

Making better choices

— an investigation of collaborative stakeholder dialogue as
catalyst for consensus building and learning in the transport
policy process

Christiane Baumann
Institute for Sustainable Futures
University of Technology, Sydney

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Certificate of authorship/originality

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

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List of publications

The discussions and findings from this doctoral thesis have been published throughout the research process. These publications are listed below in chronological order.

- 1) Baumann, C. & Zeibots, M.E. 2009, 'Beyond tradition: a systems-based definition of sustainable transport development', paper presented to the *Solutions for a Sustainable Planet Conference*, 23- 24 November 2009, Melbourne, Australia.
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- 3) Baumann, C. & White, S. 2010, 'Enhanced dialogue in the transport planning and decision-making process: enabling change through citizen/stakeholder deliberation.', *Selected proceedings of the 12th World Conference on Transport Research Society*, ISBN 978-989-96986-1-1, 11-15 July, Lisbon, Portugal.
- 4) Baumann, C. & White, S. 2010, 'Learning from the world — adding a strategic dimension to lesson-drawing from successful sustainable transport policies', paper presented to the *Australasian Transport Research Forum 2010*, 29 September – 1 October 2010, Canberra, Australia.
- 5) Baumann, C. & White, S. 2011, 'Collaborative stakeholder dialogue: a pragmatic pathway towards sustainable urban transport development', paper presented to the *3rd World Planning Schools Congress*, 4-8 July 2011, Perth, Australia.
- 6) Baumann, C. & White, S. 2011, 'Pathways towards sustainable urban transport development. Investigating the transferability of Munich best practice in collaborative stakeholder dialogue to the context of Sydney', paper presented to the *State of Australian Cities National Conference 2011*, November 29-December 1, Melbourne, Australia.
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Abbreviations

ADAC	German Motorists' Association (<i>Allgemeiner Deutscher Automobilclub</i>)
CSU	Christian Social Union
SPD	Social Democratic Party
IHK	Chamber of Industry and Commerce (<i>Industrie und Handelskammer</i>)
CEO	Chief Executive Officer
GDP	gross domestic product
ACF	Advocacy Coalition Framework
PRM	parking space management (<i>Parkraummanagement</i>)
MVV	Munich Transport Association (<i>Münchner Verkehrsverbund</i>)
MVG	Munich Transport Company (<i>Münchner Verkehrsgesellschaft</i>)
NGO	non-government organisation
DIP	deliberative inclusive procedure
CSD	collaborative stakeholder dialogue
Vkt	vehicle kilometres travelled
BMW	Bavarian Motor Works (<i>Bayerische Motorenwerke</i>)
TUM	Munich Technical University (<i>Technische Universität München</i>)
APT	Active and public transport
MRT	Motorised road transport
CoM	City of Munich (<i>Landeshauptstadt München</i>)
OECD	Organisation for Economic Co-operation and Development
NRMA	National Roads and Motorists' Association
CBD	Central business district

Abstract

This research investigates strategies to achieve a broader focus in urban transport development that better integrates environmental, social and economic considerations.

In the past, the primary objective of urban transport policy was to facilitate economic growth by expanding capacities for motorised road transport (MRT). However, recent decades have made it apparent that a preoccupation with growth has negative impacts on sustainable urban development. This awareness produced new stakeholder groups who are demanding that social and environmental priorities be included in urban development by promoting active and public transport (APT) policies.

Efforts by local governments to implement APT policies are a source of major conflict between the advocates of change and stakeholders who want to maintain the focus on MRT expansion. This is because APT and MRT policies compete for limited public space and funding and so implementing APT policies often compromises the transport-related interests of MRT groups and vice versa. If MRT stakeholders have more resources to influence policy development — more money, more access to people in power, and more know-how in advocacy and mobilising public support — they can create barriers to the implementation of APT policies.

This research builds on an empirical case study conducted in Munich, using data from interviews with government and non-government stakeholders. It reveals that a process of collaborative stakeholder dialogue (CSD) was a catalyst for policy solutions which better balance active, public and motorised transport. The collaboration created shifts in the way stakeholders interacted, resulting in cooperation rather than confrontation. It resulted in the adoption of consensus views rather than extreme positions, and in learning based on an integration of stakeholder value and knowledge systems.

To demonstrate the practical and theoretical advantages of CSD for facilitating better policy choices, the research systematically compares CSD to the traditional adversarial style of stakeholder interaction in the transport policy process. To improve the process and application of CSD in the transport policy process, the research investigates whether CSD can coexist with procedures for lay citizen engagement. Finally, it discusses under what conditions CSD can be transferred to other cities, using Sydney as case study.

The research concludes with suggesting CSD as a pragmatic strategy to counterbalance the difference in influence competing stakeholder groups have in the urban transport policy process, and to so facilitate better policy choices. This strategy is most appropriate in problem situations with high levels of conflict between competing stakeholder groups that all have influence.

CHAPTER 1. INTRODUCTION

1.1. Urban transport systems and sustainable development — a wicked problem

In 2007 the City of Sydney announced it was going to build 200 km of cycleways by 2012 to improve cycling conditions in the central city area (City of Sydney 2007). This plan involved converting several inner city road lanes, predominantly used for motor vehicle traffic and parking, into cycleways for dedicated bicycle use. As soon as construction started, opposition from some groups within the community emerged, splitting urban transport stakeholders into two camps. On one side there were groups that opposed this development such as the National Roads and Motorists' Association (NRMA)² and associated motorist interest groups who acknowledged the need for cycleways but not at the expense of already limited road space, claiming that '[f]or most Australians, the car is and always will be the only viable transport option for most everyday trips like shopping, dropping kids to school and visiting family' (Crawford 2010). Businesses argued that the removal of parking spaces would lead to a decline in trade for small businesses located along the route of the cycleways (Smith & Moncrieff-Hill 2010). On the other side were interests represented by the Lord Mayor of the City of Sydney and bicycle user groups who advocated the provision of enhanced bicycle infrastructure. They argued that active transport options should be prioritised because of their benefits with regard to health, environment and urban liveability, and because active transport helps to ease problems of congestion (City of Sydney 2007).

The conflict was played out heatedly in the media; the fervent opposition to the cycleway development was particularly fuelled by a talk-back radio commentator (Smith 2010). At the height of the conflict one business, through a lawyer, sent a letter of demand to the City of Sydney falsely claiming to act on behalf of 102 businesses along a road that had parking spaces removed to accommodate the cycleway (Munro 2010b). The advocates of cycleway development responded with passionate public protest and social media campaigns (Munro 2010c).

² The NRMA's website is at <http://www.nrma.com.au/> (accessed 20 January 2012)

Today the cycleways are in still place and are associated with substantial increases in cyclist numbers, however, they are still contentious and their future is uncertain (Munro 2010a). For example, during the campaign for the state government elections in March 2011 the opposition leader and now premier promised he would get rid of the ‘crazy’ cycleways that had been ‘deliberately set out to inconvenience motorists’ (SMH 2011a), and the city’s major newspaper, *The Sydney Morning Herald*, referred to ‘anti-cycleway forces’ in a recent article (Moore 2011).

This example shows how a minor infrastructure project can be transformed into a platform for a heated ideological conflict where the different stakeholder groups only focus on differences between their objectives rather than on areas of agreement. It illustrates the fundamental dilemma governments face when they attempt to implement transport infrastructure programs that promote active and public transport (APT) or that restrict motorised road transport (MRT) — policies often referred to as ‘sustainable transport policies’. These prospective policies need to appeal to and gain acceptance from a wide spectrum of stakeholder groups ranging from APT advocates through to MRT advocates. These groups have conflicting problem definitions, value priorities and transport-related interests, and they have different types and levels of resources to influence public opinion and thus political decision making. This adds complexity to the decision making that takes place around sustainable transport policies and often creates barriers to their implementation.

Situations in which stakeholders have differing definitions of the problem and potential solutions are often referred to as *wicked problems*. Rittel and Webber (1973, p. 155) established this term to highlight that issues in social policy and planning in pluralist societies do not have ‘optimal solutions’ as ‘there is nothing like the undisputable public good’. Approaching these situations using conventional scientific methods that were developed to deal with relatively ‘tame’, soluble problems is therefore bound to fail. Altshuler (1965, pp. 4-5) comments on the political nature of planning means that ‘[s]ignificant planning problems are never simply technical; they always involve the determination of priorities among values’ (1965, pp. 4-5). Rather than being ‘solved’, these problem situations can only be systematically analysed and managed (Ackoff 1979).

The following sections illustrate the different dimensions of the wicked problem surrounding the development of sustainable urban transport systems, setting out the line of reasoning that leads to the primary research question of this thesis: *What are the critical success factors needed to counterbalance the asymmetric influence of motorised road transport (MRT) interests and active and public transport (APT) interests in the urban transport policy process, and to achieve a broader focus in urban development that better integrates environmental, social and economic considerations?*

Section 1.1.1 describes how the transport function serves multiple ends in the urban system but in doing so also generates problems that compromise sustainable urban development. Section 1.1.2 explains how stakeholder groups evaluate and respond to these problems differently based on differing value and interest priorities. Accordingly they conceptualise and advocate different pathways to achieve more sustainable transport outcomes. Because resources such as public space and funding are scarce these pathways are often competing and so create stakeholder conflict. Section 1.1.3 argues that asymmetries with regards to the influence that different stakeholder groups have on transport policy development can create barriers to achieving a shift away from the traditional emphasis on motorised road transport to a broader focus that better integrates environmental, social and economic considerations.

1.1.1. The reflexivity of the urban transport function

Urban transport systems serve multiple ends by providing access to goods, services and opportunities for social interaction and cultural exchange. They are thus a vital facilitator of the social and economic development of cities. However, transport activities also create negative impacts for individuals and groups other than the beneficiaries.

According to Wachs (2004, p. 141), transport systems ‘provide one of the most essential human services and comprise large proportions of our everyday urban environment’. They give people the opportunity to access work, education, medical services and places of cultural and social exchange. They supply businesses with their factors of production and distribute the goods they produce. Yet enabling these transport activities, in particular motorised private transport, freight transport and public transport, requires the input of scarce resources such as non-renewable fossil fuels, urban space, and public

funding. The per-passenger requirements of public transport however are significantly lower than for motorised private transport. Emissions generated by these activities are detrimental to human and ecosystem health. Figure 2 in Section 2.1 illustrates these interrelated effects.

In the past the primary objective of urban transport development was to facilitate economic growth by expanding networks for motorised road transport. Yet recent decades have made it apparent that a focus on economic growth makes the system more expensive and has negative impacts on society and environment (OECD 2002). This is because transport-generating activities consume scarce resources more quickly than they can be regenerated. This overuse has significant negative impacts on the sustainable development of cities. Importantly, these impacts are often not immediately evident but are dispersed over time and space; that is, negative effects may be carried over to future generations or to geographically different parts of the world. Among the most pressing issues are:

- The congestion of transport networks which creates costs to the economy (see for example BTRE 2007) and decreases urban liveability (see for example Jacobs 1961; Vuchic 1999).
- The depletion of non-renewable fossil fuels ('peak oil')³ and the lack of sufficient alternative energy sources and transport options which create problems for economy and society (see for example UKERC 2009). This particularly affects areas of urban sprawl that are dependent on motorised private transport (see for example Brueckner 2000; Dodson & Sipe 2008) and financially weaker parts of society that depend on affordable transportation (see for example Dempsey et al. 2011; DfT 2000).
- Emissions from motorised transport which contribute to climate change and human health issues — both problems that are likely to generate substantial repair costs, or externalities, that impact on macro economies by generating restorative costs in the future (see for example Stern 2006).

³ The Association for the study of Peak Oil and Gas (ASPO) defines peak oil as 'the maximum rate of the production of oil in any area under consideration, recognising that it is a finite natural resource, subject to depletion'. The ASPO's website is at <http://www.peakoil.net/> (accessed 27 January 2012)

1.1.2. Ambiguity in defining paths towards a sustainable transport system

Today it is widely acknowledged that current patterns of urban transport development cannot be sustained on a long-term basis, and that environmental and social considerations need to be better integrated into policy development, especially by promoting active and public transport (Kahn Ribeiro et al. 2007; Schiller, Bruun & Kenworthy 2010). While developing urban motorway networks and increasing road capacities was pursued as a central objective of transport policy as late as the 1990s, it was always contested both by scholars (Downs 1962; Mogridge 1997; SACTRA 1994; Whitelegg 1997) and by stakeholder groups in the general community (Engwicht 1993; Jacobs 1961). However, given the multiple functions of urban transport systems that benefit different groups and interests, views about future paths towards sustainable transport systems vary widely and are often conflicting.

Sustainable development is defined as the integration of environmental, social and economic ends in a ‘virtuous cycle’ (Smith 2009). This means that progress towards one end should also serve the other ends, or at least not compromise their development. The most widely accepted definition of a sustainable transport system — adopted by the Ministers of Transport of European Union countries and reviewed by several political mechanisms — is described as one that:

- [A]llows the basic access and development needs of individuals, companies and societies to be met safely and in a manner consistent with human and ecosystem health, and promotes equity within and between successive generations[.]
- [I]s affordable, operates fairly and efficiently, offers choice of transport mode, and supports a competitive economy, as well as balanced regional development [.]
- [L]imits emissions and waste within the planet's ability to absorb them, uses renewable resources at or below their rates of generation, and uses non-renewable resources at or below the rates of development of renewable substitutes while minimising the impact on the use of land and the generation of noise (CST 2005, p. 5).

This definition of a sustainable transport system integrates social, ecological, economic and spatial objectives associated with urban transport development. Nonetheless, it only describes a normative vision; it does not describe not how to operationalise it in a way that enables clear objectives to be set and progress to be measured. The planning

literature addresses this gap in several ways: the OECD EST (Environmentally Sustainable Transport) project proposes a set of guidelines from a planning perspective on how to develop high-quality strategies and policy solutions based on a long-term vision (Wiederkehr et al. 2004). Yet they do not provide insights into how to deal with conflicting stakeholder interests in policy development and implementation (which is further discussed in Section 7.1). The need for sustainable transport planning guidelines is also reflected in increasing calls for a ‘sustainable mobility paradigm’ (Banister 2008) that is more able to deal with the wicked problem of sustainable transport development than traditional transport planning paradigms (that are summarised in Table 1 in Section 2.3). To date, however, the sustainable mobility paradigm is yet to permeate all institutional levels and traditional paradigms prevail strongly. This is discussed in detail in Section 2.3.

Given this lack of a universally agreed-on action strategy to achieve sustainable transport systems, transport experts and stakeholders groups have identified different pathways for moving in that direction (see Section 2.3.3 for a detailed overview). In the context of this thesis, I assume that stakeholders define these pathways based on their transport-related value priorities and the interests that arise from them. These dominant values cover a spectrum from individual freedom and material growth through to social equity and environmental health (illustrated in Figure 4 in Section 2.2). According to these value priorities stakeholders have different preferences for how they want governments to invest in infrastructures and services. Stakeholders valuing individual freedom and material growth tend to favour private motorised transport for people and freight (MRT stakeholders and interests), whereas stakeholders prioritising social equity and environmental health tend to favour public transport and active transport (MRT stakeholders and interests).

Due to the limitations in the urban space and public funding, however, the different pathways cannot be realised in parallel but often conflict and compete. They conflict in that the objectives of different stakeholder groups are interdependent, and so furthering one objective often compromises or is perceived to compromise other objectives, or even the primary objective itself. The different pathways are competing in that proposed solutions vie for limited resources such as urban road space and public funding to be used for motorised vehicles, public and active transport infrastructures. Whitmarsh, Swartling and Jäger point to this dilemma by stating that:

‘[S]ustainable mobility’ means different things to different groups and implies trade-offs between different desirable characteristics, such as freedom of movement, economic competitiveness and environmental protection (Whitmarsh, Swartling & Jäger 2009, p. 233).

Consequently, efforts by governments to move away from the status quo of transport development that prioritises motorised road transport, and instead promote active and public transport and restrict private car use, can be the source of major conflict between APT stakeholders that support the change and MRT stakeholders that perceive the policy as incompatible with their objectives and therefore want to conserve the status quo of transport development. These stakeholders, or interest groups, are individuals or associations representing the transport-related interests of sectors of society including business groups such as industry chambers and automotive companies; infrastructure providers and operators; user groups such as motorists’ and cyclists’ associations; environmental protection groups; local resident action groups; and experts such as academia, think tanks and consultants. They are further described in Section 2.1.1.

1.1.3. Asymmetries in stakeholder influence as a barrier to more sustainable transport development

A basic premise of this thesis is that barriers to the implementation of APT policies can be created by MRT stakeholders who have more resources to promote their interests in the policy process — more money, more access to people in power, and more know-how in advocacy and mobilising public support — than APT stakeholders.

Stakeholder or interest groups typically do not have a formal say in the processes of policy development, decision making and implementation. Nevertheless they have the power to promote or create barriers to the implementation of prospective policies in two ways: first, through putting direct pressure on decision makers, for example, a business group lobbying against a proposal on the grounds that it would create economic disadvantages; and secondly, by influencing public opinion about policy proposals, for example, through influencing and expanding the discourse surrounding a policy issue through media campaigns, public protest or the release of scientific or authoritative information that supports or weakens the case for a particular policy proposal. This is further discussed in Section 2.1.1.

These activities can have several effects on the quality and long-term implementability of policy proposals: first, they can create barriers to the implementation of a prospective policy if decision makers consider the proposal politically unpopular. Kingdon (2003, pp. 131-8), for example, describes the predicted degree of public protest as one of the main ‘survival criteria’ for policy proposals being considered by planners. Second, they can weaken the intended effects of a policy proposal if decision makers implement a compromised version of the original proposal in an attempt to increase public acceptance. And third, ongoing conflict can prevent a policy proposal from unfolding as intended on a long-term basis if the policy is abandoned during or after implementation. Sections 2.2.2 and 4.2 analyse the effect of these barriers on policies that promote active and public transport or create restrictions to motorised road transport.

These conflicts between interest groups are an essential element of pluralist democratic societies, where it is assumed that macro deliberations in society take care of balancing various interests. However, from a perspective which focuses on sustainable development and wicked problems, it can be problematic when some groups persistently have more resources than others and therefore have a disproportionate influence on policy development. This is because in wicked problems policy proposals not only determine the distribution of benefits but always involve tradeoffs and implicit decisions on value priorities and the distribution of negative impacts across groups in society or on the environment (Voß, Bauknecht & Kemp 2006). As Hajer and Kesselring (1999, p. 3) note, ‘the unintended negative effects of modernisation come to occupy centre stage and the production of “goods” can no longer compensate for the inherent production of “bads”’.

In this thesis I assume that in cities that face problems with ‘unsustainable’ transport development, MRT interests have more influence on policy development than APT interests, partly based on the historical preference for MRT. Various studies investigate this dominance of MRT interests on urban structures and transport systems. Taebel and Cornehl for example describe the road lobby in the United States as a ‘great web of automotive interests’ that actively shaped urban transport systems:

... [T]he auto's continued place of privilege in the United States is attributable to the fact that alternatives to the car are virtually nonexistent; that some very powerful economic interest groups have labored hard and long to keep it that way; and that the structural characteristics of the nation's

economy work to prevent the kind of changes needed to develop viable transit alternatives (Taebel & Cornehl 1977, p. 60).

Hamer (1987) similarly describes a strong road lobby and its political activities in the United Kingdom. Laird et al. (2001, pp. 117-32) analyse the influential groups in Australian transport policy development. Yago (1984) compares the decline of urban public transport in Germany and in the United States between 1900 and 1970 in the light of MRT interests. Logan and Molotch (2007) describe urban development as being dominated by the collective efforts of business elites who, despite pursuing divergent goals, collectively operate on the premise that growth is always positive and benefits all sectors of society. Urry attributes the dominance of what he refers to as the 'system of automobility' to its self-organising and self-expanding character:

[A]utomobility is a self-organising, non-linear system that presupposes and calls into existence an assemblage of cars, car drivers, roads, petroleum supplies, and other novel objects and technologies. The system generates the preconditions for its own self-expansion, including elements, processes, boundaries, and other structures, and the unity of the system (Urry 2008, p. 343).

On a more general level Woodhill (2010, p. 60) proposes that 'our current political systems tend to appease powerful economic interests at the expense of the overall well-being of the majority and the environment'. He argues that this is because sustainability is a fundamentally different problem from the problems which our existing system of policy development was designed to deal with. Nevertheless, it needs to be acknowledged that the car system not only serves business interests, but that cars were and are a popular means of transport because of the private benefits they create.

To conclude, the basic assumption of this research is that the traditional structural dominance of MRT interests is a major barrier to achieving a shift to a broader focus in transport policy development that better integrates environmental, social and economic considerations. In other words, progress towards more sustainable transport systems is not blocked primarily by a lack of suitable policies but by an asymmetry towards 'unsustainable' interest and value priorities in the transport policy arena. To date only a few investigations (which are discussed in Section 1.5) have explicitly included interest groups and the effects of their activities on policy deliberations and decision making in the study of transport policy change, and only a few have investigated how the asymmetric influence of stakeholder groups can be balanced so as to achieve durable

and effective progress towards more sustainable transport development. The aim of this thesis is to contribute to filling this gap by answering the question: *What are the critical success factors needed to counterbalance the asymmetric influence of motorised road transport (MRT) interests and active and public transport (APT) interests in the urban transport policy process, and to achieve a broader focus in urban development that better integrates environmental, social and economic considerations?*

1.2. Aim and scope of the thesis

This thesis investigates the role of governance structures in achieving sustainable transport outcomes in cities. It is doing so in the context of financial and resource restrictions, public opinion as well as technical issues. The outcomes provide planners, elected decision makers and sustainable transport advocates with insights into how to more effectively develop and implement sustainable transport policies. The following sections define the scope of the investigation.

1.2.1. A focus on process rather than outcomes

The thesis focuses on transport governance, and in so doing on pathways to policy change towards more sustainable urban transport development. It focuses on the policy *process* rather than on particular *outcomes* because it assumes that the major barrier to policy change is the presence of conflict among stakeholder groups that wield asymmetric influence on policy development in a wicked problem. This argument has been introduced in the previous section and is further developed in Chapter 2.

The focus on governance does not imply, however, that this research argues that other areas of sustainable transport research are less important. Good governance is powerless without good policies and good tools, methods and institutions. The aim of this research is to contribute governance-related insights to the bigger puzzle of sustainable transport development, while expecting other research to keep contributing complementary outcome-oriented findings.

Government is also the only player in the urban system that has the resources, and at the same time the responsibility, to address wicked problems in an integrated way and to counterbalance dominant influences (see Section 2.1.1).

1.2.2. The urban system as analytical boundary

The analytical boundary of this thesis is at the city level. This is because urban transport systems are to a large extent developed and governed by cities individually, so that cities within the same state can have different transport systems and problems. In addition, it has been argued that cities are *functional* economic units while nations are not (Jacobs 1984); that is, socio-economic activity takes material shape in cities rather than at the abstract level of the nation. Vickers (2010, p. 28) comments that a city, rather than its roads, is the smallest system worth studying when addressing problems such as congestion.

From this systemic perspective (which is further explained in Section 1.3.1) the scope of the thesis takes into account all transport modes as well as all players in the urban system that have a stake in the outcomes of transport planning and decision-making, not only individual modes or stakeholder groups. They are introduced in Section 2.1.1.

1.2.3. A pragmatic focus on change creation

The thesis has a pragmatic focus on creating change rather than a normative perspective. It aims to develop recommendations that take into account the complexities governments face today, in particular the dynamics of interest groups in the transport policy process. A normative perspective would look at how the process should ideally operate, for example, by empowering citizens rather than interest groups in the policy process. This thesis, on the other hand, accepts interest group activity as an essential part of contemporary pluralist societies and therefore as ‘unavoidable as political facts’ (Cohen & Rogers 1995, p. 26). From that perspective it focuses on identifying pragmatic pathways to overcome asymmetries of dominant influences in the transport policy process.

A thesis studying interest group activity in the policy process might be expected to enter into a discussion of political ideology. However, again from a pragmatic perspective, I decided not to do so because I did not feel such an analysis would be constructive in practice. As the case study in this research will show (in Chapter 5), different groups and individuals who identify with different political ideologies can even end up agreeing on a way forward and reach consensus.

There is a tension between the complexity of the field of study and the aim to contribute to practically relevant outcomes. To account for this the thesis is grounded in an empirical case study that analyses success factors in one successful case (see Chapters 3 and 5) — the findings and their applicability to the wider context of urban transport development are then discussed in Chapters 6 to 9.

Based on the pragmatic perspective of this thesis the subject of inquiry is mainly limited to the interactions of interest groups in the transport policy process. This conceptually excludes so-called ‘weak’ interests that often do not have the resources to organise and articulate their interests in the transport-political arena but are nonetheless affected by policy outcomes, for example, poor, old or homeless citizens (Von Winter & Willems 2000). The implications that policies have for ‘weak’ interests are taken into account in the discussion of the empirical case study findings: Section 7.2 compares the case study conclusions with conventional structures of planning and decision making, while Section 8.2.2 compares the case study findings with procedures of lay citizen participation in the policy process.

1.3. A transdisciplinary and systemic research framework

Having established the problem statement, and the aim and the scope of the thesis this section introduces the overarching research framework. Section 1.3.1 describes how a systemic view is able to conceptually capture all elements of the wicked problem and Section 1.3.2 introduces transdisciplinarity as a way to investigate ‘real-world’ problems through multiple lenses.

1.3.1. A systemic view of the urban transport function

In Section 1.1.1 I introduced different elements that are relevant at the interface of the urban transport function and sustainable development (and that are illustrated in Figure 2 in Section 2.1): the physical transport infrastructure system; the environment that provides resources and digests emissions; the spatial structure of a city that provides space for transport and other functions that contribute to urban liveability; and the economic system, whose exchanges with individuals in society materialise in traffic activity. In Sections 1.1.2 and 1.1.3 I added to this complexity by introducing the human

activity system — that is, the government-based stakeholder groups and non-government stakeholder groups which have conflicting values and competing interests.

These elements of the wicked problem are all relevant for investigating how urban transport systems can be made more sustainable. In that regard Ackoff (1979) emphasises that wicked problems, which he calls *messes*, originate not from isolated system components but from their interrelated effects. They can therefore not be solved from a perspective that reduces a problem into its elements and attempts to optimise these. Management on a holistic level is required. For example, a policy proposal for active transport enhancement that does not address the relevance of the transport function to the economy is likely to meet strong opposition. The inquiry in this thesis therefore requires an investigative perspective that enables a wicked problem to be dealt with without having to conceptually exclude some of its elements. Systems theory provides such a perspective.

Meadows (2008, p. 11) describes a system as ‘an interconnected set of elements that is coherently organized in a way that achieves something’. This definition implies that systems consist of three things: system elements, their interconnections, and a system function or purpose (p. 11). For example, the purpose of the urban transport system is to provide access to goods, services and destinations for individuals and businesses. The elements of this system consist of: the transport infrastructure (roads, cycleways, rails); vehicles (trucks, cars, trains, bicycles); the individuals and businesses who use this infrastructure and, critically, their motives for doing so; and finally, the resources (fuel, money, energy) needed to enable this travel. The infrastructure elements are interconnected through the individuals and businesses that use them. If an element was removed, the system could not perform its function — a system is more than the sum of its parts. Another important characteristic of systems is that the structure of the system is the source of system behaviour. In other words, system behaviour is an emergent property of the system structure and reveals itself over time (Meadows 2008, pp. 11-34).

Systems theory has evolved over a number of decades that have produced valuable theories, tools and methods. Ison (2008, p. 144) provides a comprehensive overview of the evolution of systems theory and its various streams. This thesis, however, does not adopt a particular systems framework or approach but rather uses systems thinking as an overarching lens to structure the inquiry into the wicked problem of sustainable

transport development. Still, it makes use of particular tools or methods where they help the investigation. For example, Section 2.1 develops a systems-based model of the urban transport function based on a nested model of sustainability, Section 2.1.1 uses *soft systems methodology* to illustrate the range of stakeholders and their roles, values and interests and Section 2.2 uses a *critical systems heuristics* to explain implications of value ambiguity in the policy process.

1.3.2. A transdisciplinary approach to research

Section 1.2.3 highlighted a special characteristic of this research project: its focus on creating change in a real-world problem situation rather than on filling a gap in theory or providing ‘answers to conceptual puzzles’ (Wickson, Carew & Russell 2006, p. 1049). Transdisciplinarity is increasingly advocated as an appropriate way to investigate change creation with wicked problems such as sustainable urban development (see for example Max-Neef 2005; Wickson, Carew & Russell 2006), as ‘none of them can be adequately tackled from the sphere of specific individual disciplines’ (Max-Neef 2005, p. 5). Carew and Wickson (2010, p. 1147) suggest that for transdisciplinarity the ‘problems in question are not theoretical and abstracted, but exist within rich, contested real-world contexts’, and that they ‘tend to be those that are perceived or nominated by society as pressing and urgently in need of resolution’.

Rather than adopt the perspective of one discipline only, transdisciplinary (TD) research allows the integration of the aspects of the problem situation that are attributed to different disciplines. A disciplinary perspective, or ‘thought-style’, is ‘characterized by a specific way of looking at the world and distinguishing relevant and irrelevant aspects ... this includes the state of knowledge, methods, theories, quality criteria and open questions’ (Pohl 2011, p. 621). In the case of this research the subject matter sits in what would conventionally be viewed as political science, but because of the pragmatic focus on achieving sustainable transport outcomes, the methodological approach and the direction of the analysis do not quite fit with political science conventions.

Max-Neef (2005, p. 15) suggests transdisciplinarity, rather than being a new discipline, is ‘a different manner of seeing the world, more systemic and more holistic’. The role of the TD researcher herein is to facilitate an intellectual exchange between different

thought-styles, or ‘the context specific negotiation of knowledge’ (Wickson, Carew & Russell 2006, p. 1047).

To clarify, this thesis is transdisciplinary in the way it conceptualises the problem situation (see Chapter 2) rather than in the research methodology it applies. It is therefore different from TD research projects that are often described as building on an evolving methodology that integrates methods from epistemologically different traditions of knowledge generation, and which co-generate knowledge with the relevant stakeholders (see for example Pohl 2011; Wickson, Carew & Russell 2006; Zierhofer & Burger 2007).

1.4. Structure of the thesis

The structure of this thesis is evolutionary in that the findings and conclusions of each chapter establish the logical basis for the steps taken in the subsequent chapters, thus reflecting an exploratory research journey. I have adopted this format because the findings of the empirical case study have strongly shifted my original ideas and assumptions on the most effective pathway to achieving sustainable transport outcomes. I have changed from an adversarial stance to a collaborative one (as I describe in Sections 5.1.3 and 5.5). Through this shift I got immersed in a new field of theory that I had to relate to my original assumptions. This process enabled me to draw conclusions at the interface of fundamentally different approaches to stakeholder interaction in the policy process — conclusions that would not have been as relevant to practice had I used a less flexible format. Figure 1 illustrates the structure of this thesis.

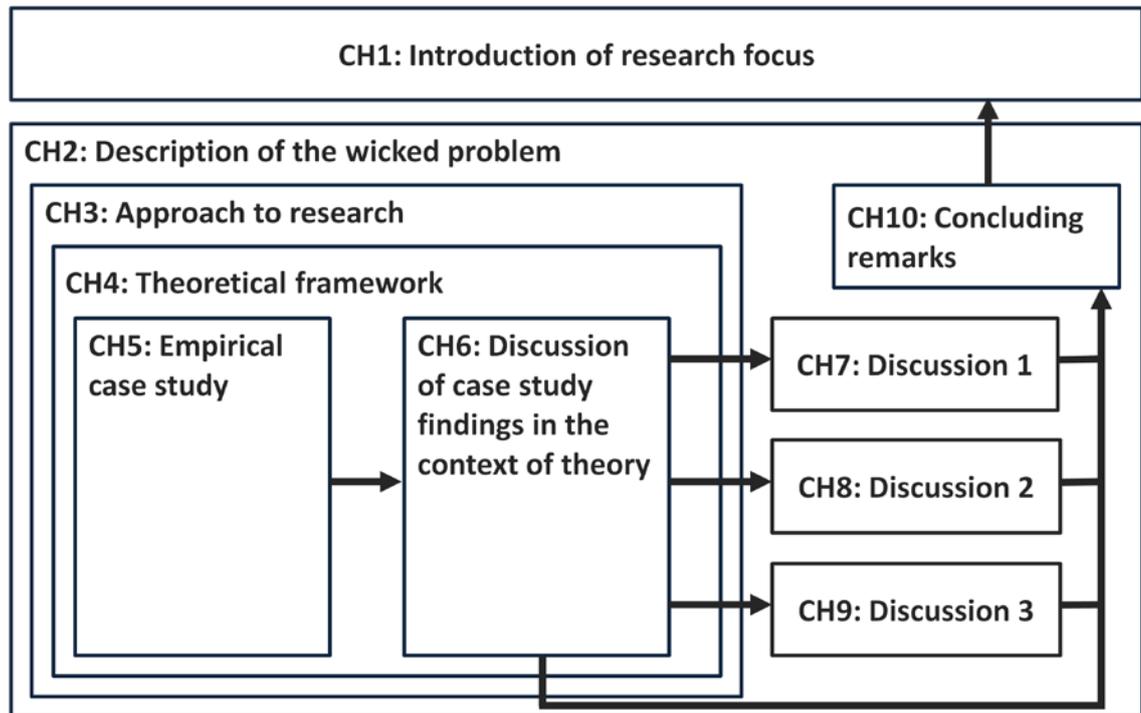


Figure 1: Structure of the thesis
(Source: created for this research)

Chapter 2 introduces the wicked problem of sustainable urban transport development in detail. This serves to set the scene for the research, to highlight the gaps in existing knowledge on sustainable transport governance and to introduce the main research question. Chapter 3 describes the approach to research I have chosen to develop answers to this research question. Chapter 4 establishes a theoretical framework to guide the case study research. This framework serves to develop a better understanding of different mechanisms of policy change and barriers to sustainable transport outcomes therein.

Chapter 5 follows this framework and, contrary to the original expectations of an adversarial policy process, reveals a process of collaborative stakeholder dialogue (CSD) as a successful pathway towards more sustainable transport development. In CSD, stakeholders representing the diversity of interdependent interests in a wicked problem jointly explore the various aspects of a problem situation in a collaborative forum, in order to develop mutual understanding and to identify the common ground they share as a basis for consensus building. A CSD typically has no formal influence on the policy process. Rather, planners and elected decision makers take part in the deliberations and so develop a better understanding of the problems and the issues at stake.

Chapter 6 discusses the case study findings in the context of the theoretical framework and existing research. It suggests that existing definitions of sustainable transport development are predominantly focused on the outcomes of the policy process and so ignore the connection between governance processes and positive policy outcomes that had been identified in the empirical case study. To account for this it proposes an alternative process- and systems-based definition of sustainable transport development.

Chapter 7 comparatively assesses CSD against conventional adversarial processes of transport planning and decision making in order to demonstrate the practical and theoretical advantages of CSD over adversarial processes in achieving sustainable transport outcomes. It concludes by proposing collaborative stakeholder dialogue as a powerful governance tool to better balance competing and conflicting interests in the urban transport policy process and so achieve a better integration of environmental, social and economic considerations in policy development. It also shows that CSD is most appropriate in problem situations resembling a ‘hurting stalemate’, which is the case for many wicked transport policy issues today.

Chapter 8 addresses concerns as to whether ‘elite’ forums such as CSD may crowd out the interests of lay citizens as well as the interests of weaker stakeholders within the forum. In doing so it introduces a framework that enables the comparison of interest group and lay citizen participatory procedures against a set of social goals. The chapter concludes that these two types of public engagement do not have to be mutually exclusive, and that they can coexist and even be mutually supportive.

Chapter 9 addresses the transferability of CSD to other political contexts and cultures by discussing the case study findings with relevant experts in Sydney. It develops a framework of contextual preconditions and stakeholder incentives that need to be present in order for a CSD to be successfully implemented. It concludes that that it is not yet clear whether a CSD could be successfully implemented in Sydney.

Chapter 10 makes concluding remarks by revisiting the aim of the study and the main research question, and by discussing the relevance or applicability of these findings to other areas of public services provision.

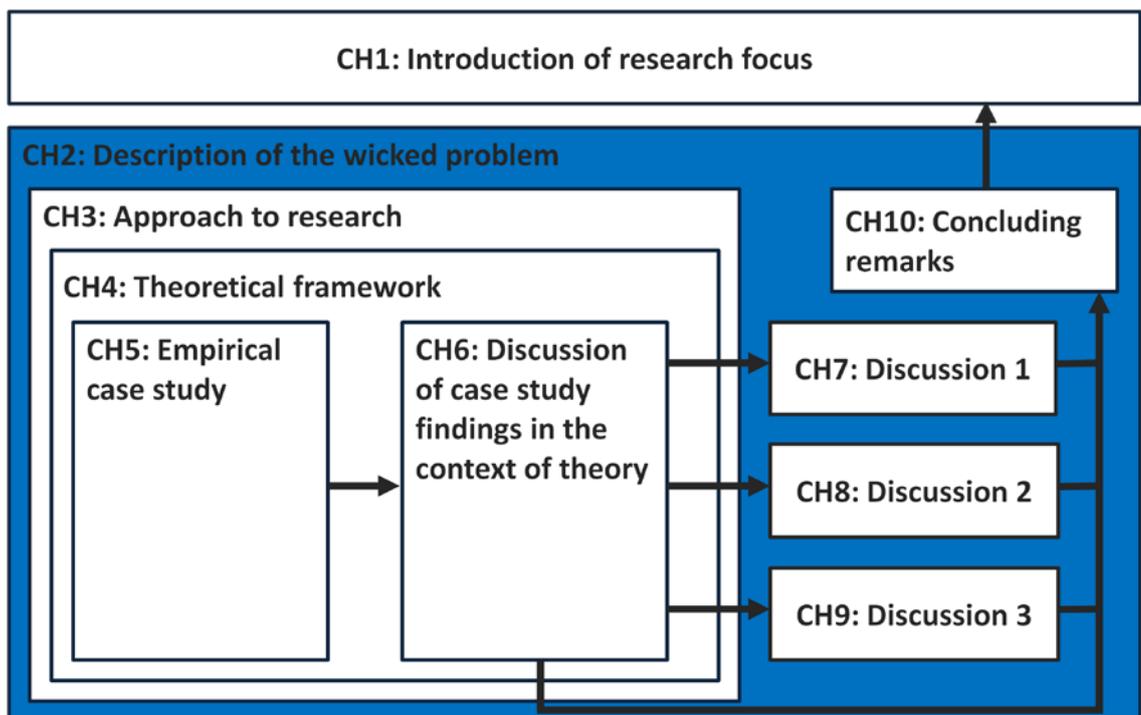
1.5. Significance of the research for elected government, practitioners and sustainable transport advocates

This thesis develops answers to the question of what types of communication and resulting relationships between different stakeholders in the policy process can contribute to a shift away from the traditional orientation of transport policy development towards facilitating motorised road transport to a broader focus that better integrates environmental, social and economic considerations. The unique strength of the thesis is that it employs a systems perspective that integrates aspects of political science and urban planning in a transdisciplinary framework. This integration makes it possible to systematically assess knowledge gaps at the interface of material infrastructure systems and value-based dynamics of human activity systems, and so produce insights that would not be possible from a discipline-based perspective.

The approach is also unique in its pragmatic focus on change creation that includes interest groups in the study of policy change. This political dimension of policy development and implementation is often neglected in sustainable transport research. It is a dimension which is especially relevant to wicked problems. While some research projects have investigated the role of interest groups in transport policy change over time (Bratzel 1999b; Dudley & Richardson 2000; Townsend 2003), these studies are largely descriptive of past events: Bratzel investigates preconditions, contents, and impacts of APT policies in urban transport development and the activities of transport stakeholders as part of that process. Dudley and Richardson investigate British transport policy change between 1945 and 1999 and the role of interest group activity therein. Townsend investigates the stakeholders and processes which shape urban transport in Southeast Asian cities. By contrast, this thesis develops strategic recommendations about how to pragmatically create change in a wicked problem situation that is challenged by the ambiguity and the asymmetric influence of values and interests in urban transport policy making. The insights from this study advance the knowledge about preconditions and pathways towards more sustainable, liveable and low-carbon urban transport futures.

CHAPTER 2.

THE HUMAN ACTIVITY SYSTEM IN THE TRANSPORT POLICY ARENA



To lay the conceptual foundations for the thesis investigations this chapter introduces the stakeholder groups in the transport policy process and their transport-related values and interests — the human activity system. In doing so it illustrates how conventional approaches to promote sustainable transport development are challenged by the dynamics of stakeholder conflict in the policy process. This is the gap in knowledge that this research addresses.

The chapter starts by embedding the human activity system in a systems-based model of the urban transport function (Section 2.1). It then describes how irresolvable conflicts between the values and interests of stakeholders, combined with asymmetries in the resources different stakeholder groups can use to influence transport development, create challenges for governments in their efforts to implement sustainable transport policies (Section 2.2). This is followed by a historical overview of how transport planning practice and research has responded to problems arising in the physical transport system, captured in three planning paradigms: *Predict and Provide*, *Predict and Prevent* and the normative ideal, *Sustainable Mobility* (Section 2.3). Section 2.4 concludes the chapter by discussing the shortcomings which hinder the efforts of current transport governance approaches to appropriately deal with existing challenges and successfully shift to *Sustainable Mobility*. This section does so by introducing the main research question: *What are the critical success factors needed to counterbalance the asymmetric influence of motorised road transport (MRT) interests and active and public transport (APT) interests in the urban transport policy process, and to achieve a broader focus in urban development that better integrates environmental, social and economic considerations?*

2.1. The human activity system embedded and interrelated

Section 1.3.1 established that describing wicked problems in a systemic way helps to make more transparent their essential elements and so facilitate analysis into ways to address them. This section conceptualises the urban transport function and the role of its human activity system in a systems-based model.

The ideas and arguments in this section were initially developed in Paper 1 and Paper 2 (see List of Publications).

Checkland (1972, p. 53) developed a classification of different types of systems that are both embedded and interconnected: natural systems, designed physical systems, designed abstract systems and human activity systems. This classification is helpful in that it can be adopted to show the interrelatedness of physical and human activity systems in the urban transport system, as illustrated in Figure 2 below:

- The natural system refers to the environment that provides resources and space and digests emissions and waste.
- Designed physical systems are transport systems and the cities they operate in. They follow physical laws and can be investigated by conventional scientific methods. For example, changes in travel behavior that emerge from a change in public transport service provision are to a certain extent predictable.
- A designed abstract system is the economy that materialises its exchanges in a physical system.
- The human activity system in the context of transport policy encompasses three groups of people: first, individuals in their roles as households in the economic system. In that role the individual travel decisions of households are considered as emergent behaviours caused by the structure of the transport system. Second, individuals or groups in society that have an interest in how they want government to intervene in the physical system to better align the emergent system behaviour with their values. And third, government, consisting of elected decision makers and planning professionals. The second and the third groups are relevant in the context of this study as they make goal-oriented or purposeful decisions about how to change the physical system. These stakeholders are introduced in Section 2.1.1.

To adapt Checkland's model to the purposes of this thesis I made several modifications in Figure 2. First, I overlaid Checkland's model with the traditional conception of a nested model of sustainability. This sustainability model considers the economy as a subsystem of society, and society as a sub-system of the environment (Giddings, Hopwood & O'Brien 2002, p. 192). It is nested because people and society are dependent on the environment for resources, food, shelter and even the air we breathe. Importantly, the environment can exist without people, but people cannot exist without the environment (Lovelock 2000). Society, theoretically, can exist without the economy,

but there can be no economy without society (Giddings, Hopwood & O'Brien 2002, p. 192).

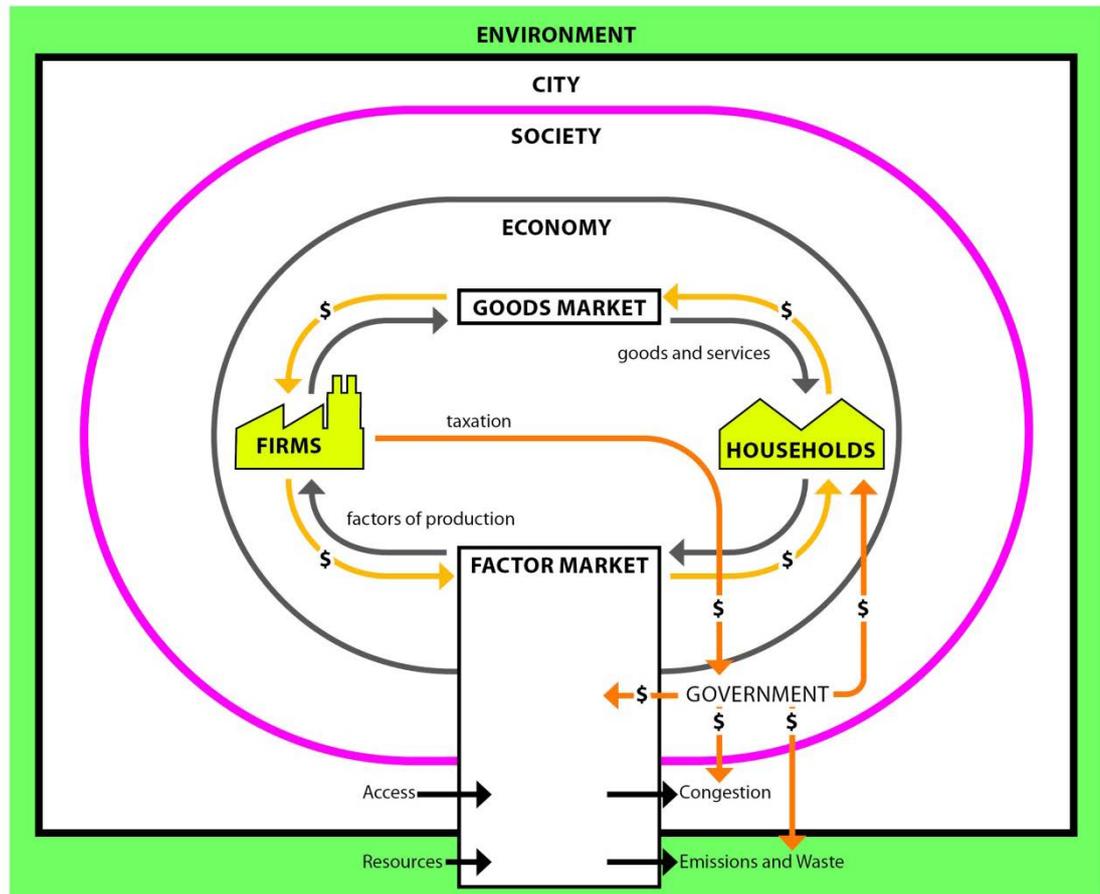


Figure 2: The urban transport function as embedded in a systems-based conception of sustainability (Source: created for this research based on Checkland 1972; Giddings, Hopwood & O'Brien 2002; Kroon 2007)

To make more transparent the major role transport plays within the socioeconomic dynamics of a city, the sustainability model is augmented with the macroeconomic conception of the Circular Flow of Income and Expenditure (CFIE). The CFIE is a conceptual configuration used to organise and simplify the complex array of economic exchanges that constitute the structure of a macro economy (Kroon 2007, pp. 33-56). In the CFIE firms and households interact in two types of markets: the goods market and the factor market. In the goods market goods and services are exchanged for money. The factor market provides the elements that are necessary to produce these goods and services. The factor market involves knowledge and labour provided by households and the materials for production. As most of these interactions require transportation, transport systems are an essential part of factor markets.

Finally, to account for the spatial limitations of urban transport systems the sustainability model is further augmented by introducing the boundary of a city as enclosing a 'physical-social system' (Vickers 2010).

In summary the model in Figure 2 synthesises the basic assumptions this thesis makes about the fundamental relationships between natural systems, designed physical systems, designed abstract systems and human activity systems in the context of urban transport development. The following section outlines in detail the different stakeholder groups in the human activity system. This is relevant because, as Section 2.2 argues, the dynamics between these stakeholder groups are assumed to create major barriers to the implementation of sustainable transport policies.

