Moving Targets: Mobilities, Sustainability and Space on Vancouver Streets

by

Peter Marriott

M.A., Simon Fraser University, 2011 B.A., University of Alberta, 2008

Project Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Urban Studies

in the
Urban Studies Program
Faculty of Arts and Social Sciences

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SIMON FRASER UNIVERSITY
Spring 2017

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Approval

| Name: | Peter Marriott |
|--|---|
| Degree: | Master of Urban Studies |
| Title: | Moving Targets: Mobilities, Sustainability and Space on Vancouver's Streets |
| Examining Committee: | Chair: Karen Ferguson Professor Urban Studies and History |
| Peter V. Hall Senior Supervisor Professor Urban Studies | |
| Meg Holden Supervisor Associate Professor Urban Studies and Geogra | ohy |
| Mimi Sheller External Examiner Professor Department of Sociology Drexel University | |
| Date Defended/Approved: | March 27, 2017 |

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Abstract

This project explores the politics of mobility in Vancouver, as expressed through debate over the allocation, configuration and use of street space. Using a mobilities framework to explore the social relationships embodied within these choices about the allocation of physical movement of people within cities, this research consists of two in-depth case studies of commercial streets in Vancouver that have been the subject of recent neighbourhood plans. The project uses multiple qualitative methods, including document analysis, in-depth interviews and contextual observation, to locate a complex and sometimes contradictory discourse around mobility policies in Vancouver. Sustainability targets that rhetorically call for a reduction in automobile use are not realized in the actual interventions made to street space; instead, more symbolic measures are pursued that leave the social relationships of auto-mobility unchallenged. A deliberate re-politicization of mobility spaces is required to achieve a more intentional, sustainability and equity-focused distribution of urban mobility.

Keywords: Mobilities; urban transportation; streets; mobility politics; modal conflict; Vancouver, BC

Dedication

To all those who made it possible to finish another one.

Acknowledgements

It turns out that it doesn't get any easier the second time, but it's still worth it. Completing a degree and writing a thesis are, as always, collective efforts, and I am grateful to many people for the support and insight they offered throughout this journey.

Particular thanks are due to the entire Urban Studies faculty and staff: Peter Hall, Meg Holden, Karen Ferguson, Paddy Smith, Anthony Perl, Terri Evans and Matt Hern. Throughout this project, I was fortunate to benefit from Peter Hall's research rigour, wisdom and knowledge base, and from his encouragement and patience through many of my more aspirational deadlines. Meg Holden has continually challenged me to think critically and actively: to be both utopian and pragmatic. Through coursework, speakers, events, field trips and more, the Urban Studies program has profoundly changed how I think about and interact with all aspects of the city.

In writing this paper, I am enormously grateful to all of my interview participants for their generosity of both time and ideas. Thanks as well to Mimi Sheller for sharing some of her time in Vancouver to serve as my external examiner.

The last three years have been a series of adventures: late nights in the skybridge, meaningful brunch debates, American karaoke bars, course readings on mountain summits. We'll always have loco (until it gets blandly redeveloped). The common and lasting thread has been the chance to share space with and learn from an extraordinary group of people, many of whom have become extraordinary friends. Thanks to all.

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Chapter 1.

Introduction

1.1. Signposts

The twentieth century saw North American cities reshaped around the private automobile. Travelling far, fast, freely and privately became the dominant paradigm of movement for people within cities, and an expectation of how urban lives are structured. The *mobilities*—the social relationships—associated with this automobile movement became essential to everyday urban life (Henderson 2013: 37), bringing expectations of public policy choices about the allocation of resources. The state must provide fast and uncongested pathways at most times; minimal friction with other users; abundant places to store vehicles; and free travel in the sense that there is no direct economic cost to mobility. Conventional measures of urban economic success have, until recently (Kenworthy 2013: 8-21), been so strongly correlated with ever-increasing private automobile travel that any measure to reduce it has been seen as catastrophic. The mobility of the car has been deemed essential to urban prosperity; the mobilities of the car have been deemed essential to urban life.

But a relative lack of space—many different people clustered close together—is the defining physical characteristic of a city (Wirth 1938: 1-24). This gives cities an essentially public nature and makes the allocation of space a key (re)distributive question. Deliberately or casually, actively or passively, the physical spaces of the city represent continued compromises between a multiplicity of needs, of visions and of contributions to building it. Public space, in its most broad sense, is the core of what

cities and their politics are about. Cities must choose to cultivate a particular valuation of public life (Amin 2008: 5-24). To be sure, many people do minimize the public aspects of urban life. They move from private residences to private vehicles to private workplaces. They define "public" to exclude those that they would rather not share space with. Conceptions of public space include and exclude different publics in different fashions.

A substantial portion of urban public space is found in public street rights-of-way—more than a quarter of all land in the City of Vancouver, for instance¹. Streets are places of function and movement, but also expressions of citizenship and rights (Blomley 2007). With the dominance of the automobile, streets have privileged the flow of people in private vehicles above all else, under the guise of technocratic standards. But, on some levels, this hegemony is being challenged. Streets are receiving renewed attention in urban theory, policy and practice. Urban policy wishes for streets that are "great" (Jacobs 1995) or "complete" (McCann 2013). Urban sustainability policy imperatives demand that automobile travel has to decrease substantially to meet energy or emissions reduction targets (Banister 2005). Contemporary urban practitioners recognize and desire to accommodate modes of travel other than the automobile in the design of streets. These and other interventions have the potential to remake streets as political and contestable public spaces.

However, this potential is not fully realized. Missing in most mainstream discourse about mobility and streets is engagement with its social dimensions: urban innovations promote other forms of mobility without adequately challenging the social relationships and expectations embedded within the automobile (Sheller 2011: 291). This research project investigates case studies in one city to explore how integration is achieved between transportation policy goals; the implementation of physical changes to streets; and the expectations, ideologies and social systems of movement at stake in deliberations over urban transportation.

¹ Based on analysis from Metro Vancouver's 2011 Regional Land Use map, available in Metro Vancouver's open data catalogue.

1.2. Research Question

This study's main research question is: how do public discourse and policy choices surrounding the allocation and configuration of space in mixed-use streets in the City of Vancouver reflect different conceptions of mobility? This question is addressed through in-depth case studies of how different forms of mobility are deliberated and prioritized in two recent neighbourhood-area plans in the city.

Vancouver is often perceived as a North American leader in sustainable transportation policy and practice (see e.g. Grescoe 2012: 253). But, like other cities, Vancouver often struggles to bridge the gap between the development of overarching policy and its actual implementation. Transportation policy sets collective objectives, but governments seek to achieve them by enabling certain types of individual choices. This thesis explores how deliberate the connections are between the objectives of sustainability plans and a complex mobility politics.

Vancouver is notably encountering a transition away from "easy" options for implementing sustainability plans toward more involved projects that may require challenging established policy choices and interests. Having previously chosen not to expand its roadway network, the city's streets are sites of multiple and contradictory mobility demands, demanding choices about how existing space is reallocated (City of Vancouver 2012c: 6). By studying how systems and ideologies of mobility are expressed at street level, this project sheds some light on how the inevitable conflicts over multiple uses in limited space can be better understood and engaged with.

1.3. Relevance and Applicability

Overarching policy is realized, or not realized, in its implementation. The details matter. The practice of planning is inherently and irrevocably connected to ethical questions about what a polity and a community ought to be. However, these questions

are often subsumed by technical analyses and procedural frameworks. There is a need to rediscover and re-politicize planning as a practice at multiple levels—to rediscover "the very idea of planning," as one scholar puts it (Campbell 2012: 393).

Urban transportation—particularly the movement of people within a city—exemplifies the challenges city governments face in living up to these ideals. Transportation plans and policies are statements of public values and priorities: for example, that less energy-intensive and more space-efficient modes of travel are desirable. This formulation suggests implementing a reduction in the amount of space allocated to move and store private vehicles. But policy and implementation are rarely so integrated or aligned; policy moves in multiple directions, through complex institutions and governance regimes. The effect is that the values articulated in plans are not always realized. The actual policy expressed in implementation becomes bottom-up, the aggregation of a multitude of smaller decisions. Results are not always coherent, as multiple and competing values are favoured differently at these different scales of policy-making.

Urban transportation, on the one hand, demonstrates how technocratic, procedural, elite-driven planning can excise value questions in favour of ostensibly neutral bases for decision making. In law, construction, and operation, certain expectations of movement are codified, neutralized and recreated (Blomley 2011). But it also exemplifies another vice of cities: a populism that extrapolates individual experience to universal understandings; that categorizes, generalizes and "others" those who are perceived to interfere with individual transport preferences; and that projects particular "common sense" impressions into the political realm (Walker 2012). Transport policy prescriptions can sometimes be derived from a collection of poorly interpreted anecdotes. The provincial government justifies a major bridge project because congestion "is frustrating for families" (British Columbia 2013); there is no need to break down and interrogate this statement more critically. At the same time, the project is presented in technical terms: economic progress, safety and efficiency are listed as justifications as well. We seem to lack the language to escape either of these. This research project proposes one way to better understand how discourse is created and

how the arguments that are made about transportation reflect a deeper contestation of values.

