Smarter ways to change: learning from innovative practice in road space reallocation

Helen Rowe, University of Melbourne

Abstract:

As city planners seek to make cities more sustainable and liveable, and manage the competing uses of increasingly busy city streets, the use of roads is being rethought. Policies and projects are emerging which aim to reallocate road space to make more efficient use of road space and cater for a broader range of road uses. To facilitate changes to road space use, it will be important to discover effective implementation processes to effect change, in particular processes that cater for likely resistance to road space change and support community engagement practice. This paper examines five road space reallocation case studies across four continents, drawing on research conducted at sites in San Francisco, New York, Bogotá, Copenhagen and Yarraville in Melbourne. In each project, a novel implementation approach has been used, as changes to road space were implemented temporarily or in a 'pop-up' way. These case studies form part of the growing trend of 'pop ups' and tactical urbanism, but are specific to the road environment. The research findings show that using temporary projects provides an innovative way to enable people to explore and engage with changes to road space, by reducing fears and providing an implementation process that draws people in. These findings aim to encourage further experimentation with the use of temporary projects to introduce change to road space use.

Introduction

With an increasing focus on creating more compact, sustainable and liveable cities, the use of one particular part of our cities is being rethought – the use of roads. Policies and projects are emerging around the world which seek to shift the way we use and manage road space, from *Complete Streets* in the USA (McCann and Rynne eds. 2010) to *SmartRoads* in Victoria (VicRoads 2011). These policies and projects aim to balance multiple road uses and, in doing so, reallocate road space to cater for new uses, such as public transport, cyclists, pedestrians and public open space. While this agenda presents an interesting shift in thinking about roads space use, its implementation may face challenges. Cars have dominated road use for much of the last century and this has fixed not only practices around managing roads, but also broader attitudes about what roads can and should be used for. Attempts to reallocate road space away from cars to more liveable and sustainable uses are therefore likely to face resistance. To facilitate change, innovation is therefore not only required in how we think about road use, but also in the processes by which change is negotiated and implemented.

Uncovering innovative ways to introduce change is the focus of this research. In this paper, I examine five road space reallocation case studies across four continents that have taken on the challenge of implementing road space change in a novel way. In each case study, the change to road space was made in a temporary or 'pop up' fashion. These examples are in many ways part of a broader trend of tactical urbanism, which sees short-term installations used to explore various urban changes in engaging and playful ways, including changes to road space use (see for example Lydon, 2012). While there are a multiple benefits of taking a 'temporary' implementation approach, this paper focuses on the benefits related to engaging the community and supporting people to explore change. These aspects of the practice play an important role in supporting the transition to new road uses. The discussion provided also draws on literature regarding decision-making and environmental psychology that provides insight into the reasons for the project successes described. These research findings aim to spark more debate and experimentation with 'temporary' implementation processes in changing road space use in Australia.

A new agenda for road space use

As cities have become more populated, streets are busier, have more competing uses and, in particular, competition between cars and other uses is intensifying (Lee and March 2010, 85). In this context, a number of cities are seeking to make better use of road space and balance a broader range of uses to achieve more liveable and sustainable cities. A number of policies catering for diverse road uses in an integrated way are arising and influencing each other. For example, the 'Complete Streets' legislation appearing in a number of US states (for example see California Complete Streets Act of 2008 and discussion in McCann and Rynne eds. 2010), which has influenced the update of Queensland Streets, *Complete Streets: Guidelines for Urban Street Design* (Institute of Public Works

Engineers Australia, 2010). Another leading example, from the UK, is *Link and Place* (Jones et al, 2007), which is reflected in South Australia's *Streets for People* (Government of South Australia et al, 2012) and elements of Victoria's *SmartRoads* policy (VicRoads, 2011). The 'link and place' approach examines a road's role as a 'link' (providing for movement for cars, goods vehicles, public transport, cyclists, pedestrians) and as a 'place' (people standing, sitting, sightseeing, shopping, trading, public performances and cultural significance) (Jones & Boujenko 2009, 2,3). Based on these 'link' and 'place' functions, different road treatments and road space allocations are proposed, for example giving more space to pedestrians, where a road has a strong 'place' function. *SmartRoads* (VicRoads, 2011) states that its approach assists road authorities to make trade-offs in the use of limited road space between competing uses, including consideration of bus and tram priority projects.