2.1.1. Stakeholders in the human activity system of transport policy making

This section describes the spectrum of government and non-government stakeholders in the transport policy arena. Both government and non-government stakeholders are relevant for the study of policy change because, as discussed in Section 1.1.3, non-government interest groups have an informal influence on government-based planning and decision making. Healey (2010, p. 52) refers to these linkages between public officials, professionals and key lobby groups as forming different policy communities that tend to shape political programs.

A useful tool to map the different stakeholders and their roles and goals is provided by Checkland and Scholes (1999) within the framework of *soft systems methodology* (SSM). SSM is an organised approach to tackling real-world problem situations. Its aim is to help organise the investigation of such problem situations so that strategies for improvement can be devised. Its major premise is that individual stakeholders in a problem situation have different worldviews and, based on these, develop different ideas about the definition of the problem and about purposeful interventions to transform the situation. SSM offers a tool to organise these different perspectives and stakeholders: purposeful activity modelling, or CATWOE. CATWOE is a mnemonic that stands for Customers, Actors, Transformations, Worldviews, Owners and Environment of a system.

In the transport policy system context, the owners are elected decision makers, and the actors are employed planners and technicians. The key distinction is that owners give the final yes or no to decisions, whereas actors are responsible for developing and implementing proposals. This distinction is necessary when trying to discern the power structures within organisations. The community, or customers, are the individuals and groups receiving the service or item that the system produces, but also the victims of negative effects. Within this group citizens have the power to get rid of decision makers through elections, while they cannot remove public servants from their positions. Environment stands for the constraints that individuals or groups take as given when proposing a policy solution or transformation, for example, political, economic, legal, ecological, social or institutional framework conditions.

The following sections describe system customers (citizens and interest groups), system actors and system owners in the context of the transport policy process and highlight the environment or constraints that limit and enable their actions. It is important to point out here that individuals can hold multiple roles; for example, elected decision makers and planners are at the same time citizens or can be involved in interests groups. Section 2.2 then describes the spectrum of values and worldviews, and the resulting transformations that different stakeholder groups propose.

Households and firms ('system customers')

Citizens as households are, together with firms, the consumers of the transport system. In that role their individual travel decisions are part of the emergent system behaviour (see above). However, if these system customers consider their transport-related interests to be at stake they can engage in purposeful activities to influence policy development, typically by forming or joining interest groups (see below).

Interest groups ('system customers')

This thesis builds on a broad definition of interest groups based on Thomas (2004), which includes informal, spontaneous groups that form, for example, to protest against unpopular policies through to formal organisational and institutional interest groups:

An interest group is an association of individuals or organizations or a public or private institution that, on the basis of one or more shared concerns, attempts to influence public policy in its favour (Thomas 2004, p. 4, emphasis in original).

In the transport policy arena these include: business interest groups, for example, car manufacturers or groups that advocate for the interests of local businesses; user groups, for example, car or bicycle user groups; public interest groups, for example, groups that promote urban liveability and environmental protection; private and public institutional groups, for example think tanks, universities or unions; and non-associational groups and interests, for example, spontaneous protest movements (classification based on Thomas 2010). Most of these groups are not formed primarily for political purposes, however, they become politically active when they consider their values and interests to be at stake (Thomas 2010).

To assist the purposes of the research I set up a dichotomy between these interest groups according to the type of transport development they prioritise: motorised road transport, or MRT interests and stakeholders, and active and public transport, or APT interests and stakeholders. I assume that MRT and APT interests are linked to particular transport-related value priorities ranging on a spectrum from growth and individual freedom to environmental protection and social equity. This value spectrum is introduced and discussed in Section 2.2. The dichotomy makes it possible to have a better grasp of the complexity of interest groups and their objectives and strategic activities in real-world urban transport policy settings. It does not claim to represent accurately a situation which in reality is far more multifaceted. For example, I recognise that MRT interest groups often also support public transport solutions if they perceive them to contribute to economic development. This dichotomy is thus a pragmatic tool to facilitate the analysis which has also been used by other researchers, for example, Bratzel (1999b, p. 22) in his study of the ‘conditions of success in sustainable urban transport policy’, distinguishes between environment- and growth- or car-oriented actors. Coughlin (1994, p. 139) similarly describes transport policy as a product of two competing value systems or cultural views, one ‘green’ and one ‘growth-biased’ or industrial. He suggests that each of these systems attempt to ‘manage automobility to further its vision of how we ought to live, manage our resources, and use technology’ (Coughlin 1994, p. 139).

Interest group advocacy strategies vary widely and ‘attempt ... to bring pressure to bear on policy makers to gain policy outcomes in their favour’ (Thomas 2010, p. 1). The related activities are often referred to as lobbying, which can build on direct and indirect approaches. Interest group representatives using a direct approach try to gain access to decision makers, build relationships and influence their attitudes so that they become

conducive to their cause on a long-term basis. They do this, for example, by providing technical or political information (Thomas 2004, p. 6). Indirect approaches aim to influence the public discourse — Hendriks (2002, p. 9) describes discourses as story lines that build upon evidence, values, myths and opinions and represent ‘...a shared means of making sense of the world embedded in language’ with regards to a particular problem situation. Attempts by interest groups to influence this discourse take place in the public sphere, for example through campaigns in the media or through the publishing of research results that support or discredit a particular policy direction, or through legal action. Hall succinctly describes this informal influence of interest groups on policy making:

Organized interests, political parties, and policy experts do not simply ‘exert power’; they acquire power in part by trying to influence the political discourse of their day. To the degree they are able to do so, they may have a major impact on policy without necessarily acquiring the formal trappings of influence (Hall 1993, p. 290).

In that regard Hall (1993, p. 288) describes interest groups as ‘transmission belts’ between state and society, and points to the relevance of the media as a ‘mirror of public opinion and a magnifying glass for the issues that it takes up’. Schattschneider argues that this ‘socialisation of conflict’ is the decisive issue for political decision making:

The central political fact in a free society is the tremendous contagiousness of conflict. Every fight consists of two parts: (1) the few individuals who are engaged at the center and (2) the audience that is irresistibly attracted to the scene. The spectators are as much of the overall situation as are the overt combatants. The spectators are an integral part of the situation, for, as likely as not, the *audience* determines the outcome of the fight. The crowd is loaded with portentousness because it is apt to be a hundred times as large as the fighting minority, and the relations of the audience and the combatants are highly unstable ... the audience is overwhelming; it is never really neutral; the excitement of the conflict communicates itself to the crowd. *This is the basic pattern of all politics* ... The outcome of every conflict is determined by the extent to which the audience becomes involved in it. That is, the outcome of all conflict is determined by the scope of its contagion (Schattschneider 1960, p. 2, emphasis in original).

Pressure, or ‘an advantage in the fight to be heard by policy makers’ (Thomas 2010, p. 6), can also be built through the resource advantages some interest groups have, for example, the power of businesses to fund political parties or to make decisions on employment in a local area.

There is often an uneven distribution of resources which can influence policy making between MRT interests and ‘weaker’ APT interests; it is an asymmetry that can create barriers to the implementation of policies that support active and public transport or restrict motorised road transport. This asymmetry is discussed further in Section 2.2.2.

Elected decision makers (‘system owners’)

Decision makers are elected by the public and are therefore accountable to the needs and values of the community. Wachs (2004, p. 142) summarises the purpose of transport policy as being ‘to provide society with the benefits of transportation services while minimising their costs as much as possible’. Achieving a socially fair balance between the benefits and costs of a policy proposal requires consideration of the effectiveness, efficiency, legitimacy and social equity of the policy and the trade-offs between these factors (Renn 2008, p. 286; Wachs 2004, p. 142).

Effectiveness means that policies need to contribute to delivering transport services. Efficiency refers to the costs of developing and implementing a policy in relation to the benefits it delivers. Legitimacy refers to the subjective acceptance of a policy proposal by the community. Equity refers to the distribution of the costs and benefits of a prospective policy across the community. Section 7.1 discusses these elements further and uses them to develop a sustainable transport governance framework that makes it possible to compare and contrast adversarial and collaborative approaches to stakeholder interaction.

Decision making around prospective policies is complex because the costs, benefits and aspects of equity and legitimacy of a prospective policy are evaluated differently by the various stakeholder groups, which creates conflict. Wachs highlights the political nature of transport policy making:

Answers to these questions [of what should be done in any particular situation] always depend on how different interests perceive the effectiveness, efficiency ... and equity associated with the issues these questions raise. That means that such questions are inherently political. Indeed, transportation decision making is always intensely political (Wachs 2004, pp. 142-3).

As discussed in Section 1.1.3, this conflict is an essential part of pluralist democracies. However, in wicked problems it can be problematic when the influence of stakeholder

groups is consistently asymmetric, because this often means that negative impacts are distributed on some population groups while other groups consistently benefit.

Planners ('system actors')

The task of urban transport planners is to develop policy solutions that address pressing or future community problems and, if the decision makers accept them, it is also their job to implement them. Planners are bound by instructions coming from elected decision makers. The perspective on planners as mere technicians, however, has often been contested, and many commentators argue that the role of planners is to counterbalance power inequalities. In that regard Davidoff proposes an approach of 'advocacy planning':

Moreover, planners should be able to engage in the political process as advocates of the interests both of government and of such other groups, organizations, or individuals who are concerned with proposing policies for the future development of the community. ... The right course of action is always a matter of choice, never of fact. ... The welfare of all and the welfare of minorities are both deserving of support; planning must be so structured and so practiced as to account for this unavoidable bifurcation of the public interest (Davidoff 1965, pp. 332-3).

Forester (1989, pp. 6-7) highlights that 'planning in the face of power' requires planners to have political skills: 'to be rational in practice, planners must be able to think and act politically — not to campaign for candidates but to anticipate and reshape relations of power and powerlessness'. Rittel and Webber (1973, p. 169) similarly emphasise that 'the expert is also the player in a political game, seeking to promote his private vision of goodness over others'.

Planning departments typically consist of different specialist departments that provide their expert input into policy development, and planners also often cooperate with academics or engineering consultancies (Scheiner 2003). This integration can lead to internal conflicts of interests due to 'competing agendas and the protection of empires in local authorities between the different teams' (Hull 2008, p. 102), for example, between transport, land use and environmental administration. Many recent commentators emphasise that the integration of contradictory interests in the planning process, and thus a transcendence of institutional silos, is a crucial step towards more sustainable policy outcomes (Bertolini, Le Clercq & Kapoen 2005; Jones & Lucas 2000; Lautso,

Spiekermann & Wegener 2004; Legacy, Curtis & Sturup 2012; Marshall & Banister 2007; Potter & Skinner 2000; Stead & Geerlings 2005).

2.2. Values, worldviews, interests and influence

This section clarifies key assumptions of this thesis regarding stakeholder values, worldviews, interests and influence. The previous section introduced the stakeholders in the human activity system of transport policy making as part of a CATWOE analysis. These stakeholders include: citizens and interest groups ('system customers'), elected decision makers ('system owners'), planners ('system actors') and the environments in which they operate. Section 2.2.1 completes the analysis by describing the spectrum of stakeholder values, worldviews and interests in the transport policy arena, and the different interventions or transformations these stakeholders advocate. In Section 2.2.2 I then argue that differences in the transport-related stakeholder value priorities are the main source of conflict in the transport policy arena, and that asymmetries in the level of influence that MRT and APT stakeholders have on policy development can act as a barrier to more sustainable transport development.

2.2.1. Ambiguity of values, worldviews and interests in the transport policy arena

Values relate to the deeply held beliefs of an individual or group. They are based on education, religion, or the lived experiences of individuals and are highly resistant to change. As already indicated in the previous section, the predominant values relevant to transport development have been described as being along a spectrum that ranges from prioritising material growth and individual freedom, often associated with a preference for motorised private transport and to some extent public transport; through to environmental and social values that are more closely linked to a preference for public and active transport modes (see Figure 4 below).

These value priorities act as 'perceptual filters' (Sabatier & Weible 2007, p. 194) that influence how individuals or organisations interpret the functioning of the urban transport system as well as changes to the system — Renn (2008, p. 290) refers to the phenomenon of individuals perceiving the same material environment in different ways as *interpretive ambiguity*. In this thesis I refer to these value-filtered perspectives as

worldviews. These worldviews influence how stakeholders develop ideas about the sources of urban transport problems and their ‘critical perceptions of causal relationships’ (Sabatier & Zafonte 2001, p. 11565). They typically block out dissonant information and reaffirm conforming information (Sabatier & Weible 2007, p. 194).

Based on these perceptual filters stakeholders develop normative ideas on how government should intervene in the designed physical system so as to better align it with their value systems. The resulting responses of different stakeholder groups to a particular problem situation often vary widely, which is also referred to as *normative ambiguity* (Renn 2008, p. 290). For example, it is contested whether congestion problems should be approached by enhancing road capacities for motorised private transport, or by restricting individual car use and providing attractive alternative public and active transport options.

The difference between values and interests can be decisive for the reaction of stakeholder groups to particular policy proposals. Forester highlights this difference as follows:

when we lose on our interests, we often ask if gaining on some other interests can compensate us. But when we lose cherished values, we feel morally compromised, betrayed, damaged ... or sold out (Forester 1999, p. 468).

Mouffe refers to such ‘various affective forces which are at the origin of collective forms of identifications’ as ‘passions’, and points out that

Current democratic political theory is unable to acknowledge the role of “passions” as one of the main moving forces in the field of politics and finds itself disarmed when faced with its diverse manifestations (Mouffe 2005, p. 24).

Addressing passions, however, is often used by interest groups as a strategy to mobilise members of the public and so broaden the scope of a conflict (Schattschneider 1960, p. 74). This ‘socialisation of conflict’ has already been discussed in the previous chapter in the context of interest group strategies.

The relationship between values, interests and framework conditions with regard to transport development and importantly, to how these can change, is best illustrated

using the a tool provided by *Critical Systems Heuristics* (CSH): the ‘eternal triangle’ of boundary judgments, facts, and values (Ulrich 2005, p. 6) (see Figure 3).

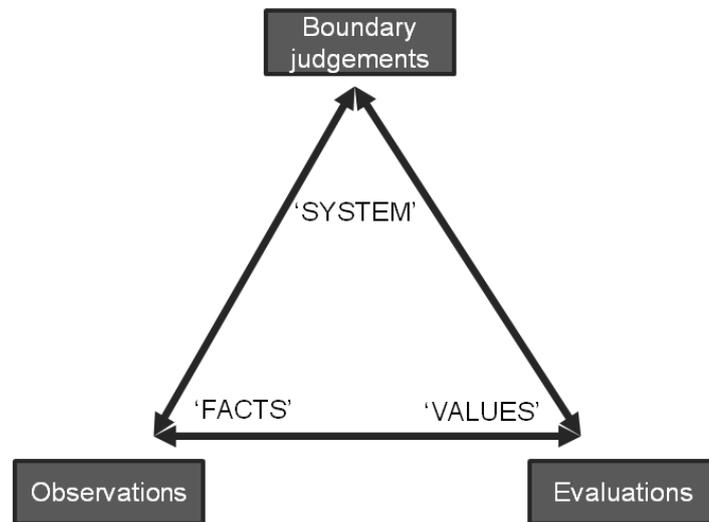


Figure 3: The ‘eternal triangle’ of boundary judgments, facts, and values
(Source: redrawn from Ulrich 2005, p. 6)

Ulrich argues that every claim to knowledge is unavoidably selective based on the boundary judgments, facts and values an individual applies — hence the eternal triangle. Boundary judgments ‘determine which empirical observations and value considerations count as relevant and which others are left out or considered less important’ (Ulrich 2005, p. 2). He suggests that we consider each aspect of the triangle in the light of the other two corners. For example, if we expand the boundaries of our reference system new facts and values become relevant. Learning and change take place if these new facts and values are incorporated in the way we interpret our environment and develop normative and practical ideas or interests on how to intervene in it. Hall similarly defines a process he calls social learning:

Learning is conventionally said to occur when individuals assimilate new information, including that based on past experience, and apply it to their subsequent actions. Therefore, we can define social learning as a deliberate attempt to adjust the goals or techniques of policy in response to past experience and new information (Hall 1993, p. 278).

The role of learning is further discussed in Section 4.3.2 in the context of different pathways to policy change.

2.2.2. The influence of value coalitions and their resources on policy development

The investigations in this thesis draw on the formulation known as the Advocacy Coalition Framework (ACF) (Sabatier & Jenkins-Smith 1993). Chapter 4 describes the ACF and its relevance to this study in full detail, however, it will be useful to mention some aspects here as they help to illustrate barriers to transport policy change.

The ACF assumes that individuals or groups with shared value priorities on transport development associate in advocacy coalitions:

An advocacy coalition consists of interest group leaders, legislators, agency officials, researchers, and even journalists who share a set of basic beliefs (policy goals plus critical perceptions of causal relationships) and engage in some degree of coordinated behavior in an effort to make governmental policy more consistent with those beliefs (Sabatier & Zafonte 2001, p. 11565).

Advocacy coalitions sit along the spectrum of transport-related values (introduced in the previous section) according to their value priorities (see Figure 4). They invest their resources in influencing policy development and decision making, so as to transform their values into implemented policies. The ACF assumes that the advocacy coalitions or the group of advocacy coalitions with the most resources has the strongest influence on policy outcomes (Sabatier & Jenkins-Smith 1993).



Figure 4: The relative weight of advocacy coalition (AC) value priorities influences the direction of policy development
(Source: created for this research)

A basic assumption of this thesis is that in many cities that are considered 'unsustainable' in transport terms, the value priorities of the dominant advocacy coalition(s) are too far on the MRT side. Therefore, the thesis defines progress towards sustainable transport development as a shift away from the traditional priority of transport policy development to facilitate material growth and individual freedom to a

broader focus that better integrates environmental, social and economic considerations. This should not be taken to imply, however, that a shift to the far APT side would automatically guarantee more sustainable development.

Achieving this shift is difficult because the status quo of policy development is always the result of previous power struggles; that is, current structures are in place because they represent the value priorities of the advocacy coalition(s) that emerged dominant in previous stakeholder conflicts. Hall (1993, p. 277) for example comments that ‘the interests and ideals that policymakers pursue at any moment in time are shaped by “policy legacies” or “meaningful reactions to previous policies”’. Mouffe observes that this political dimension in which policy making takes place is often ignored, and politics is often reduced ‘to a set of supposedly technical moves and neutral procedures’:

Society is always politically instituted and never forgets that the terrain in which hegemonic interventions take place is always the outcome of previous hegemonic practices and that it is never a neutral one (Mouffe 2005, p. 34).

Section 4.2 analyses barriers to the implementation of APT policies in more detail. The following section describes how transport planning theory and practice has historically responded to the increasingly wicked problem of sustainable urban transport development.

2.3. Evolution of transport planning paradigms

The predominant mindset, or paradigm, that defines the goals, structures and heuristics of transport planning and decision making has changed substantially over time. This section provides a historic synthesis of the characteristic features of the dominant transport planning paradigms ranging from *Predict and Provide*, the traditional planning paradigm, through to the *Sustainable Mobility* paradigm that defines the normative ideal of policy making today.

Hall defines a policy paradigm as an ‘interpretive framework:

Policy-makers customarily work within a framework of ideas and standards that specifies not only the goals of policy and the kind of instruments that can be used to attain them, but also the very nature of the problems they are meant to be addressing. Like a *Gestalt*, this framework is embedded in the very terminology through which policymakers communicate about their

work, and it is influential precisely because so much of it is taken for granted and unamenable to scrutiny as a whole (Hall 1993, p. 279) .

Low, Gleeson and Rush (2003, p. 93) similarly describe a paradigm as a dominant ‘storyline’ in a stakeholder discourse network that justifies the direction of policy development. According to this definition the processes and tools of the policy process are ‘usually designed to reflect a particular set of ideas about what can and should be done in a sphere of policy’ (Hall 1993, p. 290). Vatn (2009, p. 2207) illustrates this by referring to environmental appraisal methods as ‘value articulating institutions’. A paradigm change therefore requires a shift in the dominant value priorities guiding transport development, which can, for example, be triggered by changes in technologies or resource availability.

Table 1 provides a historical overview of the evolution of dominant transport planning paradigms. I have drawn the conceptual boundaries between these paradigms to better illustrate key differences. However, this should not imply that they followed each other in a neat sequence where one paradigm replaced the other. Rather, while most transport agencies today adopt the ideas surrounding Sustainable Mobility in their stated strategies, these ideas have not yet permeated all institutional levels, and Predict and Provide is ‘still a powerful force in transport policy’ (Owens 1995, p. 43). Low, Gleeson and Rush (2003, p. 111) describe Predict and Provide as ‘one storyline in a discourse network’ that spreads across otherwise divergent transport professionals. Its discursive diversity makes it resilient in the face of the emergent paradigm of Sustainable Mobility.

	PREDICT&PROVIDE	NEW REALISM/ PREDICT & PREVENT	SUSTAINABLE MOBILITY
Emergence	1950s	Early 1990s	2000s
Context of the planning process	Economic growth after WW2, technocratic worldview, freedom of choice	Road capacity problems, climate change, scarcity of resources, demographic change	Climate change, scarcity of resources, demographic change, increased focus on urban liveability and ecosystem value
Perception of problems	Linear, reductionist	Multi-dimensional, reductionist	Complex, interrelated, dynamic (wicked problem)
Priority areas of urban development	Road infrastructure	Land use and transport integration	Systems perspective with priority for people and active transport modes
Preferred policy instruments	Supply measures oriented towards mobility increase	Integration of supply and demand measures oriented towards mobility increase	Integration of supply and demand measures oriented towards accessibility increase
Dominant appraisal method	Cost-benefit-analysis (CBA)	Multi-Criteria-Analysis and – Decision-Making (MCDM)	Least-Cost-Planning (LCP)/ Integrated Resource Planning (IRP)
Institutional interactions	Separate agencies, poor communication, language biased towards road traffic	Attempts to integrate agencies and improve communication	Integrated agencies, communication and shared responsibility, objective language
Citizen involvement	Information	Information and participation	Participation and empowerment

Table 1: Historical overview of the evolution of dominant transport planning paradigms: Predict and Provide, Predict and Prevent/ New Realism and Sustainable Mobility
(Source: created for this research based on Banister 2008; Owens 1995; Vigar 2000)

2.3.1. Predict and Provide

The Predict and Provide paradigm gets its name from a caricature of the way transport agencies reputedly see their role, which is to predict the degree of traffic growth based on past trends and then provide sufficient infrastructure to meet it (Owens 1995). This approach goes back to the 1950s when road infrastructure had to be provided for fast growing economies which saw the connection between gross domestic product (GDP) and traffic volume as a determined invariance. Solutions were mostly conceived in

terms of technological fixes involving changes to vehicle or signalling technologies, but they did not involve systemic change. Different transport modes were isolated from one another through uni-modal assessment methods focused on travel time savings, and through the segregation of agency responsibilities for different modes with poor communication between them. Philosophically, the Predict and Provide approach has been associated with a set of values based on the individual's freedom of choice (Owens 1995) and a language strongly biased towards road traffic (Vigar 2000).

Recent commentaries see Predict and Provide as problematic because it intellectually isolates transport from other functions within the urban system, overlooking critical interactions, and because it marginalises aspects of social and ecological sustainability (Litman 2003).

2.3.2. The New Realism, or Predict and Prevent

The intellectual foundation of the sustainable mobility paradigm is a concept known as the *New Realism* that emerged in the 1990s as a consequence of the realisation of the various problems surrounding constant road capacity expansion (Goodwin 1991). The New Realism was fully established with the release of the SACTRA report in the United Kingdom, the first government-authorised report that documented how road capacity expansion leads to induced traffic growth (SACTRA 1994). Induced traffic growth is related to ideas surrounding travel time constancy, that is, the idea that people on average spend a certain amount of their daily time on travel. If road capacities are expanded trips can be made in less time; the saved time however will be invested in additional travel. Metz (2008) sparked an intense debate on this issue in the transport research community.

Unlike Predict and Provide the New Realism paradigm does not consider travel as an end in itself, but rather as a demand that is derived from 'the value of the activity at the destination' (Banister 2008, p. 73), for example, access to employment, goods and services. It acknowledges 'that trends can be influenced as well as predicted' (Owens 1995, p. 43), and has therefore also been referred to as *Predict and Prevent* (Owens 1995). The New Realism advocates transport demand management (TDM) measures that explore multiple options for gaining access to employment, goods and services, including non-travel options. In doing so the New Realism has contributed to

developing a range of novel policies and strategies to promote sustainable transport development, for example, pricing schemes and influencing travel patterns through land use planning (Owens 1995).

2.3.3. Sustainable Mobility

Since the emergence of the New Realism in the early 1990s transport development has faced more challenges, in particular issues surrounding climate change, urban liveability and social inclusion. The ideas of the New Realism have therefore been expanded to include a greater emphasis on people and social dimensions in a paradigm referred to as Sustainable Mobility (Banister 2008).

Characteristic features of Sustainable Mobility involve more meaningful engagement of citizens in the policy process (for example, Section 8.1.1 provides an overview of relevant procedures), an acknowledgement of the interdependence of the different dimensions of urban development, and planning and decision making tools that are better suited to dealing with the wicked problem of sustainable transport development.

In the remainder of this section I briefly discuss suggested ways to move towards Sustainable Mobility that have been developed in research and practice (see also Table 1). Many of the underlying ideas for these strategies have been developed in the New Realism paradigm. The suggestions respond to the system elements illustrated in Figure 2 in Section 2.1, ranging from policy recommendations that affect the designed physical system, the abstract system and the natural system through to changes in the human activity system. These recommendations — with the exception of those that directly affect the structures and institutions of the policy making process — aim to change the travel behaviour of households and businesses (‘system customers’) through modifications to the transport system structure. In other words, they aim to change the emergent system behaviour (an essential characteristic of a system that has been described in Section 1.3.1).

Designed physical system

Recommended changes to the physical transport system include enhanced public and active transport infrastructures as well as a better integration of land use and transport functions (LUTI). These solutions are discussed in detail by Schiller, Bruun and Kenworthy (2010).

Designed abstract system

There are various financial mechanisms to create disincentives for using motorised road transport. Some of them aim to better allocate the cost of using road and parking infrastructure to their users, as these users are typically strongly subsidised by society (see for example Glazebrook 2009; Shoup 2005). Examples include road pricing, tolls, congestion charges, taxes, and incentives. The profits are typically used to enhance public transport infrastructures. Yet as Townsend (2003, p. 29) highlights, road pricing policies, although they are highly rational from an economic perspective, have so far not been widely implemented due to the successful opposition of MRT interest groups.

Natural system

There are recommendations on how to reduce the impact of motorised transport on the environment. First, there is research on fuels that could replace scarce fossil fuels, for example, so-called biofuels such as ethanol or diesel made from plant material, or hydrogen (see Worldwatch Institute 2007 for an overview). Second, there are new vehicle technologies under development that use conventional fuels more efficiently, or which use alternative fuels, for example, electric vehicles (see Pistoia 2010 for an overview). Third, there are emerging technologies for capturing and storing carbon emissions; carbon capture and sequestration (CCS) (see Metz 2005 for an overview). However, all these technologies are not mature for mass markets, and they are often associated with new environmental impacts. For example, biofuel production uses agricultural farmland and affects food prices. Importantly, these technologies only address the resource and emissions side of the wicked problem but ignore the negative social, economic and spatial impacts of urban transport systems that have been described in Sections 1.1.1 and 2.1.

Human activity system

There are two different types of recommendations that concern the human activity system: first, suggestions on how to influence the travel behaviour of households and businesses as system customers, for example, through marketing and information campaigns that aim to increase awareness of alternative ways to access goods, services and opportunities for social exchange. Second, recommendations that aim to improve the outcome quality of the policy making process by changing the rules and structures that planners and decision makers use. These include institutional integration (see

Section 2.1.1), more appropriate indicators and decision making tools, public engagement (see Section 8.1) and organisational learning (see Argyris & Schön 1978; Senge 1994 for examples of key literature). In the following I briefly introduce two of these types of recommendations — decision making tools and indicators — in more detail. In doing so I highlight in what way they are value-articulating institutions rather than ‘objective’ tools.

Decision support tools

The preferred decision making tool of the Predict and Provide approach to transport planning is benefit-cost-analysis (BCA). BCA typically aims to maximise individual mobility in terms of vehicle kilometers travelled (vkt). It assumes that gains and losses are substitutable and can be added across individuals (Andrews 2007).

While BCA is an adequate tool for the efficient allocation of scarce resources in the absence of conflict and uncertainty, it does not sit well with wicked problems. Certain harmful impacts, for example those on ecosystems or biodiversity, cannot be substituted or traded off against gains in other areas. Applying BCA to complex decisions regarding *wicked problems* of sustainability that involve risk, uncertainty and common goods therefore cannot lead to optimal outcomes (Vatn 2009), partly because BCA favours proposals that create an economic benefit and dismiss those that have more intangible benefits. Wachs (2004, p. 143) highlights that although BCA ‘takes place within a technical framework, it is inherently political and can be influenced by people involved in the evaluation of a project, whether they be politicians, staff ... or members of the general public’. Other problems relate to the way travel time savings and discount rates are estimated.

Sustainable Mobility prescribes a more social conception of decision making tools that accepts the interdependencies of individual decision making and incorporates norms and values into ends and the means used to achieve them. This can for example be achieved through a more meaningful engagement of citizens in the policy process (which is described in Section 8.1.1). Another way is to use Least-Cost Planning (LCP) or Integrated Resource Planning (IRP) that are often suggested as more sustainable ways of applying BCA. They enable the consideration of both demand- and supply-sided measures to satisfy access needs and allow the incorporation of public participation

techniques as essential parts of decision making (Campbell & White 2005; Hillsman 1995).

Indicators

The selection of indicators is crucial for sustainable outcomes as they prioritise the aspects to be considered to achieve progress towards set targets (see 2.3 on value articulating institutions). However, a lack of transparency and coherence in establishing sustainable transport indicators makes them subject to differing interpretations by different groups. This makes it difficult to operationalise the ideal of sustainable transport development, and to measure and demonstrate success (Gerike 2007). In addition, while some data is easily available, indicators involving subjective values are hard to define and measure and often have high implementation costs (Litman 2008). This tension between convenience and comprehensiveness can lead to incoherent guidelines for the definition and implementation of sustainable transport indicators (INRETS 2008; Litman 2008).

There is a variety of indicators and databases available that attempt to systematically measure progress towards sustainable transport development and provide a basis for comparing cities. Quantitative indicators such as changes in mode share in favour of APT, increased investments in APT infrastructure, dedication of road space, accident numbers, and public transport ridership are most comprehensively documented in the International Organisation for Public Transport (UITP) Mobility-in-Cities-Database. It provides data on 100 major international cities for 1995 (Kenworthy & Laube 2001).⁴ Kenworthy (2008) assembles 26 of these variables through a clustering and ranking technique to distribute the cities into five categories. These categories range from least to most sustainable cities for passenger transport (see Figure 5).

⁴ The UITP's website is at <http://www.uitp.org/publications/Mobility-in-Cities-Database.cfm> (accessed 20 January 2012)

Comparatively least sustainable transport	Comparatively less sustainable transport	Comparatively sustainable transport	Comparatively more sustainable transport	Comparatively most sustainable transport
Houston	Bologna	Manchester	Paris	Zurich
Phoenix	Montreal	Glasgow	Madrid	Berne
Denver	Wellington	Newcastle	Helsinki	Shanghai
Atlanta	Toronto	Copenhagen	Jakarta	Cairo
San Diego	Nantes	Johannesburg	Amsterdam	Vienna
Riyadh	New York	Rome	Sao Paulo	Munich
Los Angeles	Kuala Lumpur	Graz	Manila	Prague
San Francisco	Sydney	Tehran	Bogota	Berlin
Calgary	Tel Aviv	Taipei	Dusseldorf	Cracow
Chicago	Ho Chi Minh City	Milan	Tunis	Mumbai
Washington	Lyon	Guangzhou	Budapest	Beijing
Ottawa	Marseille	Harare	Stuttgart	London
Perth	Athens	Oslo	Seoul	Osaka
Melbourne	Ruhr	Stockholm	Brussels	Dakar
Vancouver	Geneva	Cape Town	Singapore	Chennai
Brisbane	Bangkok	Frankfurt	Sapporo	Tokyo
[empty]	Curitiba	Hamburg	Barcelona	Hong Kong

Figure 5: Sustainable transport clusters
(Source: Kenworthy 2008, p. 5)

In a second step Kenworthy calculates a mean value for each variable for each cluster. He finds that in approximately half the variables there is a consistent pattern of increase or decline in the value of the variable across the clusters (see Figure 6 for an example).

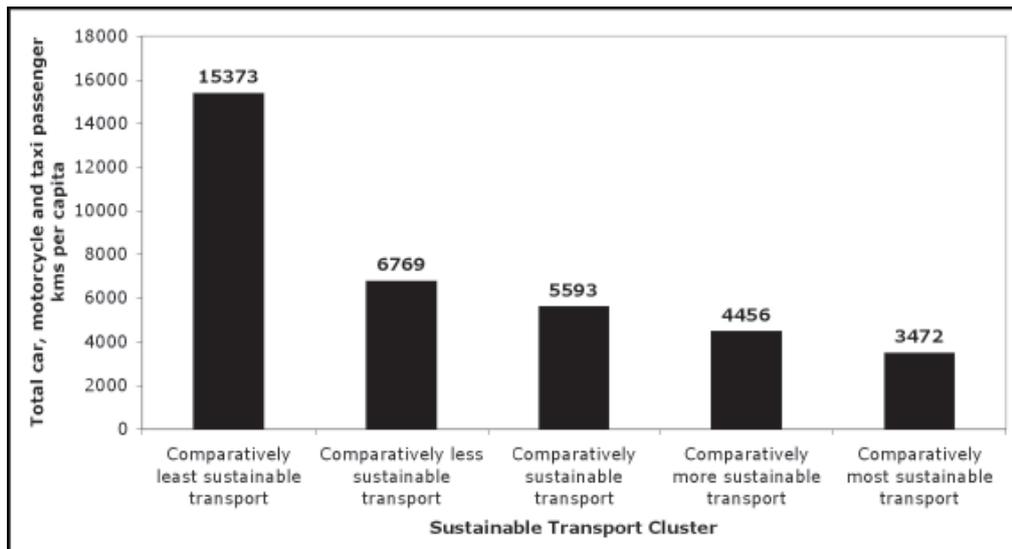


Figure 6: Total private passenger mobility (passenger km) per capita by sustainable transport cluster
(Source: Kenworthy 2008, p. 8)

Qualitative indicators for good sustainable transport performance are the nomination of a city for the Institute for Transportation and Development Policy's (IDTP) Sustainable

Transport Award⁵ and positive reflection in the media or academic literature. Transport quality is also often assessed as part of a wider range of indicators in so-called quality-of-life assessments, for example the yearly Mercer Quality-of-Living Report that ranks international cities.⁶ Some of these indicators are applied in Section 5.1.1 to document the choice for Munich as a case study in this research.

2.4. Conclusion and resulting research questions

In summary, there are valuable recommendations from a planning perspective on how progress towards more sustainable transport development could be achieved, but their implementation often faces barriers in the policy process. While there are different types of barriers, for example institutional or regulatory barriers (see Rietveld & Stough 2005 for an overview), some of the major barriers for APT policies are political. This is due to asymmetry of influence different stakeholder groups have in the transport policy arena: MRT interest groups who gain benefits from current patterns of transport development and fear these will be restricted by the implementation of APT policies typically bring to bear their weight on decision makers to not implement particular policies. If MRT interest groups have more resources to influence transport development than the advocates of change they can impede the implementation of new policies, or they can ensure that modified versions of policy proposals are implemented that often do not bring about the intended change. Dominant interests can also influence decision making tools (that have been defined as value articulating institutions in Section 2.3). This is problematic with regards to achieving transport development that gives equal weight to environmental, social and economic considerations.

These dynamics are often not taken into account in recommendations for sustainable transport development; rather, the sustainable transport literature often appears to suggest that achieving progress is only a matter of identifying the most appropriate policies from a planning perspective. This lack of attention to governance factors, especially with regards to sustainable transport development, has also been highlighted by other transport researchers. For example, Bratzel (1999b) suggests that the main

⁵ The IDTP's website is at <http://www.itdp.org/get-involved/sustainable-transport-award/> (accessed 20 January 2012)

⁶ The reports website is at <http://www.mercer.com/articles/quality-of-living-survey-report-2011> (accessed 27 January 2012)

obstacles for achieving an environmentally sustainable transport policy are not lacking knowledge in the first place, but political will and skill. Similarly, Townsend comments:

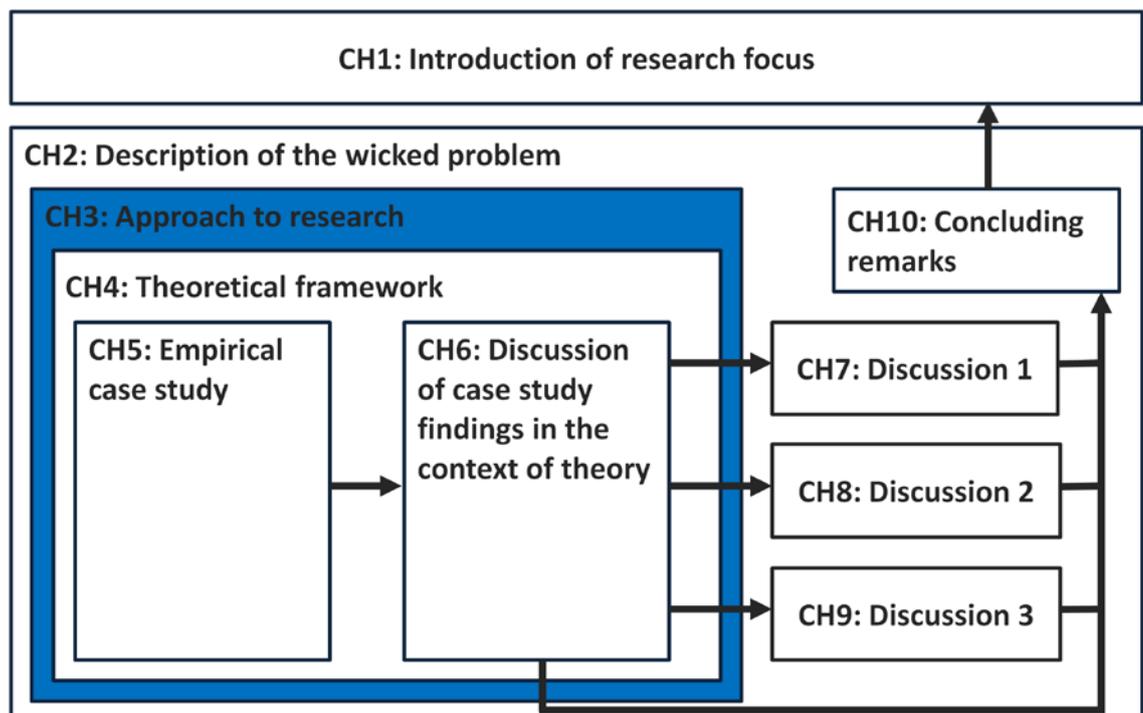
While ‘correct’ policies and government actions can clearly be identified by the UTP [urban transport planning] process and other technical measures consistent with transport economics, these are not always taken and the actual process diverges from the idealised process. According to economists, this occurs because vested interests benefiting from ‘incorrect’ policies engage in lobbying of decision-makers and other means in order to maintain or increase the benefits (‘rents’) they receive. As a result, more optimal or ‘correct’ policies remain unimplemented (Townsend 2003, p. 29).

Low (2005, p. 179) analyses discursive storylines in Australian urban transport and concludes that in order to achieve ecologically sustainable cities ‘[u]nderstanding is needed not only of what should be done, but of what stops it being done’. These barriers are further discussed in Section 4.2.

This thesis assumes that current approaches to transport policy making do not have sufficient mechanisms to balance the asymmetric influence of competing interests in wicked problems. Consequently the aim of the research is to develop answers to the following question: *What are the critical success factors needed to counterbalance the asymmetric influence of motorised road transport (MRT) interests and active and public transport (APT) interests in the urban transport policy process, and to achieve a broader focus in urban development that better integrates environmental, social and economic considerations?* The following chapter formulates an approach to develop answers to this question.

CHAPTER 3.

APPROACH TO RESEARCH



In the previous chapter I introduced the elements of the wicked problem of sustainable urban transport development. In this chapter I outline how I plan to investigate the part of the wicked problem that I have identified as the most critical to successfully implementing sustainable transport policies (in Section 2.4): the question of how the asymmetry of stakeholder influence in the transport policy process has been, or can be, counterbalanced.

Section 3.1 establishes a case study methodology as main method of data collection. Section 3.2 then introduces Adaptive Theory as a mechanism to generate knowledge from the case study data.

3.1. Case study methodology

In this section I argue that given the complexity of the problem situation, identifying success factors and the way they work requires a detailed and flexible exploration of a single case study rather than the use of a large sample of cities. I suggest that learning about the factors that made a particular case study ‘relatively successful’ in achieving sustainable transport outcomes can then provide valuable insights to cities that share similar problems.

The term ‘relatively successful’ acknowledges that sustainable transport is not a finite goal but an ongoing process of development.⁷ It also recognises that there can be no ideal policy solutions or strategies, but that what constitutes success in sustainable transport terms will vary from city to city, depending on the particular context of problems and framework conditions. There are various reasons why a city would be considered ‘relatively successful’ in sustainable transport terms:

- Compliance with commonly accepted qualitative or quantitative sustainable transport indicators (see Section 2.3.3 for examples).
- Successful implementation of sustainable transport policies: the literature describes a range of best practice examples of implemented APT policies, for example, significant improvement of transit structures (e.g. Singapore) or active transport options (e.g. New York City, Copenhagen, Portland), the abandonment of planned freeway developments (e.g. Vancouver) or even the removal of existing freeways

⁷ The term ‘relatively successful’ has also been used by Bratzel (1999a).

(e.g. Seoul, Portland) (see Napolitan & Zegras 2007; Schiller, Bruun & Kenworthy 2010 for detailed descriptions of these examples).

- Successful institutional changes in the policy process as outlined in Section 2.3.3 or successfully implemented sustainable transport strategies.

Section 5.1.1 describes why Munich has been selected as a ‘relatively successful’ case study in the context of this thesis.

A case study is typically:

an intensive analysis in which the inquirer attempts to examine and understand key variables which are important in determining the dynamics of a situation, in order to provide detailed insight into a specific phenomena. (Appleton 2002, p. 82).

The research design can consist of a single case or a comparative analysis of similar events or phenomena in multiple cases (Silverman 2010, pp. 139-40; Yin 2009, pp. 46-65).

Case study research is well suited to investigating success factors for transport policy change in the human activity system because it examines particular actions, events or phenomena within the context in which they occur. This is relevant because, as Easton (2010, p. 9) suggests, ‘events are caused by processes and structures in the world that are, for the most part, invisible yet real’ for example, power relations among stakeholders in the policy process. He therefore argues that ‘causes of events can only be explained by reference to the interplay among these forces. Case studies ... are admirably suited to the task of the teasing out of these interplays’.

Case studies allow for flexibility in the research process in that both data collection and analysis can be adapted to the emergence of new findings. However Carroll and Johnson (1990, p. 43) warn that the inherent flexibility of case studies can easily lead the research process down unforeseen paths, highlighting the need to be explicit at each step about what is being done and why in relation to assumptions and research questions. The case study design section (Section 5.2) therefore documents and reflects in detail on my research experience and the decisions I have made.

Case study research has been met with scepticism by some commentators who claim that the generalisability of results is limited because of the small sample size and the

lack of statistical sampling procedures to demonstrate the representativeness of cases, as done in quantitative research (Flyvbjerg 2004, p. 421; Yin 2009, p. 14). There are other researchers, however, who adopt the stance that generalisability is present in a single case (see for example Easton 2010; Flyvbjerg 2004). Silverman explains the rationale of this approach as follows:

Since the basic structures of social order are to be found anywhere, it does not matter where we begin our research. Look at *any* case and you will find the same order' (Silverman 2010, p. 147, emphasis in original).

He comments, however, that this approach is only relevant to 'the most basic research on social order', and that it should be guided by strong theoretical positions (Silverman 2010, p. 148).

In this research I adopt the stance that critical insights can be gained from a detailed investigation of an individual case study in successful sustainable transport development. To make these insights (that I describe in Chapter 5) theoretically relevant and generalisable for the transport research community I discuss my findings within the context of existing knowledge in Chapter 6. Chapters 7 to 9 then discuss aspects that aim to make the process and application of my findings more practically relevant for practitioners and advocates in other cities and to demonstrate the practical and theoretical significance of my findings by discussing them within the context of existing processes and structures.

3.2. An adaptive theory approach to knowledge generation

There are different opinions with regards to the way theory can be generated from case studies. Yin prescribes thorough hypothesis development before the collection of data (2009, p. 35); Flyvbjerg on the other hand states that 'the case study is useful for both generating and testing of hypotheses' (Flyvbjerg 2004, p. 425).

Hypothesis testing assumes that a particular assumption can be verified or falsified — a deductive approach to research. This approach is not suitable for the investigations in this thesis because by narrowing the investigation to pre-defined analytical categories, hypothesis-testing cannot capture emerging themes that might have been ignored before. It could therefore miss important aspects of the wicked problem.

Theory generation from empirical data on the other hand implies that a hypothesis is generated through immersion in the data — an inductive approach. This process of exploring a situation and analysing themes that emerge from the data without pre-defined criteria for analysis builds on the ideas of *Grounded Theory* (Glaser & Strauss 1967). Grounded theory assumes that theory is implicit in the data and therefore emerges out of the analytical process. It prescribes iterative cycles of reflexivity and responsiveness to rival evidence and theories. For two reasons this approach is not suitable either: first, I contend that the data collection process cannot be started on a ‘clean slate’ (Layder 1998, p. 54) as is prescribed by the original ideas of grounded theory. This is because I recognise that I am already informed by theory, for example through the process of identifying my research question, and that my personal experience, education and previous reading on the subject will undoubtedly influence the way I collect the data and interpret my findings (Layder 1998, pp. 106-8; Patton 1990, p. 475). Second, the large variety of forms which wicked transport policy problems can take complicates the inquiry into the success factors of policy change. It is therefore useful to build the inquiry on a theoretical framework that is able to inform data collection and analysis in a guiding, navigating role without being a rigid, prescriptive structure. This has been suggested by several researchers, for example, Sabatier and Jenkins-Smith state that:

It is *logically impossible* to understand any reasonably complicated situation ... without some theoretical lens ... distinguishing between the set of potentially important variables and causal relationships and those that can be safely ignored (Sabatier & Jenkins-Smith 1993, p. xi).

A theoretical framework is thus a tool to ‘bound inquiry and direct the attention of the analyst to critical features of the social and physical landscape’ (Schlager 2007, p. 293). Empirical data is in turn used to evolve and test the original ideas on theory.

To account for the shortcomings of both deductive and inductive approaches to knowledge generation in the context of this thesis I use an *Adaptive Theory* approach that integrates general theory and theory grounded in empirical research as mutually informing (Layder 1998) (see Figure 7):

[Adaptive Theory] combine[s] an emphasis on prior theoretical ideas and models which feed into and guide research while at the same time attending to the generation of theory from the ongoing analysis of data (Layder 1998, p. 19).

[T]he theory either adapts to, or is shaped by, incoming evidence while the data itself is filtered through, and is thus adapted by, the prior theoretical materials (frameworks, concepts, ideas) that are relevant to their analysis (Layder 1998, p. 5).

Adaptive Theory thus ‘treats seriously the philosophical premise that observation is always saturated with theoretical ideas and makes a virtue out of this fact by treating it in a systematic manner’ (Layder 1998, p. 113).