Relevant to theory is the development of ways to use case study research to advance mobilities theories at multiple scales of the social world. This project builds on a rich literature around mobility systems, politics, unevenness and justice, and applies it to a new set of case studies focused on how these broader issues are expressed within the particular ambit of local government transportation policy.

1.4. Project Outline

To answer the research question, this project is organized in three main sections. First, theoretical concepts are developed. Chapter 2 grounds the project in relevant literature concerning urban politics and policy relating to transportation; the "mobilities" paradigm and the social science of different forms of movement; and urban policy and design literature concerning the configuration of streets.

Second, these concepts are applied to empirical study. Chapter 3 outlines the research methods used, while Chapter 4 surveys Vancouver's transportation policies concerning the configuration of multi-use streets and their implementation to date. Chapter 5 and Chapter 6 provide an in-depth case study of the politics of proposed and implemented mobility changes in two community planning processes.

Finally, Chapter 7 synthesizes key findings and identifies what systems and ideologies of movement can be induced from these cases, concluding by reflecting on what implications these have for transportation policy.

Chapter 2. Key Concepts

This chapter situates the research question in relevant literature. It begins by exploring the politics of local governments and transportation, and some of the factors that impact how public policy emerges from this arena. It then turns to questions of urban mobility and reviews how the "mobilities" literature presents mobility as a socially constructed and contestable phenomenon. Finally, it explores academic and practitioner literature relating to streets and street use, and their contemporary points of conflict.

2.1. Cities, Transportation, Policy and Politics

The decisions made by governments rarely live up straightforwardly to democratic ideals; they are fraught outcomes of imperfect processes, ideological filters and technical prescriptions. Governments are recursive and complex systems; Easton's (1957: 383-400) classic formulation of politics as an orderly and comprehensible policy system has been supplanted by more contingent and contextual understandings of politics and government. Local governments, in particular, defy easy characterization. On the one hand, they offer the promise of local accountability, responsiveness and autonomy. On the other, they are constrained by multiple levels of intergovernmental relationships², by informal and contingent governance arrangements and by public

² In the Canadian context, municipal governments are notably "creatures of the province"; no powers are accorded to municipalities in the constitution, but instead provincial legislatures are empowered to make laws concerning municipal institutions. The result is inconsistent jurisdictional powers and expectations, and varying models of regional and local government, governance and boundary-setting in urban areas. See e.g. Lightbody's (2009) study of city-region consolidations led by Canadian provinces for further context.

ideologies that are not clearly articulated, expressed or contested. Cities are governed pragmatically and imperfectly, limiting capacity for democracy and accountability (Kantor et al. 2012: 276). To one philosopher, cities are "grue"—that is, neither blue nor green. They are neither easily defined nor easy to extract coherent and integrated outcomes from (Cunningham 2012: 50); the "grue" metaphor suggests that knowledge of cities and our capacity to predict future outcomes is limited by the capriciousness, complexity and change of the urban world.

Despite urban transportation being the product of multiple actors, local governments are still important players in shaping the systems, infrastructure and regulation of space that facilitates the movement of people within a city. Cities are defined by social and economic connection and exchange, making mobility of people, goods and ideas central to their functioning. From Benjamin's flâneur wandering the Paris arcades (1999) to the high modern expressways of Le Corbusier (1987) to Jane Jacobs' anti-utopian defence of the multi-use streets in her own neighbourhood (1961). great urban writers regularly give transportation systems central focus in their accounts of cities. If cities are "engines of innovation"; then to explore a city's streets is to experience "nothing less than human progress" (Glaeser 2011: 1). Urban transportation networks are also sites of urban decline, of inequality and exclusion (Harvey 1992: 202). And, urban transportation is a central policy problem for challenges of energy use (Gilbert and Perl 2010); public health (Lachapelle and Frank 2009: S73-S94); and climate change (Hoornweg, Sugar, and Trejos Gomez 2011: 1-21). Mobility defines urban life. To the extent that cities can lead policy responses to these major global challenges, transportation also relates intimately to urban sustainability—or, more precisely, to urban unsustainability (Banister 2005: 11). Broadly, these multiple literatures on urban theory and practice are a reminder that the consequences of transportation decisions are city-defining and relate to global problems and challenges.

Yet urban transportation in practice also exemplifies how urban policy emerges in contradictory ways. Transportation is portrayed as being comprised of technocratic, objective service decisions, not complex policy questions that entail value propositions about different possible futures or distributions of shared resources. The metonym that "there is no liberal or conservative way to pave a street" (Lightbody 2006: 239), used to

explain the non-policy-focused nature of local governments, summarizes the problem. The prevailing approach to evaluating urban transportation, for instance, has been solely to measure velocity and delay for motorized vehicles (Litman 2011). To the extent that this is understood to be a value-neutral, technical evaluation, it obscures capacity for democratic debate and accountability and raises expectations that transportation problems have technically optimal solutions, rather than clearly articulated policy priorities. Lightbody's account of the development of local governments in Canada shows cities to be struggling generally to see themselves as policy-making, rather than technical bodies (2006: 107): they are focused on adjudicating small, parochial processes rather than articulating and evaluating different conceptions of what the world should be. In this light, the dominant paradigm of transportation-as-technical has entrenched a particular understanding of the purpose, objectives and role of cities in building transportation systems.

The picture is not quite so simple or singular. Urban movements relating to sustainability, new urbanism and others have mounted challenges to the dominant paradigms. Examples abound of policy prescriptions for alternative outcomes. There are broad themes that recur in most urban sustainability literature about the nature of changes that cities should make to their transportation systems. Newman and Jennings, for instance, put forward ways to undo automobile-centric patterns of urban development in favour of public and non-motorized modes, by building abundant mass transit (2008: 126-132). Popular literature, too, reflects a shift in values and expectations. Grescoe (2012) documents his own experience with global efforts to build transportation systems that are not automobile-oriented. And, in policy, cities are developing policies, standards and targets for multiple transportation modes and systems that do not favour the car. These are all plural literatures, with ample disagreements about what policies are desirable, but there is at least a surface consensus that transportation as it has been built needs to change. The prevailing transportation policy is being contested in these literatures, suggesting that a time of change is at hand.

But, as Mees points out, the scale of rebuilding that these alternative conceptions of transportation require has limited their impact: despite their dominance among professionals in cities, progress has been achieved at a "glacial rate" (2010: 6). There is,

to say the least, a gap between ideals and practice. How to bridge this gap has been a problem that has vexed writers in the sustainability literature. And so writers talk about "nudging" people in the spirit of "libertarian paternalism" toward alternative choices (Thaler and Sunstein 2008: 72). And it is occasionally argued that the challenges of sustainability are so great that time and effort cannot be expended on democratic processes or decisions.

And so we return to questions of government—and governance. The common thread on all sides of the argument is that the particular—and ideological—roots of policy decisions are not always made apparent. In the complex world of city governments, local governing regimes of elites (Stone 1989) work to limit the choices that are allowed into public discourse or democratic debate. Cities are technocratic because the actual choices they face are obscured. From Molotch's (1976: 309-332) classic formulation of the city as a growth machine to analyses of more contemporary forms of urban neoliberalism being embedded into urban life (Keil 2002: 578-601), urban writers have documented how the contestable space for urban decision-making is shrunk. There is, then, a need to understand local government decisions within this complex and contingent context.

Technocratic decision-making can promote a different kind of motivation for public policy: populism. Cunningham (2014) documents the rise of Rob Ford in Toronto as being explained by popular reaction to perceptions of elite-driven decision-making. Ford enjoyed considerable political support among some constituencies by promising to end a "war on the car". But this is, in the end, still a clarification of the issues with urban politics and policy-making; Mayor Ford certainly exemplified a particularly conservative way to pave a street, but his tenure marked the rebranding, not reform, of the overall system. Freeden (1998) conceptualizes ideologies of having, at root, a goal of making "essentially contestable" concepts incontestable. Rob Ford replaced one such system with another, for a time, but the discursive space in which urban transportation decisions are made remains generally limited.