A number of cities are also focusing on reallocating use of road space to public open space, in response to growing population density. Plans by the City of New York (2007, 2011) and the City of San Francisco (2010) not only seek to increase public open space, but also encourage agencies to identify opportunities to create space on city streets. *PlaNYC* (City of New York 2011, 42) states, 'Transforming our streets from utilitarian corridors for vehicles into great places for people, improves the everyday experience of the millions who use them'.

These examples of new thinking are flowing through to changes to road use on the ground, for example providing more space for public transport, pedestrians and cyclists or converting car parking into bike parking or public space. However, such changes are unlikely to progress without encountering some challenges.

Potential barriers to introducing road space changes

Catering for, and balancing, a range of road uses in the ways described is a significant and sophisticated shift in transport thinking. Implementing such a paradigm shift in road management is, however, likely to face some barriers. Since cars became the dominant form of transport, the transport planning profession has deferred to cars in road management and prioritised their needs (e.g. Jacobs et al 2002). In relation to implementing *Complete Streets*, McCann and Rynne (2010, 61) comment that 'the dominance of the automobile paradigm is not easy to displace'. Given this dominance, resistance to changing road use and reallocating space away from cars is likely.

There is much literature highlighting community resistance as a feature of urban change and development, often focusing on NIMBY (Not In My Backyard) opposition to change and issues such as resistance to increasing housing density and wind farms developments (see for example Devine-Wright 2009, Woodcock et al 2011, Devine-Wright & Howes 2010). While there are many anecdotes to draw on, for example about the resistance to reallocating the use of even a single car park, less has been written specifically about reactions to changing road uses.

Literature that does touch on reactions to road space change, includes Lee and March (2010, 85), who note that pedestrianising areas and reducing car parking, particularly within shopping strips, is controversial and opposed on the basis of impacts to traders. Hine (1998, 153) highlights similar themes of resistance in relation to reallocating road space to bus-only routes and pedestrianisation, while also pointing to evidence that pedestrianisation actually increases retail turnover. Taylor and Tight (1997, 176) find that there is generally a vocal dissenting minority against road change in the form of traffic calming projects and note that car owners are less likely to support such changes. In the Melbourne context, media coverage of road space reallocation projects highlights community concerns, resistance and even legal action have come in response to road space reallocation (see for example Lucas 2008, 2010, Carey 2011 and Irwin 2011). In discussing the difficulties facing delivery of *Complete Streets*, McCann and Rynne (2010, 61, 63) highlight that there is often a lot of fear in the street design phase of projects and transport departments face the challenge of working with local communities who do not necessarily share their vision. The authors conclude with a warning that the transition from auto-centred transport planning to complete streets is almost always a long one (*ibid*, 63).

While the literature indicates likely defensiveness to road space change, it is difficult to discern how much of the reaction described stems from resistance to the proposed changes as opposed to ineffective processes for stakeholder engagement. It seems likely that resistance to change *as well as* inadequate engagement processes are barriers to implementing road space change. Taylor and Tight

(1997, 172) find, for example, that the consultation process itself was an important factor in determining public opinion regarding traffic calming projects. Jones et al (2007, 10), discussing implementation of *Link and Place*, highlight the importance of stakeholder engagement as a component of design development and argue for innovative, practical tools and techniques that enable stakeholders to have input.

It appears that planning a successful implementation process for road space reallocation projects will need to cater for resistance to changing road uses and provide an improved engagement process. These are key features of tactical or temporary urbanism practice explored below and considered in the research case studies.

An emerging practice and potential solution

One emerging practice that appears to offer a novel approach for introducing urban change, is the increasing use of temporary or pop up projects, including everything from pop up restaurants and cinemas to temporary parks and bike lanes. In some cases pop ups are simply used to provide an engaging public space for a brief period, however the approach can also be used to trial and explore new uses of an area. These temporary interventions are variously referred to in the literature as temporary urbanism (Bishop & Williams, 2012), tactical urbanism (Lydon 2012), guerrilla urbanism (Lydon 2011, 2012), DIY urbanism (Zeiger, 2011) and urban prototyping (Gehl Architects, 2012). Momentum is building regarding their use¹ and the practice potentially offers lessons for implementing road use change.

While there is existing use of trials in transport and design practice, the projects referred to here add to and extend this experience. They offer temporary interventions that are more playful and colourful than simple trials, borrowing from the pop up design approach, which draws people in and actively engages them with new uses. They are more obviously temporary and constructed from flexible design elements that can be tweaked (see for example Figure 1).