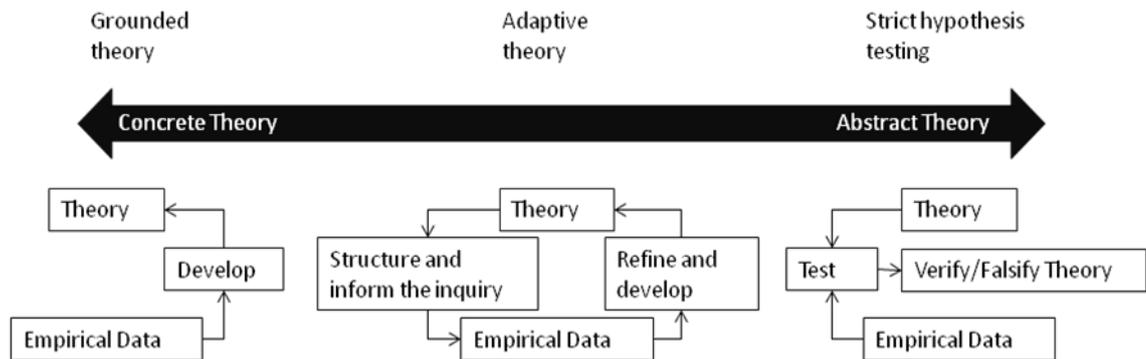
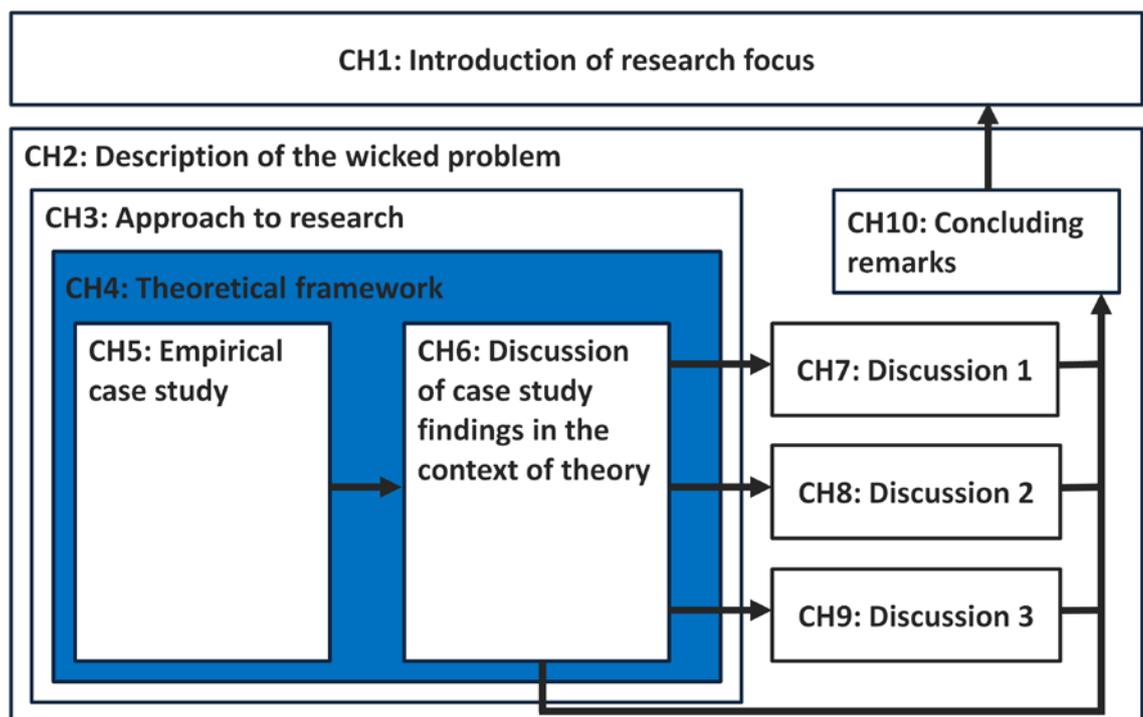


Figure 7: Adaptive Theory, contrasted with Grounded Theory and strict hypothesis testing (Source: Behrisch 2011)

A central idea in Adaptive Theory is the link between the behaviour of research subjects and the context of that behaviour such as institutions, ideas or knowledge. Layder (1998, p. 146) encourages researchers to investigate the ‘nature and interconnections between lifeworld and system elements — rather to hold them apart methodologically’. Adaptive Theory therefore fits well with the intellectual framework of this thesis that views the purposeful actions of individuals in the human activity system as reactions to their interpretations of the material world and changes therein (see Section 2.2.1). Section 5.1 describes in detail how Adaptive Theory was applied to the empirical case study.

CHAPTER 4.

HOW AND WHY DOES POLICY CHANGE?



Our theories determine what we measure (attributed to Albert Einstein)

The previous chapter introduced the methodology I selected to develop answers to the research question I introduced in Section 2.4. It concluded that investigating the wicked problem of transport policy making (discussed in Section 1.1 and Chapter 2) requires a theoretical framework to help organise and guide the inquiry. The aim of this chapter is to outline the theoretical foundation that informs data collection and analysis in the empirical case study (that will be described in Chapter 5).

Section 4.1 introduces three conceptual models of the policy process. Each model emphasises institutional elements and interactions between stakeholders that are relevant for the study of policy change in the context of this thesis. I therefore suggest a synthesis of these elements. Section 4.2 builds on the synthesised model to discuss barriers to the implementation of sustainable transport policies. Section 4.3 explains how the three conceptual models describe different mechanisms for policy change, and how these can contribute to overcoming barriers. Section 4.4 investigates how the conceptual models have been applied in empirical transport research. This provides guidance on how to approach the case study inquiry in Chapter 5.

4.1. A theoretical framework that reflects the wicked problem

Guided by the characteristics of the wicked problem outlined in Chapter 2 a theoretical framework for investigating strategies to counterbalance the asymmetric influence of stakeholders in the transport policy process needs to:

- Be able to incorporate the spectrum of non-government stakeholders that can informally influence the outcomes of the policy process (see Section 2.1.1). The framework needs to acknowledge the way the different value systems of these stakeholders create interpretive and normative ambiguity, leading to competing and conflicting interests in the outcomes of the policy process (see Section 2.2).
- Conceptualise the activities of these stakeholders as being constrained and enabled by the value-articulating institutions of the dominant planning paradigm (see Section 2.3). This also includes framework conditions — and changes to those conditions — that are external to the policy process (see Sections 2.1 and 2.2).

- Be able to accommodate, rather than simplify, the complexity and uncertainty of the wicked problem (see Sections 1.1 and 2.1).
- Be able to distinguish between activities in the planning system and in the political system of the policy process (see Section 2.1.1), so as to be able to separately investigate aspects of policy quality and political feasibility.
- Be suitable to investigate processes on the local governance level (see Section 1.2).

The following sections introduce three theories of policy change: the Advocacy Coalition Framework (ACF) by Sabatier and Jenkins-Smith (1993), the Multiple-Streams model by Kingdon (2003) and Institutional Theory based on Scott (2008). Each of these theories meets different aspects of the above list of criteria (see Table 2).

	Advocacy Coalition Framework (ACF)	Multiple Streams	Institutional Theory
How does policy change?	By one advocacy coalition (AC) taking advantage of exogenous windows of opportunity to gain in power over other ACs, or through negotiated agreement of all ACs	By key individuals taking advantage of exogenous windows of opportunity to link policy ideas to politically relevant problems	Change is triggered through changes in relevant institutions
Conceptual inclusion of non-government stakeholders	Includes full spectrum of relevant stakeholders	Narrower spectrum than ACF, limited to external experts	Not addressed in detail
Role of institutions	Highlights importance of venues and resources of the policy process as well as external framework conditions	Changes in external framework conditions as window of opportunity for policy change	Addresses institutional elements in detail, including cultural aspects that are relevant to paradigms
Accommodation of complexity	Accommodates full complexity of wicked problem	Accounts for complexity of designed systems but not human activity system	Accounts for complexity only through the lens of institutions within the policy process
Planning and politics distinction	Rejects stages heuristic	Three parallel streams: policies, problems, politics	Not addressed in detail

Table 2: Comparison of elements of three theories of the policy change that are relevant to this thesis: the Advocacy-Coalition-Framework, the Multiple-Streams-Model and Institutional Theory (Source: created for this research based on Kingdon 2003; Sabatier 2007; Sabatier & Jenkins-Smith 1993; Scott 2008)

A common element of the three theories is that they all analyse the policy process over periods of several years or even decades. However each theory highlights a particular aspect of the transport policy process: the first theory, the Advocacy Coalition Framework (ACF) focuses on the activities and relative strengths of stakeholder alliances, or advocacy coalitions, in the policy process and how these act strategically to transform their core beliefs into implemented policies. The second theory, the Multiple-Streams model, explains the evolution and dynamics of ideas throughout the processes of agenda setting and alternative policy generation in the policy process. It also explains how windows of opportunity arise and help individuals to promote these ideas. In doing so the Multiple-Streams model describes under what conditions an idea or proposal can emerge from the planning sphere and be considered for implementation in the political arena. The third theory, Institutional Theory, finally makes explicit the framework of rules, norms, values, routines and cultural aspects that enable and constrain stakeholders in the policy process.

I do not attempt to integrate these theories into an entirely new theoretical framework. This would be difficult as they disagree, for example, on the issue of using a stages heuristic. The Multiple-Streams model uses the idea of different parallel stages of the policy process, which Hendriks (2004, p. 276) describes as a ‘useful heuristic device to disentangle what would otherwise be a “seamless web of public policy transactions”’. The ACF on the other hand rejects the stages idea on the grounds that it is too simplistic and because it conceptually separates the different stages so that policy formulation and politics are often investigated separately — the ACF was in fact developed as a response to these shortcomings (Sabatier 2007, p. 7). Integrating these theories is also not imperative because, as I argue in Section 3.2, the theoretical framework guides the inquiry but theory is also informed by empirical data and it evolves. The framework therefore remains flexible throughout the research rather than imposing a rigid structure.

In that sense I use the ACF as the main theoretical framework while drawing on elements of the Multiple-Streams model and Institutional Theory where the ACF has shortcomings with regards to the requirements outlined above. In particular, the Multiple-Streams model outlines the events within a policy subsystem and the conditions that trigger these events in more detail than the ACF, and it highlights the role of so-called *policy entrepreneurs* in these events (Sabatier 2007, p. 6). In addition the Multiple-Streams model contributes a stages heuristic, which proves analytically

useful for distinguishing between the roles of planners ('system actors') and elected decision makers ('system owners') in the policy process (see Section 2.1.1). Although the ACF basically rejects the stages idea, Sabatier et. al. (2009, pp. 133-4) acknowledge that the ACF is often applied in combination with other frameworks, including the Multiple-Streams model. Institutional Theory complements the ACF with its treatment of institutional aspects, most importantly norms and cultural aspects such as routines and accepted knowledge systems.

To sum up the ACF serves as tool to structure the inquiry and is thus a means to an end rather than 'a lens to understand and explain beliefs and policy change' (Weible & Sabatier 2007, p. 123). As a consequence I do not follow the various guidelines that have been developed for practitioners using the ACF (see for example Weible & Sabatier 2007) but instead follow the Adaptive Theory approach to research that has been outlined in Section 3.2.

4.1.1. Policy change and learning: an advocacy coalition approach

Investigating policy change over time

The *Advocacy Coalition Framework* (ACF) was developed by Sabatier (1988) to deal with conflicting goals, technical disputes and multiple stakeholders when investigating policy change over time. In so doing the framework considers policy change as the result of competition among advocacy or value coalitions within a policy area — a *policy subsystem*. Today more than 80 case study applications worldwide form a sound empirical basis for the ACF and have contributed to several revisions and clarifications (see for example Sabatier & Weible 2007; Weible, Sabatier & McQueen 2009). Figure 8 illustrates the conceptual model of the ACF.

The ACF conceptualises the policy process as involving a number of policy communities, or *advocacy coalitions*. Advocacy coalitions consist of government and non-government stakeholders that have an interest in transforming their policy beliefs into implemented policies (Sabatier & Jenkins-Smith 1993, p. 237) (see Section 2.2 for a first introduction of advocacy coalitions in the context of this study). By forming an advocacy coalition of like-minded allies stakeholders expect to increase their resources for doing so. The ACF therefore explicitly rejects the assumption that most bureaucrats

and researchers involved in a policy area will be neutral (Sabatier & Zafonte 2001, p. 11566).

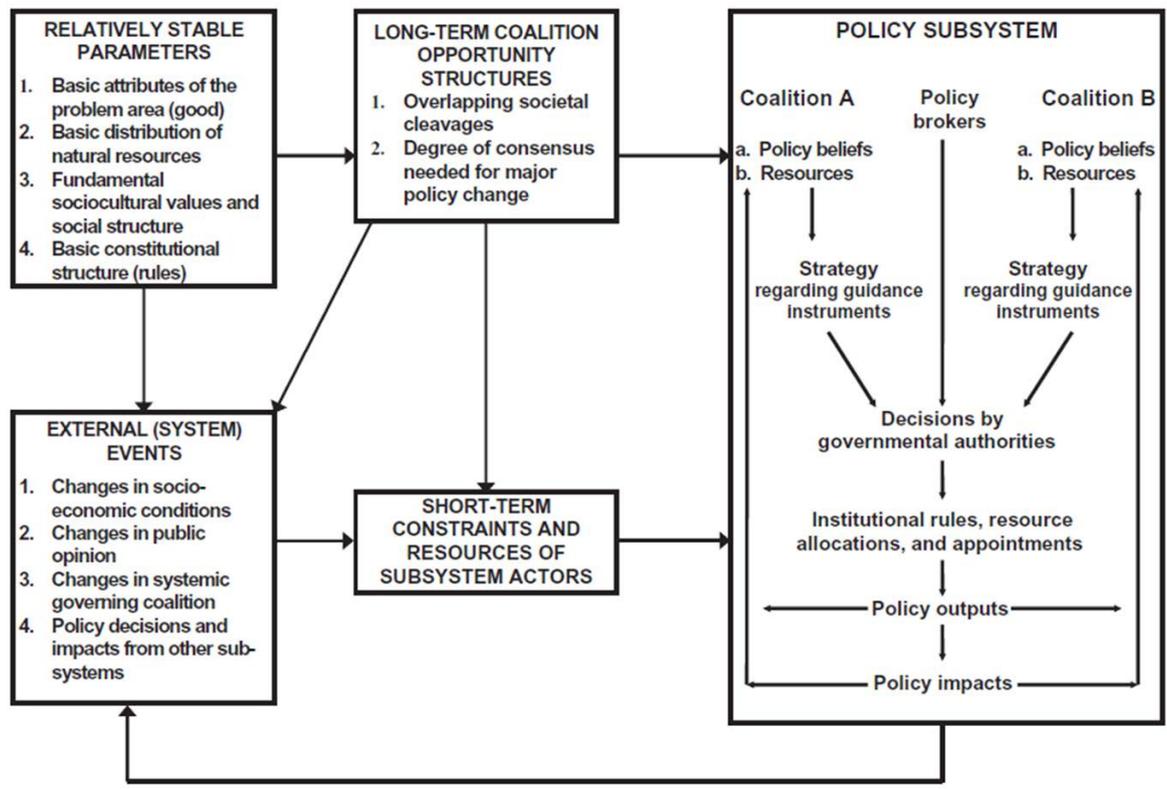


Figure 8: 2007 Advocacy Coalition Framework (ACF) flow diagram (Source: Weible, Sabatier & McQueen 2009, p. 123)

Relative advocacy coalition strength defines policy outcomes

The relative strength of advocacy coalitions determines which policy alternatives rise high on political decision-making agendas, and therefore the outcomes and impacts of the policy process. According to this understanding, significant policy change can only occur when the dominant advocacy coalition loses the majority of power to a minority advocacy coalition, or when the dominant advocacy coalition changes its beliefs.

The goal-directed activities of advocacy coalitions are enabled or constrained by framework conditions. These can be stable conditions that remain unchanged over long periods of time, for example, legislation or parliamentary processes, or they may be subject to sudden change. The ACF defines external shocks as a ‘necessary but not sufficient condition for major policy change within a subsystem’ (Sabatier & Weible 2007, p. 198).

Changes in the framework conditions can change the distribution of resources among stakeholder groups and so shift the distribution of power among advocacy coalitions. These resources consist of members in positions of formal legal authority to make policy decisions, supportive public opinion for an advocacy coalition's policy position, strategic use of information, mobilisable individuals or groups in the attentive public, financial resources, and skilful leadership that uses these resources efficiently and attracts new resources (Sabatier & Weible 2007, pp. 201-3). Conflict among competing advocacy coalitions is often mediated by so-called policy brokers that have an interest in getting the process to produce a decision.

Belief systems as 'perceptual filters'

The ACF defines the belief systems of relevant advocacy coalitions as hierarchically organised in three levels of belief (see Figure 9): deep core beliefs; policy core beliefs; and secondary beliefs (Sabatier & Weible 2007, p. 194). Deep core beliefs represent a stakeholders' personal value system. Policy core beliefs relate to basic assumptions about the sources of problems and the desired outcomes of the policy process. Secondary beliefs describe ways to deal with existing problems so as to achieve intended outcomes and are narrower than policy core beliefs. These descriptions of beliefs in the ACF align well with my own perspective on values and interests outlined in Section 2.2. In the remainder of this thesis I keep using the terms from Section 2.2.

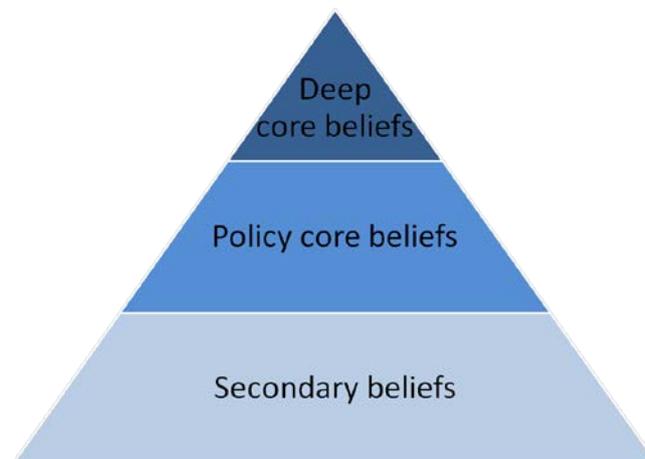


Figure 9: The pyramid of belief systems in the ACF
(Source: created for this research based on Sabatier & Jenkins-Smith 1993)

The ACF defines these three sets of beliefs as 'perceptual filters' that tend to block out dissonant information and reaffirm conforming information (Sabatier & Weible 2007, p. 194). This increases the internal cohesion of advocacy coalitions and allows them to

remain stable over long periods of time. On the other hand perceptual filters can distort policy discussions. The ACF describes a ‘devil shift’ towards other ACs, that is, a tendency to see opponents as less trustworthy and more powerful than they probably are (Sabatier & Weible 2007, p. 194). Another effect is a ‘dialogue of the deaf’ in which participants talk past each other without achieving an agreement (Sabatier & Jenkins-Smith 1993, p. 48).

Relevance to theoretical framework

The ACF aligns well with the criteria outlined at the beginning of this section by incorporating all stakeholders that have a stake in the policy process and establishes the connection between stakeholders’ beliefs and their political actions. In addition it makes explicit the resources stakeholders can use to attempt a shift in the power balance of advocacy coalitions in a policy subsystem. In so doing it acknowledges the role of internal and external framework conditions in creating shocks in the system and thereby redistributing these resources. The ACF is well suited to exploring policy developments on the local level as it is located within the boundaries of a policy subsystem rather than a fixed institutional framework. Finally, the large empirical basis of the ACF provides good guidelines on how to organise inquiry in a way that produces useful answers to my research question (Weible & Sabatier 2007).

4.1.2. Agendas, alternatives and public policies: a multiple-streams model

Three parallel streams

John W. Kingdon’s empirically grounded model of public policy making sees the policy process comprising three streams — problems, policies, and politics — that run in parallel and independently from each other, as shown in Figure 10 (Kingdon 2003).

This model is different from models of the policy process that assume a sequence of stages including problem identification, alternative specification and appraisal, and decision making (Carroll & Johnson 1990). According to Kingdon, a parallel conception is more appropriate because:

... participants do not first identify problems and then seek solutions for them; indeed, advocacy of solutions often precedes the highlighting of problems to which they become attached. Agendas are not first set and then alternatives generated; instead, alternatives must be advocated for a long

period before a short-run opportunity presents itself on an agenda (Kingdon 2003, pp. 205-6)

The generation of alternatives takes place in the policy stream. Agenda setting and decision-making are part of the political stream and are a response to problems that are considered politically relevant.

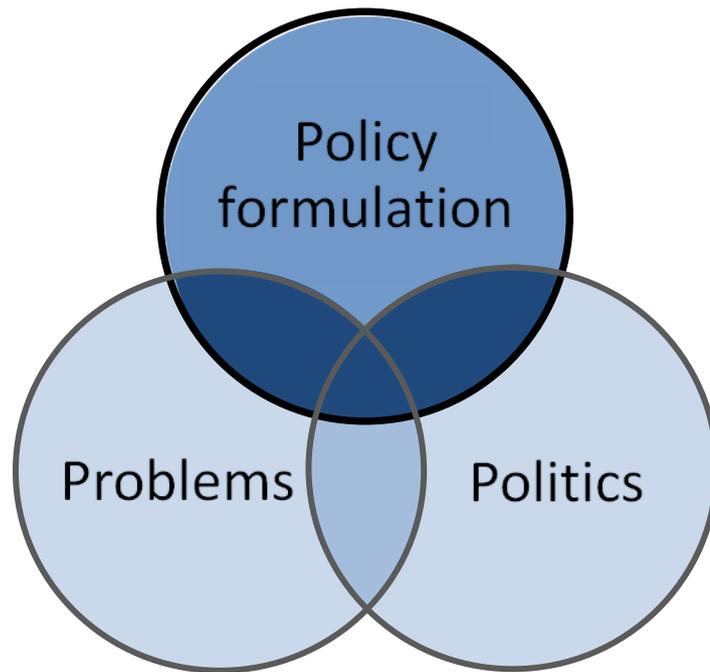


Figure 10: Three parallel streams in the policy process and opening policy windows as opportunities for coupling of the streams
(Source: created for this research based on Kingdon 2003)

Windows of opportunity for coupling the streams

Policy proposals can only become implemented when the three streams are coupled, that is, when a proposal can be linked to a problem that is pressing on the agenda, and is at the same time made in a 'ripe political climate' (Kingdon 2003, p. 201).

Opportunities for partial couplings — as a first step towards complete linkage of the three streams — arise when 'policy windows' open either in the problem stream or in the political stream (Kingdon 2003, p. 165). For example, when new knowledge or swings in national mood shift the attention of elected decision makers to different problem areas, or when changes in administration or legislation offer opportunities for planners to draw attention to their proposals. Policy windows are sometimes predictable such as in the case of a change in elected governments, or they can open unexpectedly,

such as in the case of major accidents or crises that can suddenly change the public perception of particular problems.

Kingdon's notion of policy windows implies that opportunities for coupling policy proposals to the political and problem streams depend largely on dynamics and events that take place outside the transport policy process, and that are beyond the control of most planners, decision makers or stakeholders. Bratzel (1999a, p. 177), for example, identifies social crises and impressive political mandates as important preconditions for fundamental transport policy change in his study of 'relatively successful' European cities. He describes these policy windows 'as a political opportunity for change, a necessary but not sufficient condition'. This description of policy windows aligns well with the ACF notion of 'external shocks' to the system that can redistribute resources.

The role of policy entrepreneurs in the coupling process

Although the opening of windows cannot be influenced in a direct way, insights into the significance of suitable policy windows for policy change can help advocates of a policy proposal to better read the signs and time their activities. Kingdon quotes one of his informants on the role of policy windows:

As I see it, people who are trying to advocate change are like surfers waiting for the big wave. You get out there, you have to be ready to go, you have to be ready to paddle. If you're not ready to paddle when the big wave comes along, you're not going to ride it in (Kingdon 2003, p. 165).

According to Kingdon coupling activities are often managed by key individuals, or policy entrepreneurs:

... who are willing to invest their resources — time, energy, reputation, money — to promote a position in return for anticipated future gain in the form of material, purposive, or solidary benefits (Kingdon 2003, p. 179).

Policy entrepreneurs lie in wait for windows to open to push their proposals. They can be found in all areas of the policy process. Kingdon picks up the surfer analogy to explain the qualities of a successful policy entrepreneur:

... entrepreneurs are ready to paddle, and in their readiness combined with their sense for riding the wave and using the forces beyond their control contributes to success (Kingdon 2003, p. 181).

Policy entrepreneurs are also engaged in activities of ‘softening up’, that is, pushing their ideas in many forums in order to get the public, interest groups, experts and elected decision makers in a policy community receptive to new ideas (Kingdon 2003, p. 127).

Relevance to theoretical framework

The ideas of the Multiple-Streams model address some elements of the ACF in a more explicit way. This applies particularly to the way changes in the internal and external framework conditions of the policy process create opportunities for advocacy coalitions to promote their ideas in a policy subsystem. However, Kingdon assumes policy entrepreneurs inside or close to government play a crucial role, whereas the ACF has a more comprehensive perspective of stakeholder dynamics outside of the policy process.

4.1.3. Institutions and organisations: ideas and interests

The role of institutions is to some extent implicitly included in both the ACF and the Multiple-Streams model with regards to framework conditions and changes to those conditions (policy windows or external shocks). However there are other institutional elements that these models do not address but that are relevant for policy change, for example norms or cultural aspects.

Three institutional pillars

The goal-directed activities of stakeholders within an advocacy coalition aim not only to influence individual decisions, but also to change institutional structures on a long-term basis, for example so that the process ‘automatically’ produces their desired outcomes. According to Schlager (1995, p. 248), policy change results from actions by rational individuals seeking to improve their circumstances by designing and adopting changes in institutional arrangements.

Scott in his comprehensive analysis of ‘Institutions and Organisations’ defines institutions as:

Compris[ing] regulative, normative and cultural-cognitive elements that, together with associated activities and resources, provide stability and meaning to social life (Scott 2008, p. 48).

Each of these three elements, or ‘institutional pillars’, forms a different basis for legitimacy in the policy process (Scott 2008, pp. 47-72). Regulatory processes establish

rules and aim to ensure others' conformity to them by introducing sanctions as formal or informal rewards and punishments. Normative elements comprises values and related norms that specify and 'define legitimate means to pursue valued ends' in the form of goals and objectives (Scott 2008, p. 55). Norms also provide prescriptions regarding the roles of government stakeholders. The cultural element assumes that behaviour is a function of an individual's 'internal representation of its environment' manifested in its cultural or belief system (Scott 2008, p. 57). This aligns well with the ACF idea of the consistency between beliefs and political behaviour. The cognitive element emphasises the role of habits and routines in decision-making based on the bounded rationality of stakeholders (Schiefelbusch 2009, p. 92).

Relevance to theoretical framework

Accord to Schlager (1995) policy change is in fact institutional change at the normative and cultural-cognitive level. This relates to the idea of institutions as value articulating institutions that form essential parts of a dominant planning paradigm (as discussed in Section 2.3). This idea also explains why innovative policy proposals often face strong institutional barriers (Rietveld & Stough 2005). Finally, the idea that policy change is institutional change aligns with Meadows' hierarchy of the effectiveness of leverage points to intervene in a system, which concludes that 'the higher the leverage point, the more the system will resist changing it' (Meadows 1999, p. 19).

Based on these observations, I consider it important to pay special attention to institutional pillars and changes thereof in order to develop a better understanding for the mechanics of policy change.

4.2. Analysing implementation barriers for sustainable transport policies

This section uses the theoretical frameworks described in the previous section, in particular the Multiple-Streams model, to analyse the barriers to sustainable transport policies (see Section 2.3.3 for an overview) in the planning process (Section 4.2.1) as well as in the political process (Section 4.2.2). In doing so it picks up on the themes that emerged from Chapter 2 surrounding the characteristic features of the wicked problem of sustainable transport development.

The ideas and arguments in this section were initially developed in Paper 3 and Paper 4 (see List of Publications)

The analysis highlights that barriers arise when the value systems of stakeholders in a problem situation are conflicting, which is the case for most issues in the transport policy arena (see Section 1.1). This becomes problematic for sustainable transport policies if groups aiming to conserve the status quo of transport development and associated value priorities have more influence than the advocates of change (see Sections 1.1.3 and 2.2). In Section 6.3 I revisit these sustainability barriers in the context of my empirical research findings.

4.2.1. Barriers in policy formulation

This section systematically analyses barriers to sustainability in the process of policy formulation and the criteria that proposals have to meet in order to emerge from the policy stream. This is relevant because activities in the policy stream define the actual content and quality of implemented policies:

Political conflict is not like an intercollegiate debate in which the opponents agree in advance on a definition of the issue. As a matter of fact, *the definition of alternatives is the supreme instrument of power*; the antagonists can rarely agree on what the issues are because power is involved in the definition (Schattschneider 1960, p. 68, emphasis in original)

Kingdon compares the generation of policy alternatives to a process of natural selection where only ideas that meet certain criteria are shortlisted for political consideration. These ‘survival’ criteria are technical feasibility; congruence with the values of policy community members; and anticipation of future constraints such as budget, public acceptability, and decision makers’ receptivity (Kingdon 2003, pp. 131-9). While existing practices for assessing technical feasibility and, more predominantly, for assessing the costs of transportation projects, are often contested and might constitute substantial barriers to more sustainable solutions (see for example Flyvbjerg, Holm & Buhl 2002), I focus the analysis on survival criteria that do not remain internal to the policy community but have interfaces with the political and the public spheres: value congruence and anticipation of public and elected decision makers’ receptivity.

Value congruence

According to Kingdon proposals need to be compatible with the values of the members in a policy community if they are to be shortlisted in the policy stream. If this is the case, the criterion remains internal to the policy community. In cases of disagreement however, ‘conflicts will spill over into the larger political arena’ (Kingdon 2003, p. 132). Value conflicts and ideological biases within a policy community, but also agreement on unsustainable values, can be barriers to more sustainable transport policies.

These values align with the spectrum of values outlined in Section 2.2 and illustrated in Figure 4. In Section 2.2 I propose that progress towards sustainable transport development requires a shift in the balance of value priorities underlying policy development from a focus on MRT-oriented values towards a greater integration of APT-oriented values. This shift in the values which guide policy development is also linked to the idea of a paradigm shift (see Section 2.3).

Interestingly, in his own analysis of ideological biases in the US transportation sector between 1976 and 1979, Kingdon finds that ‘transportation is a less ideologically laden arena’ (Kingdon 2002, p. 134) than other sectors such as health, given that ‘almost everybody sees the need for good transportation’ (Kingdon 2002, p. 134). However, the need for a paradigm change that better incorporates conceptions of sustainability into policy making is well established today (see Sections 1.1 and 2.3).

The idea of competing advocacy coalitions in policy communities helps explain the difficulties faced when attempting to integrate policy communities such as transport, land use and environmental planning. For example, Legacy, Curtis and Sturup (2012) describe two case studies of attempted land use and transport integration (LUTI) (see also Sections 2.1.1 and 2.3.3). The objective of policy integration is to produce more comprehensive and appropriate solutions to problems of unsustainability by integrating relevant knowledge systems (Stead & Geerlings 2005). However, as these knowledge systems involve different ideas and values about problems and the solutions survival chances of more integrated solutions are limited.

In conclusion, I suggest that value barriers to more sustainable transport policies are either due to the predominance of growth-oriented values in a policy community, or a lack of congruence with regards to more balanced value priorities.

Anticipation of future constraints

Another survival criterion for proposals in the policy stream is the anticipation of reactions of both specialised interest groups and the general public. Although planners often know about potentially highly effective solutions to certain problems, especially with regards to behaviour change, they often do not put them forward because ‘their experience with public reaction has convinced them that aside from education and warnings, not much more can be done’ (Kingdon 2003, p. 138). This second-guessing of public preferences can be a barrier to more sustainable transport policies.

Planners can choose from a range of instruments to manage transport networks (see for example May & Crass 2007). These can be either incentives to foster the desired development (*carrots*), for example investments in public and active transport infrastructures, or restrictive measures that enforce a desired change in behaviour (*sticks*), for example road pricing measures. While carrots are not as contentious as sticks unless they require limited urban road space, employing carrots alone is often considered too weak to produce the substantial changes that are needed to achieve more sustainable transport development. On the other hand, sticks often face opposition from specialised interest groups or the public (see Schaller 2010 for an example). They are therefore considered by planners to be unpopular and controversial (Gatersleben & Uzzell 2003). This view is linked to assumptions of NIMBYism (Not In My BackYard-ism). That is, there is an expectation amongst planners and decision makers that while citizens and organisations are aware of the negative implications that their travel behaviour has for the public good and generally agree on the need to address problems with restrictive interventions, they often will not support the implementation of measures that affect them personally (Whitmarsh, Swartling & Jäger 2009). Hajer and Kesselring (1999, p. 6) sum up this social dilemma by stating that ‘people drive as consumers but demand policy change as citizens’.

Despite the potential effectiveness of sticks, conventional expert-based policy making has few mechanisms to generate direct feedback from the public on supposedly unpopular interventions. To anticipate public reactions, planners often rely on indirect

data such as forecasts, user statistics, customer feedback, and the experience and intuitive assumptions of experts (Meyer & Miller 2000). However, this data mainly documents or extrapolates reactions to previous interventions, rather than giving indications on possible reactions to future change. Due to this lack of security, planners often do not communicate solutions. Instead, they make assumptions about what the public, and the decision makers who try to anticipate the wishes of the public, would disapprove of (Warren Centre 2001). As Kingdon observes:

Many ideas are discarded because specialists cannot conceive of any plausible circumstances under which they could be approved by elected politicians and their appointees (Gatersleben & Uzzell 2004; Kingdon 2003, p. 139).

Some researchers suspect that a lack of trust between planners, elected decision makers and the public is the source of these barriers. Gatersleben and Uzzell, as a result of their study of the perceptions of residents, planners and elected decision makers on possible solutions to transport problems, report that:

Negative measures, while being more forceful, are unlikely to be effective if they are not supported by a public that either sees no alternative or assesses that it is in their individual or collective best interests. ... In order for any measure to have the desired effect, it needs to be accepted and seen as a salient strategy for addressing the problem, which also has to be perceived as real. ... If the residents do not reciprocate by having any confidence in their elected members' awareness of their problems and their preferences in respect of sustainability policies, then those policies will become unworkable. ... Not only do individual car users need to trust those institutions that implement car travel reduction measures, those institutions also need to trust individual car users. ... Based on this collective perception, it seems that local authorities have very little encouragement to try and implement change unless they are forced to do so (Gatersleben & Uzzell 2003, pp. 401-3).

Hartz-Karp makes a similar point, stating that 'regardless of the technical merits of experts, experience has shown that if proposals do not reflect the values of the community, implementation is fraught with problems' (Hartz-Karp 2005, p. 8).

Due to this lack of effective ways for people to generate collective solutions, policies that are put forward tend to be cautious about using sticks and oriented towards short-term successes (Harding, Hendriks & Faruqi 2009, p. 44). I therefore define second-guessing as a second barrier to more effective solutions to sustainability problems.

4.2.2. Barriers in the political process

The criteria a policy proposal has to meet in order to be presented for political consideration do not necessarily align with the selection criteria in the political stream. This is because a successful coupling of the streams requires proposals to address a problem that is high on the political agenda, in an environment where ‘politics takes over from policy analysis’ (Rose 2001, p. 18).

The problem orientation of the political stream explains why the assessment criteria of elected decision makers differ significantly from those of planning practitioners who are concerned mainly with the inherent qualities of a proposal. Decision makers need to be convinced that the policies they support provide effective solutions to the problems of their electorates. However, as public opinion is subject to being influenced by the communications of interest groups and as some of these interest groups also have influence on the economy and employment decision makers are likely to take these interests into account as well (see Section 2.1).

Political decision-making criteria can therefore be defined as two-dimensional: one dimension is the decision makers’ own values and ideas with regards to the problem situation, desirable outcomes and the means to achieve them; and the other is the decision makers’ assumptions about the public’s reaction to policy proposals. In the case of sustainable transport policies (see Section 2.3.3), however, the public reaction is unlikely to be unanimous and economic interests often have more influence on politicians than public opinion does (see Section 1.1).

Based on this analysis, the advocacy of policy proposals the grounds of their inherent benefits is unlikely to be sufficient to gain political support. Rather, in order for advocates or practitioners to effectively advocate their preferred policies, the benefits need to be promoted in terms of how they satisfy the various interests involved, and how they avoid opposition or public controversies. As long as there is no political willingness or consensus to promote them, policy proposals remain mere ideas in the bureaucratic sphere.

In conclusion, barriers to sustainable transport policies can be defined as being due to a lack on the part of their advocates of the strategic knowledge or skills required to obtain

political support for a program, rather than a lack of suitable policy lessons (see also Section 2.4).

4.3. Pathways to policy change

The analysis of barriers in the previous section highlights that — apart from technical and financial considerations — the implementation of a new policy idea is more likely to occur when the policy aligns with the values of a majority of the members of a policy community in the policy stream. If the policy is then presented for consideration in the political stream, the chances of implementation are higher when the idea aligns with the priorities of decision makers, which are essentially informed by the problems that are articulated as important by the public. This section illustrates how the ACF and related theories conceptualise mechanisms for overcoming these barriers and creating policy change.

The advocacy coalition framework (as introduced in Section 4.1.1) describes two mechanisms for a shift in policy away from the status quo: either the advocacy coalition promoting change wields more power than its rivals through adversarial tactics and is thus able to implement change (power shift), or all advocacy coalitions reach an agreement to move away from the status quo through direct interaction (idea shift). The characteristic differences between the adversarial and the collaborative mechanism are synthesised in Table 3 and described in detail in the following sections. I acknowledge that in a real-world policy setting these distinctions are not as clear cut. However, they are analytically useful to highlight and contrast the characteristics of collaborative and adversarial stakeholder interaction.

Both adversarial and collaborative mechanisms can achieve different degrees of change, ranging from incremental change ‘that adjusts policy without challenging the overall terms of a given policy paradigm’ (Hall 1993, p. 279) to fundamental change ‘marked by radical changes in the overarching terms of policy discourse associated with a “paradigm shift”’ (Hall 1993, p. 279). Fundamental change is often associated exclusively with adversarial politics or a power shift — this was also the initial assumption that informed the early stages of the data collection process for this research (see Sections 4.4 and 5.1.3). However, as I argue in Section 6.1 based on the findings

from the empirical case study described in Chapter 5, a collaborative process can bring about similar fundamental changes in the priorities underlying transport development.

	Style of stakeholder interaction	Mechanism of change	Level of stakeholder learning
A. Collaborative style of debate	Collaborative dialogue among interdependent stakeholders in institutionalised setting	Shift in stakeholder perceptions through collaborative learning process; typically facilitating consensus	Learning about the values behind other groups' interests
B. Collaboration within adversarial framework	Negotiation and bargaining in institutionalised setting	Identification of smallest common denominator; typically facilitating compromise	Learning about other groups' 'willingness to pay'
C. Adversarial style of debate	Adversarial tactics and strategies in the public arena without direct stakeholder interaction	Shift in the amounts of influence that groups have on policy making based on power struggles	Unchanged

Table 3: Synthesis of the characteristic differences in the mechanisms and outcomes of policy change based on collaborative and adversarial styles of political debate
(Source: created for this research)

4.3.1. Power shift in adversarial setting

Power shifts are related to an adversarial style of debate between groups that take advantage of opportunities to bring to bear their resources on policy initiatives they oppose or want to promote (Option C in Table 3). These tactics are referred to as adversarial because individual advocacy coalitions aim to discredit the positions of their political opponents, and so increase their own influence on policy development and decision making. In this situation there is typically no direct interaction between non-government stakeholder groups.

A power shift can be viewed as a sequence with three phases (see for example Hall 1993, pp. 279-80). In the first phase, conflicts arise because the value priorities which underlie current policy development are inadequate for dealing with a new problem situation. This results in an increasing number of problems or anomalies that are initially dealt with in policy experiments:

... the movement from one paradigm to another ... is likely to involve the accumulation of anomalies, experimentation with new forms of policy, and

policy failures that precipitate a shift in the locus of authority over policy and initiate a wider contest between competing paradigms. This contest may well spill beyond the boundaries of the state itself into the broader political arena (Hall 1993, p. 280).

Second, the inability of a policy community to deal with increasing anomalies attracts public attention, and so increases the resources that relevant interest groups can use to promote or block policy change. Baumgartner and Jones (2009) argue that a reframing of issues is crucial for making ideas more appealing to groups in society, especially sections of the public that have previously been indifferent on the issue. Dudley and Richardson, as a conclusion of their study of British transport policy change over time, argue that choosing the right venue or arena is crucial for communicating new ideas and gaining influence on policy development:

It is of crucial importance, therefore, to recognize that, although an interest may be apparently excluded from a core policy community, by selection of the correct arena for its activity, and effective transmission of its message, it may by indirect means have a significant effect on the policy network and policy itself (Dudley & Richardson 1996, p. 75).

Kingdon (2003) emphasises the role policy entrepreneurs play in taking advantage of opportunities outside of the policy process to promote change. If these strategies are successful, existing power monopolies are broken up and new influence coalitions form. Hall (1993, p. 280) emphasises that this process of power shifting is based on sociological or political grounds rather than on scientific grounds, and the question of who has control of the policy discourse is central:

The movement from one paradigm to another will ultimately entail a set of judgments that is more political in tone, and the outcome will depend, not only on the arguments of competing factions, but on their positional advantages within a broader institutional framework, on the ancillary resources they can command in the relevant conflicts, and on exogenous factors affecting the power of one set of actors to impose its paradigm over others. ... Faced with conflicting opinions from the experts, decision makers will have to decide whom to regard as authoritative, especially on matters of technical complexity, and the policy community will engage in a contest for authority over the issues at hand (Hall 1993, p. 280).

In the third phase, any new alliance needs to secure its long-term influence by institutionalising its value priorities, for example, in policies, indicators or decision making tools. Crucial for a successful institutionalisation are the first successes of the new value priorities. Hall summarises this process as follows:

[The contest between competing paradigms] will end only when the supporters of a new paradigm secure positions of authority over policymaking and are able to rearrange the organization and standard operating procedures of the policy process so as to institutionalize the new paradigm (Hall 1993, p. 281).

Bratzel (1999b) identifies these three stages in five empirical case studies of environmentally-oriented policy change in European transport policy making in the 1970s.

4.3.2. Idea shift in collaborative setting

Direct stakeholder interaction can bring about learning and agreement among the members of different advocacy coalitions. If this happens in an adversarial setting a compromise can be found (Option B). If stakeholders adopt a collaborative style of debate that is based on mutual respect, trust and understanding, however, a consensus can be reached that effects a fundamental shift in the ideas or beliefs of relevant participants (Option A).

Stakeholder collaboration is an alternative to the adversarial style of policy debate. If well executed it allows more balanced and objective consideration of scientific and technical evidence in the policy process as a basis for learning across ACs. According to the ACF:

Policy-oriented learning involves relatively enduring alterations of thought or behavioral intentions that result from experience and/or the assessment of new information involving the precepts of belief systems (Hecl 1974 in Sabatier & Zafonte 2001, p. 11566).

The early versions of the ACF describe three preconditions for policy-oriented learning (Sabatier & Jenkins-Smith 1993). First, the issues at stake need to be at an intermediary level of conflict. That is, they need to be important enough for stakeholders to engage in negotiation, but they must not involve the deep core beliefs of different coalitions as these conflicts ‘generate more heat than light’ (Sabatier & Zafonte 2001, p. 11566) . Accordingly, learning across coalitions is most likely to happen with regards to important secondary aspects of the respective belief systems. Second, learning is more likely if the issues are based in the natural rather than the social sciences, as these can be discussed more objectively. Third, learning can be facilitated through a forum that is:

(i) prestigious enough to force professionals from different coalitions to partitipate and (ii) dominated by scientific norms ... (Sabatier & Zafonte 2001, p. 11566).

While the early versions of the ACF consider policy-oriented learning to be relevant only at the level of secondary policy beliefs which resembles negotiation, a later revision of the ACF argues that stakeholder collaboration has the potential to contribute to ‘a substantial change from the status quo’ (Sabatier & Weible 2007, p. 205). This revision is based on a combination of the early ACF hypotheses on policy-oriented learning with literature on alternative conflict resolution (Bingham 1986; Carpenter & Kennedy 2001; Fisher & Ury 1991; O’Leary & Bingham 2003; Sidaway 2005; Susskind, McKearnan & Thomas-Larmer 1999). These ideas are discussed further in Chapter 6 in the context of the findings from my empirical case study.

The ACF does not explicitly address the differences between a consensus building process and a compromise achieved through negotiated agreement as mechanisms of change; it only refers to a negotiated agreement. However, in the context of this research a distinction is important as consensus- and compromise-building processes are different with regards to the amount of learning and thus the level of policy change they can effect.

The spectrum of compromise and consensus

In the context of this thesis I consider compromise and consensus building as having shared foundations in that they emerge as strategies for moving beyond stalemates in that they acknowledge a shared problem and calls for joint efforts to identify ways in which all parties can pursue their interests without undermining each other. However, I argue that there are fundamental differences in the ways learning takes place.

In negotiations to achieve compromises, participants learn about what their opponents are willing to agree to or pay, and under what conditions, but the respective interests and values of participants remain largely unchanged. The results of a compromise are usually based on the highest common denominator — the points that all participants can agree on. It is likely that neither side will be truly happy with the results. A compromise-finding process is thus power-based but does not change power structures or belief systems.

In a consensus building process, on the other hand, participants learn about the interests and worldviews of their opponents, and these are thus subject to examination and change:

When parties learn about the specific, detailed concerns of the other parties, they find out that some of those concerns are much easier to satisfy than others. They learn, crucially, that what's important to another party may be far less important for them — and vice versa. With that understood, they discover that they can make offers that cost themselves little even as they benefit others significantly. They can then devise options that create mutual gains: not equally devastating compromises, but packages of “trades” that actually satisfy the concerns and interests the parties bring to the table (Forester 1999, p. 490).

Through this joint learning process a consensus — in contrast to a compromise — can achieve higher levels of agreement among process participants and in the wider community as well higher outcome quality.

The difference between the quality of learning in a compromise as opposed to a consensus building process can be highlighted using the ‘eternal triangle’ that was introduced in Figure 3 in Section 2.2. If stakeholders expand the boundaries of their reference systems as a result of the collaboration, new facts and values become relevant. This transformative type of learning has also been highlighted by others. For example, Vickers states that:

[Debate] serves not so much to produce a series of possible new solutions as to alter what those concerned regard as the relevant facts and the way in which these are classified and valued (Vickers 2010, p. 18).

I suggest that a joint learning process takes place if individuals in the consensus building process develop a shared understanding of each others’ boundary judgements, facts and values, and, based on that, negotiate a common ground and co-create knowledge so that participants’ individual triangles are altered. By contrast, in a process of negotiation participants emerge with their perceptive triangles unchanged.

4.4. Conclusions for the case study research

The previous sections established the theoretical framework to guide the enquiry into the success factors for overcoming barriers to sustainability in the transport policy process. As highlighted in Section 4.3 fundamental policy change is often exclusively

associated with adversarial politics or a power shift in the empirical literature on major policy change in transport development (as described in Section 4.3.1). For example, as discussed in Section 1.5, Bratzel (1999b) investigates the conditions for success in introducing sustainable urban transport policies in five European cities, and Dudley and Richardson (2000) draw lessons from British transport policy between 1945 and 1999 in order to answer the question ‘Why does policy change?’. Neither study highlights the potential of collaboration and learning to contribute to major policy change as significant, but rather discuss shifts in power relations as the main success factors. Similarly, Kingdon (2003) concludes from his empirical study that the significance of learning in the policy process is overrated, and that it always comes down to power relations in the end.

Based on these initial conclusions the original focus of the empirical case study in Chapter 5 was to investigate how APT stakeholders or advocacy coalitions in the transport policy process can contribute to achieving a power shift, and thus fundamental policy change towards more sustainable transport development. The research design (as described in Section 5.2) aimed to investigate the characteristics and resources of the APT advocacy coalition in a relatively successful case study in sustainable transport development. In particular it aimed to investigate the APT advocacy coalition’s strategic activities in successful cases of policy change, the windows of opportunity it took advantage of, the institutional arenas it chose for these activities, and finally the barriers and success factors involved in conducting these activities. Appendix 2 outlines the interview guideline I developed based on this research focus.