Urban transportation decisions are made within complex political and ideological arenas. Understanding how public discourse reflects broader systems requires understanding the setting in which they take place. When the policy-making function of local governments, and the genuine debates about community values and vision, are often obscured under a technocratic paradigm, or when dominant ideologies make points of contention invisible or illegitimate, then there is a need to work harder to engage with the roots of how and why decisions are made. Cowell and Owens document one approach to this, as previously assumed decisions about roadway construction in the UK was displaced, in part, because of small institutions that permitted challenges to the status quo (2006: 405). As policies themselves become mobile, and cities collect policy ideas from each other (Temenos and McCann 2014), the importance of understanding the local scale increases. There is an opportunity, then, to account for transportation choices at a smaller level; to re-contest assumed beliefs and decisions about transportation; and to attempt to ascertain how decisions are understood, debated and evaluated within this framework.

2.2. Urban Movement and Urban Mobility

In most urban planning writing and practice, "mobility" is a one-dimensional concept: a quantity of physical movement. Todd Litman summarizes the prevailing definition and the conventional normative position of practitioners:

Mobility refers to the movement of people or goods. It assumes that 'travel' means person- or ton-miles, 'trip' means person- or freight-vehicle trip. It assumes that any increase in travel mileage or speed benefits society.

[...] Mobility is measured using travel surveys to quantify person-miles, ton-miles, and travel speeds, plus traffic data. (Litman 2011: 4-5)

Notably, this definition situates movement as having incidental, instrumental social value. Mobility is the movement of a person or thing to a physical destination; it is thus itself an *unnecessary* thing except to the extent that a particular outcome might be

achieved. Within this paradigm, there is debate about whether or not to value increased mobility. Many urban writers and practitioners react to the prevailing view that more movement is required to enable more access to activities and places. A characteristic critique argues that speed should not be a primary consideration for evaluating transportation projects because "placemaking itself is mobility—and often it is the most efficient kind" (Steuteville 2014). Others (See e.g. Condon 2010) have developed policy prescriptions that explicitly argue for less mobility, by advancing slower, shorter movement largely contained to more self-sufficient communities. "Mobility," as conventionally understood, is devalued in favour of "access", in favour of making more features of the city located in close proximity to more people. If a particular type of destination can be located within walking distance, then movement to a farther location can be eliminated.

Some writers have tried to defend the concept of mobility as a policy objective by reframing its instrumental purpose. Public transit consultant Jarrett Walker, for example, has advanced an understanding of "personal mobility" as the freedom to access all of the diverse parts of the city (2012: 18-21), reframing language that has been associated with movement by private vehicles and linking it to a particular conception of freedom. Thus, enabling more mobility is the primary focus of transportation systems; mobility is still not an end in itself, but it is means to free access to the city. Fast, frequent and accessible public transport networks have the liberating potential to enable this movement to happen more efficiently and sustainably. During a recent transportation referendum in Metro Vancouver, a cycling advocacy group used a definition of more mobility as liberating as its campaign focus: a video argued that "we have to build a transportation system that will keep people moving, move them faster and more efficiently, so that they can spend their time on more important things" (BikeHub 2015).

High mobility has been associated with great urban thinkers of the past who have proposed (or, in some cases, built) vast utopian plans for high speed travel, almost always by private vehicle. High mobility has also been associated with the less utopian but just as grand-scaled construction of freeways, strip malls and suburban communities. The prescriptions that thinkers like Le Corbusier had for cities have enjoyed long reach. His argument that "the health of the city is its capacity for speed"

(Fishman 1979: 191) continues to define a great deal of mainstream transportation planning, while also being contestable on sustainability or community grounds. Many debates about mobility take place in this paradigm.

But debates over how much mobility is desirable often miss the aspects of social life that are embedded within different types of movement. There is a need for a more fulsome understanding of mobile lives, of mobility that is situated within the social world.

2.3. A Mobilities Paradigm

Urry (2007) provides an introduction and an explication of the "mobilities turn" in the social sciences. This is a theoretical framework for accounting for and engaging with the political implications of different types and forms of mobility (or immobility). In a world in which people, goods, information and ideas move much more than ever before, social relationships are mobile, and mobility is social. In short: "movement, potential movement and blocked movement are all conceptualized as constitutive of economic, social and political relations" (Urry 2007: 43). And, this increasingly mobile world is grounded in complex systems and a "fundamentally heterogeneous" set of physical objects (Urry 2007: 50-51). Mobility is a social concept, but one shaped and reproduced by an array of infrastructure systems and their materiality.

Mobilities create expectations and systems for social life: the development of rail travel, of timetabled movement, lead to a standardized and disciplined notion of time. *Kairos* becomes *chronos*; the spontaneity of "now" becomes "a powerful system of governmentality that normatively locates trains, people and activities at specific places and moments" (Urry 2007: 98). The bicycle, by contrast, gave rise to "the construction of a mobile subjectivity" (Furness 2010: 17), of free and spontaneous personal movement. This has been fully realized with the widespread use of the automobile, "simultaneously immensely flexible *and* wholly coercive," bringing with it a normative conception of "seamless" mobility freedom through all aspects of everyday life (Urry 2007: 119). These subjective experiences are created in the physical world by interdependent mobility

systems: rails, roads, pathways, metal, fuel, by the uneven consumption and use of resources (Urry 2007: 51).

The capacity to be mobile comes with social status and opportunity: these benefits, as well as the impacts and harms they bring, accrue unevenly to the population (Sheller 2011: 292-293). This is not new: a car in the 1920s was "the symbol of modernity," and people rushed to purchase automobiles to demonstrate themselves as having high social status—or they "could at least compensate their deficient sense of status with the consciousness of progress, thereby underlining their claim to a position at the top" (Sachs 1992: 32). New mobility systems and technologies change the particular totems of status—news articles emphasize how "millennials" prefer mobile phones to cars (Eliot 2014)—but mobility remains a point of social cleavage.

Mobilities research includes a diverse range of work, from conceptual studies of mobile lives (Elliott and Urry 2010) to historical reviews of how particular systems of mobility, such as the automobile, and its related social systems, have come to find dominance (Dennis and Urry 2009) to the documentation of subjective reflections on embodied experiences of movement (Middleton 2010: 575-596). And it is applied to political economy: Cresswell's (2010: 17-31) proposal of the concept of "constellations of mobility" elucidates how mobilities intersect with power relationships. These constellations are derived from six "facets of mobility, each with a politics," and include "the starting point, speed, rhythm, routing, experience, and friction" (2010: 26). A combination of these facets gives rise to a particular historically- and spatially-situated "constellation" of power relationships relating to movement, impeded movement and stillness: "kinetic hierarchies in particular times and places" (Cresswell 2010: 29). A developing literature on mobility justice links these uneven mobilities to broader—and multiple—formulations of justice (Cook and Butz 2016: 402-403).

This approach offers the possibility of understanding and reconciling the social construction of mobilities with the complexities of local politics—and of understanding how different systems of mobility emerge, become dominant and are experienced. Krueger and Agyeman (2004: 410-417) posit that understanding local sustainability

requires looking beyond explicit sustainability policies and instead at "actually existing sustainabilities", at the socially and discursively constructed outcomes observable in the real world. Similarly, studying "constellations of mobility" that emerge within both explicit and implicit transportation policy contexts could offer a deeper understanding of how different systems of mobility emerge, become dominant and change. Jason Henderson's book *Street Fight* (2013) deconstructs the ideological underpinnings of battles over street space in San Francisco, demonstrating how mobilities are constructed socially and spatially. Henderson finds that San Francisco's mobility politics is shaped by three ideological understandings of mobility: progressive, neoliberal and conservative (2013: 18), and documents cases of how these understandings conflict and resolve themselves in city policies and projects.

2.4. Complete and Incomplete Streets

One of the main functions of (Canadian) local governments is to allocate physical space for different uses, including mobility. Amidst complex local governance and with place- and time-specific constellations of mobility, these decisions about allocation have deeper significance for understanding broader forces. Streets are recognized by many urban writers as important public places; they make up a large portion of public space in a city, and shape social interactions within it. Alan Jacobs' *Great Streets* (1995) is likely the dominant work on contemporary urban planning relating to streets, with its focus on design elements that encourage community use and interaction. Lynch's more general interpretation of "city images" that constitute urban space—paths, edges, districts, nodes and landmarks—also gives rise to questions about street use and design (1992: 479). These classic texts are reminders of how streets serve multiple functions in a city and define cities' identities and images more broadly.

The predominant configuration of streets, however, has been driven by a technocratic model. Planners and engineers consider "objects" and "uses", not persons expressing rights (Blomley 2007: 1697-1712). Most space on streets favours automobile movement over all these other functions (Prytherch 2015: 52). Standards and guidelines

serve to depoliticize this choice, rendering this imperative invisible and non-contestable. The archetypal example—so-called "level of service" calculations used to measure automobile delay—can be read as a way in which the "starkly unequal power relations characteristic of the production of contemporary automobility" are reified in concrete transportation and street projects (Culver 2015: 95). Some have responded with calls for new standards, particularly writers and practitioners who have developed measuring tools and indicators for "multimodal levels of service" (See e.g. Litman 2014: 10-11), but others have rejected the idea of standards entirely. Charles Marohn, a high-profile advocate for a paradigm shift in street design (and a professional engineer), thinks that professional engineers should not play a role in designing streets (2016). Other writers agree that the desirable outcomes of urban spaces do not lend themselves to quantitative analysis, and are particularly skeptical of the promise of contemporary movements to create "smart cities" in which data are shared and transportation infrastructure is connected to networks and optimized for performance: "simply grafting more technology on to today's imbalanced system will not accomplish this" (Cortright 2016).