Figure 1 – Engaging and colourful temporary bus-cyclist only road reallocation, Copenhagen



Source: Grimar (2009)

Literature evaluating this area of practice is limited as 'research on temporary urbanism is in its infancy' (Bishop & Williams 2012, 4). The sources available primarily document innovative practice case studies and focus on urban design practice (see for example Lydon 2011, 2012, Legge 2012, and Moskow & Linn 2010, Bishop & Williams 2012). However this literature does document a number of potential benefits of using temporary projects. Comments in the literature indicate that the practice can: offer a phased approach to instigating change; help build trust amongst interest groups and the community; generate greater likelihood of public support for any eventual permanent change; make change inexpensively and flexibly allowing for alterations (Lydon 2012, 1,2); offer a practice which is

¹ See for example the numerous websites and social media pages dedicated to documenting new practice examples, including Tactical Urbanism: www.tacticalurbanismsalon.com, Sustainable Cities Collective: www.sustainablecitiescollective.com, Pop-Up City: www.popupcity.net.

the opposite of drawn out and rigid master planning processes; and, instead offer 'a stimulation' that questions 'usual and familiar uses' (Haydn and Temel 2006, 15). Outside the tactical or temporary urbanism literature, Engwicht (2005) also discusses the benefits of using engaging and humorous traffic calming interventions, indicating relevance to the transport and road context.

Study scope, methodology and case studies

The research drawn on in this paper examines five projects that implemented change to road space use via a temporary project process (set out in Table 1). The case studies have been developed primarily through face-to-face, semi-structured interviews with government contacts, who were involved with the delivery of these projects. This provides the best and most consistent source of information across these examples. This was supplemented with site observation for all projects, as well as interviews with community stakeholders and analysis of project documentation subject to availability. Five interviews were conducted with government project practitioners, one in each city. These interviews focused on interviewees' thoughts about the outcomes and benefits of using temporary projects as a way to implement change and about the future application of this approach. Two interviews were conducted with community stakeholders (in New York and Yarraville) focusing on how they had participated with the project and what they saw as the benefits of being presented with a temporary trial version of the change being proposed.

The examples selected are all government led projects that tested temporarily what could be a permanent change to road use. In addition, all projects implemented changes that aimed to create more sustainable and liveable cities in some way. To conclude, the specific research aim was to identify the ways in which using temporary projects provided an innovative process to implement reallocation of road space to new uses.

Case study	Description
Nørrebrogade (Copenhagen)	A range of temporary 'traffic experiments' aimed at reducing car through traffic and providing more space for buses, bikes and people. This included bus and bike only road sections, temporarily marked out using red paint spots (seen in Figure 1). Throughout the experiments, the community was engaged and changes were made to design elements in response to feedback.
Carrera Séptima (Bogotá)	A temporary reallocation of a section of arterial road from cars and buses to pedestrian and bike use. This was initially an opportunistic closure due to nearby road works, but was then extended following completion of works. The community was consulted during the closure and in response to safety concerns, the street was being reopened to some traffic in the evenings.
The Plaza Program (New York)	This program repurposes sections of road across the city from traffic to public space and pedestrian use, using temporary materials. These projects involved the community throughout the process and projects have often been delivery by business organisations through the Plaza Program grant process.
Yarraville Pop-up Park (Melbourne)	The conversion of a single section of road temporarily to public space and pedestrian use. The community was consulted about the project and a petition to reinstall the park was given to council following removal of the park.
The Parklet Program (San Francisco)	This program changes the use of car parks across the city into small public spaces using removable materials. Parklets are often delivered by businesses that apply for parklet permits. The Parklet Program built on 'Park(ing) Day', which involved one day repurposing of car parks (Rebar, 2012).

Table 1 – Summary of Case Studies

Findings

The five case studies were analysed with reference to the research aim and existing literature. This analysis revealed a number of innovative features of using temporary projects as a process to implement reallocation of road space use. Two of the most significant advantages of this approach are that, firstly, offering a temporary change reduces fears and risks, enabling people to explore change and, secondly, it provides for effective and engaging public participation. These two findings are the focus of this paper and are considered in turn below.