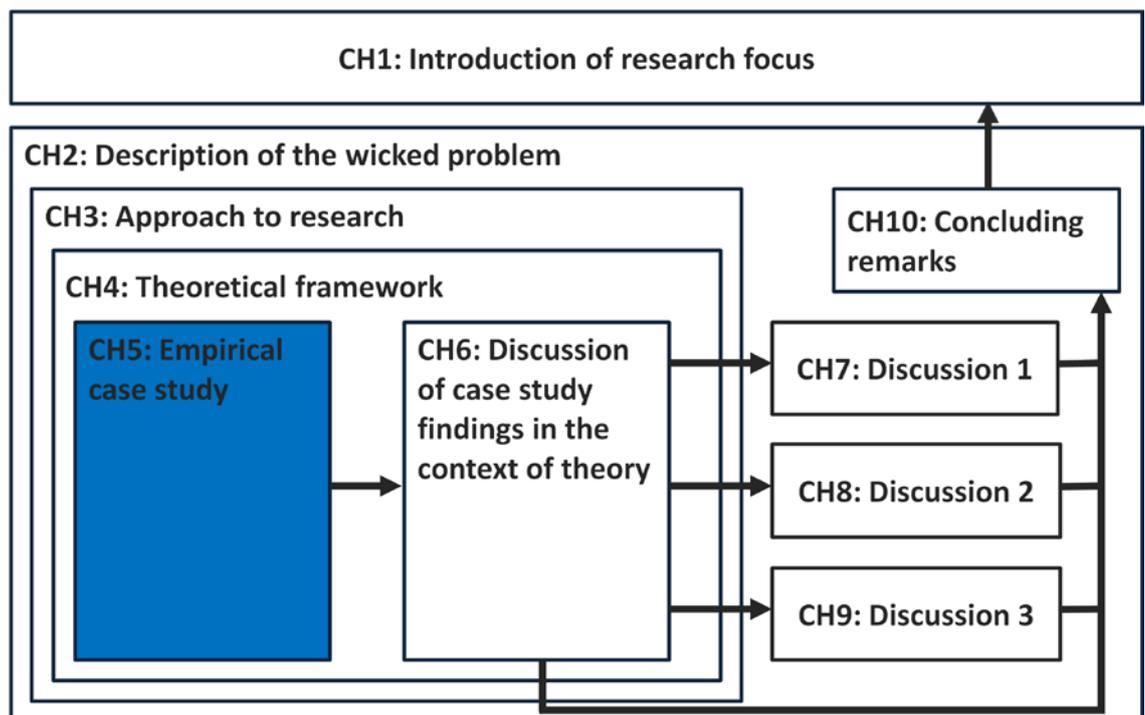
This focus on *how* policy change can be achieved through strategic actions of advocates differentiates this research from other studies in the field that are largely descriptive (see Section 1.5). However, it is a focus that has also been suggested by Sabatier and Jenkins-Smith:

From a strategic perspective, the analysis of policy change must move from the identification of conditions conducive to policy change to the analysis of tactics by policy advocates (Sabatier & Jenkins-Smith 1993, p. 101).

The following chapter, Chapter 5, provides a detailed overview of my approach to investigating this gap in the existing knowledge.

CHAPTER 5.

TRACING POLICY CHANGE IN MUNICH



The previous chapter established the theoretical framework to guide the case study research I proposed in Chapter 3 to develop answers to my research question: *What are the critical success factors needed to counterbalance the asymmetric influence of motorised road transport (MRT) interests and active and public transport (APT) interests in the urban transport policy process, and to achieve a broader focus in urban development that better integrates environmental, social and economic considerations?* It concluded that strategic insights on how to achieve this shift in the priorities guiding transport development can be gained through an investigation of the tactics and resources used by APT advocates in a city that is ‘relatively successful’ in sustainable transport terms. In this chapter I apply these conclusions to an empirical case study of Munich, Germany.

The first sections of this chapter describe the case study (Section 5.1) and the research design (Section 5.2). Section 5.1.3 highlights that contrary to my original assumptions a collaborative stakeholder dialogue was the source of fundamental policy change in Munich. This revelation prompted a shift in the focus of the research, which is described in Section 5.3. Section 5.4 analyses the success factors of the collaborative stakeholder dialogue. Section 5.5 concludes that collaborative stakeholder dialogue is a powerful alternative pathway to policy change and points to the need for further discussion in relation to theory.

5.1. Munich — a case study in sustainable urban transport development

To set the scene for the empirical work in this chapter, this section outlines why I selected Munich as a case study (Section 5.1.1), illustrates the framework conditions for policy making in Munich (Section 5.1.2) and introduces the *Inzell-Initiative*⁸, a collaborative dialogue among transport stakeholders in Munich, as the subject of analysis (Section 5.1.3).

5.1.1. Rationale for case selection

In Section 3.1 I argue that every city that has achieved progress towards sustainable transport development — all ‘relatively successful’ cities — can provide insights into

⁸ The website of the Inzell-Initiative is at http://www.inzell-initiative.de/_engl.Version/index_eng.htm (accessed 20 January 2012)

how advocates or governments might achieve change in the direction of policy development. From that perspective, the shortlist of case study candidates is long. I have selected Munich — a city in which I have lived, worked and studied for more than six years — for a number of reasons:

- Sustainable transport indicators (see Sections 2.3.3 and 3.1): Munich ranks high in both the Mobility-in-Cities-Database (ranked among the comparatively most sustainable transport cities) and quality-of-living-indices (Place 4 in the Mercer Quality of Living Survey 2011 as the top German city). The City of Munich has contributed to a continuous increase in cycling mode share in the past decade; it has implemented a widely accepted parking space management system; and it was the first city in Europe to establish a mobility management department (these developments are described in Section 5.3.3). Appendix 3 outlines detailed transport indicators for Munich in comparison to Sydney and the average of Western European cities for the year 1995.
- Language: the analysis takes into account secondary data such as media articles and government documents as discussed in Section 5.2.1. This limits the list of potential candidates to English and German speaking cities, and eliminates high profile candidates such as Amsterdam and Copenhagen, which are often cited in the literature as successful examples of sustainable transport development.
- Familiarity: an interpretive analysis of transport policy change and its context is potentially more rigorous if the researcher has a detailed knowledge of the city. This excludes other European cities like Vienna and London, or North American cities like Portland and New York City that have similar relevance as case studies but which I am unfamiliar with.
- Size: one of the objectives of this thesis is to make its findings applicable to Sydney. This excludes candidates like Freiburg and Munster, for example, which have populations of less than one million inhabitants.

5.1.2. Framework conditions for transport policy making

This section outlines the basic characteristics of the transport policy environment in Munich: the development of the physical infrastructure system, the political landscape,

the stakeholders in the human activity system, and the basic features of the planning paradigm.

Urban infrastructure development

Munich is the capital of the state of Bavaria and Germany's third largest city. It is of great economic importance as a strategic hub in the south of Germany, and as a consequence, it needs to accommodate large traffic volumes. It has about 2.6 million inhabitants with about 50% living in the city area and the other 50% living in suburban districts. The city area covers approximately 310 km². Its old centre is encircled by the *Altstadtring* (Old City Ring Road); the wider inner city area is encircled by the *Mittlerer Ring* (Middle Ring Road); the city area is encircled by the *Autobahnring* (Motorway Ring Road) (see Figure 11). If not otherwise stated I refer to this city area when I mention Munich in the remainder of the thesis.

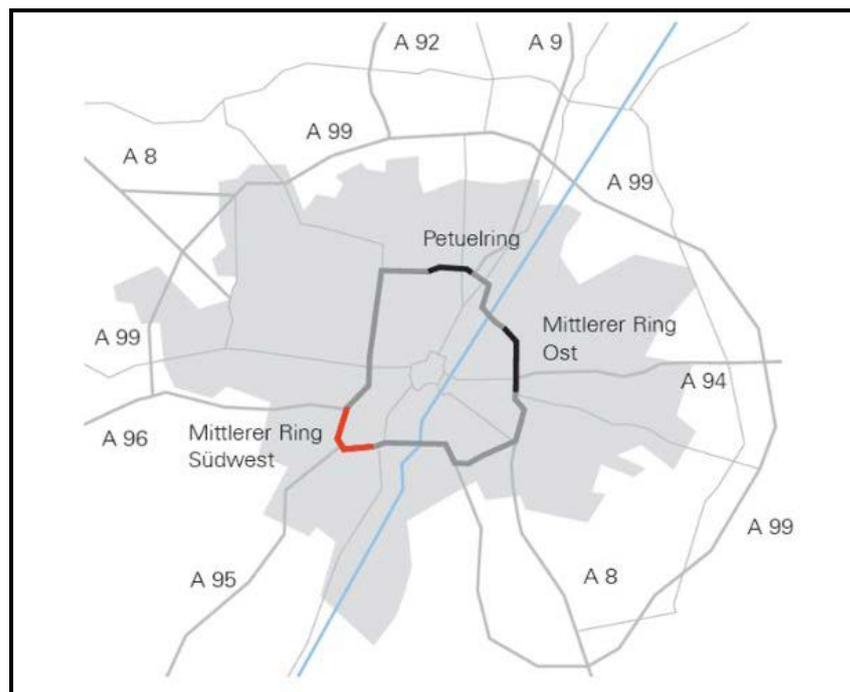


Figure 11: Major roads in the Munich city area: *Altstadtring* (inner circle), *Mittlerer Ring* (middle circle, dark grey) and *Autobahnring* (outer circle)
(Source: City of Munich website, accessed 31 January 2012)⁹

The city was largely destroyed during World War II but rebuilt based on the old structures that were based on Theodor Fischer's *Staffelbauordnung*, or progressive building development order, rather than a more modern structure. The 1960s saw a

⁹ The city's website is at <http://www.muenchen.de/rathaus/Stadtverwaltung/baureferat/projekte/mittlerer-ring-suedwest.html>

tendency towards more car-oriented development based on the North American model. However this was abandoned after the mayor at that time visited Los Angeles and reportedly decided that he did not want the same development for Munich. In 1975 the *Landeshauptstadt München*¹⁰ or City of Munich clearly voted for a polycentric system of district centres spread over the entire city. Munich adopted the principle ‘compact, urban, green’ as key strategy for spatial development. The idea of ‘compact, urban, green’ combines dense urban land use with the promotion of mixed-use developments instead of mono-functional commercial or housing areas (City of Munich 2005).

In 1972 Munich hosted the Olympic Games which brought development of the subway and suburban train network forward. Since then, Munich has followed what some interview participants referred to as ‘double-track strategy for transport development’ (Interviewee #1, TUM), which refers to the development of a high quality public transport network, but at the same time the acceptance of the car as the primary means of transport in the inner city area as well as in the suburban districts.

Munich was the first German city to introduce a pedestrian only shopping zone, or mall, in the centre of the city in the 1970s — a transformation that was strongly opposed by business associations at first but which gained wide acceptance over time (Interviewee #13, CoM).

From the 1980s onwards the city area of Munich has increasingly been confronted with the limitations of its largely road based networks because congestion could not be tackled successfully. This was first counteracted with technological solutions that were mainly based on telematics applications, an initiative called *Kooperatives Verkehrsmanagement*¹¹ (KVM- Cooperative Traffic Management). However in the early 1990s transport stakeholders became increasingly ‘disillusioned’ (Interviewee #1, TUM) with KVM as they realised that these solutions alone were not sufficient to overcome the problems of congestion and conflicts regarding the use of urban road space.

The awareness of these limitations produced two conflicting positions in the policy community on how to deal with the challenges of consistent growth of urban transport

¹⁰ The city's website is at <http://www.muenchen.de/Rathaus/1336/index.html> (accessed 20 January 2012)

¹¹ The KVM website is at http://www.muenchen.de/Rathaus/kvr/strverkehr/verkehrssteuerung/vt_projekte/208773/68_kvm.html (accessed 20 January 2012)

demand in Munich. The first proposal called for the construction of three tunnels along the *Mittlerer Ring* to relieve traffic congestion (see highlighted sections in Figure 11) while the other proposal advocated improving access by active and public transport services while restricting private car use in the inner city area. Section 5.3.1 describes how this conflict culminated in a damaging stalemate that served as an essential precondition for the collaborative stakeholder dialogue that is the subject of this case study analysis.

Political landscape

As head of the City of Munich, the mayor is responsible for the city area (1.3 million inhabitants); responsibility for the suburban districts with another 1.3 million is divided among many players.

Since World War II the City of Munich, has almost consistently had a social democratic local government headed by the *Sozialdemokratische Partei Deutschlands*¹² (SPD – Social Democratic Party of Germany). There was only one term of conservative government headed by the *Christlich-Soziale Union*¹³ (CSU – Christian-Social Union of Bavaria) from 1976 to 1980. Since 1990 the SPD has governed in coalition with *Buendnis 90/Die Gruenen*¹⁴ (Alliance 90/The Greens), a coalition referred to as *Red-Green*. By contrast, the suburban districts are largely governed by the CSU and this sometimes complicates decision making.

In their brief period in power the CSU started to prepare plans for three tunnels along the *Mittlerer Ring* in an attempt to relieve road traffic congestion. However when the SPD came back to power in 1980, parts of the SPD under Mayor Kronawitter as well as the Greens, argued that Munich could not accommodate any more urban road development because the city was already ‘drowning in congestion’ and that ‘every additional car would be one too many’ (Interviewee #12, CoM). As a consequence the tunnel plans were shelved in the 1980s and replaced by a policy of introducing traffic calming measures to keep traffic out of residential areas. This included changes to the road infrastructure such as establishing 30km/h zones, installing speed humps and narrowing the entrances to local roads serving residential areas. This development was

¹² The SPD's website is at <http://www.spd.de/aktuelles/> (accessed 20 January 2012)

¹³ The CSU's website is at <http://www.csu.de/partei/international/english.htm> (accessed 20 January 2012)

¹⁴ The Greens website is at <http://www.gruene.de/> (accessed 20 January 2012)

often accompanied by a political philosophy that aimed to put restrictions on car traffic until motorists ‘would not be keen on driving anymore’ (Interviewee #12, CoM).

As a response to these developments under the SPD and then Red-Green coalition governments, the CSU, in collaboration with car advocates such as the ADAC and BMW, began to mobilise public opposition to the government by taking advantage of the public frustration with road capacity problems to depict the Red-Green coalition as ‘enemies of the car’ (Interviewee #12, CoM), while at the same time promoting their own tunnel plans. These developments produced a political stalemate that culminated in two competing citizen referenda on transport development in 1996 which will be described in more detail in Section 5.3.1.

Stakeholders in the transport policy arena

Transport always used to be a ‘political hotspot’ (Interviewee #1, TUM) in Munich. There is disagreement between groups that advocate an improvement in the ease of movement of motorised traffic, and groups that prioritise high quality active and transport networks and urban liveability.

Strong players in the first group are *Bayerische Motorenwerke*¹⁵ (BMW – Bavarian Motor Works) as the local car manufacturer and major employer, the *Allgemeiner Deutscher Automobil-Club*¹⁶ (ADAC – German Motorists’ Association) and the *Industrie und Handelskammer*¹⁷ (IHK – Chamber of Industry and Commerce).

The players in the second group emerged in the 1980s: the Green party, the *Allgemeiner Deutscher Fahrrad-Club*¹⁸ (ADFC – German Cyclists’ Association) and environmental organisations such as *Green City*¹⁹.

Transport planning

Transport planning responsibility in Munich is divided between five departments of the municipal government: the *Planungsreferat* or Planning Authority is responsible for concept planning of the spatial, social, ecological, residential and economic development in Munich; the *Kreisverwaltungsreferat* (KVR) or District Administration

¹⁵ The BMW website is at <http://www.bmw.de> (accessed 20 January 2012)

¹⁶ The ADAC’s website is at <http://www.adac.de/> (accessed 20 January 2012)

¹⁷ The IHK’s website is at http://www.muenchen.ihk.de/mike/ihk_geschaeftsfelder/ (accessed 20 January 2012)

¹⁸ The ADFC’s website is at <http://www.adfc.de/> (accessed 20 January 2012)

¹⁹ Green City’s website is at <http://www.greencity.de/> (accessed 20 January 2012)

Authority is the traffic regulation and enforcement department, for example, it coordinates police and traffic signs; the *Baureferat* or Building Authority implements the planned infrastructure; and the *Umweltreferat* or Environmental Authority assesses the potential impacts of the planned interventions. Coordination between these five departments takes place on the strategic level in *Lenkungskreisen* or Steering Groups and on an operative level in *Arbeitskreisen* or Working Groups. Working groups are the main communicative link between the planning authorities and the members of the local district councils.

Munich has a long tradition of urban development plans or *Stadtentwicklungspläne* that contain the transport development plan or *Verkehrsentwicklungsplan* (VEP) as an integrated component. These plans are revised about every 10 years, with the first plan dating back to 1963–64 and subsequent plans following in 1975, 1983 and 1998. The latest plan, *Perspective Munich*, is proactive in that it defines ‘urban development as a process’ (City of Munich 2005) that sets out the key parameters but is sufficiently flexible to adapt to a changing situations.

The urban development plan is developed in coordination with all relevant departments. It contains the *Verkehrsentwicklungsplan* (VEP) or transport development plan as an integrated part that is discussed with all parties and levels of government that are affected by traffic ranging from citizens to the European Union (EU). The VEP has three mandatory guiding concepts for all decisions: first, to reduce motorised traffic, then to shift unavoidable traffic to less environmentally harmful transport modes, and finally to manage the remaining traffic (City of Munich 2006).

As part of these plan creation activities Munich has procedures for citizen engagement that have been in place since the 1980s (Fahnberg, Beckmann & Koppen 2001). Citizen engagement also occurs on a regular basis in *Stadtviertelparlamenten* or urban district parliaments. In these meetings citizens can raise issues or make suggestions that must be responded to by administration and council members.

Public transport provision in Munich is headed by the *Münchner Verkehrsverbund*²⁰ (MVV – Munich Transport Association), which coordinates tram, bus, subway and suburban trains in an integrated network and tariff system. *Münchner*

²⁰ The MVV's website is at <http://www.mvv-muenchen.de/en/home/index.html> (accessed 20 January 2012)

*Verkehrsgesellschaft*²¹ (MVG – Munich Transport Company) is the operator and provider of bus, tram and subway services, and is owned by the City of Munich. The Bavarian State Government has responsibility for the provision of regional and suburban train services and is one of the associates of the MVV.

5.1.3. Introducing the subject of analysis

The original aim of the Munich case study as stated in Section 4.4 was to learn how public and active transport advocates were able to strategically contribute to creating policy changes towards more sustainable development. However, the data collection process (see Section 5.2 for an outline of the method) revealed that the adversarial power-based framework I had originally assumed to be in play (see Section 4.4 for a discussion of this) did not apply to the situation in Munich.

Many of the initial comments of the interviewees when I presented the interview guideline and background (outlined in Appendix 2) were along the lines of ‘This is not how we work here’, or ‘In Munich things are different. We work together here’.²² Significantly, all participants emphasised the shift from adversarial to collaborative political relations in Munich as the single main success factor for the positive developments with a special emphasis on the role played by a deliberative stakeholder engagement forum — the Inzell-Initiative — as the main trigger for this change.

The Inzell-Initiative was established in 1995 and is a professionally facilitated dialogue among transport stakeholders in Munich that takes place outside the formal administrative and political processes. It was initiated by Christian Ude, the Mayor of Munich, and Bernd Pischetsrieder, the CEO of BMW, after years of intense stakeholder conflict that had largely blocked progress in transport development. Its aim was to ‘solve traffic problems together’ by focusing on areas of agreement rather than dissent, sending out the message:

We basically agree on 90% and should not block these 90% only because we fight over 10% (Interviewee #12, CoM).

²¹ The MVG's website is at <http://www.mvg-mobil.de/en/> (accessed 20 January 2012)

²² These comments were mostly made in the introductory part of the interviews. The aim of the introduction was to establish rapport with the interviewee, and I therefore did not record these initial conversations. For that reason I cannot provide quotes for these statements.

This collaborative dialogue identified and consolidated the common ground among parties who had previously seen themselves as having fundamentally incompatible or contradictory positions, and created a more stable political climate in which they were able to proceed. The Inzell-Initiative still exists today, with general meetings every one to two years, and more regular meetings in interdisciplinary working groups.

Since its establishment in 1995, the Inzell-Initiative has fundamentally changed the ways stakeholders interact and developed proposals for policy development, thus facilitating more effective and acceptable policy solutions. Significantly, every stakeholder interviewed commented that outcomes were better with the more collaborative approach of the Inzell-Initiative than with the adversarial process that was in place previously — Section 5.5 describes these effects and outcomes in more detail as a conclusion of the case study analysis.

In line with the Adaptive Theory-based approach to research (discussed in Section 3.2) I adapted the focus of data collection and analysis towards exploring this collaborative process in detail. The findings are outlined in the Sections 5.3 to 5.5. Section 5.2 describes the steps in data collection and analysis that produced these findings.

5.2. Research design

5.2.1. Data collection

Data collection method

The case study draws on material from semi-structured expert interviews as the main source of data. This is because insights on how the policy change in Munich took place are provided by a number of individuals inside and outside of government who played an active role in the process or witnessed it from close range — hence their ‘expert’ status. Archived materials such as council notes and media reports serve to further describe the context and provide additional perspective.

The benefit of expert interviews is that these individuals offer first-hand insights into the events from a particular perspective, for example, government or the bicycle user group. The expert status in this sense is relative as it is awarded by the researcher. It should not be confused with the traditional meaning which defines an expert as

someone who has responsibility for the conception, implementation or control of a solution, or who has access to privileged information on groups of people or decision making processes (Meuser & Nagel 1991, p. 443). A second benefit of expert interviews is that experts can link observed events and phenomena in an explanatory way, rather than leaving this task to the researcher who has less insights. Still, I recognise the methodological limitations of expert interviews, for example, the potential for selectivity in recalling past events and what Bickerstaff and Walker (2005, p. 2138) refer to as ‘reinterpretation with hindsight’.

Learning about the insights of experts and their interpretations of events requires the researcher to be flexible during the interviewing process. A semi-structured format uses an interview guideline, but lets the conversation move in directions the interviewee considers important (Flick 2009, pp. 149-75). It also provides scope for the evolution of ideas in the interview framework that could lead to new insights. For example, as outlined in Section 5.1.3, the first interviewees in Munich emphasised that the policy shift was strongly related to a collaborative stakeholder dialogue that fundamentally changed the way stakeholders interacted and developed objectives and solutions for transport development. Based on that insight, I changed the focus of the interview framework to explore this process in detail.

To inform interview preparation and participant selection and to supplement the interview data, I collected a series of archived documents ranging from newspaper and internet articles through to council meeting minutes and government publications. I identified these documents through internet searches, searches in the City’s archive, and documents that were suggested by interview participants. While some of these documents are referred to in the case description in Sections 5.3 and 5.4 they were not subject to a systematic analysis. This is because the primary points that were relevant to the analysis came from the interviews, and I knew that most of the events described by the interviewees are not described in other sources. The material from the interviewees therefore formed the primary data material and the other materials were used merely to supplement and expand on the primary sources. To confirm that the overview of the events and processes that took place in Munich was complete and well rounded I forwarded an earlier version of this case study chapter to all interview partners for feedback (see also Section 5.2.3).

Preparation and revision of interview questions

Appendix 2 documents the initial interview guideline I developed based on the theoretical framework described in Chapter 4. As some participants asked to see the list of questions before the actual meeting, I forwarded this guideline to all interview participants, highlighting that it was not a rigid structure.

To adapt these guiding questions after receiving feedback from the initial interviews I studied the archived documents and revisited the theoretical framework as well as additional literature. This dialogue between empirical data and theory is in line with the adaptive theory approach described in Section 3.2. The insights from this process are discussed in Chapter 6 and Section 5.5.

Stakeholder portfolio

Appendix 1 provides an overview of the 13 interview participants in Munich, including their organisational affiliation at the time of being interviewed and their in-text description.

To select these participants I first constructed a portfolio of relevant organisations that had reportedly advocated or contributed to public and active transport development in the past. I then used a combination of two strategies to identify committed interview participants: candidate self-selection and high-level cascading.

Most of the relevant organisations were obvious choices, for example, local government administration, the Green Party, non-government organisations (NGOs), and bicycle user groups. The shortlist also included experts with more of an observer role including an academic and two journalists. Given my background as a former Munich resident, most of these organisations were known to me. However, to verify the intuitive selection of the most relevant players, I searched the homepages of several transport-related initiatives, for example the Inzell-Initiative and the *Münchner Forum*²³. In addition I screened relevant media articles and research and government reports.

After shifting the focus of the interviews, I decided, in contrast to my original plan to only interview public and active transport advocates, to also include MRT-oriented

²³ The Forum's website is at <http://muenchner-forum.squarespace.com/> (accessed 20 January 2012)

organisations. I therefore included BMW and the German Motorists' Association (ADAC).

The search identified additional relevant institutions, for example *Bund Naturschutz in Bayern e.V.*²⁴, an organisation that aims to protect the natural environment from — among a range of other detrimental effects — negative transport related impacts. However, I decided to restrict the participant list to organisations primarily related to transport.

In hindsight the number of interviewees seems justified. The principal themes and success factors emerged in every single interview, independent of the organisational background or political orientation of the interview participants. While I acknowledge that a broader sample of interviewees might have added valuable *additional perspectives* I do not think that they would have added critical *new insights*.

Participant selection

Once I had selected relevant organisations, I contacted the nominated transport political speakers or sustainability experts whose contact details were usually available on the organisations' homepages or in relevant documents.

To select participants from organisations for which I could not identify a relevant interview partner, I applied a combination of strategies that I called *candidate self-selection* and *high-level cascading*. Self-selection means that I did not send the interview request to a particular person, but rather to the general email address of an organisation. This was successful in most cases; for example, I received a direct positive reply from a senior planning official.

High-level cascading consisted of contacting the most senior member of an organisation, for example, the Mayor, in the hope of either an interview invitation or a referral to another relevant interview partner. This technique provided me with some of the most insightful and committed interview partners.

Helpful referrals to other potential interview partners were provided by the interview participants, often highlighting the same set of key individuals. In this way, I felt

²⁴ The Bund's website is at <http://www.bund-naturschutz.de/index.html> (accessed 20 January 2012)

confident that I had captured the individuals that could provide the most valuable input to the research.

The benefit of both candidate self-selection and high-level cascading is that the organisation or institution chooses their speaker, usually a senior member experienced in speaking on behalf of the organisation. That way, ethical concerns regarding unintended organisational misrepresentation and related problematic situations for participants can be minimised. Organisational misrepresentation can occur when negative or confidential information is disclosed.

Dealing with multiple perspectives

Most interview participants spoke from several perspectives because they often had several roles, for example, transport planner and green party member, or green politician and employee for a public transport provider. This became apparent as participants often felt the need in the introductory part of the interview to describe their multiple roles.

I embraced these multiple perspectives rather than try to reduce them to one single perspective. In so doing, I encouraged participants to use whatever perspective they considered relevant while making explicit their switches. This provided some interesting angles to participants' accounts and in some cases they found it to be a relief, as participants apparently had difficulties disentangling their personal views — for example, often strongly APT oriented — from their organisations' policy line.

In some cases it was also absolutely necessary for participants to speak from their personal or expert perspective, given that their role at the time of the interview was different from the role they held when they gained the insights that were relevant to the research. In other cases participants were relatively new to their current role but could build on longstanding experience from previous roles.

In summary, offering the use of multiple voices to participants turned out to be an important outlet for valuable statements and additions that would not have been disclosed from an organisation-only perspective. To avoid unintended organisational deception and compromising situations as described above, participants could choose to

remain anonymous, and to review and withdraw their quoted material at anytime during the research process.

To clarify, the use of multiple perspectives is not part of the analysis as is often the case in sociological research, which may examine, for example, when, how and why participants use different voices (Silverman 2010, p. 227). This was not the aim of the expert interviews. Rather, these interviews aimed to gain insightful knowledge that often only the participant could provide.

5.2.2. Data analysis

Transcription of interview data

To capture the richness of the interviews and to be able to double-check comments in their context I digitally recorded the interviews. I then produced an abridged transcript of the recordings by transcribing only aspects of the interview that were relevant to the research question (Meuser & Nagel 1991). So as not to lose data that might become relevant at a later stage in the transcription process, I transcribed brief descriptions of the omitted sections in brackets.

Abridged transcripts are sufficient for expert interviews because the focus is on what is said, rather than why and how (Meuser & Nagel 1991). In this respect the expert interviews differ from interviews in sociological disciplines that require a verbatim transcript to be able to analyse discourses and narratives in the data.

Interview coding and analysis

I coded the interviews in the qualitative research program NVivo, using an iterative process. The first step was taking notes, or memoing, during the transcription process. I then analysed the three interviews I considered most insightful, attempting to identify emerging themes or structure. I discovered the most useful way to begin was to assign categories to different sections of the transcripts based on a logical structure in line with the interview questions:

- General background and context of transport development and politics in Munich.
- Why was there a shift away from adversarial politics?

- What were the steps and events preceding the implementation of the Inzell-Initiative?
- What were the effects and outcomes of the Inzell-Initiative in terms of changes in policy outcomes, stakeholders and institutions?
- How were these effects and outcomes generated?
- And what are negative aspects and criticism regarding the Inzell-Initiative?

In a second iteration I developed several sub-coding categories that I used to classify the remaining interviews, adding and modifying codes during the process.

Dealing with the language divide

Many interview responses had a specific German meaning, especially in the case of idioms that can easily get lost in translation. To make these responses accessible to an English speaking audience I consulted with native speakers to identify the most appropriate expressions. In order not to lose meaning from the German interview accounts, I used bi-lingual coding categories and left the translation from German into English to the case study write-up stage.

Another challenge was that many German (transport) political terms have no direct English equivalent. For example, the German language has no commonly used equivalent for the term ‘policy’. If interview participants referred to the term, they used the English word. I resolved this problem by using two German terms that come closest to the definition of policy change in the context of this thesis: *Verkehrspolitikwandel* (or change in transport politics) and *Wandel in der Verkehrsentwicklung* (or change in transport development).

5.2.3. Validity and reliability

As noted in Chapter 3 the case study analysis does not attempt to seek the ‘truth’ of what happened in Munich. It therefore has no quantitative element, that is, I do not measure the relevance of an argument in terms of how *many* participants refer to it, but rather in terms of how *relevant* the participants considered it to be. I investigated this through questions such as ‘What do you consider the most important elements that have contributed to the described effects?’

The decision not to use a quantitative method arose for a number of reasons. First, the structure of the interviews was fairly open; that is, not every participant was asked the same set of questions. As a consequence, the fact that participants did not raise a point does not automatically mean they did not consider it relevant but might just not have mentioned it. For example, when prompting participants on points relating to success factors that previous interviewees mentioned as crucial, they often strongly agreed although they might not have mentioned them otherwise.

Second, participants were selected in their roles as experts with special insights into the subject area. Therefore I considered every input as valuable even if only one person mentioned it. Also the diverse background of the participants contributed to the different emphasis or significance they attributed to an issue. For example, a sociologist identifies different success factors or places greater emphasis on different aspects of the situation to what a transport planner does.

To enhance the reliability of the case study account I forwarded a preliminary version of Chapter 5 to the interviewees for feedback. A number of participants read the full account and found themselves and the overall description of events in Munich to be very well represented. Giving interview participants the opportunity to review their contributions before publication was also a condition of approval required by the UTS Human Research Ethics Committee. Knowing that they would have the opportunity to review their responses before publication also encouraged participants to talk more openly.

To enhance the rigour and transparency of the research account I kept the documentation of events and phenomena as described by the research interviewees, (discussed in Sections 5.3 and 5.4), separate from my own interpretations and conclusions (discussed in Section 5.5). However, I suggest that the qualitative analysis and documentation of semi-structured interviews is unlikely to be entirely free of personal bias given the personal background and worldviews the researcher brings to the process. The subjectivity of qualitative research was discussed in some detail in Chapter 3.

5.3. Events and effects surrounding policy change in Munich

This section documents in detail the policy change in Munich which accompanied the introduction of the Inzell-Initiative. It first outlines the conditions that triggered the change from an adversarial to a collaborative style of transport stakeholder interaction in Munich while Section 5.3.2 describes the course of events that led to the establishment of the collaborative stakeholder dialogue, and Section 5.3.3 documents the effects and outcomes of that collaborative process. The success factors that combined to produce these effects are the subject of Section 5.4.

5.3.1. Window of opportunity for initiating change in the style of stakeholder interaction

The Munich interviewees identified two key developments that set the preconditions for a change in the quality of political debate in Munich. The first was changes in the general socio-cultural development at that time. The second was a series of events and actions that eventually culminated in a political stalemate, creating an incentive for stakeholders to collaborate and enabling the mayor to take action which will be described in more detail in Section 5.3.2.

Change in line with socio-cultural change

Some participants observed a general diminution in ideological rigidity in German political culture in the 1990s, that is, some stakeholder groups started to move away from passionately and antagonistically defending valued positions to adopting more pragmatic perspectives that allowed them to some extent to cooperate with their political opponents where they considered it beneficial. This is further discussed in Section 9.1.3 with regards to the transferability of the Munich model to other cities.

An example that was mentioned as remarkable for that development was that in the mid 1990s an individual within the Green party initiated an internal discussion regarding the interaction with political opponents by publishing an article in the party journal which asked the question:

Why do we actually fight about the 20 per cent of issues where we don't move forward rather than concentrate on the 80 per cent where we could definitely work together with all stakeholders (Interviewee #1, TUM)?

This conciliatory approach was surprising given earlier approaches that basically opposed what other, more MRT-oriented groups had wanted.

Another realisation by different stakeholder groups in the early 1990s was that high quality transport systems are not achieved by just improving the coordination of technical systems, but that the coordination of human, social and value systems is relevant too, and that this requires a different approach to policy making (Interviewee #1, TUM).

A political stalemate as incentive for change

This section first describes the situation in Munich when Christian Ude took over as Mayor in 1993 — strong fronts or ‘ideological trenches’ (Interviewee #12, CoM) between the City of Munich and MRT stakeholders that created blockages in the policy process, culminating in two competing public referenda on the future of Munich’s transport development. It then describes how this intense conflict made stakeholders more receptive to collaboration as an alternative to the existing adversarial style of stakeholder interaction.

A contested political environment puts pressure on the mayor

When the Red-Green coalition came to power in 1990 under Mayor Kronawitter it promoted a change in policy development that aimed to provide disincentives to private car use — they ‘heralded the Red-Green transport policy change’ (Interviewee #12, CoM). However, in their approach they did not manage ‘to take everyone on board’ (Interviewee #12, CoM), especially not MRT stakeholders like BMW, ADAC and IHK. This created a contested political environment with the government in one trench and industry in the other (Interviewee #11, ADAC).

During that time there was little direct communication between the two sides. Instead, communication was made through public fights in the media and ‘open conflict’ (Interviewee #5, Green Party) that created blockages in the transport policy process with one interviewee describing stakeholders as ‘throwing clubs between each other’s legs’ (Interviewee #11, ADAC) and another stating that ‘it was difficult to bring something forward on the transport political level’ (Interviewee #6, Green Party).

This ‘trench warfare’ (Interviewee #12, CoM) was also reflected in an ideological rigidity in the policies Red-Green proposed. They did not make any concessions to political opponents and so deepened the divide, as was the case for example with the implementation of extensive traffic calming policies that were supposed ‘to take the fun out of driving’ (Interviewee #12, CoM).

The antagonism between government and MRT stakeholders was most stark between BMW and the City of Munich. For example, BMW tried to influence the City’s transport planning efforts by releasing publicly a proposal to build a series of car parks at the boundaries of the inner city area, or *Blaue Zone*, without first consulting with the administration.

As a result of these adversarial tactics being played out in the public arena the Red-Green coalition lost support from some parts of the community, and, according to one interviewee, transport problems became number two in surveys of the public assessment of political issues (Interviewee #12, CoM).

Two competing referenda as the culmination of adversarial politics

The previous section described the situation when Christian Ude took over as Mayor in 1993. However the conflicts and stalemate continued until 1995, culminating in two competing *Buergerbegehren* or citizen initiated referenda (Gregorczyk 1998) deciding the future of Munich’s transport development. Public referenda are a tool for citizens to directly influence local politics by being granted formal decision making power on a particular policy proposal. They are used to overturn council decisions or to implement a new policy that council had refused to implement. In order to be granted this decision making capacity proponents of the referendum need to collect a certain number of signatures from the community. If successful the decision is then opened up for an electorate-wide vote. Councils are legally bound to implement the decision of the citizen vote.

In 1996 there was a citizen initiated referendum to support the construction of three tunnels around the inner city area along the *Mittlerer Ring* that would connect to the *Autobahnring*. The plan to build these tunnels was developed in the 1980s during the short period of conservative government described in Section 5.1.2. The tunnel initiative was backed by groups like BMW, IHK, ADAC and other MRT-oriented stakeholders.

To counteract this referendum, APT stakeholders started a second initiative called the *Better Referendum* which proposed a series of alternative projects to invest the funds that would have been required to construct the tunnels. These included public and active transport infrastructure enhancements, childcare services and improvements to public spaces and parks. The *Better Referendum* was backed by the Red-Green coalition, environmental and community groups.

In the voting process the competing referenda were presented as two options, a third question asked for a decision between the two proposals. From both sides there were huge efforts to mobilise the public. Interestingly there was a clear majority for both proposals — voters in the suburban districts were in favour of the tunnel solutions, inner city residents preferred the *Better Referendum* (Hajer & Kesselring 1999). However, in the third vote the tunnel referendum won by a few hundred votes and the initiative had to be implemented against the wishes of the governing coalition.

Lessons from the referenda as incentive for stakeholder cooperation

The circumstances around the referenda were described as positive by some participants as it brought the situation to a head where everyone, but in particular the mayor, realised that the adversarial style of politics was too resource intensive and ineffective:

You can't work like that in transport politics on a long-term basis, and all stakeholders were aware of that (Interviewee #9, Journalist).

One participant described the referenda as the end point of adversarial politics, or as part of the change that took place in the culture of debate in Munich:

The referendum was the actual change; it was the end point of the whole development. Before the referendum everyone was sitting in their trenches for years and when it was over every politician independent of their orientation was glad the issue was done with and that the citizens had decided. It was a closure in that sense ... if you look away from the referendum, if you look at the trenches, then of course Inzell was a reaction to that. Everyone tried to get out of that situation, and they have done this by asking — initiated by the City — 'how can we most effectively achieve something in transport politics?' and they concluded that this would only work when everyone comes out of their trenches and sits down together. This was definitely a consequence of the extremely adversarial discussions beforehand (Interviewee #9, Journalist).

From this context Mayor Ude initiated a dialogue with the then newly appointed CEO of BMW in 1995, in order ‘to find a more adequate culture of debate’, ‘to overcome ideological trenches’ and ‘to solve transport problems together’ (Interviewee #12, CoM). According to some interview participants this was because the Red-Green coalition realised that their original approach to solving the existing road capacity problems by restricting motorists was not politically viable because of the loss of votes involved in being publicly depicted as the ‘enemy of the car’ (Interviewee #12, CoM):

You don’t get very far if you only start from the ecological corner ... If a project has a green label, it’s already dead (Interviewee #8, CoM).

Initiating a dialogue with political opponents in the Inzell-Initiative was therefore described as:

A clever political manoeuvre that contained BMW so that they couldn’t really shoot anymore (Interviewee #4, Green City).

From the perspective of APT stakeholders some interview participants commented that the tunnel referendum demonstrated the ineffectiveness of radical strategies in the political environment at that time, as ‘they could not avoid things that way’ (Interviewee #8, CoM). As a result, they were open to engage in a new type of debate.

MRT stakeholders also became more open to collaboration because they realised the inevitability of restrictive measures. Rather than oppose final proposals they decided to take part in policy discussions and promote ‘innovation before restriction’ (Interviewee #11, ADAC):

We see the problems, but we don’t want to solve them with restrictions that then again will not be accepted or lead to public opposition ... We felt that it is also important to come up with innovative solutions that do not need to compromise mobility (Interviewee #2, BMW).

BMW in particular had an interest in solving the existing traffic problems in order to maintain the positive image of the car that would otherwise be associated with congestion and pollution.

5.3.2. Establishment of the collaborative stakeholder dialogue

This section highlights the course of events which led to the establishment of the collaborative dialogue in the Inzell-Initiative, its purpose and objectives, the spectrum of participants and the major themes of the forum.

Actions by the mayor

When Mayor Ude came to power in 1993 he identified transport as a top priority issue and seized the topic ‘almost brutally’ (Interviewee #12, CoM). To initiate a shift in policy direction and stakeholder interaction, he started out by sending clear signs to both the public and organised stakeholders.

As a first step, he dissolved the planning department for traffic calming measures. This was a clear signal of his commitment to a change away from restrictive policies towards ‘solving transport problems together’ (Interviewee #12, CoM).

As a second step, the mayor actively tried to gain ownership of the political discourse on transport in Munich. He did that by publishing a series of articles in a free weekly newspaper that continually addressed the main sources of transport problems in an effort to make them more transparent. Another objective of this series of articles was to send out a message that he did not want to continue with ideology-laden policies.

Third, to reassure unsettled motorists about the policy changes he proposed, Mayor Ude started a dialogue with BMW from which the Inzell-Initiative emerged (Interviewee #12, CoM).

Given the sensible and incremental nature of the mayor’s approach one participant described him as not being a radical reformer but as ‘treating politics as an evolutionary process’ (Interviewee #12, CoM).

Objectives of the Inzell-Initiative

The Inzell-Initiative was officially established as a forum for transport stakeholders in Munich to identify and discuss problems and to discover consensus corridors for common solutions, based on a more adequate culture of debate. The idea was that the presence of respected third parties — BMW, state government officials, universities, citizen initiatives — would help to ‘pacify’ (Interviewee #12, CoM) contested issues

among the different stakeholder groups. One participant described the Inzell-Initiative as a ‘catalyst for implementation’ (Interviewee #12, CoM) that helped to create the majorities necessary for implementing policies in Munich, but also as an instrument ‘to relativise these policies if it serves reaching a consensus’ (Interviewee #12, CoM).

Keller et al. summarise the ‘spirit of Inzell’ as follows:

- Progress in transport decision making is not achieved through politics but only through finding common ground
- It is important to discard the old ideological trenches because everyone knows that today we need all modes of transport but we need to use them in a sensible way
- The informed discussions in the context of the Inzell-Initiative support political decision making but by no means replace it (Keller, Kessler & Mailer 2006, p. 714).²⁵

The Inzell-Initiative is officially an event hosted by the City of Munich and BMW, with BMW often providing facilities and catering. Participants require an official invitation. Some interviewees reported protests at the early stages of the Inzell-Initiative from APT stakeholders who wanted to see more NGOs and environmental groups participating in the forum, as the initial circle was rather exclusive (Interviewee #6, Green Party). Nowadays the forum is more open and appreciative of the special knowledge provided by NGOs and citizen initiatives (Interviewee #3, Green City), and it also invites mayors from the suburban districts.

According to some observers, the Inzell-Initiative was at first a political construct only — ‘a clever political strategy to keep political opponents at bay’ (Interviewee #4, Green City). The positive effects the stakeholder collaboration had on participants and policy outcomes (that are described in Section 5.3.3) were not planned but rather evolved from the participants’ appreciation of the cooperative approach and the understanding that they could achieve more by working together.

Format, objectives and contents

The first meeting of the Inzell-Initiative was a professionally facilitated two day futures workshop based on Jungk and Müllert (1987) that was closed to non-participants. The role of the facilitator was to tease out the main points of conflict and put them on the

²⁵ I have translated this quote from the German.

table for discussion. The style of the workshop included visioning techniques and mapping exercises, which some participants who held senior positions in their organisations found this difficult to handle. However these issues were resolved during the first day which was also made more successful by the facilitator having been suggested by BMW and so viewed as authoritative by MRT-oriented participants (Interviewee #12, CoM). An important output from this first forum was a commonly agreed document of eleven principles on transport development that was signed by all stakeholders. The content and relevance of this document is discussed in Section 5.4.2.

Subsequent forums took place every one to two years, and there have been eight meetings so far. Major themes or problems that emerge from the discussions are transformed into projects. Interdisciplinary, multi-institutional working groups that are made up of sceptics and supporters of a project administer the projects. This serves to increase the participants' awareness of the different aspects of the problem situation and helps dissolve potential conflicts in the early planning phase. Once the main issues are resolved and solutions agreed to, implementation becomes the task of administration.

The working groups are headed by a responsible project mentor. This is typically not an administrative officer but a representative of one of the stakeholder groups involved. Section 5.3.3 describes the remarkable results that were achieved when a previously strong opponent of a policy solution (parking space management) agreed to become project mentor. The working groups meet up to once a month, and so establish close relationships among participants from different sectors.

One interviewee described the Inzell-Initiative as a:

Pre-parliamentary or pre-political platform where many ideas are born, where it is possible to feed in and discuss ideas and to get feedback. If an idea is presented to Council as a recommendation from Inzell they are unlikely to oppose it because everyone is on board (Interviewee #8, CoM).

For example, the current transport development plan was discussed within the framework of the Inzell-Initiative, and the extension of the subway system was initiated there. Another participant described the forum as 'institutionalized public-private partnership' (Interviewee #13, CoM).

It should be noted that the Inzell-Initiative is not involved in all aspects of transport policy in Munich. This is because it is not a formal process but rather a voluntary association of stakeholders who select contested topics involving large numbers of stakeholders with the aim of reconciling differences and identifying pragmatic solutions (Interviewee #2, BMW).

Although members of council and administration take part in the forum it has no formal competence for planning or decision making. It is also important to note that the forum engages interest groups only; lay citizens have other mechanisms to influence policy development in Munich (see Section 5.1.2).

5.3.3. Effects and outcomes of the collaborative stakeholder dialogue

This section documents the effects and outcomes the Inzell-Initiative has had on the policy development in Munich, according to the interviewees. They described effects in several areas: changes in participant's ideas and interaction, institutional changes in line with this idea change, and finally a change in policy direction and outcomes based on a shift in institutions and ideas.

Effects on transport development

To provide some contextual information on transport development in Munich I first describe the aspects the many interviewees, in particular the senior transport planner, highlighted to illustrate Munich's success in transport terms since the Inzell-Initiative was established. To be clear, interviewees did not always draw direct causal links between these developments and the Inzell-Initiative, and they also described some effects as consistent with a general socio-cultural change. For example, regional areas around Munich showed similar increases in cycling to the inner city areas that were targeted by the city's marketing efforts (Interviewee #7, MVV), and non-motorised traffic has gained increased acceptance all across the European Union and is now considered more attractive, a development one participant referred to as shift in the 'urban mobility discourse' (Interviewee #1, TUM). However, they often highlighted how the effects of the stakeholder collaboration enabled developments that would not have been possible before 1995. For example, one participant realised on reflection that all the positive developments he described during the interview were 'in some way related to Inzell' (Interviewee #11, ADAC). In the following I first describe the

development of Munich’s vehicle traffic and active and public transport since the establishment of the Inzell-Initiative. I then document a number of developments and policies that were repeatedly mentioned by interviewees as direct or indirect products of the Inzell-Initiative.

Between 1993 and 2009 incoming traffic into Munich’s centre via the *Altstadtring* has decreased by almost 50 per cent, while incoming traffic via the Middle Ring Road (*Mittlerer Ring*) decreased by almost 24 per cent (Zorn 2011, p. 9) (see Figure 12). According to a senior transport planner this development is remarkable in that it is contrary to all traffic forecasts and it occurred despite growing resident and employment numbers (Interviewee #13, CoM).