Amidst this increased attention to sustainable transportation and the configuration of urban space, a burgeoning "complete streets" literature has emerged with particular examples and proposals for urban design. "Complete streets" writers, advocates and practitioners engage with a politics of mobility inasmuch as they challenge the dominant automobile-oriented paradigm of city street design and function. McCann (2013) offers an exemplar of this literature: she reviews a number of examples of practical solutions to accommodate multiple types of street users through design interventions, and discusses how such policies might be attained and what their benefits are. These are linked to broader social shifts: McCann acknowledges that "consistent progress will come only when...[governing bodies] start to examine and change the systems that keep producing incomplete streets" (2013: 165). In that regard, the series of slogans and campaigns that emerge: streets for all, "slow streets", "sticky streets" and others can be seen as articulating alternative constellations of mobility. Urban professionals too have started to lead public conversations about the politics of how space is allocated: former New York transportation commissioner Janette Sadik-Khan's Street Fight (2016) is perhaps the highest-profile recent example of this work, but many urban planners are becoming outspoken, particularly in social media, about how street design needs to change. There are many hashtags.

In addition to literature, renewed attention to street space is seen in a myriad of "tactical" urban interventions in many cities that bypass existing standards, processes and deliberations that transportation projects are otherwise subject to. Janette Sadik-Khan, for instance, is very fond of "pilot projects" that are not actually pilots. North American cities are seeing a myriad of "pop-up" parks, street closures, bike lanes, public art and other interventions in streets. Vancouver's Downtown business association paints alleyways under the program name "more awesome now" (Downtown Vancouver Business Improvement Association 2016). It is an open question whether such project can be considered "tactical" when they are usually sponsored and funded by governments and business groups, but nonetheless they do contribute to a certain kind of re-imagining of street space and mobility.

However, the "complete streets" literature and these movements sometimes obviate the social context of streets and mobility. The focus is on re-engineering and addressing conflicts between "uses" and "functions". Blomley observes a dominant "pedestrianism" that regulates the sidewalk to privilege unimpeded flow in a way that depoliticizes and de-contests itself (2011: 11), and many contemporary interventions in street space continue in that paradigm. Critical social sustainability and environmental justice writing also criticizes the "complete streets" movement for its presumptions of equity and choice. The movement proffers inclusion and safety for all users, but fails to engage with systems of exclusion and unsafety, and the impacts that street redesign projects have had on these systems (Zavestoski and Agyeman 2015: 4-5). The utopian ideal that everyone can access a street that has been designed for multiple modes runs against the realities that transportation is not a free choice made by equally mobile participants (Martens 2017: 31). Cities feature spatially segregated socioeconomic communities and multiple temporal and spatial constraints on people. Taking to the streets, in a state-sanctioned tactical way, can be a new site of social exclusion,

³ She describes her approach as a melding of Jane Jacobs and Robert Moses, though unpacking all of the nuances of such a claim is beyond the scope of this paper.

replacing the inequities of automobile dominance with a different kind of social hierarchy. There is evidence of race- and class-based exclusion from these practices: "newer urban interventions tend to serve wealthy communities, sometimes at the expense of poorer city-dwellers, particularly those of color" (Kolson Hurley 2016). Interventions in streets can be an appropriation of genuinely tactical practices—protests, graffiti, street vending, busking—that have historically been practiced by members of marginalized communities, and they can also gentrify those same communities.

Streets are being re-politicized in piecemeal ways, which can serve to challenge the dominant mobilities of the automobile that have reshaped cities. But movements toward "complete streets" may not adequately address how mobility and space are differentially allocated in an inequitable setting. There is a gap here—who are these streets being completed for?—buried under the assumptions and the preferences of dominant groups. "More awesome now", indeed, but for whom? Contrary to their intentions, completing streets can be seen in some cases as an act of perpetuating uneven mobilities that reflect historical power inequities (Sheller 2016).

2.5. Summary

Mobility is socially constructed and constitutive of social relationships: the capacity to move intersects with social and political inequities in the city. The allocation of street space can reproduce or ameliorate these inequities. Through the imperfect filter of local governmental institutions and their technocratic orientation, cities have reified the hegemony of the car and now, in a piecemeal way, are beginning to challenge it on sustainability or aesthetic grounds. But the social context in which movement is enabled or impeded for different members of the city is ground that needs to be explored. This project builds on this conceptual framework to interrogate how, in two particular cases, the allocation and configuration of space in local government planning projects conceives of, distributes and enables capabilities for mobility among its population.

Chapter 3. Methodology

This research project undertakes two in-depth case studies of communities in Vancouver to understand how mobility politics are constructed and engaged with on their main commercial streets. This is a qualitative, mixed-method approach, including interviews with key informants, document analysis, informal physical observations and the use of population, infrastructure and service data.

3.1. Case Study Approach

Case studies study complex social phenomena in an in-depth, interpretive way, with the risk that the conclusions drawn may not be generalizable or useful for making causal inferences. A common mitigation approach is to increase the number of cases studied (King, Keohane, and Verba 1994: 208-213), though this in turn can risk loss of depth and context-specific knowledge, as well as increasing the scope of a research study. For this project, time and resource limits make only a small number of cases feasible; the challenge, then, is to select those cases that best answer the research question and will be most likely to enable generalization to theory.

Flyvberg defends in-depth case study research and offers four approaches to selecting a small number of cases that "maximize the utility of information...on the basis of expectations about their information content" (2006: 230). This research project uses Flyvberg's approach of "critical cases" to identify instances in which the project's hypothesis is most likely to be true (2006: 229-232), and therefore affords maximum opportunity for falsification. The cases selected are places in which multiple conceptions

of mobility are likely to be at play: if evidence collected shows that there are not multiple conceptions of mobility present, then the theory likely lacks explanatory power. However, if evidence supports the hypothesis, then further research is suggested to explore its applicability elsewhere.

3.2. Case Selection

This project refers to publicly documented discourse over street-level interventions that have been pursued since the passage of the Vancouver's most recent Transportation Plan in 2012. The "allocation and configuration of space" further restricts the case selection frame to changes that are proposed to Vancouver's multi-modal arterial street network, on which multiple uses are also evident in buildings and spaces. These are the corridors in which different forms of mobility most come into conflict and contestation; this project is less interested in, for example, neighbourhood greenways, or murals or decorative lights, even though they also contribute to how understandings of mobility are shaped and expressed.

"Vancouver" is restricted to the core City of Vancouver, and focused on projects that are adjudicated and implemented at the level of the local government. As noted, transportation is complex and multi-jurisdictional, and some approaches to studying transport demand a broader geographical or governmental scale for study. However, this project is more interested in case studies of particular places within the core city because the historic and built-up nature of its movement corridors are likely to make conflicts more explicit. This is not to say that multi-modal transportation planning in suburban areas is straightforward or inconsequential, but detailed study of the denser, core built-up urban area is likely to have more widely-applicable observations to other places than the reverse.

This project broadly surveys roadway changes across the City of Vancouver since 2012; however, it further focuses the research question on two particular cases drawn from community plans that have been undertaken since then. The West End

neighbourhood immediately adjacent to downtown completed a community planning process in late 2013, with attention to a complex array of transportation networks on narrow streets with high-density mixed uses. The Grandview-Woodland neighbourhood continues to focus attention on a potential reconfiguration of a mixed-use street, Commercial Drive, outside of downtown.

These are critical cases for study because: they represent street-use changes that happen through public processes with documented comments and debate, and with many different interests at play; they have demonstrable conflicts between different forms and modes of travel; they are limited rights-of-way with constraints that likely make an accommodating configuration for all perspectives impossible to achieve; and they have enjoyed a high profile and extensive controversy and debate.

3.3. Research Methods

A case study offers the opportunity to combine multiple methods and data sources to develop a holistic understanding of a concept: "the peculiar strength of the case study is its ability to cover both a contemporary phenomenon and its context" (Yin 1981: 98). These cases are studied primarily by in-depth document review and interviews with key informants. Additional data is collected for context-setting and triangulation of findings through unobtrusive observation and secondary quantitative data.