Reducing fears and risks, and exploring change

Possibly the most important feature associated with using temporary projects, is that they provide a non-threatening way for people to explore change to road space. By nature, temporary projects create a test environment for new road uses, using playful materials. These conditions make the community less apprehensive and open to exploring possibilities and taking greater risks, as the change is not 'locked in'. Interviewees noted that: people gave themselves permission to approach it as test (Interview New York City (NYC) Sept. 7, 2012); it lowered their expectations and angst because it was short-term (Interview Melbourne July 18, 2012); the process was presented as 'give it a try and if it's no good we'll take it away' (Interview San Francisco 14 Aug., 2012); and, 'if change is worrisome then it's not that big a deal if we can come back to where we are today' (Interview NYC Aug. 27, 2012). This outcome aptly demonstrates comments by Haydn and Temel (2006, 15), that temporary uses can be viewed as 'stimulations' that allow us to question 'usual and familiar uses'. This approach is a contrast to government simply imposing road space change permanently, which one community stakeholder interviewee noted would likely result in backlash (Interview Melbourne Oct. 27, 2012).

The process also allowed people to see if their fears would be realised. This is important given community fears about losing car space was cited as a barrier to change in almost all case studies. According to interviewees, people view street space as being for cars (Interview NYC Aug. 27, 2012) and it is 'very emotional for people to say you can't drive somewhere' (Interview Copenhagen 25 Sept., 2012). People have 'all these fears about what will happen' (Interview NYC Sept. 7, 2012), and this gentler change process enabled them to see that their fears were unrealised.

Interviewee responses revealed yet another way temporary projects can support people to explore change: altering how temporary a project is. In New York, one approach being discussed was to use shorter one-day or one-week plazas to let 'communities on the fence' test plazas out (Interview NYC Aug. 27, 2012). In Yarraville, one option was to implement the pop-up park for a longer period. Finally, in San Francisco, comfort with the one day 'Park(ing) Day' led to the longer, more permanent parklets. The duration of a temporary project is something to be 'dialled-up' or 'dialled-down' to accommodate community attitudes and their changing level of comfort with a road space change, a concept described in Figure 2. This feature itself could be a useful tool in implementing change to road space use in different community contexts.





Critically, these temporary projects enabled positive outcomes to be realised, which might not otherwise have been pursued. The exploratory temporary process allowed controversial changes to be considered and in the end they led to positive outcomes, which were supported by the community. This result would not have been possible without the aid of this process.

Engagement and participation

Discussions with interviewees about their experiences using temporary trial projects, revealed another important benefit. This approach provides an improved process for public engagement and participation. Interestingly, the case studies demonstrated that use of temporary projects supported an unanticipated depth and complexity of engagement and participation.

Using temporary projects firstly provided an effective way to get people engaged and start a conversation. A number of interviewees stated that the process was a clear contrast to attempting to engage people with traditional planning processes. These traditional approaches usually use words and plans, and do not tend to draw people in. What does engage people is turning project ideas into something real. The changes proposed in these case studies are not plans, but instead live, tangible demonstrations. This allows people to visualise and experience the project benefits and dis-benefits first hand. One interviewee commented that temporary projects enable planners to 'bring people along' as it gets 'these things on the ground as soon as possible, otherwise it's just talk' (Interview NYC Aug. 27, 2012). In this way temporary projects provide an effective process to generate dialogue, a point particularly highlighted in the Copenhagen case study. Here a controversial road space change was proposed and the temporary process was effective in creating the much needed community debate.

In addition to drawing people in, people found it worthwhile to participate in the temporary project process. People readily engaged with the process because their voice was heard and their involvement was rewarded. When people provided input it had an impact. They suggested an improvement or proposed a project and it was implemented. With San Franciso's Parklet Program, people suggested a location where a car park should change to public space and a permit could be granted to let them go ahead and do it. The flexible nature of designs made of temporary materials, also enabled alterations to be made in response to suggestions and concerns. This type of responsiveness to community input was a clear element of all case studies. For example, in Bogotá the timing of the street closure was altered to address local concerns about safety (Interview Bogotá Sept. 4, 2012). Finally, in a number of projects, local knowledge was drawn into the design process. Designs were improved, commented one interviewee, by drawing on local knowledge as 'these are the people who know' (Interview NYC Aug. 27, 2012). This exploratory, temporary design approach creates change with the community, not to them. It also reflects commentary by Green (1994, cited in Taylor and Tight 1997, 171) that community consultation is part of good design practice and that drawing on local knowledge leads to better understanding of local features, idiosyncrasies and traffic issues.