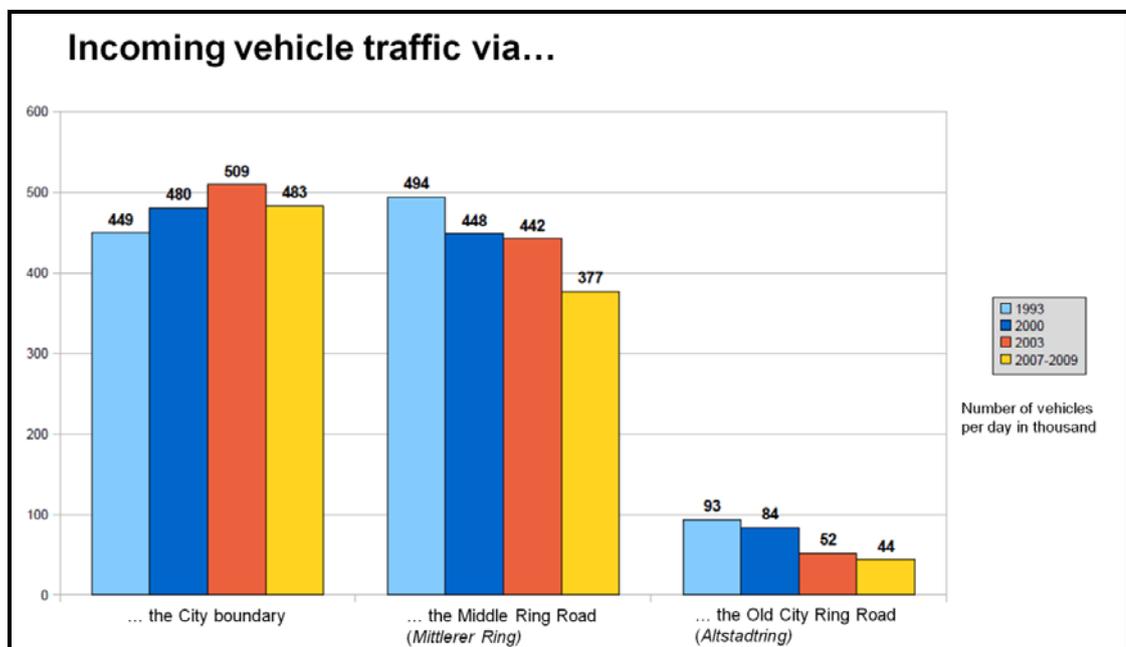


Figure 12: Development of vehicle traffic in Munich
(Source: Zorn, 2011, p. 9; translation from German original)

The three tunnels along the *Mittlerer Ring* have been built or are still being built after the referendum in 1996 (that has been described in Section 5.3.1). However, as can be seen in Figure 13 the tunnels did not generate additional traffic. While the average yearly increase in vehicle traffic along the *Mittlerer Ring* between 1985 and 1990 was at 2.1 per cent and between 1990 and 1995 just below 2 per cent, the average yearly increase between 2003 and 2009 was only at 0.7 per cent (City of Munich 2011, p. 12).

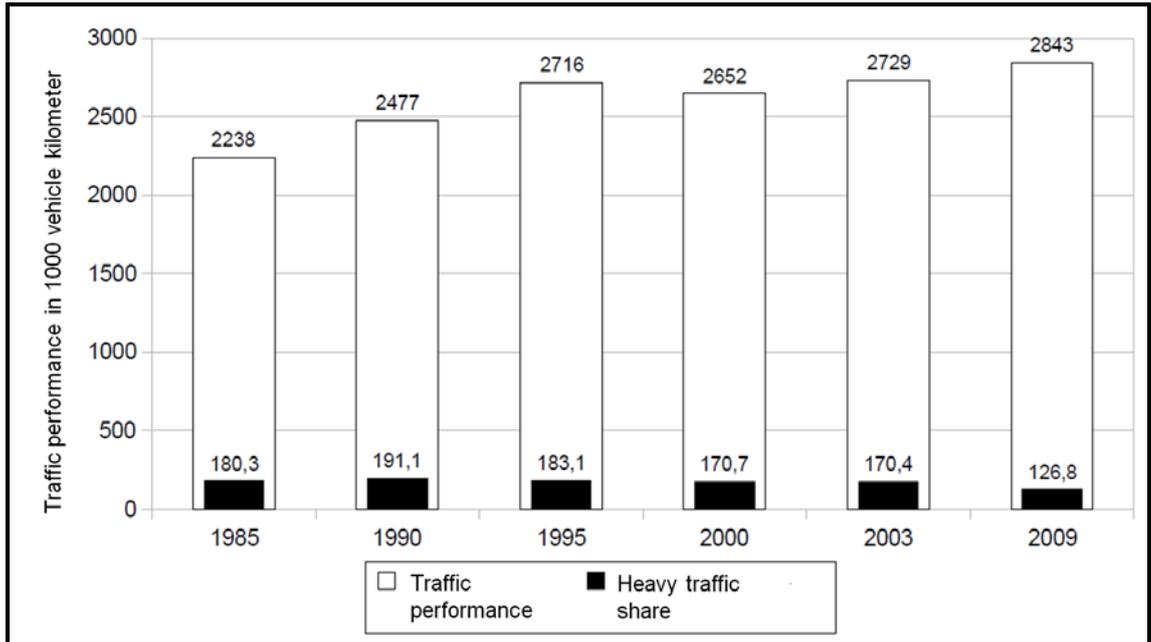


Figure 13: Development of traffic performance along the *Mittlerer Ring*
 (Source: City of Munich 2011, p. 12, translation from the German original)

In summary most of the increases in transport demand in Munich have been accommodated in the public and active transport network so that the overall vehicle traffic load stagnated (see Figure 14 and Figure 15). According to a senior transport planner the flow in the Munich road network today is better than before 1990 (Interviewee #13, CoM).

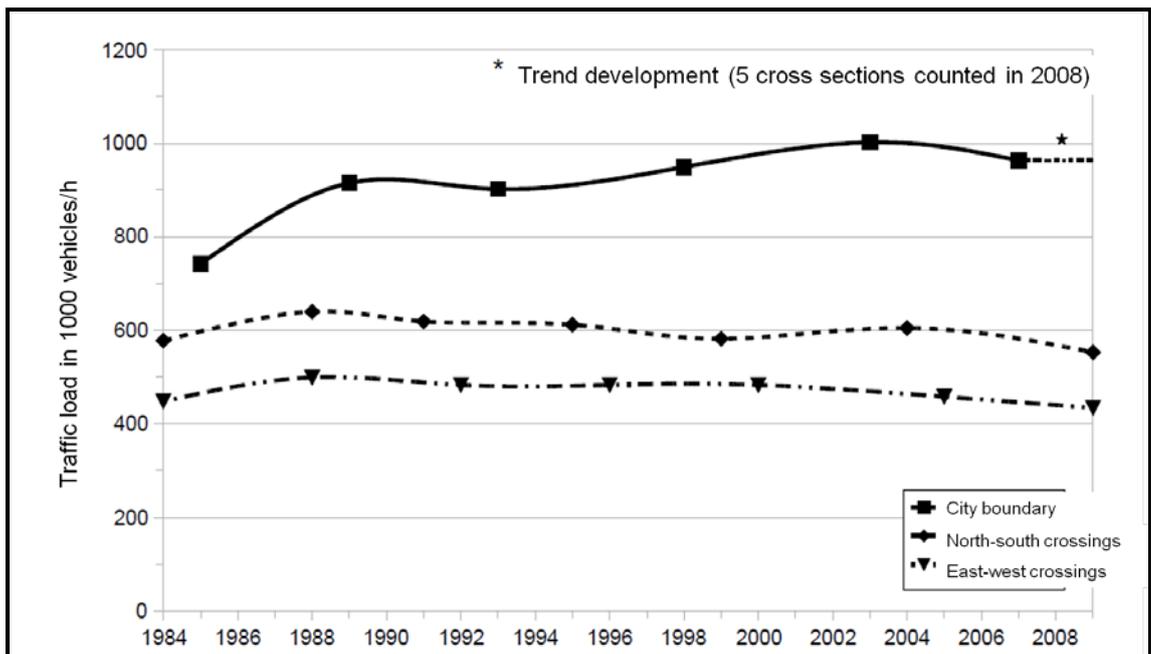


Figure 14: Development of traffic load at the city boundary and at the major north-south and east-west crossings
 (Source: City of Munich 2011, p. 10, translation from German original)

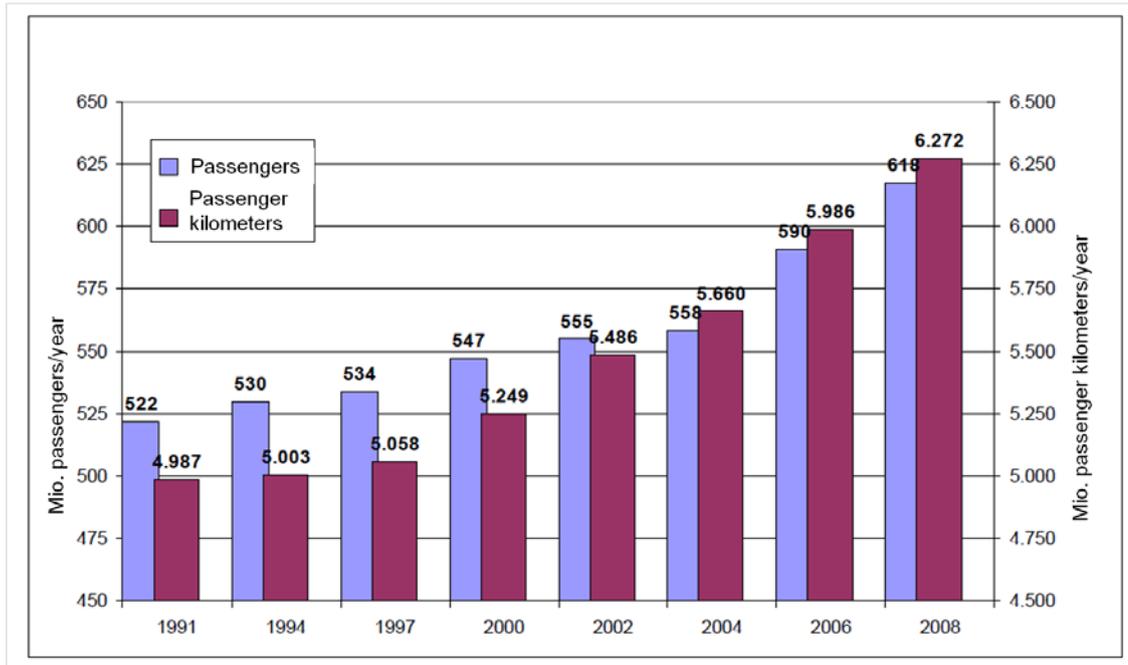


Figure 15: Public transport development in Munich (MVV area)
 (Source: City of Munich 2011, p. 27, translation from German original)

In addition to these positive developments in motorised traffic, Munich has seen an increase in cycling of 40% between 2002 and 2008, with 14% of daily trips made by bicycle in 2008 (City of Munich 2010, p. 23) (see Figure 16). One interviewee commented that cycling has become an accepted mode of transport in all areas of society, and that public transport has also changed its image and is no longer seen as the transport mode for the poor and old (Interviewee #7, MVV).

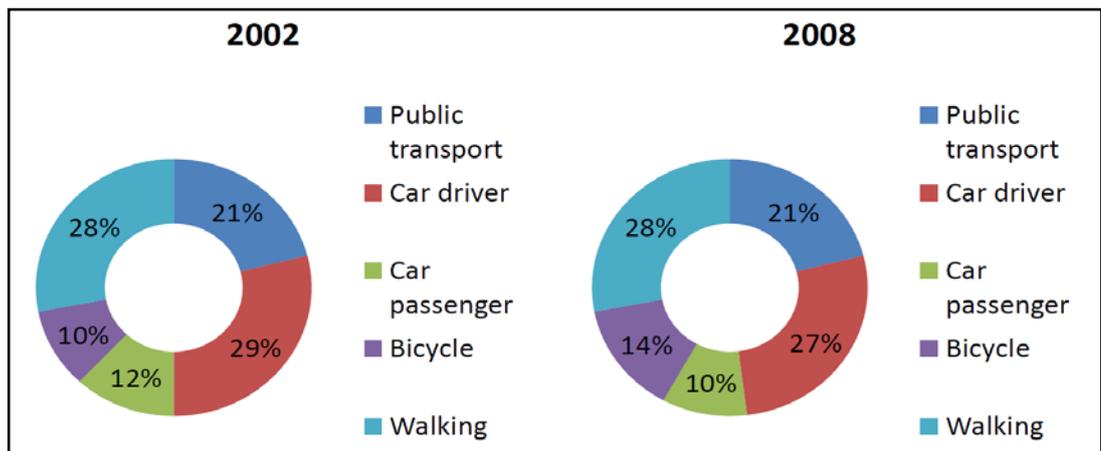


Figure 16: Main means of transport across all travel purposes on a reference day in 2002 and 2008
 (Source: 2002 data provided by Georg-Friedrich Koppen, City of Munich; 2008 data redrawn from City of Munich 2010, p. 23; both translated from the German original)²⁶

²⁶ Appendix 3 provides the following modal split data for 1995: 27.3% public transport, 32.3% non-motorised transport, 40.4% private transport. However, this data might be based on different sources.

The following sections describe some policies that interview participants directly or indirectly attributed to the Inzell-Initiative. The implementation of these policies reportedly contributed to the developments described above.

Parkraummanagement (PRM), or parking space management

One of the first successes of the Inzell-Initiative was the implementation of an inner city wide *parking space management* (PRM) system (Keller, Kessler & Mailer 2006, p. 714). This measure had been contested for a long time, and had been particularly opposed by the Chamber of Industry and Commerce (IHK).

The success of this system was that rather than being designed only as a restriction for motorists, it was developed as a sensible re-dedication of urban parking space to accommodate residents and shoppers, while commuters were encouraged to switch to public transport (Interviewee #6, Green Party). The PRM system was grounded in sound research by Peter Kirchhoff, a well-respected professor at Munich University of Technology. His approach was to investigate the ratio of resident parking to commercial traffic in each inner city district. This ratio was used to calculate appropriate timeframes for parking space management. That way, commuters were discouraged from driving into the inner city area, freeing up space for commercial transactions and residents. The system was tested and evaluated based on pilot projects prior to wide-scale implementation.

The IHK was integrated into the project in a responsible role (Interviewee #12, CoM). In this way all opponents were brought on board from the start with the final outcome leading to surprising effects both in terms of public acceptance of the policy as ‘it was seen as everyone’s brainchild’ (Interviewee #12, CoM); and in terms of increased availability of parking space for residents and shoppers.

Mobility management

Since 2005 the City of Munich has established a mobility management department, an approach that has made it a pioneer in Europe. The main aim of mobility management is to inform citizens of their mobility options across all modes before people start their actual travel activities and so influence travel demand. It is thus a different approach from traffic management or telematics solutions that only set in when the traffic is already on the road (Interviewee #8, CoM).

Mobility management projects involve consulting new Munich citizens and education programs for school children and seniors, often in cooperation with NGOs like Green City (Schreiner 2012).

Mobility management was described by the head of transport planning as an ‘ideal addition to traditional planning activities’ (Interviewee #13, CoM) given that the integration of hard and soft policies is more effective than implementing one option only.

Institutionally it was described as most remarkable that the department ended up being created in the District Administration Authority (KVR). This institution was known for a long time as ‘the advocates of motorists’ (Interviewee #12, CoM) because they saw it as their main priority to ensure the streamlining of traffic flow, often at the cost of pedestrian crossings or cycling policies. Nowadays the KVR treats all transport modes on an equal basis and increasingly embraces soft policies such as educational programs (Interviewee #12, CoM).

Cycling campaign

One of the most recent projects of mobility management is the cycling campaign Munich launched in 2010 which is an ‘emotional marketing’ campaign that supplements the city’s investments in cycling infrastructure and has been described as a ‘real product of mobility management’ (Interviewee #13, CoM). It is grounded in the realisation that it is more cost effective to manage traffic within the available infrastructure system than to build new roads in a city with limited urban development space. One participant commented that the level of investment in this soft policy campaign ‘would not have been politically possible before Inzell’ (Interviewee #13, CoM).

Mobinet

Mobinet was a large-scale demonstration project which ran from 1998 to 2003 aiming to create a multimodal transportation management system for the Greater Munich Area project and improve the quality of urban traffic and reduce congestion. Its budget of 40 million Euros was 50 per cent funded by the German Department of Research, Education and Technology (BMBF); the other 50 per cent was contributed by private project partners (Kesselring 2004).

The success of the Mobinet grant application was attributed to the strength of the multi-institutional stakeholder alliance with partners like the City of Munich, Munich Technical University and BMW; an alliance that was reportedly possible through the relationships established in the Inzell-Initiative (Kesselring 2004; Interviewee #13, CoM).

Mobinet brought a substantial amount of funding into the city, making possible a large number of research and pilot projects ranging from telematics applications to public transport and mobility management projects. While not all of these projects produced exciting results, the cooperation of the project partners on a working level brought about substantive benefits for future collaborations (Interviewee #8, CoM).

Mobinet was also described as having laid important foundations for the establishment of the mobility management department in Munich (Interviewee #8, CoM).

Effects on process participants

Three main themes emerged from the interview accounts with regard to changes to the ideas and interactions of transport stakeholders in Munich: first, an end to political trench warfare as a result of a diminution of ideological entrenchment in the political debate and the dissolution of traditional advocacy coalitions; second, an enhanced cooperative culture and increased opportunities for exchange; and third, as a result of this, a change in values and ideas, or learning, and a willingness to move away from extreme positions.

From political trench warfare to cooperation beyond conflict

All interview participants emphasised that the Inzell-Initiative worked to ‘pacify’ the stakeholder conflict in Munich (as was illustrated in Section 5.3.1). Today policy discussions do not serve primarily to defend positions but are more oriented towards jointly finding pragmatic solutions to commonly perceived problems based on evidence.

One participant described this collaborative style of debate as ‘post-confrontative’ (Interviewee #1, TUM), or a ‘cooperation beyond conflict’ (Interviewee #1, TUM). Another participant commented that political arguments in council meetings and attempted political attacks gain little traction in the media as ‘they don’t believe it anymore’ (Interviewee #12, CoM).

One participant concluded that the Inzell-Initiative is not really important anymore today because the former fronts have softened and dialogue also takes place without the forum (Interviewee #6, Green Party). This is consistent with the comment of one interviewee that even if government changed the stakeholder collaboration would persist:

They would not be able to completely rewind it because it makes too much sense ... Another mayor would have used the instrument Inzell as well but for slightly different contents ... No one would question the instrument because it is too good in terms of the stakeholders involved (Interviewee #12, CoM).

Appreciation and consolidation of the cooperative culture

All interviewees appreciated that the Inzell-Initiative enhanced the cooperative culture among stakeholders in Munich whereas previously they did not know each other or did not communicate:

Inzell has brought the players closer together. This is what actually distinguishes Munich, that players communicate at all and that there is regular exchange (Interviewee #7, MVV).

Stakeholders know each other, you usually have a contact person in mind if there is a problem or if you need anything, there is mutual esteem. The old trenches don't exist anymore and everyone tries jointly to bring forward solutions that appear suitable for problems (Interviewee #11, ADAC).

One interviewee who joined the forum in 2003 commented on the cooperative culture in the Inzell-Initiative, especially between BMW and the City of Munich:

A spirit has developed since 1995 that puts the cooperative culture in the foreground. It is always difficult to explain to outsiders the role BMW has occupied in Munich, as many cannot understand how the connection to the City can be so close, how the City works so closely with BMW. But it has been a common growth process where trust has developed. Through the joint work BMW has brought itself in a position that is truly far beyond pure company interest as a car manufacturer; BMW has established itself as a stakeholder (Interviewee #2, BMW).

It was repeatedly stated that cooperation at the project level in the working groups significantly improved relations and formed the essential foundation for the success of projects such as Mobinet. The improved relations brought benefits to small collaborative projects outside of the formal policy process as well. For example, greater cooperation between the ADAC and MVV led to the development of a special program

that offers public transport discounts for ADAC members on weekends (Interviewee #11, ADAC).

Smaller citizen initiatives have also benefited from the enhanced cooperative culture and are now considered as holding key knowledge and bringing innovative ideas into the policy process —a ‘new generation of citizen initiatives’ (Interviewee #1, TUM):

The formal working groups are an important basis: you don’t need to establish a roundtable because you see each other on a regular basis and we get close to the action ... we have managed to gain a reputation as a reliable partner, and we get involved on the basis of that (Interviewee #3, Green City).

Based on the successes of the collaborative practice, participants realised that ‘they could achieve more by working together in focused areas rather than fighting each other on broad fronts’ (Interviewee #11, ADAC):

A way more important effect [than the actual policy outcomes] is that you get to know each other, that a relationship of trust is established, based on the understanding that you can achieve more by working together rather than fighting each other. Prejudices between the Greens and BMW have been eliminated and they have discovered commonalities. This compromise is the secret of success in Munich: it is fairly quiet on the transport political front now and at the same time we have a relatively sustainable transport system (Interviewee #8, CoM).

In summary the analysis of the interviews suggested that every participant felt they had benefited from the process. Government could achieve successes in policy development, stakeholders like BMW and ADAC could avoid the implementation of policies they considered too restrictive and APT stakeholders viewed the process as a useful arena in which to make their ideas heard and thus achieve incremental progress towards their goals:

By working together you simply get further than by blocking each other (Interviewee #8, CoM).

This ‘relatively good climate’ among transport stakeholders distinguishes Munich from many other cities in Germany that have more conflicts (Interviewee #11, ADAC).

Enhanced willingness to compromise

The cooperative culture among participants of the Inzell-Initiative increased the willingness of stakeholders to move away from extreme positions so as to find a compromise acceptable to all stakeholders. As one participant stated:

We rowed back a little bit [to take everyone on board again] and achieved so much more through that (Interviewee #12, CoM).

This process of ‘going back and taking everyone back on board again’ allows ‘many little building blocks towards the right direction’, as it ‘lowers the threshold to implement unpopular interventions and enhances the willingness to compromise’ (Interviewee #3, Green City).

Some interviewees also described a tipping point at which participants gave up their extreme positions, facilitated by the collaborative forum. For example, parking space management (PRM) was always strongly opposed by MRT stakeholders on the grounds that it was detrimental to businesses, but once BMW was willing to give up their strong position and cooperate, other opponents gave in as well.

Learning and shift in worldviews

The collaborative dialogue established a climate that allowed participants to learn from each other, and thereby enhance mutual understanding for each other’s positions. A major shift in Munich’s transport policy that resulted from the Inzell-Initiative was described as a move away from the approach of imposing restrictive policies that created restrictions to private car use towards supply- and service-oriented strategies that create attractive incentives and alternatives for travel behaviour change (Interviewee #12, CoM).

As a result of this shift in approach, MRT stakeholders became more open to ‘green’ solutions: they increased their understanding regarding the necessity for more public and active transport options in the inner city area, and they came to understand ‘that it is important to look beyond their own boundaries to find out what’s realistic and what’s utopian’ (Interviewee #11, ADAC). For example, one interviewee commented on how the conservative party (CSU) evolved from a ‘transport political Neanderthal’ (Interviewee #6, Green Party) to being more open to new ideas and developments. Others reported that BMW ceased to oppose, and even started to financially support, the

development of new tram infrastructure that takes away car lanes — ‘a leap of faith’ (Interviewee #7, MVV) or a ‘paradigm shift’ (Interviewee #13, CoM):

There is now a different spirit, for example, BMW has accepted that something has to change in the city if people want to continue driving at all. They now support public transport enhancement and parking space and mobility management, but they would not support radical interventions. In exchange the City is also open to cooperating with BMW (Interviewee #8, CoM).

Several interviewees described how the relationship between BMW representatives and green stakeholders evolved over the duration of the Inzell-Initiative:

Of course there was trouble, but in the end we have developed a mutual understanding: he knew what I cared about and I understood his point. And when I look at statements of BMW colleagues today as compared to 20 years ago there has been a major development. It has been a learning process for both sides (Interviewee #5, Green Party).

According to a senior transport planning official the deliberations among participants of the Inzell-Initiative helped increase the understanding among stakeholders that limited urban space requires a sensible distribution in order to be able to maintain current levels of mobility (Interviewee #13, CoM). The official also appreciated that participants had learned about the complexity and difficulties of the planning task in a public institution, and have so increased their understanding for the work of administration.

Effects on institutional structures

The shift in worldviews and the move to a cooperative culture among the participants in the Inzell-Initiative was accompanied by a change in institutional structures.

The most significant structural change was the establishment of the mobility management department. Munich became the first European city with a substantial budget in a department that was previously known as the motorists’ advocate (see ‘Mobility management’ section above).

The increased introduction of APT stakeholders to traditionally MRT-supporting institutions reportedly contributed to spreading innovative ideas throughout the administration and changed the self-image of administration staff in their interaction with politicians:

In the past the administration understood itself as the executor of political orders, however I see it the way that we know the objectives and the legislation and our role is to consult politicians on how these objectives can be achieved. Most of my colleagues don't see it that way, but if you work like that you can influence quite a lot — but only if there are political majorities of course (Interviewee #8, CoM).

The administration under Red-Green introduced many innovative approaches that are supported in a dialectic way. This goes beyond the classical role and perspective of administration; it's not only ticking boxes. There are many young and motivated employees and projects actually become implemented (Interviewee #3, Green City).

Another change that took place in the last two decades is the role of citizen initiatives in the policy process:

What changed significantly is that ecologically oriented groups are not seen as opponents anymore but as competent holders of key knowledge that articulates particular opinions and positions. The best example is Green City — there was a lot of courting for them to join Inzell. This would have been unthinkable at the beginning of the 1990s (Interviewee #1, TUM).

This change can be observed in the shifting objectives of these groups, for example, Green City was previously named *Munich Carfree 2000*. It can also be seen in their more professional approach and cooperation with the media and the City (Interviewee #1, TUM). One participant referred to this relatively strong positioning of green stakeholders in Munich as the result of a 'march through the institutions'²⁷ (Interviewee #1, TUM).

Finally, the interview analysis suggested that the Inzell-Initiative itself has become institutionalised, both as the actual forum and as a symbol for the cooperative culture in Munich, 'the spirit of Inzell'. This term has been introduced by Prof. Hans-Hermann Braess who was BMW head of transport research at the time the Inzell-Initiative was established.

5.3.4. Limitations and negative aspects of the deliberative stakeholder forum

In summary, the Inzell-Initiative was undoubtedly seen as positive by all interviewees:

²⁷ The notion of 'a long march through the institutions' is based on Marxist ideas and was popular with the student movements in the 1960s that formed the early basis for the establishment of the German Green party. The idea is that it is possible to create fundamental change by joining the institutions of power and creating change from within the 'machinery'. Dryzek et al. (2003, pp. 35-42) describe this development in Germany in detail.

Inzell was definitely a lucky draw for transport planning in Munich (Interviewee #5, Green Party).

To put the documented positive developments into perspective this section highlights issues regarding the limitations and negative aspects of the Inzell-Initiative that were outlined by the interviewees.

Democratic concerns

One of the issues that was raised is the democratic legitimisation of a stakeholder collaboration such as the Inzell-Initiative:

Institutions have been created that are extremely powerful and have enormous influence on policy making down to the operational level. However these institutions have no democratic legitimisation, but their constitution is bound to some form of democratic representation given that participating stakeholders are legitimised by their own institutions. Nevertheless these institutions create themselves and gain legitimacy through the consensus they create. Today no transport-related council decision in Munich is made anymore without the loop via Inzell (Interviewee #1, TUM).

In that sense it was seen as critical that knowing about the resources that have gone into developing a suggestion to some extent creates pressure on council members to approve them (Interviewee #1, TUM).

The predominant role of BMW in the Inzell-Initiative has also been a point of concern. BMW considers itself as a ‘founding member’ (Interviewee #5, Green Party) — the Inzell-Initiative is officially called an initiative of BMW and the City of Munich, and in relation to that some interviewees commented that there are certain hierarchies. For example, one participant reportedly suggested changing the structure of the forum to enable a more problem-based approach. Although approved by all major participants in one-on-one dialogues, the suggested change was blocked when the participant officially put it forward. After the decision the participant was told that the suggestion would have been more likely to succeed had it been passed on to BMW:

When you have this collaborative spirit it is strange that such blocking is taking place ... it is obvious that there are clear hierarchies in Inzell. But on the other hand it is generally not a bad thing to have hierarchies because someone needs to take care of everything (Interviewee #5, Green Party).

BMW also reportedly had ‘secret meetings’ (Interviewee #5, Green Party) with the KVR and at some stages provided funding for studies so that they could bring in their own topics, an outcome that led one interviewee to question whether a car manufacturer was an appropriate partner for such a transport forum:

I asked myself sometimes whether everything went according to the rules. An administrative authority is supposed to do what the council as democratically elected body requests and not to meet the interests of individual corporations (Interviewee #5, Green Party).

On the other hand, the observation was made that there is often strong opposition in council meetings when there is too much ‘BMW jargon’ (Interviewee #5, Green Party) in policy proposals.

Lack of courage

A point of concern raised by many green stakeholders was the way that Munich supports the development all transport modes simultaneously in a double-track strategy (discussed in Section 5.1.2), rather than more courageously committing to prioritising active and public transport options. This leads to a discourse that only allows for compromise and makes radical change impossible:

There are no discussions about congestion charging but about optimised parking space management, because congestion charging is too hot a topic for some of the participating stakeholders (Interviewee #1, TUM).

We try to make everyone happy, but we could definitely show more courage (Interviewee #7, MVV).

This lack of clear commitment was also addressed in relation to the future of the Inzell-Initiative:

During the first 10 years everyone was happy that they were able to cooperate at all. Now it would be interesting to see whether Inzell can outgrow itself and really get filled with life, or whether it continues as it is for the next ten years (Interviewee #7, MVV).

On the other hand interviewees acknowledged that they would not be able to achieve more radical progress without the Inzell-Initiative:

Inzell is a broad political reservoir for consensus finding. Even if the results are not always what would be desirable or necessary [from our perspective], small steps count as well, even if they only have symbolic character. They

contribute to wresting a compromise from the hardliners which also helps the overall situation (Interviewee #3, Green City).

Lack of output efficiency

Some participants said that the collaborative process did not produce sufficient outcomes in relation to the resources invested, and that a lot more could be done:

The relatively few successes have been sold well (Interviewee #7, MVV).

Many ideas of Inzell end in talk ... there are areas that would require more pragmatism; the approach is often too scientific. It would be good to be a bit more target-oriented (Interviewee #11, ADAC).

There is a slow change in that everyone now accepts that it is about resource efficiency, but many still ignore that the car is by far the least efficient mode of transport (Interviewee #8, CoM).

It was also commented that some of the successful projects are linked to the political constellation of Mayor Ude and the Red-Green coalition, as topics like parking space management and public transport enhancement are still controversial within the conservative parties (Interviewee #12, CoM).

Increasing complexity as limitation

The Inzell-Initiative has been growing in the last 15 years, so that there are now 80–100 participants. This is because representatives from the wider metropolitan region have been included in the terms of reference. However these developments reportedly inhibit the workshop character the Inzell-Initiative had at the beginning when it had 20–30 participants. This is making it more and more difficult to define clear tasks in the framework of a one-day workshop (Interviewee #2, BMW).

5.4. Success factors for collaborative stakeholder dialogue

This section describes the success factors of the collaborative stakeholder dialogue in Munich from the perspectives of the interviewees. These success factors can be divided into three areas: first, factors that enabled the establishment of the forum and have contributed to its longevity; second, factors that have promoted trust and learning among stakeholders in the deliberative process; and third, factors that have enhanced the acceptance of the resulting policies.

5.4.1. Success factors for implementation and institutionalisation

High-level initiative and commitment

Interview participants repeatedly emphasised how the powerful combination of BMW, the mayor, with the state authorities as third parties, was a major incentive which enticed senior stakeholders to participate in the forum (Interviewee #12, CoM):

If the process had been initiated by the third mayor or other senior officials rather than by Mayor Ude it would not have been anywhere near the success story it has been (Interviewee #11, ADAC).

Initially, Mayor Ude performed a number of rather symbolic acts to demonstrate his goodwill and readiness to cooperate and his move away from restrictive policies (that I described in Section 5.3.2). For example, together with the CEO of BMW he removed 1324 traffic signs in three old city areas and replaced them with very limited signage painted onto the road itself and at the area boundaries (Keller, Kessler & Mailer 2006, p. 714). This change was supposed to encourage traffic participants to cooperate better — a ‘training ground for more tolerance in road traffic’ (Interviewee #12, CoM).

The presence of senior officials in the forum was also important because it enabled the forum to authorise relevant decisions (Interviewee #2, BMW). The commitment of participants was demonstrated through the financial and in-kind contributions of participating organisations, for example, BMW and MVV have employees that contribute a substantial part of their daily work to projects related to the Inzell-Initiative (Interviewee #12, CoM).

Key individuals as change agents

Key individuals reportedly played a major role in the developments that took place in Munich. These ‘masterminds’ (Interviewee #8, CoM) are:

individuals [with shared interests and similar values] that sit at the interface between politics, administration, science and NGOs, have a good education and the resources to create change (Interviewee #8, CoM).

One interviewee commented that these individuals can achieve enormous successes within institutions if they dedicate themselves to a cause (Interviewee #9, Journalist).

In terms of the actual implementation of the Inzell-Initiative, the former assistant to the mayor was described as ‘one of the biggest string pullers Munich transport politics has ever seen’ (Interviewee #1, TUM):

He was holding together all the strings that brought about the change in Munich’s transport politics; he was one of the driving forces behind Inzell (Interviewee #1, TUM).

Many participants highlighted the particular talent of the Mayor Ude as leader of the change process:

It requires someone who is taking care, who has a certain reputation ... Mayor Ude is a special case, he understood time and again the need to push the process forward; he has used his weight (Interviewee #11, ADAC).

Mayor Ude is a politically fearless person. He was not afraid to open up to and cooperate with industry (Interviewee #12, CoM).

Another key personality that was often referred to is the current mobility manager who actively co-created his position through continuous string pulling activities both inside and outside of the Inzell-Initiative:

A lot of the developments can be related to him, for example he succeeded in bringing mobility management onto the City’s agenda, he was one of the driving forces behind it ... he was successful with the ideas he introduced into the process. The change in this one person exemplifies the fundamental change that has taken place in the political culture in Munich (Interviewee #1, TUM).

The role of informal networks

Many participants highlighted the role of informal networks across institutions as a major resource for enabling change:

Personal contacts enable more than formal forums (Interviewee #5, Green Party).

For example, a factor that was described by many participants as an important precondition for the establishment of the Inzell-Initiative was the personal relationship between Mayor Ude and Bernd Pischetsrieder, the CEO of BMW at that time. They knew each other from school. While their respective predecessors did not like each other on a personal level, this new relationship enabled a change to the culture of the debate.

One participant mentioned a group of about ten APT-oriented individuals across different institutions in Munich that form ‘an invisible network that can create good pressure’ (Interviewee #8, CoM). Another interviewee described the mix of formal and informal networks in Munich — both inside and outside of the Inzell-Initiative — as a valuable resource ‘to get a better feeling for the state of the city’ (Interviewee #3, Green City) and to initiate change.

5.4.2. Success factors for achieving consensus

This section documents a number of factors that according to several interviewees contributed towards reaching consensus in the collaborative process.

Commitment to cooperation beyond conflict

The Inzell-Initiative is built on the shared commitment to looking for commonalities rather than differences — ‘a cooperation beyond conflict’ (Interviewee #1, TUM) that participants referred to as the ‘secret of success’ (Interviewee #8, CoM) or ‘secret recipe’ (Interviewee #13, CoM) of the culture change in Munich. The willingness of participants to move away from extreme positions was described as crucial in that context:

There is no space for pure conflict in Inzell. If someone only advocates their own interest without a willingness to see all modes of transport, i.e. walking, cycling, public transport and cars in the bigger context it will be difficult (Interviewee #2, BMW).

Representing extreme positions is always difficult, in both directions ... the pure perspective of green politics is as problematic as the pure ‘concrete faction’ that states that motorised traffic always needs to have priority (Interviewee #11, ADAC).

In that process the Green party adopted the stance that achieving ‘many small steps [towards sustainable transport development] is better than big fluctuations’ (Interviewee #6, Green Party). The Greens therefore gave up their strict opposition to policies that benefit motorised private transport on a number of occasions and decided to support them but with pre-conditions. For example, they only accepted the implementation of a guidance system for public car parks on the condition that funding was also made available for parking space management. Through this negotiation process, but also through the collaborative learning process the negotiations involved, MRT stakeholders became in turn more supportive of green policies.

The Inzell-Initiative was therefore described as a pragmatic approach to transport policy making that structured the transport political field in a new way (Interviewee #1, TUM):

Inzell is breaking up these extreme positions. That way, many things that have been implemented in Munich attained a broader legitimacy than they would have had otherwise (Interviewee #9, Journalist).

According to one participant the consensus in Munich was also fostered through a high level of recognition for the contributions of the participating stakeholders, so that everyone felt their concerns and ideas had been taken into account (Interviewee #1, TUM).

All issues on the table

A starting point for identifying and consolidating a common ground among stakeholders who had previously seen themselves as having fundamentally incompatible or contradictory positions was putting the most contested topics on the table for discussion (as was described in Section 5.3.2):

Of course there are debates on principles. In certain areas there is explicit attention given to including opposing positions in the debate. It is not only an attempt to find the comfortable middle ground; discussions are also heated up intentionally [to identify areas of dissent] (Interviewee #11, ADAC).

Once identified these areas of dissent were left aside in the discussion and participants focused on areas of consensus where progress could be achieved. This process ‘pacified contested projects’ (Interviewee #12, CoM) and blockages could be resolved (Interviewee #6, Green Party):

Eleven principles as a common platform

In discussing the success of the Inzell-Initiative participants attributed great significance to a document outlining eleven commonly agreed principles or priorities as a basis for achieving consensus on transport development in Munich (see Figure 17) (Interviewee #1, TUM). This document was drafted by the mayor at the first meeting and sends out the main message:

We basically agree on 90% and should not block this 90% just because we disagree over the other 10% (Interviewee #12, CoM).

- 1) The structural development of residential areas should be geared to the public transport network.
- 2) The closer to the city centre, the lower the proportion of automobile traffic should be.
- 3) Through-traffic should be kept away from densely populated areas.
- 4) Those who wish to calm traffic flows in residential areas must concentrate traffic on the main arteries.
- 5) Cooperative traffic management enables the performance of the transport systems to be boosted and improved.
- 6) Local public transport has priority.
- 7) The park-and-ride system as a means of networking different modes of transport needs to be improved.
- 8) A parking-space management concept must be drawn up for the city.
- 9) In the individual transport area, commercial and trade traffic has priority.
- 10) Freight transport is to be optimized by promoting logistic systems.
- 11) Traffic is to be avoided by encouraging car owners to carry more people in their vehicles.

Figure 17: The platform of the Inzell-Initiative: shared principles for transport development (Source: Inzell-Initiative website, accessed 15 November 2011)²⁸

These eleven principles have not been altered in the past 15 years; one participant described them as ‘farsighted’ (Interviewee #13, CoM). They are today referred to as the ‘platform’ (Interviewee #13, CoM) or ‘spirit of Inzell’ (Interviewee #12, CoM). Some participants even made religious comparisons: a ‘transport political profession of faith’ (Interviewee #12, CoM), ‘the bible’ (Interviewee #12, CoM) or the ‘eleven commandments’ (Interviewee #1, TUM).

Given the situation in 1995 (described in Section 5.3.1) the fact that such a document was signed by all stakeholders was viewed as extraordinary:

These principles have always been clear to us. The real sensation was that a car manufacturer has signed them: a car manufacturer in 1995 documents publicly and in writing that they think public transport has priority! This is remarkable, but we had already documented this in the transport development plan of 1974. We have not learned so much in that sense, but BMW has (Interviewee #13, CoM).

The eleven principles have been described as a powerful instrument for influencing the transport political discourse in Munich:

[The consensus document] has tremendous significance, it is an instrument that makes it possible to actually steer the transport political discourse! It is similar to the 10 commandments; the planning of new traffic connections is

²⁸ The Initiative’s website is at http://www.inzell-initiative.de/_engl.Version/grundsaeetze_eng/grundsaeetze_eng.htm

appraised with regards to what contributions and what violations it makes against each of these 11 principles (Interviewee #1, TUM).

The mayor has dominated the transport the transport discourse since then, and he has continuously documented this in his newspaper column ... other players barely have a chance to come to the fore anymore (Interviewee #12, CoM).

The principles have become a 'doctrine of justification' (Interviewee #1, TUM), for example by allowing statements such as 'this is a good intervention because it aligns with point seven' (Interviewee #1, TUM) or 'this intervention is not good in terms of Inzell because...' (Interviewee #1, TUM). It is thus a powerful instrument for reducing the complexity of a situation so that it becomes more comprehensible and controllable (Interviewee #1, TUM).

Confidential closed-shop situation at the working group level

A number of participants highlighted the confidential closed-shop environment at the working group level as crucial for the trust-building and learning that unfolded:

You can better deal with the arguments without the press present ... I think you can talk more openly ... because otherwise you only ever have these showfights where the usual positions are often presented more strongly. When this is gone you can also try more directly to negotiate things, and next time you talk to the press things are may be a little bit closer together (Interviewee #6, Green Party)

According to some interviewees this 'new environment for debate' (Interviewee #1, TUM) in the collaborative forum where participants explain their positions rather than defend them cannot take place in the public sphere where everyone wants to save face (Interviewee #2, BMW). In a confidential situation participants are more able to leave their entrenched positions and open up to agree with or learn from each other:

In a certain setting and regarding certain topics ... the ADAC can by all means sit down with representatives of the Greens and say: yes, it is really complete nonsense that cars drive through to the inner city and that we are planning to build eleven car parks (Interviewee #1, TUM).

Stakeholders don't see Inzell as a 'nice idea of some left-wing weirdos' anymore but have learned that it is a very powerful instrument to promote consensus that takes the pressure off players to present results to the public and to immediately present definite solutions that are well-balanced. They understand that the political process also needs spaces where it is possible

to put out unfinished ideas, to learn from each other and to listen (Interviewee #1, TUM).

Another success factor of the closed-shop working group level is that controversial discussions can take place in order to identify areas of compromise or consensus (Keller, Kessler & Mailer 2006, p. 714). This is important to reconcile participants who come from a variety of institutions with different perspectives and worldviews.

Projects with local reference

Some participants highlighted that it was important for the success of collaborative projects that they remained grounded in the Munich context. That way it was possible to realise projects rather than discuss concepts:

Typical Inzell topics have a clear reference to the metropolitan area of Munich so that the stakeholders in the initiative have the power to find and also implement a solution (Interviewee #2, BMW).

Political stability

Many participants highlighted the political stability in Munich for more than 20 years — the Red-Green coalition has been in power since 1990 and Mayor Ude since 1993 — as another success factor in the consensus that was reached and maintained in the Inzell-Initiative (Interviewee #8, CoM).

5.4.3. Success factors for achieving policy acceptance

From the perspective of the City of Munich the Inzell-Initiative was established based on the premise that policy change can only be effectively promoted if more than 50 per cent of the public are on board, in particular ‘the poor and anxious, and the rich and powerful’ (Interviewee #12, CoM). The interviews revealed some strategies that were employed in the collaborative process to increase the acceptance of the resulting policies by organised stakeholder groups and the wider public.

Strategic inclusion of relevant stakeholders and expertise

One of the keys to increasing the acceptance of innovative policies was described in terms of the strategic inclusion of relevant stakeholders in the policy development phase, a strategy I will refer to as *smart labelling*. For example, in the case of parking space management (PRM) the strongest opponent, the Chamber of Industry and Commerce (IHK), took over the role as responsible project manager. By being part of

the project they started to increasingly share the awareness of the problem that the City and other stakeholders had, and as a consequence they came to support the project:

The IHK agreed to take care of this ideologically contested topic, in partnership with the City. This has worked out very very well, these things sometimes have astonishing effects (Interviewee #12, CoM).

Inclusion of all stakeholders, including those with opposing viewpoints, in the early phases of policy development helps to prevent confrontation in the later stages (Interviewee #2, BMW). In addition it creates a different message to the public:

If the message “We will take care of the problems” comes jointly from IHK, BMW, state government, university and other stakeholders it is very differently received compared to the message from the Red-Green coalition announcing a Red-Green policy change [as was described in Section 5.3.1] (Interviewee #12, CoM).

Under these circumstances is possible to present an intervention as ‘everyone’s brainchild’ (Interviewee #12, CoM) rather than the idea of a small group of elites.

Another strategy of smart labelling is the inclusion of information from institutions with high public credibility when communicating unpopular facts (Interviewee #8, CoM). For example, again in the PRM case, the system was developed by a well-respected university professor described in Section 5.3.3, rather than by ‘Red-Green tree huggers’ (Interviewee #12, CoM) or an administration official. Because of this sound scientific foundation, there was ‘highest consensus’ (Interviewee #12, CoM) for the project:

There was no political warfare anymore; people are finding parking spaces again: a miracle of space (Interviewee #12, CoM).

Sensible rather than restrictive policies

A good sense of proportion was repeatedly mentioned as a success factor for enhancing the acceptance of policy suggestions coming from the Inzell-Initiative. ‘Sense of proportion’ in this sense means taking into account the values and interests of all participating organisations in relation to policy proposals, so as not to trigger opposition from groups that perceive a proposal as incompatible with their own values and interests.

For example, in the case of PRM, the introduction of parking fees was not so much seen as a restriction but — due to the extensive scientific evaluation — as a ‘sensible

rededication of urban space to residents [from] commuters' (Interviewee #6, Green Party).

Another example was cited in relation to a strict versus 'relativised' (Interviewee #12, CoM) traffic light priority policy for trams:

If trams are given 110% priority it is increasingly annoying for motorists, however if this is reduced to about 95% and traffic light programming is not done according to ideology, it is possible to take out a lot of anger from the system (Interviewee #12, CoM).

Pilots and evaluation

Another strategy to enhance the acceptance of innovative policies in Munich was to conduct pilot projects, combined with evaluation and scientific documentation. Pilots were for example used to trial mobility management policies. This served to provide strong evidence to convince stakeholders with opposing views and to thereby 'bring things on the way' (Interviewee #3, Green City):

Without evaluation it's a question of belief (Interviewee #8, CoM).

The positive experiences from pilot projects have then contributed towards developing standard solutions (Interviewee #2, BMW).

5.5. Conclusions from the case analysis

To conclude the case study: I did not find what I expected based on my original theoretical framework (as I commented in Section 5.1.3). In stark contrast to my original assumptions (described in Section 4.4), the interview participants emphasised that the Inzell-Initiative, a collaborative stakeholder dialogue, was one of the single most important success factors for the positive developments that occurred in Munich. Although every group had to make concessions in order to achieve a consensus all interviewees emphasised that they had achieved a lot more progress than in the adversarial times before the Inzell-Initiative.

The Inzell-Initiative created shifts in the way stakeholders interacted, resulting in cooperation rather than confrontation, and in the adoption of consensus views rather than polarised positions. Through this dialogue APT ideas became more dominant in the policy process while the power distribution among the stakeholder groups remained

largely unchanged. As a result, the collaborative process balanced the economic, ecological and social interests of urban transport stakeholders and acted as a catalyst for policies that were accepted by organised stakeholders and the public on a long-term basis. The mechanism of policy change in Munich thus corresponds more with a shift in ideas than with a change in power structures — two different pathways to policy change that I described in Section 4.3.

Initially (as outlined in Section 4.4) I did not consider the ‘idea shift’ pathway as having the potential to create the necessary changes in stakeholder worldviews and interests that are required to produce significant policy change. Considering the case study findings, however, I now regard collaborative stakeholder dialogue as a pragmatic pathway or catalyst which can enable the policy process to achieve effective and durable results that contribute to sustainable transport development, especially in the context of wicked problems.

The following section (Section 5.5.1) illustrates two major qualities of this alternative pathway to policy change in the context of the main research question (outlined in Section 2.4): more effective policies based on the integration of resources and knowledge systems, and more accepted and durable solutions based on stakeholder consensus. It establishes a link between changes to the style of stakeholder interaction and improvements in actual policy outcomes in Munich. This connection between collaborative processes and positive outcomes pinpoints the essential difference between a collaborative pathway and an adversarial approach to policy making. Chapter 6 discusses these case study findings and conclusions further within the context of the theoretical framework (outlined in Chapter 4) and existing knowledge.

Section 5.5.2 concludes the case study analysis by outlining the issues that remained unanswered by the case analysis and that require further discussion in the context of existing knowledge.

5.5.1. Linking procedural aspects to substantial policy outcomes

More effective policy outcomes based on integration of resources and knowledge systems

The collaborative dialogue in Munich helped bring about the integration of environmental, social and economic considerations in policy decisions. It did this in several ways.