3.3.1. Document Analysis

A large number of documents were collected and analyzed, including:

- Public planning documents for particular projects, the citywide transportation plan and relevant local area plans;
- Documentation of public engagement processes and feedback, including published city documents, media coverage and social media;

- Documentation of advocacy or reaction by community, business or transportation advocacy groups or other high-profile participants;
- To a lesser extent, local histories and narratives of the city and the neighbourhoods studied.

Documents were collected online and downloaded for storage and analysis in qualitative analysis software.

3.3.2. Semi-Structured Interviews

Nine in-depth interviews were conducted with people from a variety of standpoints. Prospective interviewees were contacted using public-facing contact information associated with various groups, using a sampling frame of:

- Members of groups who advocated for or against a particular street configuration change;
- Members of the local business association;
- Members of nearby neighbourhood groups;
- Members of notable social or cultural organizations or institutions;
- Multi-modal transportation advocates who took part in local processes; and
- Professional transportation planning staff from the city or regional bodies.

About half of people initially contacted responded to an interview request; additional contacts and suggestions were offered by some interview participants. Participants' contributions are not confined to a single case but used to explain both, as well as providing overall context. Participants were advised that their contributions would represent their individual views and not those of their employer or other affiliated organization; consent was only collected from individuals. Given the public profile of these projects and those who were involved in them, participants were offered the option of anonymity but advised that true confidentiality could not be guaranteed. All

participants gave written informed consent to participate in an interview and to go "on the record" by having their name published. A list of participants appears in Appendix B.

Interviews took place in public places in late 2015 and early 2016; each interview was approximately an hour in length. A semi-structured approach was used. Guiding questions, reproduced in Appendix A, were used to begin each conversation, but participants were invited to expand upon points of interest that arose during each interview or to suggest other topics for discussion. With the additional consent of participants, seven interviews were fully and one was partially⁴ recorded; all recordings were then transcribed and the original audio files deleted, in accordance with requirements approved by the Office of Research Ethics. Transcripts and notes were stored securely on the university's network and loaded into qualitative analysis software.

3.3.3. Observations and Additional Data Collection

Informal field observations were made of the streets studied in both cases throughout 2016; at minimum, these consisted of traveling the length of each street by different transportation modes with particular attention to the conflicts that were apparent between different types of movement. More targeted observation was used to document and corroborate findings revealed in documents and interviews.

Additional data, including population, network and infrastructure data, were accessed through public-facing online sources. These included:

- Census (and 2011 National Household Survey) data, including population counts and profiles of small geographies, including local planning area profiles made available by the City of Vancouver.
- Transportation network geospatial data, including information made available by local and regional government bodies, and particularly transit service and route data made available in the General Transit Feed Specification (GTFS) format by the regional transportation agency.

⁴ Battery life in winter turns out to be highly variable; a fully charged battery left in a device for a week is a risky choice.

 Transportation use and mode share data collected in surveys by the local government and regional transportation agency; and particular traffic and bicycle volume counts made available by the City of Vancouver, albeit through a somewhat labyrinthine process.

3.4. Analytical Approach

In-depth case studies lend themselves to research that takes an inductive and non-positivist orientation. In this project, some initial conceptualization suggested themes for analysis—in particular, the elements of a "constellation of mobility" suggested by Cresswell (Cresswell 2010: 17-31), which forms the basis of the discussion section in Chapter 7. Initially, the project was conceived to follow this framework *a priori* throughout the case studies as well: it informed the guiding questions used in interviews, and some documents were initially coded using this scheme. However, as the project developed, it became evident that themes would more productively arise *in vivo*, from the text and transcripts themselves.

This project thus takes a grounded, inductive approach to studying its research question. The final analytical goal was to provide a sufficient narrative, grounded in the contributions of multiple data sources, to allow the emergence of themes that help answer the project's overall research question.

Chapter 4.

Vancouver: Mobility Policy and Action

At a high level, the City of Vancouver appears an outlier North American city for its rates of use of non-automobile modes of transportation and systems and practices that achieve this: "reducing automobile dependence in all its forms is a policy stance and part of the political culture of the city" (Hall 2015: 127). There is abundant popular and academic literature that frames the city in this way: Vancouver's historical rejection of a downtown freeway system is venerated, as is its early adoption of high-density downtown residential development (Grescoe 2012: 54). Its mode share for active transportation is celebrated and marketed. Local government propagates this as a brand: Vancouver's sustainability policy is expressed in superlatives, as it aspires to be the "greenest" in the world. Explanations for this include a historically progressive politics and, notably, a wide degree of latitude and discretion for city staff to negotiate in detail how development takes place (Punter 2003).

One explication of this narrative of Vancouver comes from those who oppose what they perceive as anti-automobility policy and practice. In a *National Post* column in July, 2016, for example, city transportation staff are quoted making a standard space-and efficiency-based argument that a growing population and limited space require increasing walking, cycling and transit mode share. The columnist begrudgingly accepts this as a technical argument—"there's some truth to that, for sure"—but goes on: "But the city won't tell the whole truth, which is that it has an agenda: to pester and drive out people who use cars" (Hutchinson 2016). On this view, Vancouver is deliberately—and unacceptably—privileging mobilities other than the automobile.

But the actual picture of mobility in the city is much more complex than a progressive city government discouraging use of private cars. In San Francisco,

Henderson observes that, for all its achievements in promoting walking, cycling and transit, that city is also defined by the highest vehicle registration density in the United States (2015: 14). Directly comparable data between Vancouver and other Canadian cities are difficult to find, but among large census subdivisions in Canada, Vancouver similarly features a high density of all forms of transport. People who lived in Vancouver generated the highest estimated density of work commute trips for walking, cycling, transit, automobile driving, automobile passengers and other methods. Just over half of commute trips made by people living in the City of Vancouver are made in cars, one of the lowest *rates* in Canada, but this still adds up to a higher physical *density* of car commuters than any other Canadian city.

Vancouver is a paradox: it is an outlier toward sustainability, but also an outlier for accommodating large numbers of cars in relatively limited physical space. The fact of finite space—"there's some truth to that, for sure"—thus becomes readily apparent to many mobile subjects, magnifying conflict. When space is (re)-allocated to favour one use, it must come at the expense of another. All the different users that have a stake in street space are more likely to perceive their own needs as ignored, compromised or dismissed when change happens. This is not to claim that Vancouver's mobility politics are necessarily or straightforwardly more contentious or divisive than other cities, but merely that this density of movement may make the allocation of road space more evident as a political choice about the distribution of resources than elsewhere.

There are other important dimensions that result in a complex mobility politics in Vancouver. The city's transportation network is not self-contained, and mobility is not a simple function of trips and destinations within the city proper. The metropolitan area is uniquely—for Canadian cities—governmentally fractured, with the City of Vancouver being one of many relatively small municipalities in a large and polycentric region (Lightbody 2009: 9-10). Vancouver struggles to determine its role as the core of a complex region, amidst decisions made by other local governments, regional bodies and interventions from the provincial government. Despite urban intensification in the core,

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⁵ Based on estimates from Statistics Canada, 2011 National Household Survey.

the population living in the city proper is a declining share of the region—about three quarters of residents of the Metro Vancouver Census Metropolitan Area lived outside the City of Vancouver in 2016, with the region growing faster outside the core city than within. To the extent that Vancouver attracts people from the region and beyond for work and leisure, it must deal with urban mobility demands that extend beyond local residents and workers. Vancouver is seen by many scholars as an archetype for a post-modern, de-industrialized city (Wallace 1992: 174); it therefore becomes a destination for tourism, for a branded experience, for a particular lifestyle. The city articulates contemporary global city aspirations within this paradigm, including a deliberate role as an office and service hub, but it also maintains at least a portion of its industrial base, notably a large port. All of this adds up to a multitude of complex demands for high rates of mobility to support these economic goals.

Mobility in Vancouver also has ideological dimensions, expressed in complex ways through the city's political culture and institutions. Like San Francisco (Henderson 2013), Vancouver enjoys a reputation as a more progressive city than many of its peers, but it is also an exemplary neoliberal city. Many policies enacted by the city reflect persistent ambivalence between these outlooks—seeking to be redistributive, but without disrupting the accumulation of capital; seeking to be sustainable while also defining sustainability to include an emphasis on economic growth and competition. Local governments are rarely able to articulate a coherent ideological basis for public policy, but this is particularly visible in Vancouver's sustainability planning. Mike Soron's thesis on Vancouver's Greenest City Action Plan explores this tension; he finds that it is a "partial and optimistic response to the ecological crisis" that "fails to confront the most fundamental features of neoliberalization that prevent an effective response to the ecological crisis" (2012: 83). There is active and change-seeking rhetoric in the framing of the policy problem, but the actual substance of the policy that responds to it is careful not to change the system too much. Matt Hern goes further and suggests the system is the problem: the "tepid platitudes" of official policy must be supplanted by citizen-led action (2010: 120). Waiting for leadership from institutions will take too long.