Inherent in taking a 'temporary' approach is seeing if a change to road use actually works before making permanent change. This includes asking for community feedback. For all case studies, the test nature of temporary projects was linked to finding out what people thought about the change tested. Various types of feedback, surveys and reporting back to community were present in the case studies and most projects sought specific evidence of community support or even direct approval as imprimatur to make the temporary project permanent. In this way, temporary projects supported strong participation in government decision-making and active involvement with urban change. The process also enabled people to provide input into decision-making in an informed way. Through exposure to these trial projects, the community had first-hand knowledge of benefits, as the process was akin to 'trying before you buy'.

Ultimately, people valued being involved with the innovative engagement process provided by temporary projects, and this assisted the implementation of road space change. Through the temporary trial process, project teams were able to work through issues with the community and make changes to designs in response to community feedback, with the result that projects were better suited to local needs and more likely to be supported and made permanent. This finding reflects Lydon's (2012, 1,2) observations that tactical urbanism allows for alterations ahead of capital spending, helps build trust with stakeholders and increases likelihood of support. In the ways described, all case studies demonstrated greater levels of public participation than has been traditionally associated with transport practice, which Booth and Richardson (2001, 148) note has been associated with top-down processes and tightly constrained opportunities for public involvement.

Temporary projects also provided an innovative approach to community engaging by reaching and giving a voice to the beneficiaries of the proposed road space changes, a group that is not often well represented. As noted earlier, Taylor and Tight (1997, 176) instead find there is generally a vocal

dissenting minority against change. Before a project is implemented, people who think they may be negatively impacted by a proposed change are motivated to get involved, while the benefits and beneficiaries are less clear. However as Bishop and Williams (2012, 3) note, temporary approaches 'unlock the potential of cities now' and, as such, people can experience the tangible benefits of the proposed changes and the beneficiaries are mobilised. As noted by one interviewee, rather being just a project proposal, it was a 'live proposal' that the community was already enjoying, making it harder remove (interview NYC Aug. 27, 2012). The mobilisation of beneficiaries is clearly demonstrated in the outcome of the Yarraville Pop Up Park. When the park was removed, the people who had been enjoying it became vocal, handing a petition to council demanding the park should be returned. In these ways, the temporary projects generated a greater mix of voices in the conversation and critically mobilised people who would benefit from and likely support the proposed road space changes. In short, it gave a voice to YIMBYs (Yes In My Back Yard) as well as NIMBYs.

A more positive experience of change

The use of temporary projects provides a number of innovations for governments implementing new road space uses, in terms of changing attitudes to exploring change, providing an engaging and rewarding process for people to get involved with and mobilising new voices in the discussion. Crucially the process, said one government interviewee, was 'less pain and more happiness' (Interview Melbourne July 18, 2012). Drawing on some of the literature about decision-making and environmental psychology provides insight into why this implementation process been successful in these ways.

Firstly, the findings point to temporary projects enabling people to explore change as the process circumvents defensiveness to change. Discussion by Thaler and Sunstein (2009) provides insight into this finding. The authors discuss factors that influence our decision-making and consideration of change: people have a natural tendency to bias the status quo, fall into patterns of mindless choosing and are loss averse, creating inertia towards change (*ibid*, 33-35). Groups also tend to exhibit collective conservatism, sticking 'to established patterns even as a new need arises' (*ibid*, 58). Together this could mean communities as a whole have collective inertia or opposition to change, particularly when under threat. Considering temporary projects in this context, they can been seen as less threatening to the status quo, leading people to be less protective of what they perceive they are losing than if the change were 'locked in'. Noted one community stakeholder interviewed, if the road closure had been permanent rather than temporary, the result would likely have been backlash (Interview Melbourne Oct. 27, 2012).

In addition, allowing people to experience a new version of their street in a non-threatening way offers them the opportunity to identify with a new option as the status quo and make this something they are averse to losing. Here the tendency towards loss aversion helps to explain the power of temporary projects to mobilising project supporters. This was clearly demonstrated in the Yarraville case study where the council was presented with a petition to bring back the park shortly after its closure. People become averse to losing their new 'pop up park' status quo and as Kahneman notes (2012, 305), in defending the status quo, potential losers of a change 'will be more active and determined than potential winners'.