First, interviewees described the collaborative dialogue in Munich as an instrument that facilitated learning and understanding among stakeholders and which was therefore a more holistic approach to the problem situation in the policy process. The dialogue changed the participants' knowledge from being limited to facts and ideas specific to their own context and interests and contributed towards their having a broader knowledge base that allowed them to understand other stakeholders' viewpoints, even if they did not share them. In the deliberative process, this integration of knowledge systems, for example from community groups and science, created a more appropriate perspective on the problem situation and enabled a cross-fertilisation of ideas, leading to more balanced and effective policy outcomes than could have been proposed by one stakeholder group alone. For example, from a planning perspective, the collaborative dialogue was described as enrichment, or a valuable external 'pollination' (Interviewee #13, CoM).

In addition to increasing the facts and knowledge available to participants, the stakeholder collaboration facilitated a change in participants' worldviews from considering their own interests only towards seeing them as embedded and interlinked with the wider context of the urban transport system:

You have to adjust the master plan so that modes of transport are employed according to their strengths, and avoided where problems outweigh their benefits (Interviewee #2, BMW).

Second, as discussions in the Inzell-Initiative took place outside the mainstream political arena — a 'de-ideologisation' of the policy process (Interviewee #1, TUM), and so policy solutions were less subject to the trade-offs that are often linked to the short-term thinking that is common in party politics.

Third, the increased trust and mutual understanding among participants allowed new ideas and technologies to gain traction more quickly, as it provided more room for all relevant arguments to be heard:

A framework has been found that creates an arena in which the most convincing argument can gain acceptance in the sense of Habermas²⁹, where it gets the space to articulate itself and then eventually finds recognition, regardless of whether someone is in the right party or argues from the right institution (Interviewee #1, TUM).

The climate of trust also created more openness and tolerance towards pilot projects. Conducting pilot projects has been highlighted as crucial first step for the successful implementation of innovative policies (Interviewee #8, CoM).

Fourth, the collaborative environment provided more insights and feedback to participating organisations and therefore allowed participants to better adapt or innovate. For example, from an NGO perspective the Inzell-Initiative was described as an ‘extraordinary possibility for cooperation and exchange of ideas’ (Interviewee #3, Green City).

Fifth, in addition to promoting an increase in social and intellectual capital the stakeholder collaboration in Munich increased the financial resource base of the policy process. The strong alliance of participants was described as a precondition for a number of awards and research grants that Munich received. Financial contributions from these projects, and also the in-kind contributions from stakeholder organisations, provided a substantial base of resources for more sound policy development. One participant reported that:

Of course there is an additional workload through Inzell. But it is something really special that other cities envy. We have received research grants on that basis [for example Mobinet]. That way there was often money for studies that we wouldn’t have had otherwise ... Inzell was indeed a lucky draw for Munich’s transport politics (Interviewee #13, CoM).

Finally, CSD can open up more access points to traditionally weaker interests and their specialist knowledge, for example, community or environmental interests. This was pointed out by one of the interviewees in Munich:

²⁹ Habermas (1984) describes a decision making process that is based on the *force of the better argument* rather than on the relative strength of power relations as *communicative action*.

What changed significantly is that ecologically oriented groups are not seen as opponents anymore but as competent holders of key knowledge that articulate particular opinions and positions (Interviewee #1, TUM).

More accepted and durable solutions built on consensus

The Inzell-Initiative helped stakeholders increase their understanding of each others' positions and of the values and interests behind those positions. Through this process solutions could achieve the desired results without having too many unintended or unwanted side-effects. The resulting policies were accepted by all stakeholders and the public as stakeholders saw that their values and interests were better represented in resulting solutions and developed an increased sense of ownership for them.

As a result transport in Munich became a much less contentious political issue in the eyes of the public, indicating that the public felt that 'transport was taken care of' (Interviewee #12, CoM). In addition there were no more scare campaigns in the media (Interviewee #12, CoM).

Interview participants also observed that the Inzell-Initiative made possible the emergence of a broader and more long-term perspective on urban development based on the identified common ground:

There are always areas where stakeholders lie a little bit apart from each other, but we have found a very large core of consensus ... in that we can work together on solutions that actually endure (Interviewee #2, BMW).

Solutions were also more enduring because every participant felt better off in the collaborative environment than in the adversarial atmosphere which prevailed before 1996. Even though stakeholders had to make concessions in that they could not advocate too radical solutions, all interviewees appreciated the benefits of the collaboration and they acknowledged that they would not have achieved as much in the previous adversarial environment:

The Greens would do more radical politics than they could do together with SPD or BMW in the Inzell environment, but they do not have enough power for that. But I see Inzell as positive anyway (Interviewee #8, CoM).

5.5.2. Collaborative stakeholder dialogue as a pathway to more sustainable transport development?

In the context of achieving progress towards sustainable development in wicked problems the case study analysis highlights a collaborative approach to policy making as a promising alternative to the conventional adversarial approach. However there are a number of aspects that require further discussion in the context of existing theory. These are introduced in this section and discussed in detail in Chapters 7, 8 and 9.

How do collaborative approaches compare with the sustainability change creation potential of the conventional adversarial pathway?

The case study in Munich demonstrated that significant policy change towards more sustainable transport development does not necessarily require significant changes to the stakeholder power balance but can be achieved through a collaborative learning process. However the case study does not reveal how collaborative approaches compare with the conventional adversarial pathway with regards to creating change towards more sustainable transport development. Chapter 7 compares the benefits and mechanisms of both collaborative and adversarial styles of political debate and synthesises the success factors of the Munich process with existing research.

Is collaborative stakeholder dialogue compatible with procedures of lay citizen engagement in the policy process?

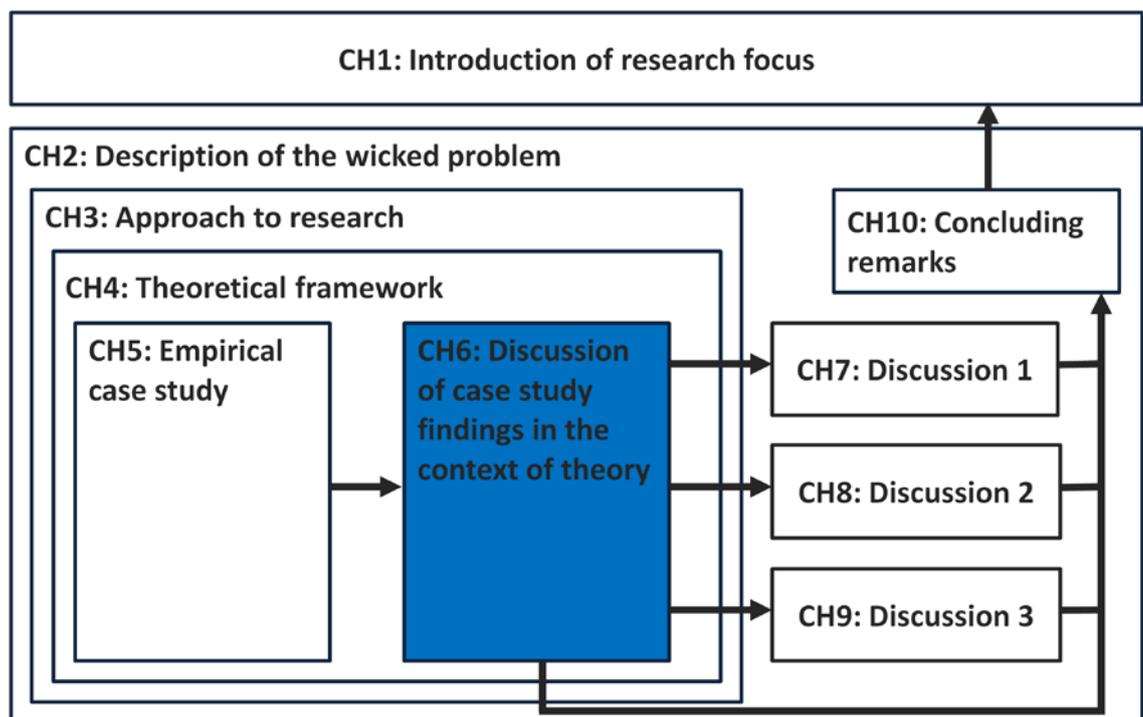
A critical concern regarding collaborative stakeholder dialogue is whether these ‘elite’ forums can coexist with procedures that aim to empower lay citizens in the policy process, or if they exclude each other. Chapter 8 addresses this concern by comparing the strengths and weaknesses of lay citizen engagement and interest group engagement with regards to the contributions they can make to sustainable transport outcomes.

How transferable is the Munich model to other cities?

Chapter 9 finally discusses in what way and under what conditions best practice examples of collaborative stakeholder dialogue can be transferred to other cities. This is achieved by developing a framework that enables an assessment of whether the preconditions for implementing CSD are present in a city. The framework is tested in the context of Sydney, Australia.

CHAPTER 6.

PLACING THE EMPIRICAL FINDINGS IN A THEORETICAL CONTEXT



The case study analysis in the previous chapter identified collaborative stakeholder dialogue (CSD) in the transport policy process as a powerful mechanism which could contribute to more sustainable transport development on a long-term basis, especially in wicked problem situations. The CSD fundamentally changed the way stakeholders interacted and developed solutions and so produced a number of effects that significantly enhanced the quality and acceptability of the outcomes (outlined in Section 5.5.1).

In order to improve the process and application of CSD in transport policy decision making, it is important to discuss this emergent governance procedure in the context of existing theory. That is the aim of this chapter.

In Section 6.1 I discuss the empirical case study findings in the context of the theoretical framework. I then identify the preconditions and success factors for consensus building that emerged from the empirical case study and integrate them with process criteria proposed by other researchers (Section 6.2). In Section 6.3 I map the effects of CSD against the earlier identified implementation barriers for APT solutions in the policy process. I conclude the chapter by suggesting an alternative definition of sustainable transport development that is able to better capture the effects of CSD than existing definitions (Section 6.4).

6.1. Mapping the Inzell-Initiative within the theoretical framework

6.1.1. A true consensus?

In Section 4.3.2 I describe how stakeholder collaboration in the policy process can produce outcomes ranging from a compromise to consensus, depending on the extent of learning that is taking place. In this section I discuss the effects of the Inzell-Initiative in relation to these consensus criteria as well as outcome criteria suggested by other researchers.

Regarding the quality of the learning process I suggest that the stakeholders in Munich that participated in the Inzell-Initiative significantly altered their boundary judgments (which are part of the ‘eternal triangle’ of boundary judgments, facts and values that is

introduced in Section 2.2.1 — the triangle explains joint learning in the policy process), most importantly by shifting from a perspective of being concerned only with their own issues towards seeing them as embedded in the urban system (as discussed in Section 5.5.1). In the process they also altered the range of facts and values they considered, acknowledging the perspectives of their previous political opponents. In this way the Inzell-Initiative has facilitated a long-term consensus on transport development in Munich.

Every stakeholder group maintained their interests, but through the collaborative process they learned about the values and worldviews behind the interests of other groups so they found more sensible thus and acceptable ways to promote their own interests, or even revise them. Some researchers have linked this process to the idea of ‘double-loop learning’ as introduced by Argyris and Schön (1978):

While single-loop learning involves adaptation and error correction in respect of a fixed goal, double-loop learning is more fundamental and connects error correction to adjustment of underlying objectives, values, norms and beliefs. Double-loop learning is needed for re-conceptualization and re-framing within issue domains. ... Social interaction appears to be particularly appropriate to foster double-loop learning since it involves an encounter with other stakeholders’ beliefs and values (Whitmarsh, Swartling & Jäger 2009, p. 233).

Innes and Booher (1999) developed a series of outcome criteria for a consensus building process based on their extensive experience with CSDs over two decades (synthesised in Table 4). There are immediate tangible results such as high quality outcomes (Criterion 1 in Table 4), innovative strategies (Criterion 2) and an end to stalemate (Criterion 3). There are also effects that unfold after the actual consensus building process has finished, for example, new partnerships, collaborations and changes in practices or institutions (Criterion 4). Then there are intangible products that can become more important for long-term policy change than they are for the actual agreement, as they are highly interrelated with the quality and acceptability of the actual policy outcomes: increases in social capital in the form of enhanced trust and relationships, more intellectual capital through mutual understanding, shared problem frames and agreed upon data, and enhanced political capital, that is, ‘the ability to work together for agreed ends’ (Innes & Booher 1999, p. 9) (Criterion 5). Finally, they consider the process of learning that takes place in the stakeholder community as the

most important intangible effect (Criterion 6), as learning can ultimately change the worldviews and consequently the actions of stakeholders.

Similar to my conclusions in Section 5.5.1 Innes and Booher see a connection between process criteria for consensus building and the likelihood of high quality, balanced and durable outcomes:

There are many reasons to believe that if consensus building meets the process criteria, it is also likely to meet the outcome criteria ... A process that is inclusive, well informed, and comes close to achieving consensus is more likely to produce an implementable proposal than one lacking these qualities. If it follows principles of civil discourse, it is more likely to build trust, foster new relationships, and create shared learning. If it encourages participants to challenge assumptions, it is likely to produce new ideas. Stakeholders are more likely to feel comfortable with a process they can organize themselves and more likely to be committed to its results (Innes & Booher 1999, p. 8).

Based on these criteria Munich can be interpreted as a textbook case according to Innes and Booher’s criteria. Table 4 maps the effects of the Inzell-Initiative (outlined in Section 5.3.3) against Innes and Booher’s consensus criteria.

Innes and Booher’s consensus building outcome criteria	How the Inzell-Initiative meets these outcome criteria
Produces a high-quality agreement	More effective policy outcomes based on integration of resources and knowledge systems (Sections 5.3.3 and 5.5.1)
Produces creative ideas and strategies	
Ends stalemate and therefore compares favorably with other planning methods in terms of costs and benefits	More efficient policy process due to end of political trench warfare (Section 5.3.3)
Changes in attitudes, behaviours and actions, spinoff partnerships, and new practices or institutions	Changes in institutional structures (Section 5.3.3)
Creates social and political capital and so produces information and solutions that stakeholders and the public understand and accept	More acceptable and durable solutions built on consensus (Section 5.5.1)
Results in learning and change in and beyond the group	Effects on process participants (Section 5.3.3)

Table 4: The effects and outcomes of the Inzell-Initiative mapped against a synthesis of Innes and Booher’s outcome criteria for consensus building
(Source: created for this research based on Sections 5.3.3 and 5.5.1 and Innes and Booher 1999)

To sum up, based on the extent of the learning that has taken place and based on the outcome criteria the process meets, I argue that the outcomes and effects of the Inzell-

Initiative can be defined as close to the consensus end of the spectrum that was introduced in Section 4.3.2.

6.1.2. A true paradigm change?

Section 4.3.1 describes the process of paradigm change as consisting of three phases: first, legitimacy problems of the existing paradigm and the accumulation of anomalies or events that cannot be dealt with under the existing paradigm; second, an expansion of the conflict into the public arena followed by a shift in power constellations and the breaking of monopolies; and third, the institutionalisation of a new stakeholder regime and paradigm.

In the case of transport policy decision making, the process of paradigm change would entail a fundamental change to the objectives of transport development, from a preoccupation with economic growth to a stronger incorporation of environmental and social concerns, achieved through the institutionalisation of a new stakeholder regime. In contrast, the change that took place in Munich was a fundamental change in the way stakeholders interacted, developed objectives and (co)created knowledge and policy alternatives, achieved through the institutionalisation of a new governance procedure. The collaborative process facilitated an indirect shift in policy development through the transformative stakeholder learning process.

Can the change that took place in Munich be described as a paradigm change even though the power relationships between stakeholders remained largely unchanged? I argue that yes; the process of change followed the same pattern as described above: first, the mayor could not solve issues of public interest anymore under the existing adversarial model and many stakeholders started to doubt the ability of this model to further their interests; second, the conflict was expanded into the public arena and led to a hurting stalemate, thus creating a chance for the mayor to initiate a new approach to stakeholder interaction. And third, the initial successes of this new process convinced stakeholders to adopt the collaborative pathway as superior to the previous adversarial approach to stakeholder interaction, building a foundation for the institutionalisation of the Inzell-Initiative in Munich.

I therefore suggest that the model of paradigm change is not only applicable to fundamental changes in the *objectives and direction* of policy development achieved

through a change in dominant stakeholders, but also to structural changes to the *process* through which policy making takes place.

6.2. Classifying preconditions and process criteria for consensus building

In this section I develop a systematic overview of the preconditions and success factors for CSD based on findings from the Inzell-Initiative and success factors for consensus building produced by other researchers (see for example Sabatier & Weible 2007; Innes & Booher 2010). This serves as a basis for developing guidelines for practitioners who are interested in implementing CSD.

The ideas and arguments in this section were initially developed in Paper 5 and further evolved in Paper 9 (see List of Publications)

Success factors for policy change through CSD have not yet been systematically linked to the way they contribute to actual policy outcomes, but are often only checklists. While such lists are valuable for assessing the quality of a process from a hindsight perspective and to compare different procedures, illustrating the links between process criteria and outcomes can provide additional insights for practitioners aiming to implement such procedures. Sidaway highlights the importance of knowing how to manage a collaborative learning process:

The standards adopted by society may change as understanding, values or technology develop; and both the process of efficiently managing the reaction to those changes and the ability to implement the agreement over a period of time is likely to be as important as the agreement itself (Sidaway 2005, pp. xiii-xiv)

Table 5 provides an overview of elements that are preconditions for the implementation and ongoing success of the CSD, and criteria for moving a CSD closer to towards learning and consensus. This synthesis is based on success factors that emerged from the empirical case analysis and suggestions by other researchers. For example, the procedural success factors of the Inzell-Initiative align well with the success factors for professional fora in the Advocacy Coalition Framework (ACF) (Sabatier & Weible 2007, pp. 206-7). Innes and Booher (2010, pp. 90-2) illustrate the incentive structures in a number of CSD case studies in the United States.

		Success factor	Rationale
Preconditions / incentives	Problem-related	(1) Hurting stalemate and lack of alternative avenues (b, c, d)	A deadlock in which none of the stakeholders is able to emerge victorious and all parties find the status quo unacceptable. None of the participating groups sees alternative means of advancing their interests.
		(2) Perceived interconnectedness of actors (a, b)	'Once parties begin to recognize that they both have complex histories and real problems that worry them, then and only then can they begin to work together to solve their problems effectively' (d).
	Process-related	(3) Perceived influence (b, d)	Participants have the impression that investing their resources will be rewarded with policy outcomes.
		(4) High level leadership and commitment (b, c, d)	Commitment of organisers and participants at a senior level so that forum is prestigious enough to attract relevant stakeholders who do not want to miss out on discussions and risk missing a chance to co-define issues and solutions.
		(5) Previous positive experience with collaboration (a, d)	Participants are impressed by previous positive experiences with collaborations; perceive them as 'almost magical' (c).
Process criteria	Legitimacy and fairness	(6) Composition of actors (b, c, d)	Forum represents the diversity of interdependent interests in a problem situation.
		(7) 'Neutral' leadership and facilitation and distributed funding (c)	The chair and the facilitator for the negotiations should be 'respected neutrals'. Funding should come from members of different coalitions to increase the legitimacy of the process.
		(8) Self-organising, adaptive process rules and norms (b, c, d)	Participants should be able to decide on ground rules, objectives and discussion themes; they should own the process.
	Learning and consensus	(9) Nature of the problem: empirical issues (b, c, d)	Purpose and task of the process are real, practical, and shared by the group; 'primarily normative issues ... are not ripe for negotiation' (c). The issues at stake are at an intermediary level of conflict.
		(10) Ongoing interaction (b, c, d)	A minimum of six meetings over a year, and continuity in participation ('turnover kills trust-building' (b)).
		(11) Authentic dialogue (b, c, d)	Participants can challenge any assumptions, deliberation not directed by external control, approximates Habermas' ideal speech conditions.
		(12) Building trust and relationships (b, c, d)	Social capital as basis for finding agreement and cross-fertilising knowledge and ideas.
		(13) Fostering creative thinking (b)	Encourages challenges to accepted knowledge and fosters creative thinking.
		(14) Confidentiality (d)	Closed-shop situation for the stakeholder discussions to create an atmosphere for learning.
		(15) Documented shared principles (b, d)	Commonly developed and agreed on principles for policy development or negotiating text.

Table 5: Preconditions and process criteria for successful consensus building in a collaborative stakeholder dialogue
 (Source: created for this research based on Forester 1999 (a); Innes & Booher 2010, pp. 89-117 (b); Sabatier & Weible 2007, pp. 206-7 (c), and own research (d))

To clarify, I do not assume that all success factors need to be present in order for a CSD to achieve the intended effects, however, I suggest that the more conditions a process meets the more likely it is to be successful (see Innes & Booher 1999 for a similar argument). Some of the success factors that are discussed in this section might also be applicable to other procedures which engage the public in policy making, for example, procedures of lay citizen participation (that are introduced in Section 8.1.1). However, the discussions in this chapter focus primarily on the mechanics of policy change through CSD, based on Innes and Booher's definition of collaborative practice as:

... an array of practices in which stakeholders, selected to represent different interests, come together for face-to-face, long-term dialogue to address a policy issue of common concern. Typically they have a facilitator and they build on the experience of mediated dispute resolution (Susskind & Field, 1996). They seek consensus rather than use majority rule, and employ methods to assure that all are heard and respected and that discussions are based on stakeholder interests and not simply on arguments about predetermined positions (Innes & Booher 1999, p. 1).

6.2.1. Preconditions and incentives for stakeholders to participate in a collaborative process

Essential preconditions or incentives for stakeholders to participate in a CSD on an ongoing basis are related to both the nature of the problem situation and the nature of the process.

Nature of the problem situation

First, in order for CSD to be considered an attractive option for all relevant stakeholder groups, including stakeholders that enjoy high levels of influence in policy development, the problem situation needs to resemble a 'hurting stalemate' (Success factor 1 in Table 1 below). A stalemate is characterised by an absence of alternative avenues through which the different stakeholder groups may be able to further their objectives more effectively, so that they see no better alternative to engaging with their political opponents. Sidaway (2005, p. 200) similarly suggests that 'at the point of stalemate, the prospect of negotiating becomes more attractive', and that 'only when the politics of power have been exhausted can the politics of co-operation become a viable possibility'.

A related incentive for stakeholders to engage in collaboration is that participants realise their interconnectedness with other stakeholders and their objectives, and that they all need the process to work because they ‘cannot get their interests met independently’ (Innes and Booher 2010, p. 35) (Success factor 2):

Once parties begin to recognize that they both have complex histories and real problems that worry them, then and only then can they begin to work together to solve their problems effectively (Forester 1999, p. 491).

The increased transaction costs of stakeholder conflict in a wicked problem therefore act as an incentive for a move away from adversarial strategies to a collaborative approach.

Nature of the process

A precondition that emerged from the Munich case study is that potential process participants need to feel they have a real opportunity to influence the outcomes of the process. That is, that their arguments will be heard and taken into account (Success factor 3):

This has a lot to do with power. Every participant of the forum knows that it is all about the power of definition, that is, which problem definition, solution perspective, pathway will be ultimately selected? Everyone knows that, everyone is accomplished in that game (Interviewee #1, TUM).

With regards to the process initiation the leadership and commitment of officials on a senior level, ideally as ‘instigators and inspirers’ (Innes and Booher 2010, p. 92) that step back and let the process emerge rather than push their agendas, is important in order for the forum to be prestigious enough to attract participants, and to effectively fund and manage the process by providing dedicated staffing (Success factor 4). One of the interviewees in Munich stated (see Section 5.4.1) that the success story of the Inzell-Initiative was only possible due to the strong championship of the mayor. Richardson (2000, p. 1009) highlights the fundamental need of interest groups to acquire information as major incentive for cooperation – if the forum is prestigious enough it is likely to attract participants as they do not want to miss out on opportunities to collect information and to co-define issues.

In order to get participants motivated and engaged in the CSD, and to keep them motivated and engaged on an ongoing basis, they need ongoing positive experience with the process and its outcomes. This serves as confirmation that the collaborative pathway

helps them to promote their interests more effectively than they could expect to do within an adversarial framework. The CSD offers this confirmation by, for example, producing high quality solutions to a conflict or by providing positive experiences in collaborating with people ‘from the other side’ (Success factor 5). Forester describes this learning process as follows:

Efforts to build consensus between those with differing values can produce unexpected results that seem almost magical to the parties involved. Although they begin with the presumptions that the other “will never talk to us” and that their value systems are so radically different that “we’ll never be able to work something out with them”, parties are often astonished to find themselves crafting real, productive, satisfying agreements (Forester 1999, p. 464).

Ongoing positive experience is also relevant because disappointment with the collaborative process can destroy possibilities for future collaborations and enhance cynicism and adversarial strategies. Bickerstaff and Walker (2005) for example document two cases of citizen engagement in British transport planning where unequal power relations meant some participants lacked influence throughout the deliberative process. This led to their becoming disillusioned.

The process of shared learning and consensus building is therefore strongly interlinked with its effects and outcomes. In this way, processes and outcomes are mutually reinforcing, either in a positive or negative way.

6.2.2. Criteria for moving a collaborative process towards consensus

Two types of procedural success factors emerged from the Munich case study. First, factors that enhance the perceived legitimacy and fairness and thus the long-term acceptance of the process and its outcomes among both participants and the wider public; and second, factors that enhance the learning process and thus the quality of the outcomes (see Table 1 for an overview). Both aspects are relevant as ‘the more successful a procedure can be in bringing diverging interests together, the greater the acceptance and value of its result, mainly in terms of political attention and influence’ (Schiefelbusch 2005, p. 268).

Factors enhancing the perceived legitimacy and fairness of the process

In order for participants to open up and contribute to the collaborative process they need to perceive it as fair and legitimate. A first condition for the process to be perceived as fair and legitimate is that all parties that have a stake in the process are represented — ‘the deal makers and the deal breakers are obvious choices, but the stakeholder group should also include those who could benefit and those who could be harmed by any agreement’ (Innes and Booher 2010, p. 93) (Success factor 6). This inclusionary strategy increases the acceptance of resulting policies and reduces the risk of attacks on decisions at later stages. A powerful example from Munich is the inclusion of the Chamber of Business and Commerce (IHK) as the strongest opponent to the idea of parking space management (PRM) as the responsible project manager for the PRM project.

An additional factor contributing to perceived fairness and legitimacy is that the facilitation and funding of the process need to come from neutral sources (Success factor 7). Nevertheless, some interviewees in Munich reported how the process benefited from BMW funding that could not have been provided by the City of Munich. Similarly, Innes and Booher (2010, p. 92) find that the better a process is funded the better the outcomes it produces.

Finally, the decision rules and the consensus finding process need to be accepted by all stakeholders and must not allow particular participants to dominate (Success factor 8). In order for participants to open up and contribute to the process it is important that they perceive it as fair and legitimate, and it is also important that the public accepts the legitimacy of the process.

Factors enhancing the learning process

Trust and mutual understanding in complex stakeholder networks are important factors for achieving learning progress in wicked planning problems (Edelenbos & Klijn 2007; Laurian 2009; Leach & Sabatier 2005) (Success factor 12). In order for trust to evolve the consensus building process requires time and ongoing interaction (Success factor 10).

To reduce ideological conflicts it is important for the discussions to focus on issues that have empirical relevance rather than on normative issues (Success factor 9). That is,

they need to be important enough for stakeholders to engage in negotiation, but they must not address deep core values as the resulting conflicts ‘generate more heat than light’ (Sabatier and Zafonte 2001, p. 11566). That way, participants can identify ‘low-hanging’ fruit and achieve collaborative successes. Nevertheless, to foster creative thinking the process also needs to allow challenges to accepted knowledge and practices (Success factor 13):

A diverse and conflictual group trying to reach agreement often comes up with ideas that are not merely marginal adjustments but creative solutions to problems (Innes & Booher 2010, pp. 94-5).

In Munich, for example, discussions and projects focused on local issues and practical solutions, but working groups included participants with significantly different interests so that all aspects could be incorporated; and trust and mutual understanding was significantly enhanced through the ongoing multi-institutional interaction in small groups at the project level.

A further success factor for consensus building is that the process needs to allow all arguments that are relevant to a problem situation to be heard based on conditions of authentic dialogue (Success factor 11). Innes and Booher (2010, pp. 97-104) outline the strategies for creating authentic dialogue as well as best practice suggestions for process design that emerged from their extensive practice with CSDs. An additional important condition that participants in Munich highlighted (in Section 5.4.2) was that a necessary condition for learning to occur was the confidential closed-shop situation of the discussions (Success factor 14).

Finally, all interview participants in Munich highlighted the importance of a consensus document that was developed at the very first meeting and signed by all participants (Success factor 15). This document outlines eleven principles a basis for achieving consensus on transport development in Munich. These principles have not been altered in the past 15 years and they have been described as a powerful instrument influencing the political discourse on transport in Munich:

[The consensus document] has tremendous significance, it is an instrument that makes it possible to actually steer the transport political discourse! It is similar to the ten commandments; the planning of new traffic connections is appraised with regards to what contributions and what violations it makes against each of these eleven principles (Interviewee #1, TUM).

Innes and Booher (2010, p. 95) highlight a similar success factor: a ‘negotiating text’ that documents the issues under discussion.

6.3. Revisiting sustainability barriers: consensus as a pragmatic way forward

In this section I revisit the previously identified sustainability barriers in policy development and implementation and relate them to the characteristics and effects of CSD. In doing so I discuss the potential of CSD to mitigate barriers to policy outcomes that better include environmental and social considerations.

The ideas and arguments in this section were initially developed in Papers 3 and 4 and further evolved in Paper 8 (see List of Publications)

Section 4.2 identified three major barriers to policy change, or, using Kingdon (2003), survival criteria for ideas to emerge from the policy stream and to gain high priority on political decision making agendas: first, the congruence of values among the members of a policy community; and second, the anticipation of future constraints in the form of budget limitations, technical aspects or public preferences. If a proposal conforms with these criteria it is likely to be forwarded for political consideration. The third survival criterion is then the applicability of an idea or policy proposal to the problems that are perceived as pressing in the community.

The following sections map these barriers against the characteristics of a consensus building process that have been discussed in detail in Section 5.5.1.

6.3.1. Reconciling value and knowledge systems

CSD can overcome barriers created by value incongruence in two ways: first, it can facilitate a consensus among conflicting stakeholder groups by increasing their understanding of each others’ positions and of the values and interests behind those positions. This process facilitates an increased understanding for the necessity of an intervention and so makes participants more willing to accept restrictive measures.

Second, it can enhance the quality of policy proposals by integrating the knowledge systems of all stakeholder groups in a problem situation. This cross-fertilisation of ideas can help to identify novel and innovative solutions, and to overcome the limitations of

the so-called *Garbage-Can-Model* (Kingdon 2003, p. 84).³⁰ According to this model, policies are not newly invented for every issue that arises in the problem stream but are a result of mutation and recombination of already existing ideas that swim in the ‘policy primeval soup’ (Kingdon 2003, p. 144).

6.3.2. Overcoming second-guessing

A stakeholder consensus can give elected decision makers more confidence in implementing *sticks*, as proposals that are put forward by planners already have approval from the relevant stakeholder groups and so they do not require decision makers to balance and trade off individual interests against each other. In Munich, for example, most transport decisions are run past the Inzell-Initiative in order to anticipate potential barriers to implementation (Interviewee #13, CoM).

6.3.3. Concluding discussion on barriers

Collaborative stakeholder dialogue shows great potential for mitigating barriers to more sustainable outcomes in the transport policy process. The likelihood of a collaborative planning approach to produce fairer and more sustainable outcomes has also been established by other researchers:

The solutions produced by consensus building processes are likely to be sustainable because both environmental and economic interests must be satisfied, because the process so fully explores options and the consequences of actions, and ultimately because it builds the capacity of key players to help the system to adapt creatively to change (Innes & Booher 1999, p. 8).

Stakeholder engagement is seen as particularly relevant to sustainability decision-making given the complexity, ambiguity and subjectivity that surround persistent problems of unsustainability. ... Stakeholder participation is thus advocated for substantive, normative and instrumental reasons (Whitmarsh, Swartling & Jäger 2009, p. 233).

These ideas also align with the suggestion of some researchers that enhancing the communication links between elected decision makers, planners and the public can potentially increase the basis of mutual trust and understanding, and so the window of effective and acceptable solutions to emerge from the policy stream. Gatersleben and Uzzell (2004, p. 478) for example suggest that ‘providing policy makers with more

³⁰ I thank Dr Betsi Beem for pointing me to this aspect of the issue.

insight into the actual malleability of car use could ... improve decision making processes on car travel reduction measures'. Arguments for enhanced dialogue are also based on considerations of policy acceptance. Hirschi, Schenkel and Widmer (2002, p. 2) argue that the effectiveness of measures cannot be assessed according to the policy outcome only, but that the process of *how* a measure is developed is equally important to ensure legitimacy and acceptance of the resulting policy.

Lash (1976) and later commentators that build on his work (see for example Legacy 2008) state that every sector of society needs to contribute to the policy process in order to achieve high quality decisions. Lash introduces a six-sided triangle model of the interconnections between planners, elected decision makers, and the public in response to his observations of limited public engagement in regional planning. The corners of the triangle highlight the roles of each stakeholder group: the public provides a framework of norms and values and local knowledge, planners use this framework to develop solutions, and decision makers select proposals they think meet the public interest. The model emphasises that dialogue between the three groups must go two ways, and that the process will become less effective if one link breaks off (Lash 1976). This six-sided triangle fits well into the Multiple-Streams model (introduced in Section 4.1.2) if the public and the problem stream are used interchangeably (see Figure 18).

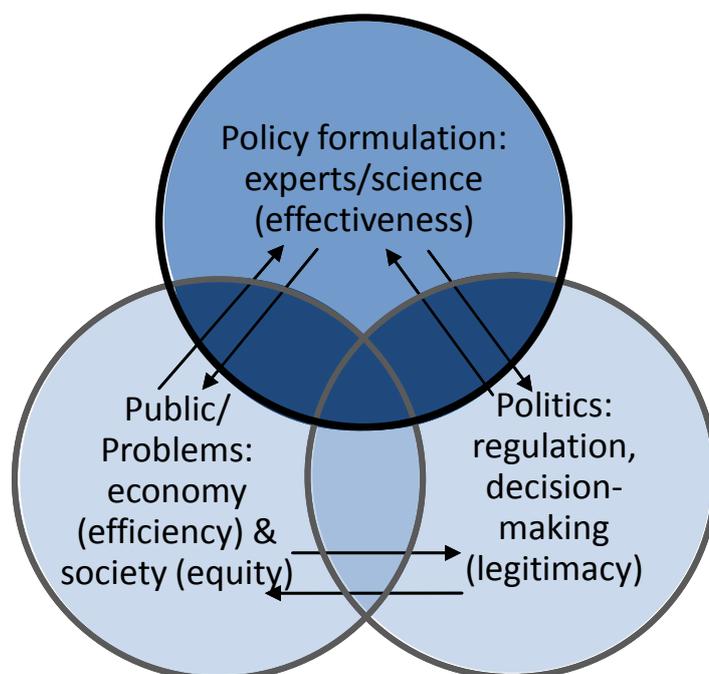


Figure 18: Lash's six-sided triangle of the interconnections between planners, elected decision makers, and the public integrated in Kingdon's parallel streams
(Source: created for this research based on Kingdon 2003; Lash 1976)

However, I do not suggest that implementing CSD automatically leads to more effective and more acceptable outcomes. The following section addresses the caveats and limitations regarding CSD.

Caveats and limitations regarding CSD

First, it cannot be automatically assumed that the interest groups represented in a CSD represent the public interest, as there are unorganised citizens or so-called ‘weak’ interests that might not have the resources to participate (see Section 1.2.3). However, these groups are still affected by the resulting decisions. In Section 7.2 I argue that a CSD has to gain subjective legitimacy through the successes it produces. However, this argument interprets the mere absence of public protest as an indicator of the acceptance or legitimacy of a process, which again conceptually excludes ‘weak’ interests. Ideally all interests should be represented in the CSD, especially groups that are negatively affected by decisions. To counteract these asymmetries in representation I suggest complementing CSD with procedures of lay citizen participation in the conclusion to Chapter 8.

Second, an appropriate process design following the success factors in Section 6.2 is fundamental to facilitating trust and a shared learning process. If participants get frustrated with the process and its results, for example, if some participants feel their contributions are not taken into account in a meaningful way and that the process is tokenistic, it is likely to create cynicism among stakeholders towards collaborative practice.

And third, CSD is not appropriate for all problem situations. Innes and Booher for example argue that a collaborative approach is not needed:

when there is already agreement about ends and means, when cause and effect relationships are well understood, and when there is relative certainty about how the decision will play out in the system (Christensen 1995). It is not feasible when an immediate decision is needed to protect life and property. It is not possible when the actors are not interdependent and hence have no reason to engage with one another (Innes & Booher 2010, p. 7).

And finally, the implementation of CSD is also not a decision that can be made by a local government alone and CSDs are not suitable every policy context. In Chapter 9 I analyse the incentives or preconditions for decision makers and non-government

organisations to engage in collaborative stakeholder dialogue, finding that CSD is most relevant to problem situations resembling a stalemate. In other words, CSD is only appropriate and functional if all relevant participants perceive collaboration is the best way to further their interests given the context of problems and stakeholder power relations in a particular policy arena. Innes (2004) clarifies these limitations of CSD in detail.

6.4. Redefining sustainable transport development: a process- and systems-based definition

Having discussed the empirical case study findings in the context of the theoretical framework and additional relevant theory in the previous sections, I conclude this chapter by suggesting a process- and systems-based definition of sustainable transport development that is able to better capture the effects of CSD than existing definitions of sustainable transport development can.

Existing definitions of sustainable transport development (as introduced in Section 1.1.2) hardly take procedural aspects into account but only focus on the actual outcomes of the process. CSD on the other hand is inherently open ended and treats problems as ‘puzzles [and] participants work jointly to put pieces together to create a shared picture of the future and a strategy for getting there’ (Innes & Booher 2010, p. 9). Outcome-based definitions therefore cannot account for the potential for change that lies in the communicative interactions of stakeholders.

To fill this gap I suggest an alternative, process-based definition of sustainable transport development that is particularly relevant to wicked problems with conflicting but interdependent values and interests. It is based on the characteristics of what Innes and Booher describe as ‘collaborative rationality’:

A process is collaboratively rational to the extent that all the affected interests jointly engage in face to face dialogue, bringing their various perspectives to the table to deliberate on the problems they face together. For the process to be collaboratively rational, all participations must be fully informed and able to express their views and be listened to, whether they are powerful or not. Techniques must be used to mutually assure the legitimacy, comprehensibility, sincerity, and accuracy of what they say. Nothing can be off the table. They have to seek consensus (Innes & Booher 2010, p. 6).

Innes and Booher describe three conditions as critical for a process to be collaborative rational, productive of socially valuable outcomes and adaptive to the wicked problem situation:

- full diversity of interests among participants,
- interdependence of the participants, who cannot get their interests met independently,
- and engagement of all in a face to face authentic dialogue meeting Habermas' basic speech conditions (Innes & Booher 2010, p. 35).

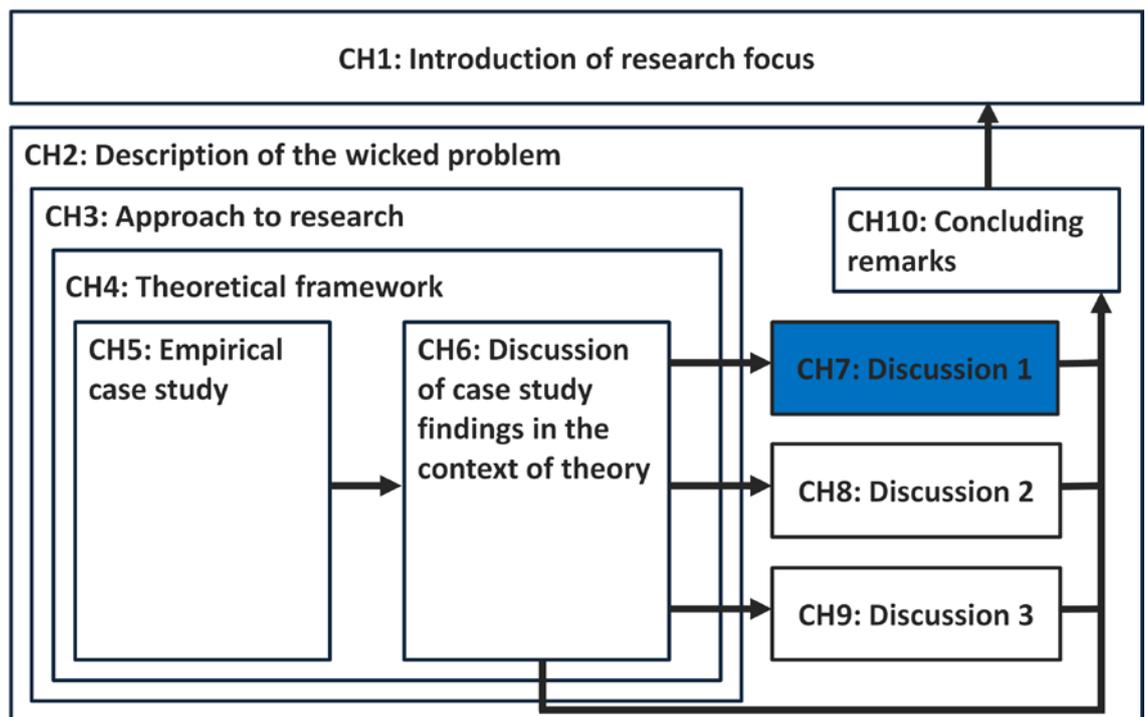
Accordingly, sustainable urban transport development can be defined as the outcome of a policy process that represents the full diversity of interdependent interests on a problem situation in authentic dialogue, so as to jointly produce innovative and adaptive solutions.

This definition has a process and a systems component: the process orientation acknowledges the impact the inclusion or exclusion of relevant knowledge and value systems has on the quality and acceptance of actual outcomes. The systems component refers to the fact that it defines sustainable transport development from an urban systems perspective, not according to the interests of individual stakeholder groups.

This definition corresponds with the call of a number of researchers for a shift away from optimisation and goal-seeking to a focus on learning as a basis for better dealing with wicked problems in contemporary societies (see for example Ramage & Shipp 2009, p. 152).

CHAPTER 7.

A SYSTEMATIC COMPARISON OF ADVERSARIAL AND COLLABORATIVE APPROACHES TO THE TRANSPORT POLICY PROCESS



The previous sections established collaborative stakeholder dialogue as a powerful alternative pathway to policy change towards more sustainable transport development. However, the mechanics of policy change in a collaborative process stand in stark contrast to those of the more conventional adversarial model I had originally assumed would explain the positive developments which had taken place in Munich since 1995. For example, there is a tension between the potential for adversarial politics to create fundamental change in a short period of time and apparent downsides in terms of dealing with wicked problems that involve a wide spectrum of stakeholder interests. Collaborative procedures on the other hand can produce more widely accepted results but are critiqued for being a status quo process (Innes & Booher 2003). This chapter investigates how the change creation potential of CSD can be judged relative to adversarial procedures.

The ideas and arguments in this chapter were initially developed in Paper 7 (see List of Publications)

In order to improve the process and application of CSD in transport, it is important to systematically compare this emergent governance process to the conventional adversarial style of stakeholder interaction that has usually been used in the transport policy process. It is also important to demonstrate the practical and theoretical advantages of CSD over adversarial processes in achieving sustainable transport outcomes. This is the aim of this chapter.

In Section 7.2 I systematically compare and contrast the strengths and weaknesses of adversarial and collaborative approaches with regards to their potential to create change towards more sustainable transport development. To do so I develop a framework that enables a comparison of the two approaches with regards to their potential to contribute to more sustainable development (Section 7.1). I conclude by proposing CSD as a tool to de-politicise stakeholder discussions and thereby counterbalance asymmetric stakeholder influence in the transport policy process (Section 7.3).

7.1. Establishing a sustainable transport governance framework

The OECD EST (Environmentally Sustainable Transport) project proposes a set of guidelines to assist governments in the development of appropriate strategies to achieve

more sustainable transport outcomes (Wiederkehr et al., 2004). These guidelines provide valuable insights from a planning perspective on how to develop high-quality policy solutions based on a long-term vision. However, they do not take into account the context of conflicting stakeholder interests and asymmetric influence (as described in Sections 1.1.3 and 2.2.2) that can create implementation barriers. In order to be able to compare and contrast collaborative and adversarial styles of stakeholder interaction within this particular political context I propose a framework that assesses public policy making from a governance rather than a planning perspective. Such a framework includes policy quality as a key element, but also considers aspects of public acceptance and social cohesion. In this section I introduce these elements of the governance framework in detail (see Table 6 for an overview).

Most frameworks that investigate the different outcome dimensions of public policy making in pluralist societies agree on the basic need for governance systems to contribute to *effectiveness*, *efficiency*, *legitimacy* and *social cohesion* (see Renn 2008 for an overview of the literature, see also Section 2.1). I selected this ‘top-down’ assessment tool because it reflects the pragmatic systems-based focus on sustainable transport outcomes of this thesis, rather than only focusing on the perspective of those who seek to intervene in the process and transform it — which would be difficult as it would require judgements regarding the definition of these transformations. In doing so the criteria for efficiency, effectiveness, social cohesion and legitimacy reflect not the concerns of those managing the political process, but a systems-based perspective on sustainable development.

Efficiency refers to ‘the degree to which scarce resources are utilized for reaching the intended goal’ (Renn 2008, p. 286). In transport this is particularly relevant to the policy process and the durability of its decisions in relation to the time and money used to come to that decision. Durability means that all stakeholders accept a policy decision on a long-term basis, so that its effects can unfold in the intended way. The need to achieve efficiency also affects the quality of actual policy outcomes with regards to the invested resources; however in the governance framework I discuss this requirement in relation to the need for policy effectiveness (see Table 6).

Effectiveness is ‘the need of societies to have a certain degree of confidence that human activities and actions will actually result in the consequences that the actors intended

when performing these actions’ (Renn 2008, p. 286). The transport policy process needs to ensure that it produces interventions that positively contribute to all areas related to urban sustainability (society, economy, environment, urban form) or at least, that these interventions are not detrimental to them — a normative ideal that is sometimes referred to as a ‘virtuous cycle’.

	Human-activity system (=policy process and its stakeholders)	Physical transport system (=materialisation of the decisions made in the policy process)
Efficiency	Process is efficient in terms of resources invested to reach agreement and in terms of the durability of the implemented agreement	Resulting infrastructure and operation is efficient in terms of resources invested to achieve sustainability impacts
Effectiveness		Resulting infrastructure achieves sustainability impacts (‘virtuous cycle’)
Social cohesion	(1) to inform and educate the public, (2) to incorporate public values, preferences and assumptions into decision making, (3) to foster trust in institutions, and (4) to reduce conflict among stakeholders	Resulting infrastructure contributes to social inclusion
Legitimacy	Outcomes of legal process are widely accepted or not contested by affected groups in society	

Table 6: Relevance of claims for efficiency, effectiveness, legitimacy and social cohesion for the policy process and its outcomes in the sustainable transport governance framework
(Source: created for this research based on Beierle 1999; Renn 2008)

Legitimacy, according to Renn (2008), has two components: the first legitimacy component is the normative objective right of a governing body to make decisions that are legally binding. The second legitimacy component is of a subjective nature: ‘the factual acceptance of this right by those who might be affected by the decision’ (Renn 2008, p. 286). The legitimacy or acceptance of transport policy decisions therefore strongly depends on how the impacts of the decisions are perceived by different groups in society, and how much interest and resources these groups have to challenge these decisions.

Social cohesion, finally, refers to ‘the need for social integration and collective identity despite plural values and lifestyles’ (Renn 2008, p. 286). In the case of transport this has implications for both the physical transport system and for society; however, I cover the

need for transport infrastructures to allow all sectors of the community to participate in social life in the criteria for solution effectiveness (see Table 6). The criterion of social cohesion thus primarily refers to society. In that regard, Beierle (1999, p. 81) suggests a number of social goals, that is, goals that ‘transcend the immediate interests of parties involved in a decision’. Four of these goals are relevant for the transport policy process: (1) to inform and educate the public, (2) to incorporate public values, preferences and assumptions into decision making, (3) to foster trust in institutions, and (4) to reduce conflict among stakeholders (Beierle 1999, pp. 82-87).