⁶ Adapted from Statistics Canada, 2016 Census of Population.

For the particular local government of Vancouver, the allocation of street space is the most important physical manifestation of the city's priorities for movement. The politics of those streets can be ambiguous, resulting in contradictory outcomes.

4.1. A Network of Mixed-Use Streets

Vancouver's dominant transportation and development pattern is its fairly consistently spaced grid of main streets, illustrated in Figure 1 below. While there are some anomalies for specific streets in these data, the overall pattern quickly emerges.

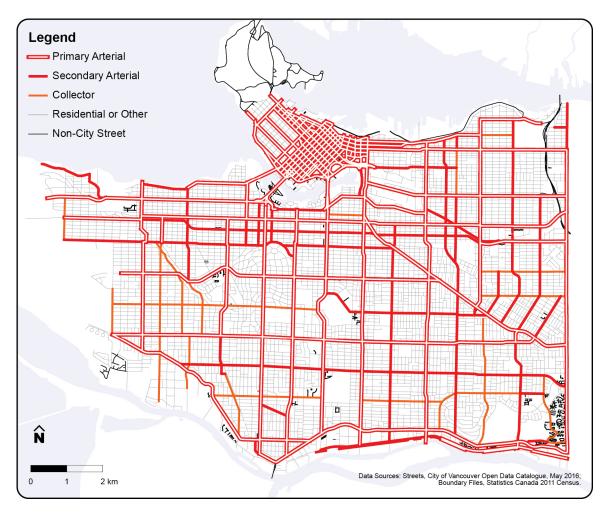


Figure 1 Map of City of Vancouver Street Classifications, May 2016

Primary and secondary arterials include Vancouver's shopping streets, which perform a large number of mobility roles. They are the city's major movement corridors for carrying private vehicles and goods. They are public transit corridors, carrying a grid of frequent bus and trolleybus lines. And the city chooses to concentrate growth on the land adjacent these streets: though Vancouver, somewhat notoriously, does not have a current formalized city-wide land-use plan, there is a consistent and deliberate choice in community plans and rezoning processes to concentrate higher densities of residential development and virtually all commercial and office development along arterial streets. Figure 2 below provides a general schematic of land use in the City of Vancouver. A number of linear commercial corridors are immediately evident.

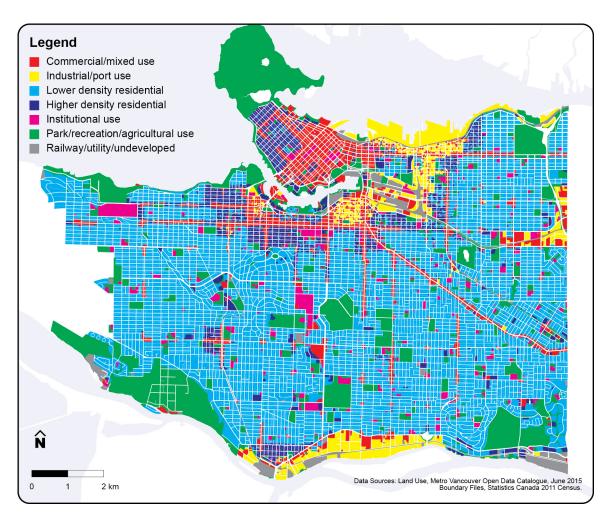


Figure 2 Map of General Land Use in the City of Vancouver, June 2015

Interestingly, there is rather little specific policy to reconcile the different mobility expectations present on these streets. The street classifications mapped in Figure 1 are not defined or prescribed in Vancouver's bylaws, except incidentally in relation to surrounding land uses. The most precise legal formulation appears in the city's *Subdivision Bylaw*, when it defines a "major street" as "a street which forms, or is designed to form, part of the arterial street system of the City with a significant portion of its vehicular traffic both originating and terminating outside the area being subdivided". The *Street and Traffic Bylaw*, for its part, governs and regulates the movement of particular street uses in some detail, but at a policy level it only references minor streets—"the roadway, but not the sidewalk or boulevard portion, of a street that does not have lane lines or directional dividing lines"—vis-à-vis permitting skateboarding and similar technologies upon them. Neither bylaw is prescriptive in terms of width, configuration or space for different uses, though it is notable that vehicular movement and multiple travel lanes are the main considerations in how streets are classified.

The only prescriptive classification of streets in Vancouver in law comes from other authorities: under the province's *South Coast British Columbia Transportation Authority Act*, the regional transportation authority (TransLink) is responsible for designating a network of major roadways across Metro Vancouver. Some of Vancouver's arterial streets are part of this network. The enabling legislation prescribes that, as part of a regional network, "a municipality must not, without the approval of the authority, take, authorize or permit any action that would reduce the capacity of all or any part of the major road network to move people"—that is, "in such a way that fewer persons would be able to travel on the major road network in a given time period than were able to travel on the major road network in a comparable time period before the taking of the action" (§21). The intention behind this section, then, is to preserve a certain amount of mobility considered essential to the region's interests above the demands of individual municipalities in a complex region.

So, Vancouver has a grid of mixed-use streets with competing uses and rather little direction for how to configure them, except for those designated to have a regional interest. But, if this gives the city government free reign to experiment with different ways to achieve mobility and sustainability policy goals—another example of Vancouver's

latitude and discretion in planning—it is not shown in the quite limited interventions that have been made so far. Indeed, most of Vancouver's main streets are configured the same way: sidewalks, multiple lanes for moving private vehicles relatively quickly, curbside parking permitted at most or all times, no dedicated cycling infrastructure and no active prioritization of transit vehicles. So, while there is not policy or intention, there is perhaps a well-established expectation of what a major street in Vancouver looks like.

Configurations of streets that deviate from these patterns are rare in the city. Figure 3 below shows streets on which space has been reserved to prioritize transit vehicles. Vancouver's transit network operates on most arterial streets in the city, but only a few corridors have lanes that prioritize this movement. And reserving a lane with markings is not necessarily the same as delivering it in practice; daily observations of the Pender Street lanes show low compliance by motorists and non-existent enforcement.8 Transit vehicles are prioritized mainly in rush hours and mainly on regional corridors. The mobility of public transit users is prioritized in the particular case of commuters travelling relatively long distances toward employment centres in the morning and away from them in the afternoon. Except for particular sections of downtown streets, bus lanes revert to automobile parking for most of the day. Reserved lanes end at all times where streets become narrower on Hastings and Broadway, suggesting that private vehicles must have access to at least two lanes at all times. This is consistent with other practices in the design of city streets: except for the Granville Street transit mall, from which private vehicles are nominally prohibited, nowhere in the City of Vancouver are bus stops located such that automobiles are unable to overtake transit vehicles; buses either stop in one of multiple travel lanes or (more commonly) pull in and out of a curbside lane otherwise used for parking.

7

Note that these are not exclusive transit lanes: bicycles and (since 2012) taxis are permitted to occupy these lanes as well, and portions of the lanes on Georgia and Hastings Street are so-called high-occupancy vehicle (HOV) lanes, in which private cars occupied by more than one (on Hastings) or two (on Georgia) passengers may also join in.

⁸ As this route is part of my (bicycle) commute to work each morning, I have also experimented with trying to enforce this lane through bell-ringing and gesturing at regulatory signs. This usually just results in being honked at.

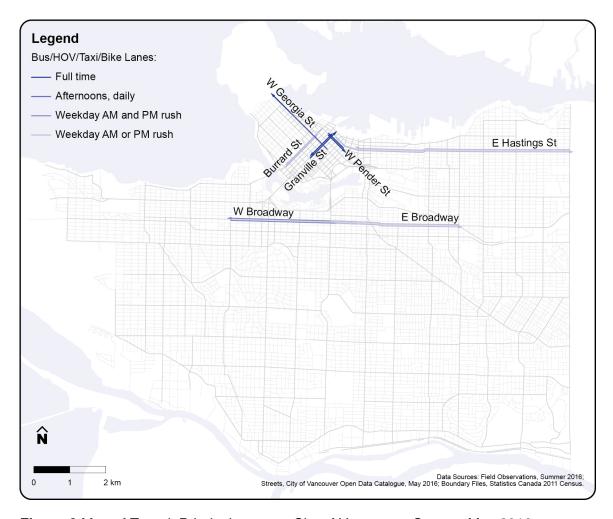


Figure 3 Map of Transit Priority Lanes on City of Vancouver Streets, May 2016

Vancouver has a large network of bicycle routes on local streets, but relatively little infrastructure on main streets. Figure 4 below shows that some major streets—typically those with wider rights-of-way and lower automobile traffic volumes—have painted bike lanes, but there are virtually no examples of physically separated lanes on arterials outside downtown. And, notably, only on Dunbar and Cambie Street does any type of bike lane exist on portions of a major commercial corridor. In both cases no space was taken away from other modes; Dunbar had wider-than-usual lanes that were narrowed, and Cambie was reconstructed with the building of rapid transit line under it (Anderson 2009). For all Vancouver's years of controversy over bike lanes on the Burrard Bridge, and for all the angst over proposed projects in the future, the prevailing model is that cycling is fit into streets where it can do so unobtrusively and without

removing any capacity for moving or storing private automobiles. Only in the downtown core is a reallocation of space pursued; Vancouver's mixed-use commercial streets have otherwise not yet seen mobility by cycling prioritized.