Temporary projects, by offering a street design made from temporary pop up materials, also offer a playful use of the street and present people with something engaging, which shifts them out of usual patterns of thinking. The work of Kahneman (2012) helps understand this finding. He explores the thesis that people have two modes of thinking; system one thinking is faster, intuitive and automatic and system two thinking is slower, deliberative and effortful. Temporary trials that are engaging and playful offer an opportunity for people to shift from more automatic 'system one' responses, to more thoughtful 'system two' consideration of the change being presented. They are supported to deliberate about whether the change being presented might offer a better type of street. This line of thinking is demonstrated in the work of Engwicht on traffic calming interventions. He notes (2005, 37) that engaging interventions 'jolt the incoming data on to a completely different track'.

Importantly, the use of temporary projects offers an opportunity for people to make sense of changes being proposed, through an open process of exploration and discussion. This is something difficult to achieve through top-down actions being imposed by governments, regardless of how worthy the policy. This echoes sociologist Peter Marris' comment (1974, 156 cited in Sarkissian 2012) that:

"People cannot reconcile themselves to the loss of familiar attachments in terms of some impersonal utilitarian calculation of the common good. They have to find their own meaning in these changes before they can live with them". While there is often frustration expressed with NIMBY opposition, temporary projects offer a process to explore change while being respectful of people and their responses to change in their environment. This reflects the approach argued for by Sarkissian (2012) who calls on us to be 'more curious about and respectful of the deeper messages that so-called NIMBYs are communicating'.

By taking into account people's natural psychological approaches to change and decision-making, temporary trial projects provide an innovative process for implementing road space change.

Future application and directions for further research

This research has provided evidence of some innovative features associated with using temporary projects as a way to change road space allocation to new uses. By enabling people to explore change to their environment, engaging people in a conversation and mobilising project beneficiaries in the debate, the temporary projects considered have supported change to road use in a creative and participatory way. By providing people with a more pleasant experience of change, it could also be argued that these experiences will support a more sustainable ongoing agenda for implementing road space change.

Based on the experiences considered in this paper, future application of temporary project approaches would particularly warrant consideration for implementing road space reallocation projects where: the benefits of the change are uncertain; the proposed change is controversial or the community is hesitant about change; and, the beneficiaries of a project need to be engaged.

This research has but scraped the surface of its subject matter. By describing some innovative features of this approach, the current research provides a step in understanding the advantages of using temporary projects. However, there are some obvious ways this research could be extended. Each of the innovative features described warrant more detailed examination than a survey of practice such as this can provide. Another area of potential focus is the involvement and perceptions of particular stakeholder groups, such as traders, in the temporary project process. Another extension of this research would be to quantify the benefits of using a temporary project process. A comparison between road space reallocation projects with and without the use of a temporary projects themselves is another area for further work.

The research presented here aims to provide evidence to spark more interest, debate and experimentation with temporary projects, drawing inspiration from the trend of tactical urbanism. As noted by one interviewee, the experiences to date with temporary projects should increase 'awareness that it's a valid, viable opportunity as a trial to test how you're using road space' (Interview Melbourne July 18, 2012). This is a rich subject matter, with much potential to improve our processes for working in increasingly complex urban environments as we seek to use roads in more sustainable and liveable ways.

Acknowledgements

The author would like to thank Dr Carolyn Whitzman, Associate Professor in Urban Planning at the University of Melbourne, for her guidance supervising my research project for my Master of Environment thesis, as well as all the interviewees who kindly made themselves available. This paper would not have been possible without their valuable reflections, input and time.

References

Bishop, P and Williams, L (2012) The Temporary City, Routledge, Oxford, UK

Booth, C and Richardson, T (2001) 'Placing the public in integrated transport planning', *Transport Policy*, 8, pp.141-149

Carey, A (2011) "Cyclists rail against new Northcote tram super stops", in *The Age* December 19, accessed online November 3 2012 at http://www.theage.com.au/victoria/cyclists-rail-against-new-northcote-tram-super-stops-20111218-1p0tf.html

City of New York (2007) PlaNYC: a greener greater New York

City of New York (2011) PlaNYC: a greener greater New York, update April 2011

City of San Francisco (2010) Better Streets Plan: policies and guidelines for the pedestrian realm

Complete Streets Act (2008) (California)

Devine-Wright, P and Howes, Y (2010) 'Disruption to place attachment and the protection of restorative environments: a wind energy case study', *Journal of Environmental Psychology*, vol.30, issue 3, pp.271-280

Devine-Wright, P (2009) 'Rethinking NIMBYism: The Role of Place Attachment and Place Identity in Explaining Place-protective Action', *Journal of Community & Applied Social Psychology*, vol.10, issue 6, pp.426-441