7.2. Comparing the change creation potential of adversarial and collaborative pathways to policy change

In this section I relate adversarial and collaborative approaches to stakeholder interactions to the sustainable transport governance framework (see Table 7 for a synthesis). This assessment is based on findings from the empirical case study and the theory introduced in Chapters 4 and 6. Importantly, I add an additional dimension to the assessment: the relative level of influence that stakeholder coalitions have in the process. This is relevant because, as Sidaway (2005, p. 198) argues, in order to make assessments of the likely outcomes of disputes a style of debate or decision making needs to be considered within the context of the distribution of power in a particular policy arena. In that regard I refer to power parity if neither MRT nor APT stakeholder coalitions are able to meet their interests independently, and to power disparity if one coalition has significantly more resources to influence policy development than others. Section 9.3 discusses this context of power in more detail with regards to the transferability of CSD to other city contexts.

	Adversarial policy process (power shift)	Collaborative policy process (idea shift)
Process efficiency — power parity	Policy process can be inefficient and create stalemate.	Collaborative process more efficient than adversarial in case of conflict or stalemate.
Process efficiency — power disparity	Process allows the possibility of far-reaching change. However decisions resulting from uneven power balances are likely to be contested at later stages.	Not applicable (because there is no incentive for influential stakeholders to engage in collaboration).
Effectiveness of resulting policies — power parity	Solutions likely to be more balanced than in the case of power disparity as groups in power need to incorporate preferences of other groups.	CSD facilitates urban systems perspective among stakeholders and can generate adaptive and inclusive solutions based on evidence-based discussions. However, it is a status quo process.
Effectiveness of resulting policies — power disparity	Dominant groups can put forward quite radical policies. However, solutions only represent interests of one group; caveat that outcomes are not balanced in all directions of sustainability.	Not applicable (because there is no incentive for influential stakeholders to engage in collaboration).
Social cohesion — power parity/disparity	Adversarial process is not focused on cooperation. There is always part of the public unhappy with solution.	CSD process can reduce conflict by 'pacifying' stakeholders.
Legitimacy — power parity/disparity	The process has a visible hegemon; however the outcomes of the process might be contested given that they only represent the interests of some stakeholder groups.	CSD might be contested on the grounds that lay public is excluded from the elite forum and problem definition process is invisible. Outcomes of a CSD are expected to have high acceptance rates as they are inclusive of all major interests. However, CSD can legitimise itself only through successes.

Table 7: Synthesis of the comparative assessment of collaborative versus adversarial approaches to the policy process in the light of a sustainable transport governance framework
(Source: created for this research)

Process efficiency

In an adversarial setting, the process of decision making and implementation can be very efficient if one stakeholder coalition has considerably more resources to influence the policy process than others — in other words, if there is a significant power disparity

so that decision makers can implement policies without having to invest time and money to address the demands of opposing groups. Decisions resulting from such a constellation are, however, likely to be overturned if the power balance shifts. By contrast, in cases of power parity, that is, when different stakeholder coalitions have similar levels of influence, the process of planning, decision making and implementation can be protracted and a resource-intensive stalemate may result (Sidaway 2005, p. 199). For example, in Munich, before the Inzell-Initiative was in place the government wanted to implement policies to limit private motor vehicle use in the inner city area. However, a coalition of organisations blocked these efforts and instead advocated the construction of a major road tunnel project. The year-long conflict came to a head in a public referendum that forced the City to build the tunnels. This conflict is described in Section 5.3.1.

In comparison, when stakeholders realise their interconnectedness in the problem situation and that none of the competing groups is able to deal with problems alone, a collaborative process can help overcome the stalemate and reduce the friction that occurs when people are locked into their political positions. In that sense the increased transaction costs of conflict or stalemate — especially financial costs and time requirements — act as an incentive for stakeholder collaboration. Libecap, for example, describes how:

in many contexts, law is not central for maintaining social order because closely knit groups can develop norms that encourage cooperative behaviour in ways that minimize the sum of both the deadweight losses of conflicts and the transactions costs of resolving them' (Libecap 1993, p. 266).

Participants in a CSD in that sense could be considered as an assembly that collaboratively governs common-pool resources because they realise their interconnectedness in the problem situation and they realise that none of the competing groups is able to deal with problems alone.³¹ Still, the CSD in Munich was criticised by some interviewees as too resource-consuming with regards to the actual policy outputs it produced (see Section 5.3.4). On the other hand I suggest that it is difficult to assess tangible policy outcomes against the intangible benefits such as trust and learning that

³¹ Ostrom (1990) describes how communities can overcome 'the tragedy of the commons' (Hardin, 1968) by governing common-pool resources in a collaborative way.

improve the outcomes of the policy process in a more indirect way, as I discussed in Chapter 6.

Importantly, a CSD is not relevant in cases of power disparity as there is no incentive for influential stakeholders to engage in collaboration if they can achieve their objectives through direct lobbying (which is discussed in Section 9.2.1 on CSD transferability).

Effectiveness of the resulting policies

If a stakeholder coalition in an adversarial setting has strong influence on policy making relative to others it can promote quite radical policies. This does not, however, guarantee quality in terms of sustainable development. If solutions are put forward by one group only, there is a risk that outcomes will not be balanced with regards to environmental, social and economic considerations. By contrast if power relations in an adversarial setting are more equal, solutions are more likely to be a combination of the preferences of the different groups. In summary adversarial politics is fluid and uncertain, which can also be a great creative and generative strength that allows the possibility of far-reaching change within a short timeframe.

In comparison a collaborative process can go beyond trade-offs between stakeholder preferences and facilitate shared learning that integrates the value and knowledge systems of those involved — in other words, the perceptive triangles of facts, values and boundary judgements (that are introduced in Section 2.2) of participants are altered. Through that process, CSD allows participants to find ways to accommodate their interests in a more sensible way, that is, to meet their interests without unnecessarily preventing other groups from having their needs met, so that solutions become more widely accepted. In the Munich case this had the result that every stakeholder group, independently of their value priorities, felt they had achieved more during the 15 years the CSD was in place than they had with the adversarial model that was in place before.

Finally, the policies suggested by a CSD are less susceptible to political short-termism than solutions that emerge from an adversarial process. This is because CSD creates a space outside the public sphere where the thinking of participants is less constrained by political strategies and allegiances and can therefore focus on long-term solutions. Taking debates out of the political context can also help to break up dominant

discourses or storylines and the related institutional structures that justify policy development (Low, Gleeson & Rush 2003), and enable a transition towards a sustainable mobility paradigm (see Section 2.3 for a historic overview of transport planning paradigms). This ‘de-politicised’ nature of discussions in a CSD is typically also more evidence-based. CSD can therefore produce more adaptive and inclusive solutions than could be proposed by one stakeholder group alone. Nevertheless, CSD outcomes are pre-set by the range of stakeholders and the definition of the problems to be solved.

Social cohesion

Adversarial politics embraces and expresses power conflict by offering the possibility of counter publics that are not included in the formal policy making process. In doing so an adversarial process can contribute to the social goals 1 and 2 outlined in Table 6: to inform and educate the public, and to incorporate public values, preferences and assumptions into decision making. Yet interest groups often strategically expand conflict to win over groups of the public so as to increase their political influence. Mouffe (2005) argues that today political conflicts are increasingly ‘played out in the moral register’, that is, not in terms of a left/right divide but in terms of good and evil. For example, in the climate change debate, rather than relying on evidence-based arguments some groups use campaigns that are designed to incite emotions in order to discredit the policy proposals of their opponents (see also Forester, 1999). As a result there are always stakeholder groups that are disadvantaged or unhappy with the decision because they did not have sufficient resources promote their own value priorities. This can be detrimental to Goals 3 and 4: to foster trust in institutions, and to reduce conflict among stakeholders.

A collaborative process by contrast manages conflict by establishing a working relationship between stakeholders who had previously seen themselves as having largely incompatible views. This collaboration typically enhances social capital among participating stakeholders in the form of trust and relationships (Goal 4 in Table 6). Based on this argument I suggest that by ‘pacifying’ or appeasing stakeholders, CSD can also appease the public. If a CSD can help to enhance relationships between interest groups so that they do not see the need anymore to pitch their case in the moral register,

it can contribute to a better informed public (Goal 1), incorporation of public values into decision making (Goal 2) and more trust in institutions (Goal 3).

At this point I want to make some clarifications to address potential criticisms of the CSD process I discuss here. The first potential criticism is that CSD is limited to the stakeholders deemed to be part of the process and it therefore represses power conflict or displaces it into other fields, for example, by splitting social movements. The second concern is that CSD might claim to eliminate power inequities and assimilate values and interests.

Regarding the first point, I want to highlight that the CSD process such as the one in Munich is a voluntary association of stakeholders who don't surrender their right to voice their concerns inside or outside the CSD arena; otherwise it would not be a CSD but tokenism. As argued in Section 6.2 and later in Chapter 9, the process is only functional as long as the participants feel they gain from it. I assume that if participants felt disempowered by the process they would step out and contest it as 'corporatist' or 'elite' in the public sphere.

Regarding the second potential criticism, that CSD can eliminate power asymmetries, I am not suggesting that the interest groups involved in transport development decision making can ever be free of conflict, or that their values and interests can be assimilated. The idea that conflict can be eliminated is a major point that Mouffe (2005) critiques in post-modernist conceptions of consensus in a risk society as put forward by Beck (1992). Schattschneider (1960, p. 74) similarly argues that '*the substitution of conflicts is the most devastating of political strategy*' (emphasis in original) and that '*the people are powerless if the political enterprise is not competitive*' (p. 140, emphasis in original). Rather than eliminating conflict and power struggles, the process of appeasement that can be achieved through CSD rather consists of subduing the conflict to a level that allows for all arguments and scientific, practice- and community-based evidence that is relevant to a problem situation to be heard, disputed and considered.

Importantly, Innes and Booher (2010, p. 90) argue that in this process CSD does not keep interest groups from being adversaries; rather, they learn to live in two worlds — they collaboratively harvest the low-hanging fruit inside the CSD and try to maximise their influence through their argumentative strength. At the same time they keep

promoting or defending their values and interests in the public sphere, but with more respect and empathy than they would otherwise have for their adversaries and their positions. Importantly, they emphasise the value of agonism, that is, the continuing tension of among stakeholder perspectives in a collaborative process as essential source of creativity (Innes and Booher 2010, p. 104): agonism, they argue, ‘enables the dialectical process, which in turn allows us to get past the taken for granted understandings that conceal power relations and support the status quo’. Similarly, Bächtiger (2010, p. 13) stresses the importance of ‘agonistic inquiry’ in facilitating a critical and rigid investigation of stakeholder ideas and viewpoints as a basis for meaningful preference transformation — he refers to agonistic inquiry as ‘a strong medicine for avoiding easy and false consensus’. Innes (2004) addresses these and other potential critiques of CSD in detail.

Legitimacy

The outcomes of an adversarial policy process might be contested on the grounds that it only represents the interests of some groups in society. For example, in 2010 in Germany the term *Wutbürger* or ‘angry citizen’ emerged to account for the ongoing public protest against a large rail infrastructure project in the heart of Stuttgart (GfdS 2010). The protests involved previously politically inactive citizens from various demographics and parties challenging an arbitrary government decision on a key infrastructure project. The decision making process had been characterised by a lack of public participation.

By contrast, the outcomes of a CSD are likely to be more widely accepted as they are inclusive of all major interests. The process, however, might still be contested by groups in society on the grounds that the lay public is excluded from the forum. I therefore suggest that CSD has to gain subjective legitimacy through the successes it produces. In Munich, for example, a media search for material published at the time of the implementation of the Inzell-Initiative did not reveal any critical articles — a phenomenon that one interviewee attributed to the fact that it is ‘boring’ for the media if there is no conflict to report on. In that sense the mere absence of public protest is interpreted as an indicator of the acceptance or legitimacy of a process. I recognise, however, that the level of public protest cannot be used as the only indicator to measure legitimacy, as there are also ‘weak’ interests that might not have the resources to voice

their protests (see also Section 6.3.3 on caveats and limitations of CSD). Ideally these interests should be represented in the CSD, or the CSD process should be integrated with citizen engagement procedures (which I suggest in Section 8.3). Yet CSD cannot guarantee a true reflection of democracy.

Another issue regarding legitimacy in CSD is that the crucial process of defining the problems and the stakeholder range is invisible as opposed to adversarial politics that has a visible hegemon. Again, I argue that CSD has to legitimise itself through its outcome quality.

As a final note on legitimacy I suggest that the level of acceptance of CSD might depend on where the process is located in the formal structures of the policy process, that is, how much formal influence is granted to interest groups. The Munich process, for example, has no formal decision making capacity, and participants can only gain influence through what Habermas (1984) refers to as *communicative rationality* or ‘the power of the better argument’. I acknowledge that if formal decision making capacity was granted to CSD participants, public acceptance of the process could be significantly lower.

7.3. CSD as a pragmatic pathway to policy change in wicked problem situations

The comparative discussion demonstrates that collaborative stakeholder dialogue (CSD) is a powerful governance tool to balance competing and conflicting interests in the urban transport policy process and so achieve a better inclusion of environmental and social considerations in policy development. The discussion also shows that CSD is most appropriate in problem situations resembling a stalemate, that is, situations with high levels of conflict between competing interests that all have influence — a precondition for the implementation of CSD that is further discussed in the context of CSD transferability in Chapter 9, and that is the case for many wicked transport policy issues today.

Looking at existing empirical research on policy change in transport development (as outlined in Section 4.4) I suggest that many of the case studies by other researchers that investigate successful policy changes which assign a higher priority given to

environmental and social considerations took place in the 1970s and 1980s, a time when the problem situation was still less wicked and therefore less in need for CSD (this evolution is described in Sections 1.1 and 2.3). In the 1970s and 1980s the public could experience the negative effects of car-oriented development more directly, for example, the effects of actual petrol shortages during the oil crisis in 1973, and the landscape of interest groups was far less diverse, in particular in terms of community and environmental interest representation. By contrast the situation in urban transport policy making today is more complex with strong interdependencies between stakeholder groups, and problems are more abstract, for example, negative effects such as climate change can be less directly experienced as they are dispersed in time and space (see Section 1.1). CSD is thus an appropriate approach to dealing with wicked problems in contemporary urban transport development. Innes and Booher describe collaborative practice:

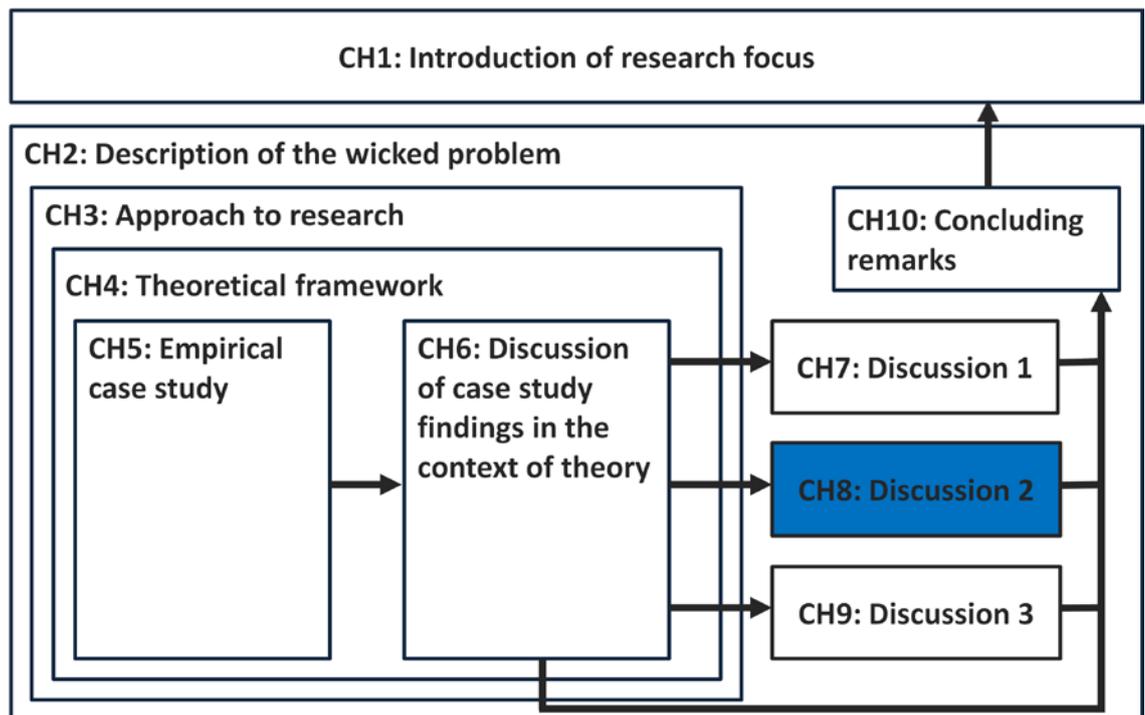
As part of the societal response to changing conditions in increasingly networked societies, where power and information are widely distributed (Castells, 1996, 1997), where differences in knowledge and values among individuals and communities are growing, and where accomplishing anything significant or innovative requires creating flexible linkages among many players (Innes & Booher 1999, p. 1).

Vatn (2009) argues along the same lines when suggesting that if the decision situation is complex, involves irreducible uncertainty, and has potential impacts on common goods and society, then a communicative, value-based approach to decision making that aims to improve the process of planning and decision making is preferable to an instrumental, expert-based approach that seeks to improve policies to a collaborative rationality.

To conclude, from a sustainability perspective a collaborative approach that produces a stable and balanced policy development on a long-term basis appears superior to an adversarial process that only represents the values and interests of some groups of society and so oscillates between more radical but potentially short-lived solutions.

CHAPTER 8.

ENGAGEMENT OF CITIZENS AND ORGANISED INTERESTS IN THE TRANSPORT POLICY PROCESS — COMPLEMENTARY OR MUTUALLY EXCLUSIVE?



This chapter addresses the question of whether procedures that facilitate a collaborative dialogue among interest groups in the transport policy process can coexist with procedures of lay citizen engagement, or whether they are mutually exclusive.

The ideas and arguments in this chapter were initially developed in Paper 10 (see List of Publications)

Despite documented successes of CSD in dealing with wicked problems such as those related to urban transport development (see Innes & Booher 2010 for well-documented case studies), there are also concerns, especially in the deliberative democracy community, about whether these types of ‘elite’ forums crowd out the interests of lay citizens as well as the interests of weaker stakeholders within the forum. Crowding out, or ‘power-over’ (Hendriks 2009, p. 173), refers to the fact that some interest groups typically have more resources — more time, more money, more experience in advocacy and lobbying, and greater access to people in power — and so they are able to influence policy development and decision making more than other interest groups or unorganised and unsolicited lay citizens (Renn 2008, p. 309). A critical concern regarding CSD is therefore whether these forums can coexist with procedures that aim to empower lay citizen engagement in the policy process, or if they would exclude each other.

The aim of this chapter is to address this concern from a perspective that focuses on pragmatic outcomes. While other researchers have addressed questions regarding the contribution that interest groups can make to democracy (see Fung 2003 for a comprehensive discussion) this chapter compares and contrasts the strengths and weaknesses of lay citizen engagement and interest group engagement with regards to the contributions they can make to sustainable transport outcomes. In doing so I adopt the perspective that interest groups and their attempts to influence planning and decision making are an essential part of contemporary pluralist societies, and that they are therefore ‘unavoidable as political facts’ (Cohen & Rogers 1995, p. 26).

I start by outlining the rationale and characteristics behind lay citizen and interest group engagement in the transport policy process. I then introduce a framework that enables a comparison of the different features of both types of procedures against a set of social goals, followed by a comparative discussion. In particular I address the question of whether or not the two procedures are mutually exclusive or if they could be implemented in a complementary manner. I conclude by suggesting a hybrid model that

integrates the respective strengths of both approaches in a way that will enable them to coexist in the transport policy process.

8.1. Approaches to engaging the public in the process of public policy making

To make more transparent the range of approaches which can be used to engage the public in the policy process, this section introduces lay citizen and interest group participation procedures and discusses the challenges they face in practice.

Lay citizens are sometimes engaged in policy development and may even be empowered to be involved in decision making in so-called deliberative inclusive procedures (DIPs). In such circumstances, elected decision makers, experts and interest groups typically contribute to the process in an informing or witnessing role. Procedures of collaborative stakeholder dialogue (CSD) facilitate dialogue among interest groups, experts and decision makers, typically without lay citizen participation. Table 8 below synthesises the characteristics of DIPs and CSD in the transport policy process.

Both DIPs and CSD can increase policy effectiveness by complementing expert decision making with the local and practical knowledge of the public; both can enhance process efficiency by reducing conflict; and both can increase public acceptance of policy decisions (Stephens & Berner 2011). But despite the similarity of their potential impacts, there is a fundamental difference between the rationales governments have for implementing these procedures. CSD offers governments a way of dealing with stakeholder conflict and stalemate, and therefore of breaking up deadlocked power constellations that would otherwise block progress in policy development. It is also a means for politicians to implement hard decisions by distributing responsibility across different stakeholder groups. The implementation of CSD is therefore done exclusively for pragmatic reasons. While citizen deliberation can also help to overcome deadlocks and to implement hard decisions, governments may initiate citizen participation in order to further democratic ideals by engaging lay citizens in areas that are usually reserved for experts and power elites (Leighninger & Bradley 2006). The rationale for implementing DIPs is therefore either pragmatic with regard to immediate problems, or normative with regards to improving the basis for policy making on a long-term basis.

	Lay citizen engagement/ deliberative inclusive procedures (DIPs)	Interest group engagement/ collaborative stakeholder dialogue (CSD)
Typical levels of application	Pragmatic focus: conflict resolution on problem and operational level Normative focus: include public values in long-term plan making	Pragmatic focus: conflict resolution on problem and operational level
Frequency	Once-off to once a year	Continuous, up to once a month
Rationales for implementation	To specify norms and values for policy development, to resolve conflict, to get approval for interventions, to enhance democratic ideals	To develop common ground for policy development, to 'pacify' stakeholders, to get approval for interventions
Desired participant learning process	From individual (NIMBY) perspective to citizen perspective	From interest group perspective to urban systems perspective
Planner as	Informant, expert	Participant in deliberative forum
Elected decision maker as	Decision maker, process champion	Participant in deliberative forum, decision maker, process champion
Citizen as	Informant to decision maker	n/a
Industry- and community-based NGOs as	(Expert) witnesses	Participants in deliberative forum
Decision making role of participants	Advisory to decisional	Advisory
Type of representation	Citizens with individual values and interests; based on random or strategic selection.	Representatives of the diversity of interests in problem situation
Information flows between the public and government	Two-way	Two-way
Degree of interaction among potentially opposing interests	Medium	High

Table 8: Characteristics of citizen and interest group participation in the transport policy process
(Source: created for this research based on Beierle 1999; Gastil & Levine 2005; Innes & Booher 2010)

8.1.1. Lay citizen participation

Normative characteristics and types of procedures

There is a variety of approaches to citizen participation (see Brodie, Cowling & Nissen 2009 for a comprehensive overview of the literature). Table 9 provides an overview of common procedures and the objectives associated with their application.

	Inform	Consult	Involve	Collaborate	Empower
Example technique	-Fact sheets -Websites -Open houses	-Public comment -Focus groups -Surveys -Public meetings	-Workshops -Deliberative polling	-Citizen advisory committee -Consensus building -Participatory decision making	-Citizen juries -Ballots -Delegated decision
Public participation goal	To provide the public with balanced and objective information to assist them in understanding the problem alternatives	To obtain public feedback on analysis, and/or decisions	To work directly with the public throughout the process to ensure that public issues are consistently understood and considered	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution	To place final decision making in the hands of the public

Table 9: The International Association for Public Participation’s Spectrum of Public Participation (Source: adapted from IAP2 2007)

Traditional procedures of community consultation — ‘Inform’, ‘Consult’ and ‘Involve’ in Table 9 — have been criticised for being ‘partial, typically allowing tightly constrained debate, with many critical decisions taking place without the benefit of public involvement’ (Booth & Richardson 2001, p. 142). Hartz-Karp (2007) describes such procedures as DEAD (Decide, Educate, Announce, and Defend), implying that they do not allow the public to have any real influence on decision making but aim to market pre-defined expert decisions. Arnstein summarises the lack of influence in many consultation processes as follows:

Participation without redistribution of power is an empty and frustrating process for the powerless. It allows the powerholders to claim that all sides were considered, but makes it possible for only some of those sides to benefit. It maintains the status quo (Arnstein 1969, p. 2).

More sophisticated approaches that engage citizens more meaningfully in actual planning and decision making — ‘Collaborate’ and ‘Empower’ in Table 9 — are also

referred to as deliberative inclusive procedures (DIPs). These are the procedures I focus on in this chapter.

Carson and Hart (2005) introduce three normative criteria to characterise DIPs: *influence*, *inclusiveness*, and *deliberativeness*. *Influence* means that the results of the deliberation have an impact on policy making. *Inclusiveness* means that DIPs are representative, or inclusive, of all sector of the public that is affected by a policy decision. Participating groups are therefore also referred to as miniature populations or ‘mini-publics’ (Fung 2006, p. 68). There are, however, differing interpretations of the idea of representation: Renn (2008), for example, discusses how different concepts of participation ranging from functional to post-modern models define representation, some of which do not require representation at all.

Deliberativeness means bringing together the knowledge and values of members of the public in an *informed discussion* in order to explore common ground based on mutual understanding. An informed discussion has two characteristics: it creates a power-neutral space by employing independent and skilled facilitators, and it makes appropriate use of expertise; that is, it uses experts in an informing rather than a controlling and decision-making role and allows two-way communication (Beierle 1999; Gastil & Levine 2005).

To be clear: DIPs do not aim to replace the role of experts in the policy process. Rather, they provide experts with better information on the values to be considered in policy formulation — Beierle (1999, p. 96) refers to citizens as ‘value consultants’ —, and they complement expertise with local or practical knowledge (Andrews 2007).

Applications in transport practice

DIPs vary according to the number of participants and the duration of the process. They range from small-scale processes that emphasise the quality of discussion, to large-scale interactions involving collective decision making (see Involve 2008 for an overview).

To learn more about DIPs in transport practice I investigated 13 international case study reports with regards to the effects the DIPs had achieved (see Baumann & White 2010 for a detailed description of these case studies). These cases were selected according to

available documentation of the process outcomes, recognising, however, that available data on impact and outcomes is limited.

The 13 cases had one of two typical objectives in employing DIPs: firstly, to create a plan for the long-term development of urban transport systems, often in conjunction with other sectors such as land use, energy, or economic development. And secondly, to resolve specific conflicts surrounding transport projects in communities.

I classified these motivations as proactive or reactive, with proactive procedures having potentially greater long-term impacts as they involve questioning the objectives and values underlying the early, strategic stages of the planning process, whereas reactive procedures can only help to resolve conflicts and blockages in situations in which the objectives have already been defined. For example, as White (2008, p. 3) argues, there is a big difference between deciding on alternative routes for a new motorway and selecting transport options from a range of supply- and demand-side measures.

Challenges for DIPs in practice

Despite a growing number of positive case studies, in practice DIPs often do not meet the normative ideals of the proponents of deliberative democracy. Challenges are mainly linked to the influence of power, and to integrating the procedure and its outcomes into the established institutions of the transport policy process.

A number of commentators suggest that powerful actors or groups inside or outside of the process can divert DIPs from achieving their normative ideals. Sidaway (2005) analyses the role of power in triggering or expanding conflict and its role in conflict resolution. He argues that ‘the distribution of power determines the outcomes of the conflict’ and that therefore ‘changes towards more participatory decision-making do not in themselves produce fair and just outcomes’ (Sidaway 2005, p. 193). Hajer and Kesselring (1999, p. 3) point out that “‘good’ (i.e. democratic) practices do not automatically produce “‘good’ (i.e. more sustainable) results’.

Hendriks (2002) describes two case studies in which government-organised DIPs were strategically distorted by organised groups. As the groups felt their interests were threatened by the DIP they refused to participate as witnesses in the process. By doing

so, they undermined the legitimacy of the resulting decisions and fought them in the public sphere afterwards.

Bickerstaff and Walker (2005), in their study of public participation in UK transport planning, describe how citizens are often coopted in the deliberative process by the presence and influence of powerful interests. This distorts the results of the process:

... our research revealed general perceptions of participation initiatives as dominated by particular and forceful interests (civic, business or institutional) or that these interests served to coopt and neuter any dissenting or oppositional voices—reinforcing a distinctly unequal set of power relations. In terms of the participants, we have pointed to a range of strategies and tactics that participants and groups used to influence or to bypass the so-called consensus position—in some cases, even before entering the deliberative forum. In this sense, more participation is clearly not the same thing as more democracy and it can in fact reproduce or even exacerbate existing patterns of social exclusion and disadvantage (Bickerstaff & Walker 2005, pp. 2138-9).

In addition Bickerstaff and Walker report frustration among participants due to a perceived lack of direct influence. This aligns with their finding that in UK transport planning, DIPs have not yet produced substantial changes to government structures or to policy outcomes — Conrad et al. (2011) discuss procedures where decision makers implemented participation procedures to comply with legal requirements but without the intention to meaningfully incorporate the generated knowledge. They describe this as ‘hearing (as required by law) but not necessarily listening’ (Conrad et al. 2011, p. 777). Legacy (2010) highlights the importance of managing the knowledge interface between citizen engagement and the conventional policy process, so that the citizen input has actual influence on policy development.

As a conclusion of their analysis Bickerstaff and Walker (2005) call for a more thorough analysis of DIPs in the context of power. Similarly Hendriks (2004, p. 10) argues that discussion about DIPs should not be limited to procedural matters and that they should not be treated as ‘isolated mechanisms with little consideration of the political or discursive context within which they operate’.

8.1.2. Interest group participation

Normative characteristics and types of procedures

Interest group participation in the policy process is rarely discussed in the ‘public participation’ literature. Instead, it is described in separate bodies of theory surrounding neo-corporatist or associative models (Cohen & Rogers 1995; Öberg 2002) and, in particular, in the literature on environmental conflict resolution and on alternative processes of dispute resolution (ADR) (Bingham 1986; Carpenter & Kennedy 2001; Fisher & Ury 1991; O’Leary & Bingham 2003; Sidaway 2005; Susskind, McKernan & Thomas-Larmer 1999).

The underlying idea is to involve interest groups in the planning process so as to better deal with conflicting stakeholder interests and asymmetries of influence. Wallington and Lawrence (2010, p. 91) also point out that agencies independent of government are an institutional response to the inability of traditional governments to adequately deal with existing problems, and that these agencies are in a better position to provide a long-term vision on policy development as they are removed from electoral cycles and political short-termism.

Practical applications of this idea are described with different labels by a number of researchers, often based on practical experience. Innes and Booher (2010) refer to collaborative rationality in public policy as an alternative to the conventional instrumental rationality; Healey (1997) advocates an approach of collaborative planning; and Sabatier and Weible (2007) describe professional fora as institutionalised settings that facilitate policy-oriented learning.

While citizen deliberation is often only a one-off event or a series of events held over a limited period of time, CSDs, although not formally part of the policy process, can become an institutionalised, continuous self-organised process that legitimises itself through its success.

Challenges in practice

There has been less empirical evaluation of CSDs than there has been of DIPs. Consequently less is known about the common challenges of CSDs, especially in the field of transport development. I introduce the common concerns and critiques that are

often raised with regards to CSDs in the literature. This critique mainly revolves around issues of power and thus aligns with the challenges DIPs face in practice.

One of the principal criticisms of CSDs is that they only involve the ‘usual suspects’ of lobbyists, NGOs, and government officials (Beierle 1999). This is problematic if these organisations claim to speak as representatives of the whole range of interests in a problem situation, thus crowding out ‘weaker’ interests. Another concern is that binding traditionally weaker interests in a collaborative forum can undermine their independence from the state and turn them ‘into tools of social control rather than vehicles of democratic participation’ (Cohen & Rogers 1995, p. 2). Some doubt the capacity of interest groups that are usually adversarial to engage in meaningful collaboration (Mansbridge 1992) and to make dispassionate judgments. Öberg, based on her assessment of corporatist practice in Sweden, on the other hand argues that:

interest-group representation cannot be understood as a process of strict delivering of positions adopted in advance. Preferences are often transformed in discussions where other interests are involved. Furthermore, the case investigated here shows that the decision-making process within a corporatist arrangement resembles deliberation, rather than negotiations between “contesting interests” (Öberg 2002, p. 455)

8.2. Comparing the strengths and weaknesses of citizen and interest group participation with regards to social goals

The aim of this section is to link the research into interest group participation and the research into lay citizen participation by making more transparent their strengths and weaknesses and by highlighting the applicability of the various procedures at different stages of the policy process, especially with regards to their potential to contribute more to sustainable transport development.

The section first introduces a framework that can be applied to evaluate both types of procedures. It then compares the various aspects of the framework and expands it by incorporating additional factors that emerged as relevant from the practical challenges that both DIPs and CSDs encounter.

8.2.1. An evaluative framework using social goals

Frameworks are useful tools to structure and guide inquiry, and so reduce the complexity of a problem situation to manageable variables. It is therefore appropriate to introduce an evaluative framework that allows us to compare and contrast mechanisms for public participation based on transparent criteria. I recognise that frameworks are inherently reductionist, and are based on the hypotheses and assumptions of individual researchers. Making these underlying judgments explicit, however, allows other researchers to build on them.

There are various frameworks available for assessing public participation mechanisms in the policy process (see for example Hendricks 2009). Most frameworks, however, focus on citizen participation, and in doing so, they largely assess them against criteria of process quality and acceptance (see for example Gaventa & Barrett 2010; Rowe, Marsh & Frewer 2004; Sidaway 2005). However, CSD procedures that are implemented based on pragmatic rather than democratic rationales require additional assessment criteria such as outcome quality, conflict reduction and long-term learning.

Stephens and Berner (2011) assess the relevance of citizen participation evaluation studies to public policy dispute resolution procedures such as CSD. One of the frameworks they consider suitable and flexible enough to apply to both DIPs and CSD is the one introduced by Beierle (1999). At its core, this framework measures outcomes related to what Beierle refers to as social goals, that is, goals which ‘transcend the immediate interests of parties involved in a decision’ (p. 81). He argues that measuring the progress of public engagement mechanisms towards these goals is relevant because the ‘benefits of achieving them spill over from the participants themselves to the regulatory system as a whole’ (p. 81). These goals are to:

- Inform and educate the public, both as a precursor to behavioural change and to facilitate informed judgments on complex issues
- Incorporate public values, preferences and assumptions into decision making, to educate public agencies about public values, preferences and assumptions
- Increase the substantive quality of decisions through public input, and to make decisions more technically rigorous and satisfying to a wider range of interests

- Foster trust in institutions, and to enable them to be more capable of dealing with the challenges of environmental issues (long time horizon to realize benefits and costs, absence of clear feedback on the success of management efforts, and the diffuse nature of benefits)
- Reduce conflict among stakeholders, to identify shared norms and values and to create stable relationships (Beierle 1999, pp. 82-7)

Beierle (1999) introduces a sixth goal — to assure cost-effective decision-making. This goal addresses the appropriate use and scope of public participation mechanisms by assessing them against the first five goals. I suggest, however, that this goal cannot be assessed without considering the particular context of a problem situation. It is therefore not included in our evaluative framework.

I suggest that these social goals align well with requirements for more sustainable transport development, as they address aspects of decision quality, process efficiency, legitimacy and social cohesion in an integrated way. In the following section I therefore build on the first five goals to comparatively assess the strengths and weaknesses of citizen and interest group participation in the transport policy process. In doing so, I assume both procedures to have the potential to contribute to more sustainable development in contemporary transport policy making, while recognising that they use different mechanisms to bring about change. In contrast to Beierle (1999), who discusses the potential of different mechanisms only under ideal conditions, I also look at potential detrimental effects to the individual goals if the participation process is not done well.

Table 10 below comparatively assesses the probability of citizen and interest group participation mechanisms in the transport policy process meeting social goals.

8.2.2. Comparative assessment and discussion

	Lay citizen engagement/ deliberative inclusive procedures (DIP)	Interest group engagement/ collaborative stakeholder dialogue (CSD)
Inform and educate public	Participating public: likely Wider public: likely if in combination with public or media outreach programs	Interest groups: likely if not only the 'usual suspects' Wider public: unlikely, but likely secondary effects if interest groups change their communication strategies as result of CSD
Incorporate public values, preferences and assumptions into decision making	Likely if knowledge interface from public to government is effective, especially if planners and decision makers are part of deliberations	Likely if knowledge interface from public to government is effective, especially if planners and decision makers are part of deliberations
Increase the substantive quality of decisions through public input	Likely if knowledge interface from public to government is effective, especially if planners and decision makers are part of deliberations Potential detrimental effects if representation/ information distorted	Likely if knowledge interface from public to government is effective, especially if planners and decision makers are part of deliberations Potential detrimental effects if representation/ information distorted
Foster public trust in institutions	Participating public: likely if influence or appreciation of contribution are obvious Wider public: very likely if DIP produces outcomes that correspond with public values and interests and not those of participants Potential detrimental effects if process unsuccessful in terms of outcome quality and influence	Interest groups: likely if influence or appreciation of contribution are obvious Wider public: likely if CSD produces outcomes that correspond with public values and interests and not those of 'usual suspects' CSD needs to legitimise itself through successes Potential detrimental effects if process unsuccessful in terms of outcome quality
Reduce conflict among stakeholders	Likely if applied to conflict resolution on pragmatic level Unlikely if applied to abstract problems on normative level	Likely

Table 10: Assessment of the likeliness of citizen and interest group participation mechanisms in the transport policy process to meet social goals
(Source: created for this research, framework based on Beierle 1999; assessment partly based on Beierle 1999)

As Table 10 shows, DIPs and CSD have different strengths with regards to meeting social goals. DIPs clearly have more benefits with regards to informing and educating the wider public, given that CSDs often take place in a closed-shop situation. Regarding the reverse flow of information from public to government, both DIPs and CSD are strong. The potential for public input to have real influence is higher, however, if planners and decision makers are part of the deliberations rather than only informants. This is typically the case in CSD, but has also been applied in DIPs (see for example Perth 2001). The caveat, especially for CSD, is that there may be detrimental effects if this public input is distorted by power asymmetries.

DIPs and CSDs can both increase the trust that process participants have of institutions if they believe their contributions are appreciated and taken into account. DIPs are more likely to foster trust within the wider public, while CSDs need to legitimise the proximity of organised interests to positions of power through successes in terms of outcome quality.

Finally, I suggest that both DIPs and CSD have the potential to reduce conflicts, enhance trust and improve relationships between stakeholders if the process deals with conflicts in which the participants are directly involved. This is the case for most CSDs. DIPs on the other hand are also applied to more abstract problems on the normative level where conflicts are unlikely to be resolved or even encountered.

In summary it becomes apparent that DIPs and CSD each have distinct strengths with regards to meeting social goals. DIPs can make substantial contributions to better policy decisions and to creating a more informed and politically efficacious public that has more trust in its institutions (Gastil 2000). In the light of the challenges to DIPs in practice as described earlier, the greatest strength of CSD is its potential to reduce stakeholder conflict by moving the debate from a moral level to an evidence-based level. In doing so CSD can contribute to a more stable environment for the policy process and enable a longer-term perspective on policy development.

8.3. DIP and CSD — complementary or mutually exclusive?

Going back to the initial question of this research: Are citizen and interest group participation in the policy process competitive or complementary? I propose that these

two types of public engagement do not have to be mutually exclusive, and that they can coexist and even be mutually supportive. From a pragmatic sustainability outcome-oriented perspective, it is more productive to use CSD to manage and transform the negative impacts of interest groups than it is to try to eliminate the influence of those groups. Properly applied, CSD can be used to better harness the positive contributions interest groups can bring to the policy process (Cohen & Rogers 1995). DIPs, on the other hand, can provide CSD with the necessary grounding in community values to enhance public trust and legitimacy.

From a similar perspective, Hendriks, who investigates the reactions of interest groups to DIPs, suggests that interest groups can also bring assets to the decision-making process, and that ‘any attempt to create more inclusive and deliberative policy making must take interest groups into consideration, as they are part of the ‘broader political reality’:

Lobby groups, experts, scientists and activists are all features of policy networks and thus, play a crucial part in deliberative governance. Not only do they provide the resources and collective energy to relay information between citizens and the decision makers (Christiano, 1996; Warren, 2001: 82-4), but they can also facilitate and foster broader public deliberation (Mansbridge, 1992). Furthermore, many of these policy actors represent sites of collective action, interest articulation, service provision, democratic schooling and social capital (Hendriks 2004, p. 11).

Based on this perspective, I suggest that CSD and DIP can also coexist as separate procedures in the policy process, and that they can inform each other as well as the government (see Figure 19). This can happen, for example, as Hajer and Kesselring (1999) suggest, in the form of a briefing document based on lay citizen input as a basis for the CSD or as a briefing paper for a DIP based on input from the CSD. In the case of Munich, the Inzell-Initiative exists in parallel to procedures of community participation, and both processes engage with the planning department. Various mechanisms for community participation provide the department with input on community values and norms for transport development as well as local and practical knowledge. The Inzell-Initiative complements this by contributing consolidated problem definitions and development principles based on a stakeholder consensus.

I propose that engaging interest groups in CSD as a separate process — in addition to their traditional informing and witnessing role within the framework of DIPs — can have two main benefits for DIPs. Firstly, in CSD interest groups are engaged in a transformative learning process whereas in a DIP, although interest groups learn valuable lessons from citizens, they do not learn from each other. It can therefore be expected that interest groups that participate in CSD will provide more nuanced witnessing accounts (rather than provide polarised positions for citizens to ‘choose’ from). And secondly, the potential for CSD to significantly reduce stakeholder conflict through consensus building can improve the quality of interest group contributions in DIPs, due to a reduced need for adversarial strategies.

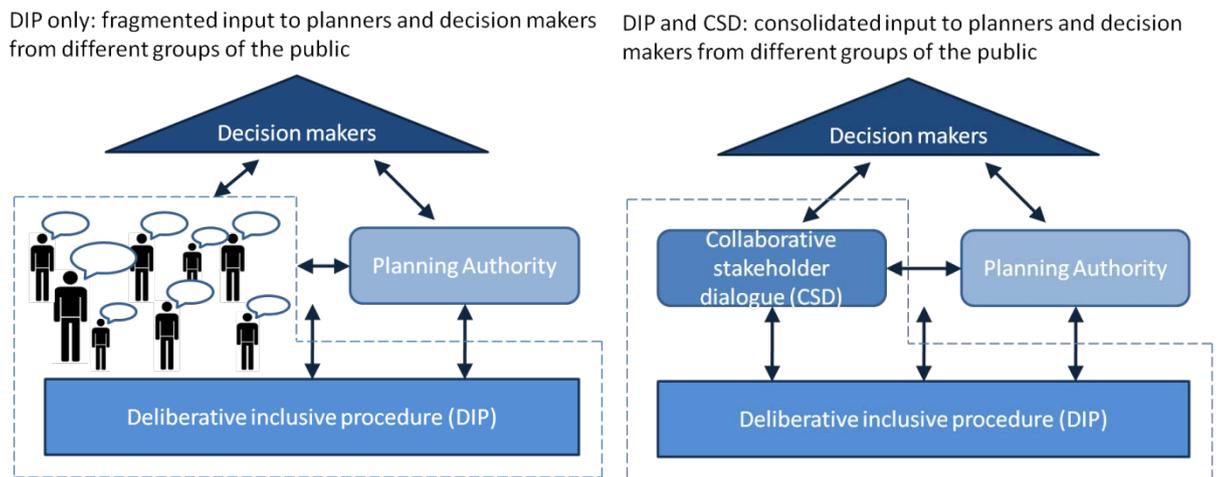


Figure 19: A model of the coexistence of DIPs and CSD in the transport policy process (Source: created for this research)

In summary I suggest that when it comes to decision making about wicked problems in sustainable transport development, a combination of the two procedures has advantages over the traditional expert-based approaches to planning and decision making. This is based on three arguments: first, a hybrid model is able to reconcile ambiguous citizen and organised stakeholder values and interests in a fair process, and so create acceptable and durable results; second, a hybrid model integrates planning expertise with citizens’ and interest groups’ values and knowledge, thereby creating solutions at the systems level rather than from individual interest perspectives; and third, a hybrid model facilitates a more long-term perspective on transport development based on reduced citizen and organised stakeholder conflict. Nevertheless, the public could still perceive the CSD as a ‘closed shop’ for insiders.

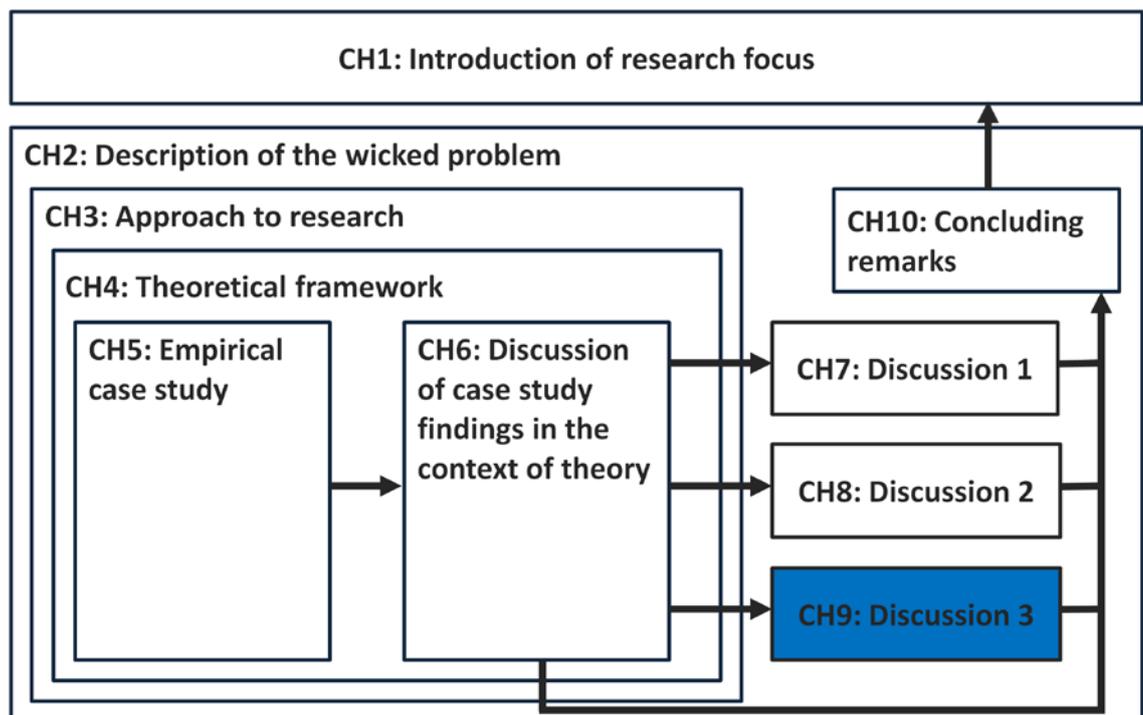
I do not propose the model of integrated DIP and CSD as an ‘ideal’ solution to problems surrounding sustainable transport development. Rather, I point to a pragmatic pathway that emerged in addressing the question of whether CSD and DIP — both of which are processes that have contributed to sustainable transport development in a number of case studies — are complementary or mutually exclusive procedures in the transport policy process. Importantly, it has also been shown that the influence of interest groups can be balanced through DIPs: in Vancouver, progressive planners (and eventually the politicians) recognised that collaborative public processes were necessary to resolve a conflict that had been going for nearly 20 years. They used citizen engagement to build, and then maintain, electoral opposition to suburban property developers. They never really had a direct dialogue with the developers and (relatively weak) road builders; instead they used DIPs to develop a consensus of all the other stakeholders and then had the numbers to implement their plans.³²

From a deliberative democracy perspective the empowerment of interest groups is far from the normative ideal. However, as has been described earlier, attaining this ideal is especially difficult in the transport policy process because it is characterised by high levels of stakeholder conflict. As a concluding tentative idea I suggest that employing CSD to manage and transform the negative impacts that interest groups can have on DIPs could potentially help DIPs to operate closer to their ideals and to produce more meaningful results. I therefore propose that rather than see CSDs as a threat to DIPs, it is possible for CSDs and DIPs to operate in a mutually supportive manner which can reinforce their influence in the policy process. However, further research is needed to further explore these ideas and the viability of this pathway.