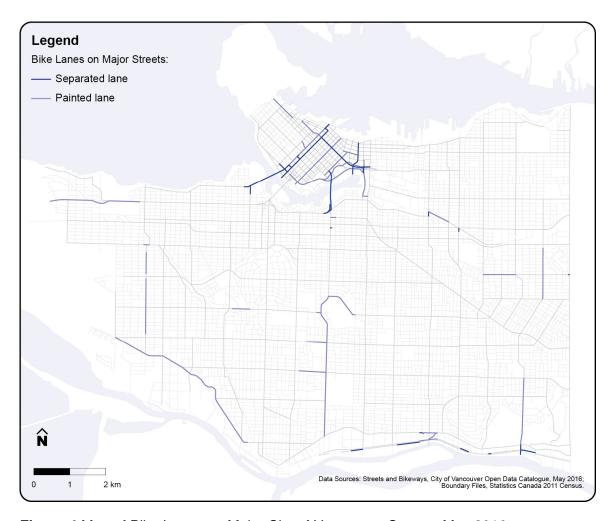


Figure 4 Map of Bike Lanes on Major City of Vancouver Streets, May 2016

Lisa Leblanc, who has worked as a transportation professional in Vancouver, observes that Vancouver has struggled to develop different configurations of arterial streets that accommodate the many different types of mobility that take place upon them:

I think it's a big challenge because there's not a lot of precedent. There's precedent for separated bike lanes on arterial streets in the downtown core, but when it comes to a destination high street like

Commercial Drive or Cornwall or whatever, I think it's very, very challenging. I think there's a lot of competing demands for street space, and a lot of really legitimate competing demands.

And, in particular, Leblanc observes that transportation planners are reluctant to displace what is assumed to be a steady volume of private vehicles. Staff must consider the impacts of displacing this mobility elsewhere. Michael Ohnemus, a transit planner, sees a tension between the intention of transportation professionals to accommodate different forms of mobility and political inertia toward maintaining the status quo—that is, the provision of maximum space for the movement and storage of private vehicles. On the one hand, there is evidence of change afoot:

A lot of the roads are already built out, so then it becomes more of a question of refitting them. How do you make that work without upsetting the status quo and people that are already on it? But I think there is an acknowledgement that there are more modes than just autos now.

But, on the other, there is a great deal of resistance to making change systematically or deliberately. This question of "refitting without upsetting" remains substantially unresolved. As Ohnemus puts it:

So there needs to be a political will to do those types of things, and when you're a politician you're often, you know, just want to listen to your voters. Obviously there's always that concern about getting reelected, so there's always a risk, or they're risk-averse. They kind of want to play it safe, or do things that make their constituents happy, rather than, you know, try something else out.

But the assumption embedded within the status quo—that private cars are inevitable, or fixed, or the default type of mobility that must be planned for—is not a "natural" state either. The status quo is a particular, chosen system that privileges some in accessing the benefits of mobility. It is a particular set of choices that have brought Vancouver streets to the configuration they find themselves in today, but those choices can easily become invisible. The prevailing systems achieve hegemony as their precepts are decontested and become the unavoidable baseline against which change must occur.

There is certainly an increasing discussion about "complete streets" in Vancouver, or least a great deal of advocacy for people's favoured modes of travel to be allocated more space on major streets. A question, then, is how and to what extent Vancouver's transportation policies make the existing *incompleteness* of its main streets visible, and contest the mobilities that are embedded within existing configurations.

4.2. Streets, Policy and Planning

4.2.1. Mode Share, Hierarchies, Ambition and Change

Vancouver's overall transportation strategy is focused on long-term targets for non-automobile modes of transportation. A shorter-term target, first proposed in 2009 as part of the development of the city's *Greenest City Action Plan*, calls for at least 50 per cent of all trips in the city to be made by walking, cycling or transit by 2020. A longer-term target, developed in the 2012 *Transportation 2040* plan, calls for two-thirds of trips to be made by walking, cycling or transit by 2040. There is ample room to debate definitions of what a "trip" is or whether the number of trips, rather than distance or another metric, is the best way to analyze transportation success. Nonetheless, even taking the targets at face value reveals competing objectives and ambivalence about how much change is possible, how much is expected and how much can be shaped.

These policies are certainly presented in grand terms: the original *Bright Green Future* report that led to the *Greenest City Action Plan* sets a stage for policy goals that are "bold" and "audacious" and supported by targets that are "ambitious but achievable"; "rigorous, robust"; and "proof that Vancouver means business" (City of Vancouver 2009: 11). The same document cites a baseline of about 37 per cent: 17 per cent each by cycling and walking, and three per cent of trips by bicycle (33). This is reasonably consistent with data that were available at the time, suggesting a fairly substantial shift in

mobility. ⁹ One key action item in the *Greenest City* plan was to develop an updated transportation plan to deliver this shift.

However, when fully operationalized in *Transportation 2040*, the target takes on a different context. This plan projects a growth in the total number of trips made in Vancouver such that the volume of private vehicle trips remains essentially the same through 2020 and 2040 (City of Vancouver 2012d: 11). In other words, there is a reduction in the share of trips made by cars, but not the absolute number of trips made by cars. The strategy implied by this formulation is that, while the city should accommodate growth through walking, cycling and transit rather than private vehicles, there is a less urgent need to shift or reduce existing vehicle trips.¹⁰

Setting policy targets is challenging for any government. Metrics can become forecasts rather than goals, and the projection can then become normative statements of how change *should* unfold. And they are inherently reductive; the outcomes of complex and dynamic systems are reduced to a single trend line. Materials used in the development of the Transportation Plan emphasize that past targets for transportation mode share have been met or exceeded much earlier than anticipated, and have included a material decline in private vehicle movement. A series of presentation slides reminds us that the utopian visions of 1976, that non-auto modes could capture 25 per cent of trips, someday, were actually met by the 1990s, and that the targets set in the 1990s for 2021 were already met in 2009 (City of Vancouver 2012e: 20-21). In that light, is the Transportation Plan's future of steady private vehicle traffic a target, or a forecast? Is it a deliberate policy choice, or a projection of an inevitable external force? Lisa Leblanc describes some of the complexity of devising the Transportation Plan targets:

I think it's being realistic about, based on historic numbers, learning from that and realizing that we're seeing a dramatic increase in

⁹ 41 per cent of people living in the City of Vancouver reported usually walking, cycling or taking transit to work in the 2006 Census, and about 40 per cent of all daily trips recorded in a regional trip diary survey in 2004 used these modes (BC Ministry of Transportation, TransLink 2004)

¹⁰ Note that the Greenest City Plan does include a target to reduce per-capita vehicle distance travelled. It is clear, though, that this target is secondary to mode share, and it also suffers from a high difficulty in collecting reliable data.

population and jobs in Vancouver without seeing a dramatic increase in motor vehicle trips. So when you look at city-wide, motor vehicles entering the city has dropped by five per cent. Motor vehicles entering the downtown core has dropped by 20 per cent since '97, which is a really good thing. But when you count up all of the trips and the proportion of trips that are expected to be made by motor vehicle versus other modes, there's only so much more of a drop that you can expect as population and jobs increase. So when you look at the targets that were set in the Transportation Plan, they were very ambitious targets based on historic experience, where less ambitious targets had been set and we exceeded the targets sooner than we anticipated, even achieving the modest targets. So there's a whole bunch of dynamic going on there.

The emphasis on growth and the impacts of increasing population and jobs suggests that those planning Vancouver's transportation network still see a certain amount of automobility—or at least mobility that is expected to reside within the automobile system—as essential to the city's economic prosperity. For all the change-seeking rhetoric in Vancouver's *Greenest City* plan, the city must not disrupt the existing order too much. There is indeed a dynamic system at work, and professional staff must navigate a complex social and political space in forming recommendations.

Is the result as ambitious as it is intended to be? Currently, the narrative from the city government is one of "mission accomplished". Based on the current method¹¹ it uses to measure progress on the target, Vancouver estimates that half of daily trips in the city are already made using non-automobile modes of travel (City of Vancouver 2016e). While this can certainly be seen as a policy success, it also has the effect of pivoting the mobility narrative away from an urgent call to shift modes of travel and toward a celebration of success. It makes it more difficult to challenge the construction of the target in the first place. The Mayor now tells the media that Vancouver has proportionally more cycling commuters than Portland, and urban blogs produce celebratory videos. The discursive space of mobility politics in Vancouver is narrowed.

