it actually happens: who should be the lead organisation, how should the planning process happen and what might be the legal regulations or policies that would enable TOD to be implemented? There has been some progress in developing better informal relationships between the actors, particularly in the South Wing, but some degree of institutionalisation seems to be seen as needed.

Secondly, at this point the understanding of TOD is still very limited to station areas and railway infrastructure. TOD advocates in The Netherlands do not think about extending the concept to include main streets as transportation corridors involving walking, cycling and public transit infrastructure (e.g. sidewalks, cycling paths, trams and buses). This may be related to the fact that, as the participants mentioned, TOD is still seen as a transportation concept and knowledge of the concept is mostly limited to transportation planners; land use planners, other professionals and the public do not seem to be aware of TOD. This indicates that incomplete transfer of TOD policy ideas, specifically interdisciplinary collaboration, inter-regional cooperation and land use-transportation integration, may have occurred in the past.

Finally, a barrier to TOD implementation in The Netherlands may be the lack of public participation in planning processes. In a number of the successful TOD cases in our international meta-analysis, planners conducted long-term, widespread public consultation on the future of the region, including sustainability, transportation, housing and the built form. This level of consultation (which was not based on specific projects) eventually led to a much broader understanding of planning issues, which created more public acceptance of higher densities and public transportation infrastructure. Compared to the US and Canada, where public participation techniques are taught at planning schools, Dutch planners in the workshops noted that they are

not trained in these techniques beyond simple, formal consultation on a final small-scale plan. Planning in The Netherlands is still very top-down, which might have worked in the past, but does not seem to be working presently for TOD implementation, in part because of the weak relationships between the national government and the other actors. However, a good level of public support for the higher densities and mixed uses that are critical in smaller-scale TOD implementation, as well as for the need to invest in public transport, does seem to exist. Considering the history and cultural context of The Netherlands, which encourages dialogue and consensus-building on complex issues such as management of water levels, there is a lot of potential to integrate more public participation in TOD planning processes. As the participants suggested, broadening the dialogue to include a wider variety of actors could help in the development of common planning goals.

Overall, Dutch land use and transportation planners seem to be familiar with TOD concepts and ideas, but less familiar with 'softer' transferable lessons that consistently play a role in successful TOD implementation, such as good actor relationships, the support of the national government, the need for a multi-disciplinary approach and active public engagement. It is interesting that only the 'harder', more technical aspects of TOD seem to have been transferred to The Netherlands, perhaps through the past efforts of the TOD 'believers'. Participants were, however, very receptive to the 'softer' policy ideas from the 11 international cases, and intend to bring them into their organisations; in the long-term, this may impact the future practice of planning to achieve transit-oriented regions in The Netherlands. Understanding the value of policy transfer using 'decontextualised' policy lessons, and how and why policy ideas make their way into policies or institutional arrangements through 'recontextualisation', is thus a relevant area for future research.

References

- CERVERO, R. (2008), *Effects of TOD on Housing, Parking and Travel*, Centre for Transit-Oriented Development: Urban Land Institute, Transit Cooperative Research Program Report 128.
- CHORUS, P. (2012), *Station Area Developments in Tokyo and What the Randstad Can Learn From It*, Amsterdam, University of Amsterdam.
- DIMAGGIO, P. and POWELL, W. (1983), 'The iron cage revisited: institutional isomorphism and collective rationality in organisational fields', *American Sociological Review*, **48**, 147–60.
- DOLOWITZ, D. and MARSH, D. (2000), 'Learning from abroad: the role of policy transfer in contemporary policy making', *Governance*, **13**, 5–24.
- GRIN, J. (2010), 'The governance of transitions', in J. Grin, J. Rotmans & J. Schot (eds), *Transitions to Sustainable Development: New Directions in the Study of Long-Term Transformative Change*, New York and London, Routledge, 265–85.
- KNOLES, R. D. (2012), 'Transit-oriented development in Copenhagen, Denmark: from the Finger Plan to Ørestad', *Journal of Transport Geography*, **22**, 251–61.

- LANGENDIJK, A. and BOERTJES, S. (2012), 'Light rail: all change please! A post-structural perspective on the global mushrooming of a transport concept', *Planning Theory*, **12**, 290–310.
- MARSDEN, G. and STEAD, D. (2011), 'Policy transfer and learning in the field of transport: a review of concepts and evidence', *Transport Policy*, **19**, 492–500.
- MAXWELL, J. A. (2004), 'Using qualitative methods for causal explanation', *Field Methods*, **16**, 243–64.
- NIJKAMP, P., VAN DER BURCH, M. and VINDIGNI, G. (2002), 'A comparative institutional evaluation of public-private partnerships in Dutch urban land-use and revitalisation projects', *Urban Studies*, **39**, 1865–80.
- ROSE, R. (2005), *Learning from Comparative Public Policy: A Practical Guide*, London and New York, Routledge.
- SCHWANEN, T., DIJST, M. and DIELEMAN, F. M. (2004), 'Policies for urban form and their impact on travel: the Netherlands experience', *Urban Studies*, **41**, 579–603.
- SPAANS, M. and LOUW, E. (2009), *Crossing Borders with Planners and Developers and the Limits of Lesson-drawing. City Futures in a Globalising World*, Madrid, University Rey Juan Carlos of Madrid.
- STEAD, D., DEJONG, M. and REINHOLDE, I. (2008), 'Urban transport policy transfer in Central and Eastern Europe', *Disp: The Planning Review*, **44**, 62–73.
- STONE, D. (1999), 'Learning lessons and transferring policy across time, space and disciplines', *Politics*, **19**, 51–9.
- STONE, D. (2004), 'Transfer agents and global networks in the "transnationalisation" of policy', *Journal of European Public Policy*, **11**, 545–66.
- STRAATEMEIER, T., BERTOLINI, L., TE BRÖMMELSTROET, M. and HOETJES, P. (2010), 'An experiential approach to research in planning', *Environment and Planning B*, **37**, 578–91.
- TAN, W. G. Z., JANSSEN-JANSEN, L. B. and BERTOLINI, L. (2014a), 'The role of incentives in implementing successful transit-oriented development strategies', *Urban Policy and Research*, **32**, 33–51.
- TAN, W. G. Z., JANSSEN-JANSEN, L. B. and BERTOLINI, L. (2014b), 'Identifying and conceptualising context-specific barriers to transit-oriented development strategies: the case of the Netherlands', *Town Planning Review*, **85**, 639–63.
- THOMAS, R. and BERTOLINI, L. (2014), 'Beyond the case study dilemma in urban planning: using a meta-matrix to distil critical success factors in transit-oriented development', *Urban Policy and Research*, **32**, 219–37, DOI: 10.1080/08111146.2014.882256
- THOMAS, R. and BERTOLINI, L. (2015), 'Defining critical success factors in TOD implementation using rough set analysis', *Journal of Transport and Land Use Planning*, **10**, 1–16, DOI: 10.5198/jtlu.2015.513 <https://www.jtlu.org/index.php/jtlu/article/view/513/622> (accessed 25 August 2015).
- TRANSLINK (2012), *Transit-Oriented Communities Guidelines. Creating More Livable Places Around Transit in Metro Vancouver*, Vancouver, TransLink.
- VAN EGMOND, P., NIJKAMP, P. and VINDIGNI, G. (2003), 'A comparative analysis of the performance of urban public transport systems in Europe', *International Social Science Journal*, **55**, 235–47.