³² I thank Dr John Stone for pointing me to the Vancouver case and the way it is relevant to the conclusions of this study. Legacy (2010) describes the events and processes in Vancouver in detail.

CHAPTER 9.

INVESTIGATING THE TRANSFERABILITY OF COLLABORATIVE STAKEHOLDER DIALOGUE TO OTHER CITIES



The previous chapters established CSD as a promising approach to the wicked problem of sustainable transport development that has significant advantages over conventional adversarial approaches to stakeholder interaction. In order to improve the process and application of CSD in transport this chapter investigates to what extent and under what conditions best practice examples of CSD can be transferred to other cities.

The ideas and arguments in this chapter were initially developed in Paper 4 and further evolved in Paper 6 (see List of Publications)

I first discuss whether guidelines for policy transfer are appropriate for governance procedures in Section 9.1. Concluding that these face limitations with regards to governance processes that require fundamental changes in the way stakeholders interact, I develop a framework of incentives and preconditions for process transferability based on the lessons from Munich and other case studies. I also discuss to what extent differing cultures of political debate in different countries might influence transferability. I then apply the preconditions framework to the context of Sydney, Australia, based on a series of discussions with key transport stakeholders in Section 9.2. I conclude that the framework that I have developed in this research provides a valuable foundation for assessing the presence of incentives and motivations of stakeholders to support and engage in CSD.

9.1. The transferability of a governance process

9.1.1. Current knowledge on policy transfer and learning

In the early 1990s researchers started to discuss concepts and develop guidelines for *policy learning*, *lesson drawing* or *policy transfer* from other cities (Bennett & Howlett 1992; Dolowitz & Marsh 1996; Rose 1991; Wolman 1992). But it is only more recently that they applied these ideas to the context of transport policy development (Ison, Marsden & May 2011; Marsden et al. 2011; Marsden & Stead 2011; NICHES+ 2008; Timms 2011).

The concept of lesson drawing is based on the idea that ‘when routines stop providing “solutions” is it necessary to search for lessons’ (Rose 2001, p. 10), and the idea that ‘problems that are unique to one country are abnormal [but] the concerns for which ordinary people turn to government ... are common on many continents’ (Rose 1991, p.

4). Accordingly, responses that have proven successful in one place can — to a certain extent — be generalised and transferred to other places. It has thus become a common approach for interest groups, planning practitioners and decision makers to seek guidance from cities that have managed to deal with the challenges of sustainable transport development in an exemplary way.

However, it has been claimed that the process of lesson drawing is not very different from routine planning processes. According to this view ‘it is hard to think of any form of rational policymaking that does not, in some way, involve using knowledge about policies in another time or place to draw positive or negative lessons’ (James & Lodge 2003, p. 182). James and Lodge (2003, p. 182) argue that ‘even rational policy-makers’ preference for the status quo in their own jurisdiction could be seen as implicitly involving negative lessons about alternatives in other countries or in other times.

In order to identify guidelines for how to transfer the concept of CSD to other cities I investigated the literature on lesson drawing, which Dolowitz and Marsh (1996, p. 344) define as voluntary activity of ‘political actors or decision-makers in one country [who] draw lessons from one or more other countries, which they then apply to their own political system’. They identify six possible areas of lesson drawing: ‘policy goals, structure and content; policy instruments or administrative techniques; institutions; ideology; ideas, attitudes and concepts; and negative lessons’ (p. 350). They do not, however, identify governance procedures such as CSD as a potential subject of transfer.

Looking at the nature of the different lesson-drawing areas, I propose that in the case of CSD the spectrum of participants that need to undergo a learning process is a lot wider than in the areas outlined by Dolowitz and Marsh. CSD is not only about local government advocating a new program, policy, or structure; it’s about changing the fundamentals of stakeholder interaction. Innes and Booher (2010) comment that it is highly atypical for stakeholders to question the actual governance system, and that they often only adjust objectives — this is the difference between single-loop learning and double-loop learning that has been discussed in Section 6.1.1:

When government policies fail to solve problems, the typical reaction is to try to fix the policy or to tinker at the edges of the system. Very seldom do leaders or the public question the institutions that have failed, nor do they often ask whether different kinds of practices and structures could be more

effective, much less look to ways to transform the existing model of government (Innes & Booher 2010, p. 8).

A change in the style of stakeholder interaction and debate requires that all potential participants perceive collaboration as a better alternative to achieve their goals than adopting adversarial positions, and that a CSD is therefore worth investing resources in. This is a sensitive process: the implementation of the CSD in Munich, for example, was preceded by numerous one-on-one discussions between supporters of the collaborative idea and its sceptics.

Given the overarching nature of the change required, I argue that guidelines for transferring CSD must be different from the existing guidelines for policy learning — Rose (2001), for example, suggests ten steps for learning lessons from abroad — in that they need to focus more on achieving stakeholder willingness to participate rather than on addressing aspects of technical feasibility. In doing so I assume that once the relevant participants support this procedural change, the actual process success factors (that have been outlined in Section 6.2) are largely generalisable and transferable. Forester (1999, p. 464), for example, points out that ‘many facilitators and mediators take pains to point out that these [consensus building] processes involve nothing magical at all; they take hard work, skill, sensitive exploration of issues, persistence, and creativity’. Sidaway (2005, p. 4) argues that ‘the approach of consensus building is generic and can be used in different ways in different situations’.

To develop guidelines for transferring CSD that align more with its procedural character, in the following section I use the success factors for implementing CSD (that I classified in Section 6.2) to develop a framework that allows me to assess whether preconditions for implementing CSD are present in a city.

9.1.2. A framework to assess the preconditions for transferability

As I argued in Section 6.2 that a fundamental change in the style of stakeholder interaction, such as implementing a CSD, requires that potential participants see a benefit in their participation that is worth investing resources and moving away from extreme positions (Precondition 3 in Table 11). This is the case in situations approximating a ‘hurting stalemate’ (Precondition 1), that is, situations where none of the stakeholder groups is able to meet its interests independently (Precondition 2) but feels pressure to achieve progress in a problem situation. This is an essential

precondition for collaboration because a level of government that has the political power to implement their preferred policies is likely to do so without considering the interests of those who oppose them. Similarly, lobby groups who feel their interests have been taken into account in the policy development of the current government are not likely to be interested in changing that government's approach. NGOs that have been successful in blocking government initiatives with adversarial tactics might not want to engage in collaboration with their adversaries. In the case of Munich, for example, organising a CSD was, from the perspective of the mayor, 'an instrument to create majorities for the necessary' (Interviewee #12, CoM), based on the insight that what he considered 'the necessary' could not be implemented in the adversarial political reality at that time.

If these incentives or preconditions are in place, implementing a CSD still requires high levels of leadership and commitment (Precondition 4). Finally, previous positive experiences of participants with collaboration are helpful in making relevant stakeholders receptive to the idea (Precondition 5).

These incentives or preconditions to support and engage in a CSD have different implications for decision makers and non-governmental stakeholders. This is illustrated in Table 11. They are also relevant for planners. However, while planners play an important role in advocating a CSD process and in its implementation should decision makers decide to go ahead, they are not in a position to influence this decision but are bound by decision makers' instructions.

To test this transferability framework I have applied it to the context of Sydney, Australia, in Section 9.2, based on discussions with key transport stakeholders inside and outside of government. Before doing so I briefly address cultural considerations regarding transferability in the following section.

	Decision makers	Non-government interest groups
(1) Hurting stalemate and lack of alternative avenues	No alternative avenues through which to deliver on political promises (strong and competing stakeholder interests).	No alternative avenues through which to pursue political interests; advocacy/ lobbying not effective in existing context.
(2) Perceived interconnectedness	Decision makers realise that they need to get everyone on board in order to achieve progress.	Stakeholders realise that that they all need the process to work.
(3) Perceived influence	Decision makers expect that participants will develop a better understanding of decision makers' plans and projects and thus be more supportive. This will facilitate implementation.	Stakeholders believe their arguments will be better taken into account in a CSD than in other strategies. They do not want to miss out on discussions and risk missing a chance to co-define issues and solutions.
(4) High level leadership and commitment	Decision makers realise that in order to better bring people along with them they need to bring the main actors together to deliberate on contested issues and to reconcile stakeholder interests.	Stakeholders do not want to miss out on information and relationship building.
(5) Previous positive experience with collaboration	Previous positive experience with collaborative procedures and consensus building.	Previous positive experience with collaborative procedures and consensus building.

Table 11: Incentives or preconditions for decision makers and non-government organised interests to support and engage in collaborative stakeholder dialogue
(Source: created for this research based on Table 5 in Section 6.2.1)

9.1.3. Cultural considerations regarding transferability

I suggest that unlike success factors for the actual consensus building process, the preconditions in Table 11 are to some extent dependent on the cultural inclinations of the relevant stakeholders towards a more or less collaborative policy style. Hendriks for example observes, as a result of a comparative case study of Germany and Australia, that:

In Germany, policy development is traditionally viewed as a scientific and legalistic exercise best suited to experts, who offer reasoned and objective advice (Dyson, 1982; Münch, 2001). What tends to dominate is rational and consensual debate amongst representatives of different interests, though pluralist activities also exist at the edges. Australia's policy style is much more adversarial and combative. Apart from some minor attempts with corporatist structures, policy making is generally the result of decision

makers juggling the competing claims of different interest organisations (Hendriks 2004, p. 294).

Sidaway (2005, p. xiv) similarly comments that ‘while in one society peace and quiet may be prized above everything, elsewhere people may openly relish a quarrel’.

Gambetta (1998) identifies two types of cultures that differ in their openness to deliberation and collaboration: ‘Claro!’ cultures and ‘analytical’ cultures. ‘Claro!’, which could be translated with ‘I knew it all along!’, is characterised by highly opinionated stakeholders who are reluctant to have their ideas scrutinised in a deliberative process. By contrast, in an ‘analytical’ culture individuals are more willing to open up and reflect on their ideas.

I suggest that these cultural aspects are, while highly relevant, not the decisive factor for transferability. There are several reasons for this: first, in a wicked problem there are so many complex factors that interact and that can affect the implementation of a CSD, for example, the style of political leadership or the particular dynamics of stakeholder power relations in a city. I consider the cultural inclination towards collaboration as only one of these factors. Second, the style of stakeholder interaction can vary widely within one nation. For example, in Germany, only Munich has a CSD in place while other cities rely on the conventional style of political debate. And third, the style of stakeholder interaction can change rapidly from highly adversarial to collaborative, as is documented in Section 5.3.1 for the case of Munich.

Bächtiger and Hangartner (2010), in their comparative study of the influence factors on deliberative action in Switzerland and Germany, find that the effects of culture are not as clear, but that the drivers for deliberation are rather of an institutional nature or are dependent on stakeholder strategies and status. They tend to agree with scholars who reject the idea of a ‘holistic cultural approach’ that structures the style of stakeholder interaction in a country. For example, Sass (2006, p. 10) proposes that ‘culture is akin to a “tool kit” with which actors construct strategies of action” to overcome challenges they face in particular contexts’. However, they acknowledge that their study only includes political cultures that are considered to be ‘analytical’ in the sense of Gambetta.

Given the ambiguity with regards to the influence of cultural considerations on the transferability of CSD, the decision to test the preconditions framework in Sydney in the

next section was not based on cultural considerations. Rather, Sydney emerged as an obvious candidate because many transport commentators to whom I had explained the Munich case study suggested that CSD would be a valuable tool to change the way Sydney's transport networks are managed and developed.

9.2. Testing the preconditions framework in Sydney

In this section I first describe the framework conditions for policy making in Sydney (in Section 9.2.1), in order to allow comparative insights between conditions in Munich (that have been described in Section 5.1.2) and Sydney. I then describe the approach I selected to test the preconditions framework and the findings that emerged from this approach in Section 9.2.2, followed by a discussion of the findings in Section 9.2.3.

9.2.1. Framework conditions for transport policy making in Sydney

This section outlines the basic characteristics of the transport policy environment in Sydney and compares them to the characteristics of Munich which have been described in Section 5.1.2. I look at the transport infrastructure system, the political landscape and the stakeholders in the human activity system, and the basic features of the planning paradigm.

Urban infrastructure development

Sydney is the capital of the state of New South Wales and, being slightly larger than Melbourne, is Australia's largest city. It is the prime economic driver of the Australian economy. It has about 4.4 million inhabitants in a metropolitan area that covers approximately 12,000 km². This however includes large areas of undeveloped land; the population density of Sydney in developed areas is estimated at 2040 people per km² (Pucher, Garrard & Greaves 2011, p. 6). Sydney has a centre-based structure, distributing close to 40 per cent of employment, retail, educational and entertainment destinations across 26 key centres. A particular challenge to transport development in Sydney is the extent of its waterways which creates bottlenecks such as the Sydney harbour crossing and limits possibilities for expansion, especially in the CBD area. In the sustainable transport cluster in Figure 5 in Section 2.3.3 Sydney's transport system ranks as 'comparatively less sustainable' (Munich ranks as 'comparatively most

sustainable’). Appendix 3 outlines detailed transport indicators for Sydney in comparison to Munich and the wider Australia-New Zealand region for the year 1995.

In the first half of the last century Sydney had a world class public transport system based on an extensive heavy rail system for most of the metropolitan area as well as bus, tram and ferry services. However, the rapid growth in private vehicle ownership in the second half of the 20th century led to road-based solutions being prioritised by governments, and to a dismantling of the tram network. This development was accompanied by low-density urban sprawl based on the North American model that favours low-density environments with dispersed residences and jobs, locking in car dependence.

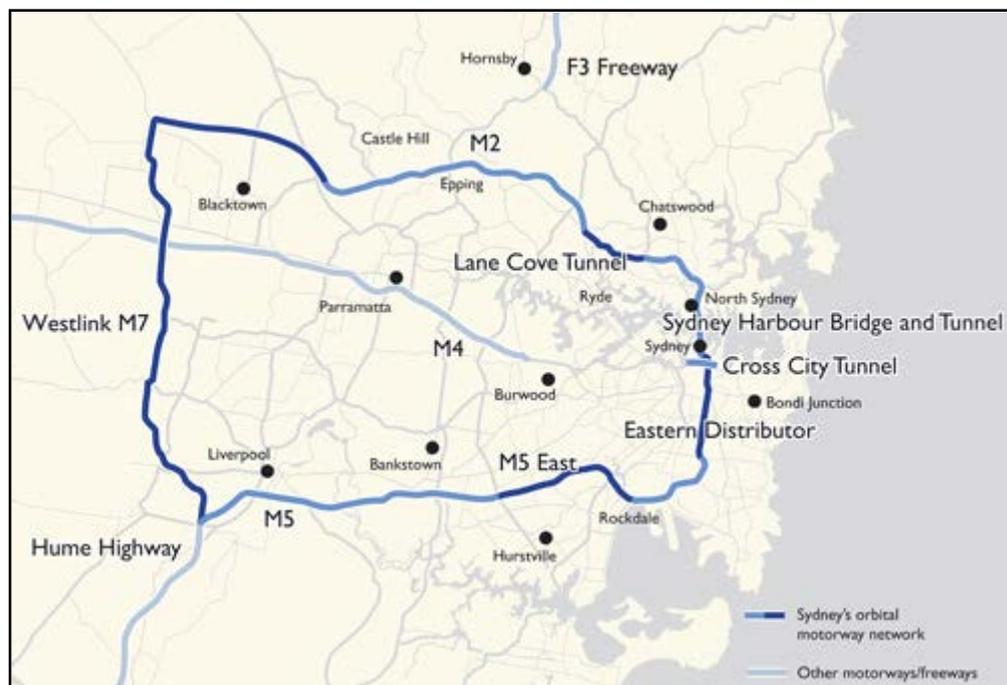


Figure 20: Sydney's motorway network
(Source: RMS website, accessed 27 January 2012)³³

Political landscape

In stark contrast to Munich, where the mayor is responsible for the whole city area covering 1.3 million inhabitants on 310 km², Sydney is divided into 43 local government areas that comprise the Sydney Metropolitan area. Sydney therefore has no overall governance but the different councils are directly subordinated to the State

³³ The New South Wales Government's Roads and Maritime Services. The RMS's website is at <http://www.rta.nsw.gov.au/usingroads/motorwaysandtolling/index.html>

Government of New South Wales. The *City of Sydney*³⁴, covering an area of 26 km² with 177,000 people, has therefore significantly less resources to coordinate urban development on a city level than the City of Munich. However, the City of Sydney covers the heart of the economic centre of Sydney, the central business district and its fringe areas, and generates an estimated one-third of Sydney's economic activity.

As a result of the fragmented responsibilities at the city level, transport planning in Sydney is largely in the hands of the state government and its various agencies. In March 2011 there was a change in government from Labor to Liberal. After 16 years in office the previous government had faced strong criticism from the community, especially with regards to its incompetence in effectively dealing with the growing challenges the transport system was facing. There were high congestion levels on the road networks. The public transport network was at or beyond its capacity and was providing low service quality, for example, there is no integrated ticketing system. The cycling infrastructure for commuting was inadequate, especially compared to other cities such as Melbourne where cycling has been growing about three times faster in recent years (Pucher, Garrard & Greaves 2011). In 16 years, the outgoing government had announced at least 6 major plans to address these challenges, however, only a fraction of these plans were implemented (SMH 2010b). As a result transport was described as 'the emblematic issue of the election' (a comment by Andrew West at SMH 2011b).

In 2009 the *Sydney Morning Herald*, the city's major newspaper, financed an independent public inquiry to create a *Long Term Public Transport Plan for Sydney*³⁵. As a catalyst for this inquiry the authors described, among other factors, community frustration about transport governance, in particular: '[a] lack of consultation, leadership and direction'; '[a] string of broken promises and *ad hoc*, mutually inconsistent and increasingly unbelievable announcements'; '[a]n increasing resort to spin and hype rather than substance in these announcements and associated justifications for successive government decisions'; and 'a pronounced absence of transparency in decisions which already affect people's everyday lives and will do so, more and more, for decades to come' (SMH 2010a, p. 2). The report was published in 2010 (SMH 2010a, 2010b) and widely acclaimed by stakeholders in the public arena. Yet it is still

³⁴ The city's website is at <http://www.cityofsydney.nsw.gov.au/> (accessed 20 January 2012)

³⁵ The inquiry's website is at <http://www.transportpublicinquiry.com.au/> (accessed 20 January 2012)

too early to assess to what extent the recommendations will be taken into account by the new Liberal government (Moore & Robbins 2010).

Stakeholders in the transport policy arena

Among the stakeholders who advocate improved infrastructure for motorised transport in Sydney are the motorists' association, the NRMA, the Sydney Business Chamber and the Tourism and Transport Forum³⁶ (TTF) which represents the interests of transport providers and investors across all modes of public transport and advocates targeted investment in Australia's roads infrastructure.

Active and public transport infrastructure solutions are prioritised by groups such as the City of Sydney, various bicycle user groups³⁷ (BUGs), Eco-Transit Sydney³⁸, and more recently, Sydney Alliance³⁹, a group made up of diverse community organisations, unions and religious organisations 'to advance the common good and achieve a fair, just and sustainable city'. In 2011 Sydney Alliance launched a strategy referred to as *400:15:1 SCA*² (which means: public transport should be within 400 metres, it should come every 15 minutes, it should only require 1 ticket, and it is Safe, Clean, Accessible and Affordable).

Unlike Munich, Sydney has no single corporate organisation such as BMW that has a direct interest in promoting the car as an attractive mode of transport.

Transport planning

Since coming to office the new state government has implemented a number of institutional changes. First, it created a new institution, Transport for NSW⁴⁰, an integrated transport authority based on the London model. The organisation is responsible at the operational level for improving customer experience, planning, program administration, policy development, regulation, procuring transport services, infrastructure and freight. The second new institution is Infrastructure NSW, which is responsible at a strategic level for coordinating and supporting the delivery of

³⁶ The TTF's website is at <http://www.ttf.org.au/> (accessed 20 January 2012)

³⁷ For example, <http://www.bicyclensw.org.au/home>, <http://bikesydney.org/new10/>, <http://www.massbug.org.au/cgi-bin/twiki/bin/view/MASSBUG/WebHome>, <http://www.bikenorth.org.au/>, <http://bikeast.org.au/> (accessed 20 January 2012)

³⁸ Eco-Transit's website is at <http://www.ecotransit.org.au/ets/> (accessed 20 January 2012)

³⁹ The Alliance's website is at <http://www.sydneyalliance.org.au/> (accessed 20 January 2012)

⁴⁰ Transport NSW's website is at <http://www.transport.nsw.gov.au/> (accessed 20 January 2012)

infrastructure in New South Wales by preparing a twenty-year State Infrastructure Strategy and more detailed five year plans.

Transport for NSW is currently developing a new *Long Term Transport Master Plan*⁴¹ which is described as a new approach to transport planning that builds on collaboration with transport customers.

9.2.2. Approach to research and findings

I tested the transferability framework in Sydney in two different ways. First, I adopted the role of ‘observer-as-participant’ (Gold 1958, p. 221) in a series of discussions with interest groups and senior decision makers. In the role of ‘observer-as-participant’ a researcher has only minimal involvement in the social setting being studied and is not normally an active participant. Second, I conducted a series of formal interviews with government and non-government stakeholders to discuss the value and transferability of the Munich model to the context of Sydney.

I initially preferred the ‘observer-as-participant’ approach over formal interviews because I assumed — based on feedback from a number of transport commentators in Sydney to whom I had explained the Munich case study — that there could be a realistic chance for CSD to be implemented in Sydney, given the recent change in government. Many observers had hoped that the incoming government would deal with these issues more effectively. I therefore saw a window of opportunity for CSD to effectively gain ground in Sydney, and to contribute to better transport outcomes.

In the role as ‘observer-as-participant’ my supervisors and I accompanied two representatives of active and public transport interest groups to meetings with other interest groups and senior decision makers. Our task was to present the Munich case study and provide academic background information on CSD. The interest groups advocated CSD as a viable option for Sydney. They did so because they believed it would make their work easier in terms of getting the arguments used by active and public transport advocates heard by the right people and thereby increase their influence on transport development. Another argument was that a CSD-type forum would be potentially more effective than previous collaborative procedures they had been

⁴¹ The plan's website is at <http://haveyoursay.nsw.gov.au/transportmasterplan> (accessed 20 January 2012)

involved in. These procedures had lacked the power to influence decisions. Finally, the support of these interest groups was based on positive experiences with the South Sydney Transport Forum, a stakeholder dialogue that was initiated before the NSW state elections in 2011 in a local area to identify common ground on specific issues. One interviewee had been impressed with the extent of common ground that could be found among stakeholders, and reported that it had been an inspiring experience to collaborate with people ‘from the other side’.

The meetings, however, revealed that stakeholders had differing views on whether CSD could function in Sydney. One senior decision maker did not think the level of conflict in Sydney was intense or polarised enough to create a stalemate as was the case in Munich. Rather, the decision maker saw the situation as involving ‘different shades of gray’, and therefore believed CSD was unlikely to bring any benefits to the current situation. Another sceptical comment this decision maker made was that unless there was major conflict, the public would expect the government to make decisions rather than putting them out to the public. A final comment was that the CSD would need to have a clear purpose or rationale and have a regional reference rather than operate on the macro level for the whole of Sydney; otherwise it would be seen as just another ‘talkfest’.

Another governmental decision maker was more supportive of the idea, suggesting it could help actors to move away from a focus on individual projects towards systems or network thinking, by developing principles for development very early on. Another potential benefit this observer acknowledged was the potential of a CSD to ‘depoliticise’ transport.

The overall impression from the meetings with the two government representatives was that they were busy with restructuring the bureaucracy after the elections, and that the idea of engagement had not been addressed in detail yet. As one of them said, ‘things have to settle first’.

One industry NGO considered CSD would be a good way to identify the ‘low-hanging fruit’, to better understand the ‘pulse of what’s going on’, and to reconcile stakeholder interests in projects that cover a broad spectrum of issues.

Given that the findings of the ‘observer-as-participants’ stakeholder meetings were quite indefinite, I complemented the data with individual interviews with two environmental NGOs as well as one senior planning official.

The environmental NGOs were divided in their conclusions after the meetings: while both still see great benefits that a CSD could bring to the Sydney context, one doubted that such a process could be meaningfully implemented on the state level as the power to do so is distributed across several institutions.

The planning official considered CSD as a valuable forum outside the media spotlight to get lobbyists to open up their thinking and to see beyond their sectional or modal interests, and to build relationships that would contribute to taking the heat out of policy debates. This enhanced public debate would improve the planning process by ‘keeping it out of the petty politics’ and by reducing the ‘angst’ of decision makers about implementing progressive policies. In terms of implementation the official considered it crucial to find a neutral and well-respected individual to facilitate the CSD. That way the forum would not be considered as endorsing government policy; rather, it would allow discussions at a deeper level.

9.2.3. Discussion: are the preconditions present?

The conclusion from the discussions and interviews in Sydney is that it is not yet clear whether a CSD could be successfully implemented in Sydney. The non-government participants did meet the preconditions in Table 11 in terms of perceived influence and previous positive experience. However, support from industry NGOs was weaker than support from environmental NGOs. Two government decision makers saw potential benefits in using a CSD process, but one of them did not believe the level of conflict was high enough to justify the implementation of a CSD. Finally, a planning official suggested CSD could improve the planning process by taking the heat out of policy debates.

In conclusion, the stakeholder incentives for supporting and implementing a CSD process in Sydney are largely different from the preconditions that were in place in Munich. In Munich the mayor was the main driving force behind the Inzell-Initiative while environmental NGOs had been rather sceptical of the idea because they feared they would be co-opted. In Sydney, the situation seems to be the other way round:

environmental NGOs see CSD as an opportunity for gaining greater influence while one government decision maker appeared sceptical with regard to the benefits.

These indefinite findings are no doubt influenced by the fact that New South Wales had just had a change of government after 16 years and the transport bureaucracy is currently undergoing a fundamental restructure. Consequently, roles, tasks and processes are not yet completely clear. This might also be a reason why there is less apparent conflict on transport issues.

A possible conclusion is that unlike Munich, where the mayor was under strong pressure to find a solution to the ‘hurting stalemate’ and deliver results, Sydney needs more time, or has more time, to implement a meaningful non-reactive stakeholder engagement procedure. It may even be that in Sydney such a procedure could go beyond the Inzell-Initiative by integrating both lay citizen and interest group collaboration as an input to government.

These findings in Sydney also align with findings by Hendriks (2004) who investigates under what conditions interest groups support processes of lay citizen deliberation. Similar to our findings, she finds that ‘weaker interest groups are more willing to engage in public deliberation than stronger interest groups’, and that ‘public deliberation also appears to be more appealing for those organisations that support the issue on the agenda and those interested in shifting the debate beyond the status quo.’ She therefore concludes that interest groups ‘participate in public deliberation opportunistically when there are strategic reasons for doing so’ (p. 33).

9.3. Conclusions on guidelines for the transferability of governance procedures

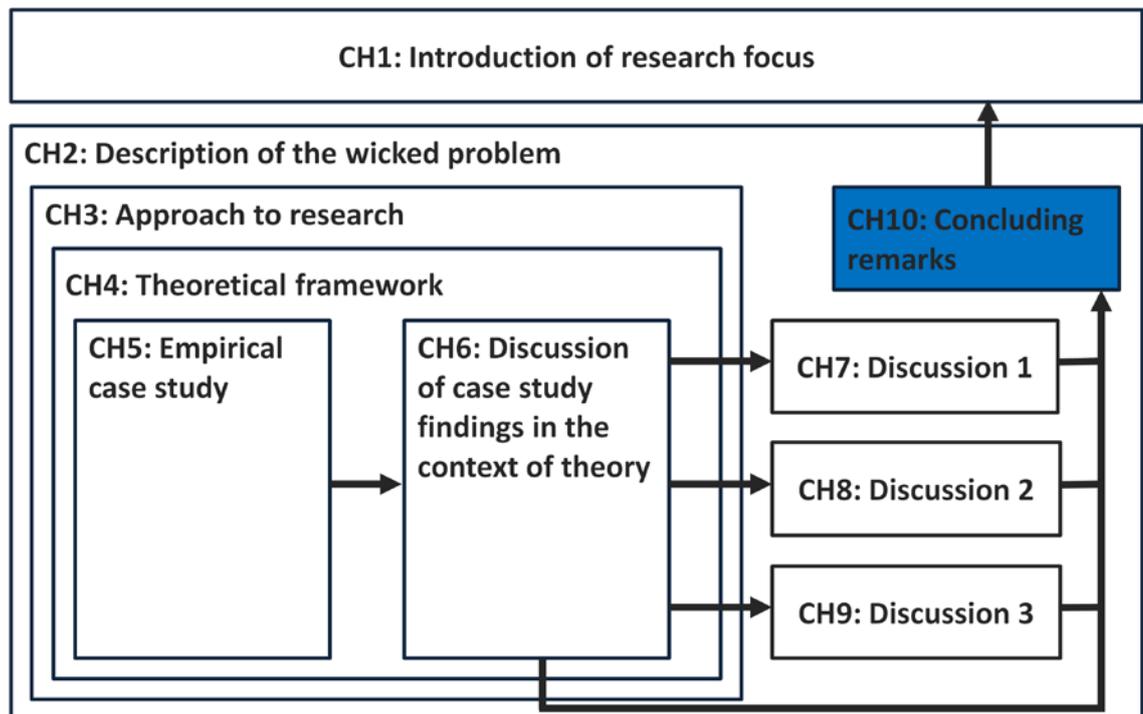
Regarding guidelines for transferring a CSD to other city contexts I suggest that the framework in Table 11 provides a valuable foundation for assessing the presence of incentives and motivations of stakeholders to support and engage in CSD. However, further applications of this table to particular situations are needed to test, enhance and refine the framework. Importantly, the investigations in Sydney revealed that changing the style of transport governance on a city level depends on a complex set of dynamics that are difficult to assess and interpret, and that they depend very much on existing

power relations among stakeholders in the urban system. At this stage it is therefore not possible to provide clear guidelines on how to transfer the Munich best practice example to other cities.

To enhance knowledge in this field, it would be valuable to investigate how, and under what conditions, it could be possible to strategically create the preconditions if they are not present in a city. For example, one of the Munich interviewees suggested that if the level of conflict is not high enough one option could be for CSD advocates to deliberately heat up contested issues and to take action in order to create a stalemate (Interviewee #8, CoM).

CHAPTER 10.

CONCLUDING REMARKS



Chapter 6 discussed the findings of the empirical case study analysis in Chapter 5 in the context of the theoretical framework. Chapters 7 to 9 discussed important issues that emerged from the empirical case study analysis and that needed further investigation in the context of existing knowledge. This final Chapter 10 concludes the research by drawing together the individual chapter conclusions. In Section 10.1 I link the chapter conclusions to the main research question (introduced in Chapter 1 and Section 2.4): *What are the critical success factors needed to counterbalance the asymmetric influence of motorised road transport (MRT) interests and active and public transport (APT) interests in the urban transport policy process, and to achieve a broader focus in urban development that better integrates environmental, social and economic considerations?* Section 10.2 discusses the implications these research findings might have on transport policy development practice and the wider field of public service provision. In Section 10.3 I provide an epilogue on developments in Sydney after the stakeholder discussions and interviews. Section 10.4 outlines areas for further research that could strengthen the practical applicability and change creation potential of this research.

10.1. Developing answers to my research question

The original aim of the empirical research in this study (as introduced in Section 4.4) was to investigate successful strategic activities of APT interest groups in achieving a shift away from the traditional preoccupation of transport policy development with facilitating economic growth towards a broader focus that better integrates environmental, social and economic considerations. This research focus was based on the initial assumption that substantial policy change can only be achieved through a change in the advocacy coalitions that hold most of the power, or a shift in the power relations between the stakeholders that influence policy development (see Section 4.3.1).

The case study in Munich (as described in Chapter 5), however, revealed that a different mechanism was responsible for making the city ‘relatively successful’ in sustainable transport development (see Section 3.1 for a discussion of what constitutes ‘relatively successful’ in sustainable transport terms): an ongoing collaborative dialogue between planners, elected decision makers and the representatives of transport-related interest groups in Munich. This process fundamentally changed the way stakeholders interact

and develop solutions, and enabled more balanced, effective and acceptable solutions to emerge from the transport policy process.

These insights shifted my initial assumptions on the mechanisms and success factors for significant policy change and established collaborative stakeholder dialogue (CSD) as a powerful alternative pathway to more sustainable transport development (in Chapter 6). This pathway is powerful in two ways. Firstly, it facilitates mutual learning and consensus among process participants. Through this process participants develop a better understanding of the values and interests behind the objectives of other groups. Through this shift in perspective they can find ways to accommodate their own interests without necessarily compromising what is important to other groups. Solutions that result from such a consensus building process are more widely accepted and durable. Second, the collaborative engagement process can facilitate solutions that integrate the knowledge systems of different stakeholder groups based on ‘agonistic inquiry’ (see Section 7.2). That way more innovative solutions emerge that better balance economic, environmental and social ideas on urban transport development.

These two characteristics of the collaborative pathway are the critical elements in providing an answer to my research question. They counterbalance the asymmetry of stakeholder influence through collaboration, and they facilitate a broader focus in policy development that better integrates environmental, social and economic considerations. These two characteristics also make it superior to an adversarial process that only includes the values, interests and knowledge of a selected group of influential stakeholders in policy development. This is particularly relevant for wicked problems, because in wicked problems policy proposals not only determine the distribution of benefits but always involve tradeoffs and implicit decisions on value priorities and the distribution of negative impacts across groups in society or on the environment (see Section 1.1).

10.2. Significance of the findings for policy making practice

The case study research revealed collaborative stakeholder dialogue as a mechanism to facilitate the implementation of transport infrastructure programs that promote active and public transport (APT) or that restrict motorised road transport (MRT). These programs often face barriers in conventional adversarial policy settings (as I describe in

Sections 1.1.3, 2.2.2 and 4.2). The research described in this thesis shows how enhanced trust and relationships among the different stakeholder groups in the urban transport policy process can improve the quality of debate on policy development and so facilitate mutual understanding and learning. This leads to higher quality outcomes from a sustainability perspective and to higher acceptance and durability of implemented solutions.

However, the case study analysis and discussion in Chapters 6 left some issues unanswered that are relevant to improving the process and application of CSD in transport, and to demonstrating the practical and theoretical advantages of CSD over adversarial processes in achieving sustainable transport outcomes. I therefore investigated the three following questions in Chapters 7 to 9 (that are further explained in Section 5.5.2): ‘How do collaborative approaches compare with the sustainability change creation potential of the conventional adversarial pathway, and under what conditions?’ (Chapter 7), ‘Is collaborative stakeholder dialogue compatible with procedures of lay citizen engagement in the policy process?’ (Chapter 8) and ‘How transferable is the Munich model to other cities?’ (Chapter 9).

The first discussion (in Chapter 7) involved a systematic comparison of adversarial and collaborative approaches to stakeholder interaction in the transport policy process. It compared their ability to contribute to change towards more sustainable transport development and revealed that CSD is most appropriate and valuable in problem situations resembling a stalemate, that is, situations with high levels of conflict between competing interests that all have influence. Many wicked transport problems develop into such stalemates.

The second discussion (in Chapter 8) assessed lay citizen and interest group engagement procedures against a set of social goals from a pragmatic sustainability outcome-oriented perspective. I concluded that these two types of public engagement — CSD and deliberative inclusive procedures (DIPs) — do not have to be mutually exclusive, and that they can coexist and even be mutually supportive. For example, it is more productive to use CSD to manage and transform the negative impacts of interest groups than it is to try to eliminate the influence of those groups. DIPs, on the other hand, can provide CSD with the necessary grounding in community values to enhance public trust and legitimacy.

In the third and final discussion (in Chapter 9) I assessed the transferability of the CSD model to other cities. To do so I developed a framework of crucial preconditions or incentives for stakeholders to support and engage in a CSD. Testing the framework in Sydney revealed that this framework is a valuable tool to investigate whether the preconditions for CSD are present in a city, and to identify areas that inhibit the implementation of CSD. However, it also revealed that no definite conclusion regarding the transferability of CSD to Sydney can be drawn.

In summary the discussion chapters established important caveats and limitations that are relevant to the applicability and transferability of CSD in transport policy practice. This can provide crucial insights for local governments or non-government stakeholders interested in promoting CSD in their policy making context.

Relevance of the findings to other areas of public service provision

I suggest that the findings of this thesis can also be of value to other areas of public service provision that regularly deal with stakeholder conflict, for example, energy or water provision. These areas typically experience less attention from social and environmental NGOs (except, for example, in the case of nuclear energy) but are often subject to strong influence from industry interest groups. CSD could contribute to a better balance of dominant influences and so allow a greater consideration of social and environmental concerns.

Nevertheless, aspects of transport development generally seem to be more value-laden compared to other sectors of public service provision, and CSD therefore seems to be most relevant to transport policy making. This is because transport infrastructure has a more significant impact on the everyday experiences of members of the public. For example, energy customers do not experience a difference in service quality if the energy source is changed — a cold beverage that is taken out of the fridge has the same quality if the fridge is supplied with coal, solar or nuclear energy. By contrast individuals and businesses experience the services provided by urban transport infrastructures very differently depending on the mode of travel, the amount of time required to reach destinations or transport goods as well as their personal preferences. Changes in the physical infrastructure system that affect these access options, either in terms of travel time or in terms of mode choice, are therefore typically strongly contested.

10.3. Creating change — an epilogue on developments in Sydney

In Sections 1.2 and 1.3.2 I highlighted the explicit aim of this research: to create change in the real-world problem situation of sustainable transport policy development. While the extent to which the research achieves this aim can only be evaluated from in hindsight, there are already indications that the research has had an impact on transport stakeholders in Sydney. A group of inner city councils, supported by a number of NGOs, have applied for a grant under the federal government's Liveable Cities Program⁴² to receive funding for the organisation and implementation of a collaborative stakeholder dialogue (CSD) based on the Munich model. The Liveable Cities Program supports state, territory and local governments in meeting the challenges of improving the quality of life in Australia's capitals and major regional cities.

The impetus for the Sydney councils to prepare this grant application emerged in the aftermath of the stakeholder interviews and discussions I conducted to receive feedback on the value and transferability of a Munich-style CSD to the context of Sydney (which is documented in Section 9.2). A City of Sydney official who became aware of these efforts approached me to learn how a CSD could improve transport policy making in Sydney. Seeing benefits in the approach, he sought support from other transport stakeholders to apply for funding to organise and facilitate an experiment in planning best practice in Sydney. With less than a week's notice eight local government authorities and four NGOs committed to the process and lodged the application as a yet-to-be formalised consortium under the Liveable Cities Program. Other inner Sydney local governments, state government officials and transport NGOs showed interest or support and are expected to participate in the CSD should the funding be granted.

If successful the Sydney process could provide exciting insights into the transferability of CSD, especially in a context where collaboration is not a compelling or necessary reaction to resolve a hurting stalemate as was the case in Munich.

⁴² The grant's website is at <http://www.nationbuildingprogram.gov.au/funding/liveablecities/index.aspx> (accessed 20 January 2012)

10.4. Areas for further research

I now highlight three aspects of CSD that seem to warrant further investigation, both to strengthen the empirical and theoretical basis of the findings and to enhance their relevance to transport policy making practice.

First, to increase the amount of empirical data on CSD, more case study research into the use of CSD in transport policy decision making is needed. To date the Inzell-Initiative in Munich is by far the most established process of its kind in the transport sector.⁴³ A larger number of international case studies could contribute to knowledge in several ways: it could investigate the relevance of cultural differences to transferability (as discussed in Section 9.1.3); it could test and add to the preconditions framework for transferability developed in Section 9.1.2 and to the classification of success factors outlined in Section 6.2; and it could integrate the findings into the literature on policy learning and transfer that was reviewed in Section 9.1.1. In that regard it would be valuable to trace future developments in Sydney as a case study.

Second, a more comprehensive body of empirical data could strengthen the conclusions made in relation to the advantages of CSD over conventional adversarial policy making discussed in Chapter 7, and it could strengthen the discussion on the use of CSD to mitigate barriers to sustainable transport policies in the policy process (in Section 6.3).

And third, it would be valuable to further investigate the possibility of a hybrid model of CSD and citizen participation as suggested at the conclusion of Chapter 8, and to investigate the benefits and relevance of such a model compared to conventional adversarial approaches.

⁴³ Innes and Booher (1999, p. 3) refer to a successful CSD in Contra Costa County, California, where environmentalists and development interests successfully collaborated to pass a ballot measure for transportation and growth management.

Appendix 1: Munich interview partners

Table 12: List of interview partners in Munich and their in-text descriptions

In-text description	Interviewee	Organisation	Position at the time of interview	Interview date
Interviewee #1, TUM	Dr. Sven Kesselring	Munich University of Technology	Social Scientist/ Mobility Expert (Mobil.TUM)	28.06.2010
Interviewee #2, BMW	Dr. Markus Mailer	BMW Group	Transport Expert	29.06.2010
Interviewee #3, Green City	Kai Sonntag	Green City e.V.	Transport Expert	30.06.2010
Interviewee #4, Green City	Martin Gloeckner		CEO	
Interviewee #5, Green Party	Sabine Nallinger	Green Party/ MVG	Council Member/ Transport Planner	30.06.2010
Interviewee #6, Green Party	Paul Bickelbacher	Green Party	Council Member/ Transport Planner	01.07.2010
Interviewee #7, MVV	Bernhard Fink	MVV	Transport Planner	01.07.2010
Interviewee #8, CoM	Dr. Martin Schreiner	City of Munich	Mobility Manager	02.07.2010
Interviewee #9, Journalist	Dominik Hutter	Sueddeutsche Zeitung	Journalist for Local Transport	06.07.2010
Interviewee #10, Journalist	Wolfgang Roth		Journalist for Energy and Environment	
Interviewee #11, ADAC	Alexander Kreipl	ADAC	Spokesperson for Transport and Environment	07.07.2010
Interviewee #12, CoM	Cornelius Mager	City of Munich	CoM for the Inzell-Initiative (until 2002)	09.07.2010
Interviewee #13, CoM	Georg-Friedrich Koppen	City of Munich	Head of Transport Planning	09.07.2010

Appendix 2: Initial Munich interview guideline

Part 1: Introductory part — mapping advocacy coalitions

Q1a: What do you/ what does your organisation consider to be the main problems in Munich' transport development?

Q1b: What do you/ what does your organisation consider to be the most effective approaches to deal with these problems?

Q2: What resources do you/ what does your organisation have to influence agenda setting, policy formulation or decision-making?

Q3a: Are there actors or organisations with similar ideas on transport development that you/ your organisation engage with?

Q3b: How does this coordinated action take place, with what resources/ influence and where?

Q4a: What actors or organisations have opposing objectives/ ideas on transport development?

Q4b: Does coordinated action take place *among* these actors and if yes, with what resources/ influence and where?

Q4c: Does coordinated action take place *with* these actors and if yes, with what resources/ influence and where?

Part 2: Retrospective analysis — how did the ideas and relative strength of the APT advocacy coalition evolve over time, and how did they influence policy change?

Q5a: Can you describe critical phases in Munich's transport policy process that have challenged traditional ideas of road development as the standard solution to capacity problems, and introduced more APT-oriented ways of thinking?

Q5b: From what context did these developments emerge, and what changes triggered these developments?

Q5c: What were the positions of the advocacy coalitions involved in these developments?

Q5d: What was your role/ the role of your organisation in these developments?

Q6a: How did the APT advocacy coalition manage to successfully promote its goals, and what strategies did they employ?

Q6b: What contextual factors or windows of opportunity helped them?

Q6c: Were there any outstanding personalities that mediated/managed the process?

Q6d: What was your role/ the role of your organisation in these developments?

Q7a: How did the APT advocacy coalition manage to institutionalise their goals in routines, norms and culture of the transport policy process?

Q7b: What was your role/ the role of your organisation in these developments?

Part 3: Prospective component — what could be?

Q8a: Based on your past experience what do you see as the greatest barriers for APT-oriented stakeholders and policies in urban transport politics?

Q8b: What do you see as the levers or success factors to overcome these barriers?

Q9: What is your vision for transport development in Munich?

Q10: What would it take to get there?

Appendix 3: Transport indicators for Munich and Sydney

Table 13: Comparative transport indicators for Munich and Sydney, 1995
(Source: Kenworthy & Laube 2001; Kenworthy & Laube 2005)

	Sydney	Australia -New Zealand average	Munich	Western Europe average
Urban form and city wealth				
Urban density (persons/ha)	18.9	15.0	55.7	54.9
Job density (jobs/ha)	8.0	6.1	32.3	27.2
Proportion of jobs in CBD (%)	12.8%	15.1%	36.3%	18.7%
Metropolitan gross domestic product per capita (USD)	22397	19775	54692	32077
Private car ownership and private transport infrastructure				
Passenger cars per 1000 people	516	575	469	414
Length of freeway per capita (m/1000 person)	59.1	128.9	45.3	82.3
Length of freeway per urban hectare (m/ha)	1.1	2.0	2.5	4.0
Parking spaces per 1000 CBD jobs	197	505	271	261
Reserved transit route and park and ride (P&R)				
Total length of reserved public transport routes per urban hectare (m/ha)	4.3	3.4	15.4	9.5
Number of P&R spaces per kilometre of reserved public transport route	26.2	44.0	27.6	25.0
Public versus private transport infrastructure provision and investment spending				
Ratio of annual investment in public transport versus private transport infrastructure	0.67	0.39	1.83	0.84
Ratio of segregated public transport infrastructure versus freeways	3.81	2.00	6.10	3.12
Public transport service levels and comparative modal speeds between private and public transport				
Total public transport vehicle kilometres of service per urban hectare (km/ha)	1427.7	-	5674.2	-
Total public transport seat kilometres of service per capita (km/person)	6451.5	-	5335.0	-
Overall average speed of public transport (km/h)	32.3	32.7	35.0	25.7
Average speed of suburban rail (km/h)	47.0	45.4	52.2	49.5
Average road network speed (km/h)	35.5	44.2	33.5	32.9
Ratio of public versus private transport speeds	0.91	0.75	1.04	0.79
Modal split for all daily trips (percentage of all trips by)				
* non motorised modes	17.3%	15.8%	32.3%	31.3%
* public transport	7.2%	5.1%	27.3%	19.0%
* private transport	75.5%	79.1%	40.4%	49.7%

	Sydney	Australia -New Zealand average	Munich	Western Europe average
Public and private transport usage				
Total public transport boardings per capita	140.9	84.0	465.5	3.0
Total public transport passenger kilometres per capita	1509.1	918.0	2621.7	15.2
Total private passenger vehicle kilometres per capita	6988.1	-	4654.9	-
Passenger car passenger kilometres per capita	10506.0	11387.0	5913.0	62.0
Proportion of total motorised passenger kilometres on public transport (%)	12.3%	7.5%	29.6%	19.0%
Transport energy use (MJ/person)				
Private passenger transport energy use per capita	28723	29610	15900	15675
Public transport energy use per capita	1074	795	1526	1118
Total transport energy use per capita	29797	30405	17426	16793
Transport smog and greenhouse emissions				
Total emissions per capita (kg/person)	206	189	110	98
Total emissions per urban hectare (kg/ha)	3901	2749	6111	5304
Total emissions per total hectares (kg/ha)	635	585	4742	2153
Transport deaths				
Total transport deaths per 100,000 people	8.9	8.6	5.7	7
Total transport deaths per billion vehicle kilometres	12.1	11.0	11.6	16
Total transport deaths per billion passenger kilometres	7.2	7.0	6.4	10
Total transport costs				
Total passenger transport cost as percentage of metropolitan GDP	11.1%	13.5%	5.7%	8.3%
Total private passenger transport cost as percentage of metropolitan GDP	9.7%	12.4%	4.5%	6.8%
Total public passenger transport cost as percentage of metropolitan GDP	1.4%	1.1%	1.3%	1.6%

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