Engwicht, D (2005), *Mental Speed Bumps: the smarter way to tame traffic*, Envirobook, Annandale, NSW

Gehl Architects (2012) 'Urban Prototyping – exploring temporary and permanent', *Cities for People*, October 19, accessed online October 25 at http://gehlcitiesforpeople.dk/2012/10/19/urban-prototyping/s

Grimar, K, (2009) 'More city life on Nørrebrogade', paper presented to Walk21 conference, New York

Haydn, F and Temel, R eds (2006) *Temporary Urban Spaces: concepts for the use of city spaces*, Birkhauser, Basel

Hine, J (1998) 'Roads, regulation and user behaviour', *Journal of Transport Geography*, vol.6, no.2, pp.143-158

Institute of Public Works Engineers Australia (IPWEAQ) and Parson Brinckerhoff (2010) Complete Streets: Guidelines for Urban Street Design, IPWEAQ, Brisbane

Irwin, J (2011) 'Cyclists fear High St squeeze following route 86 overhaul' in *Northcote Leader*, October 25 accessed online November 3 2012 at http://northcote-leader.whereilive.com.au/news/story/high-st-squeeze/

Jacobs, A, McDonald, E, Rofe, Y (2002) *The Boulevard Book: history, evolution, design of multiway boulevards*, MIT Press, Cambridge

Jones, P, Boujenko, N and Marshall, S (2007) *Link and Place: A Guide to Street Planning and Design*, Local Transport Today Ltd, London.

Jones, P and Boujenko, N (2009) ' 'Link' and 'Place': A new Approach to Street Planning and Design,' paper presented to Australasian Transport Research Forum, Auckland

Kahneman, D (2012) Thinking, Fast and Slow, Penguin, London

Lee, A and March, A (2010) 'Recognising the economic role of bikes: sharing parking in Lygon Street, Carlton', *Australian Planner*, vol.47, no.2, pp.85-93

Legge, K (2012) Doing It Differently, Place Partners, Sydney

Lucas, C (2010) 'Battle heats up over clearways' in *The Age*, February 23, accessed online November 3 2012 at < http://www.theage.com.au/victoria/battle-heats-up-over-clearways-20100222-orv7.html>

Lucas, C (2008) 'Trader uproar at clearway extension' in *The Age* May 7, accessed online November 3 2012 at < http://www.theage.com.au/news/national/trader-uproar-at-clearway-extension/2008/05/06/1209839650140.html>

Lydon, M, eds, (2011) *Tactical Urbanism: Short Term Action, Long Term Change*, vol. 1, The Street Plans Collaborative

Lydon, M, eds, (2012) *Tactical Urbanism: Short Term Action, Long Term Change*, vol. 2, The Street Plans Collaborative

McCann, B and Rynne S eds. (2010) *Complete Streets: Best Policy and Implementation Practices*, American Planning Association, Chicago

Moskow, K and Linn, R (2010) *Small Scale: creative solutions for better city living*, Princeton Architectural Press, New York

Rebar (2012) 'Home page', accessed online November 3 2012 at <www.rebargroup.org>

Sarkissian, W (2012) *What's Psychology Got to Do with NIMBY? Exploring the Deeper Meanings of Community Resistance to Proposed Housing Density Increases*, talk to Joint Center for Housing Studies, Harvard University, 22 February, accessed online on 24 June 2013 at http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/jchs_wendy_sarkissian_transcript_feb_2013. pdf >

South Australian Active Living Coalition (2012) *Streets for People: compendium for South Australian Practice*, Government of South Australia

Taylor, D and Tight, M (1997) 'Public attitudes and consultation in traffic calming schemes' *Transport Policy*, vol.4, no.3, pp.171-182,

Thaler, R H and Sunstein, C R (2009) *Nudge: Improving Decisions about health, wealth, and happiness*, Penguin, London

VicRoads (2011) SmartRoads: Connecting Communities

VicRoads (2012) Network Fit Assessment Training Material

Woodcock, I, Dovey, K, Wollan S and Robertson, I (2011) "Speculation and Resistance: Constraints on Compact City Policy Implementation in Melbourne", *Urban Policy and Research*, vol.29, no.4, pp.343–362

Zeiger, M (2011) 'The Interventionist's Toolkit', *Design Observer*, January 31, accessed online November 3 2012 at http://places.designobserver.com/feature/the-interventionists-toolkit-part-1/24308/