Vancouver has achieved its sustainability targets relating to transportation; users of the city's transportation networks will be pleased to know that they are experiencing

¹¹ Specifically, extrapolations from a city-specific trip diary survey of adults in Vancouver.

what mobility is like in the greenest city in the world. But by repeatedly setting targets that are "ambitious but achievable" Vancouver has, deliberately or not, also set a target to preserve a fixed amount of automobility, and its street network is predominantly configured to meet the expectations that go along with this. Vancouver is challenged to identify areas in which its mobility systems are "incomplete" because it has consistently set targets that complete themselves. That is, the city has become accustomed to mobility outcomes being shaped by external factors—new infrastructure, cultural shifts, demographic change. This seems to limit the degree to which the mobilities privileged by spatial choices can be contested and shifted.

4.2.2. Constructing and Operating Space

One key element of Vancouver's current and previous transportation plans is a "hierarchy of modes": that the city prioritizes the movement of people by walking first, then by cycling, then by public transit and then by private vehicles. The current plan explicitly links this to an objective to reallocate road space to favour more efficient movement of people; that is, it recognizes that the movement of automobiles in limited space limits the total amount of mobility that a given space can deliver. But the hierarchy is a "general approach", and is not prescriptive about what this means in practice or operation. Indeed, there is not a general policy concerning the reallocation of road space or resolving mobility conflicts in limited space. Rather, "in urban environments there is not always enough space to provide the ideal facilities for all users' needs, and compromises must sometimes be made" (City of Vancouver 2012c: 13). But *how* those compromises are made is somewhat opaque.

Current practice is that changes to the configuration of space are opportunistic, rather than strategic. There are lines on maps, and individual battles over particular streets, not a policy to achieve a certain level of mobility for different modes of travel. There is a proposal to build a "complete street" on Commercial Drive, but no policy that streets of a given type or width should accommodate different modes in different ways. Jeff Leigh, who advocates for cycling and sustainable transportation in Vancouver, would like to see a somewhat different approach:

...we have a hierarchy of walking, and then cycling, and then transit, and we should have a goal of shifting a certain percentage of our streets, perhaps weighted by their utilization and utility, to recognizing that mode. And instead of saying 'does anyone need to ride a bike' we say 'we're going to convert x number of kilometres of roads to complete streets that recognize all those sort of modes—let's figure out which ones to do'. As opposed to 'do you have to have a bike lane on Point Grey?'. And I think that would be brave.

Vancouver's hesitation for a more deliberate policy likely arises because, as noted earlier, it is a city that delivers a lot of mobility in a relatively small space. And so there appear to be a number of prevailing perceptions that inform the rate of change in Vancouver's transportation networks, around the precariousness of spaces, of neighbourhoods and of transportation systems. There is apprehension about reducing private vehicle traffic, lest it be displaced elsewhere. There is apprehension about changing the character of neighbourhoods by altering the levels of mobility provided by different modes of travel on major streets. As Lisa Leblanc puts it:

So I think that's been the biggest hesitation, it's been that there's lots of things to consider and lots of tradeoffs to be made, and in a city that's completely built out, there's not necessarily a lot of alternatives to receiving that shift in motor vehicle volume. You don't want to mess something else up by providing a certain level of service.

And, indeed, Vancouver's challenges are greater than in some other cities, just because the city is fully built out. Michael Ohenmus, for example, uses the example of major street guidelines in the neighbouring City of Burnaby:

So I think there's an opportunity for that, and if you even look to Burnaby they've adopted what they call the Town Centre Standards for their streets, so within their town centres they have a whole system in place for sidewalk, separated bike lane, and then the road, including kind of rain gardens and bioswales and all these other features that they've now adapted.

But Burnaby's guidelines and street typologies for major streets require more space than is available in Vancouver. Kingsway, for example, is to consist of a large building setback, wide sidewalks, a garden area, separated bike lanes, a buffer, a lane used for bus stops and parking and two continuously moving lanes of motor vehicle traffic in each direction (City of Burnaby 2015: A1). To achieve that particular type of development on most high streets in Vancouver is not physically possible without acquiring land and demolishing buildings.¹²

Vancouver's Transportation Plan does have a number of actions which suggest interventions in the allocation and configuration of space. Walking should be "safe, convenient, comfortable, and delightful", with wider sidewalks; shorter and faster crossings of vehicle lanes; and an accessible and weatherproof walking network. Portions of streets will be turned into plazas and parklets. Cycling should be "safe, convenient, comfortable, and fun", with safe routes to important destinations and cycling routes added whenever road construction happens. Public transit should be "fast, frequent, reliable, fully accessible, and comfortable" with increased and more reliable service, including transit priority measures. And, consistent with the targets it has set, the Plan reminds us that "private automobiles will continue to play an important role in Vancouver for the foreseeable future" so roads and parking will be "optimized". Altogether there are some 14 pages of "directions" which are to inform mobility planning in the city (City of Vancouver 2012d).

The challenge is in implementation and prioritization. This list of actions is not as prescriptive as street designs from other cities, but a street that delivered on all of these promises would have many of the same features. It would also, potentially, be much larger than any existing street in Vancouver. Again, the Plan lacks clarity on how competing uses and claims to space should be evaluated—instead, these directions to intervene in streets are subject to a number of qualifiers. The Plan calls for shorter pedestrian crossings of streets, "while considering needs of other road users". It calls for opening crosswalks that are currently prohibited "wherever feasible and safe". It proposes to reallocate space for bicycling from motor vehicle movement or parking "where appropriate" (City of Vancouver 2012d: A1-14). But appropriateness, feasibility

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¹² Or following Burnaby's approach of wholesale redevelopment of areas, particularly those housing lower-income populations, to obtain more space through setback and building requirements.

and consideration obfuscate the political choices that are made about space. The Plan proposes implementation strategies for a number of its actions, but these have yet to be delivered. Trying to extract an overall strategy for urban mobility instead yields a long list of hopeful actions, some of which may contradict each other, and a sometimes ambiguous connection between them and the projects that actually get built.

And so we return to seeing mobility spaces being re-constructed piecemeal, project-by-project, yet unable to substantively change the mobility hierarchy of street space they inherit from previous projects. Michael Feaver, who has explored and advocated for reconfigurations of streets and networks in the city, hypothesizes a sly political advantage in not pursuing more deliberate and systematic change. Observing that all the work organizing and campaigning for a reconfiguration of Commercial Drive would be lessened if it were more deliberately policy-driven, he muses that there is an electoral advantage in avoiding a more strategic discussion:

Like, you don't do everything because you need to have people who really want you to keep going. I don't know if it's actually the way it is.

Jeff Leigh sees perhaps a more straightforward loss of political momentum:

I think that we had some political leadership that was quite forward-looking, if we go back a few years. I think the population has overtaken them, and I don't think that they're actually pushing, them, anything too brave at the moment. They're coming up with proposals that the public is saying 'that's not enough.'

It is questionable how sustainable this piecemeal approach to mobility and space is, ecologically, socially and politically. For all the celebration of achieving its mode share targets, Vancouver faces increasing mobility challenges. The city enjoys a steady stream of news stories describing its congestion as among the worst in North America (See e.g. Edmiston 2015).¹³ Although housing unaffordability has displaced congestion as the

¹³ This is not to validate the methodologies used to generate these comparative measures of congestion, as they are usually rooted in a simplistic comparison of peak and off-peak travel times for people in cars with a particular vendor's navigation equipment.

most critical issue facing the city, transportation remains a top issue of concern with a low level of satisfaction in the city's annual budget survey (City of Vancouver 2015c). Transit ridership, rather than accommodating growth, has been flat in the City of Vancouver for five years (TransLink 2016: 14). Voters in the City of Vancouver joined their suburban neighbours in rejecting a sales tax increase to pay for new transportation infrastructure and service (Elections BC 2015: 22). Growth in active modes of travel, particularly cycling, has been achieved through city infrastructure investment, but it is not necessarily displacing private vehicle trips. Meanwhile other actors in the region—the provincial government and other municipalities—are building new automobile infrastructure surrounding the core city.

Vancouver faces the same factors that Jason Henderson observes in the creation of a "mobility stalemate" in San Francisco (2013). As the sites of acute multi-modal conflicts and competing mobilities, Vancouver's mixed-use commercial streets are either the places in which the stalemate will be realized, or the places in which it can be resolved. But the latter course likely requires a more deliberate approach than has been taken to date, including a commitment to make visible the political choices about what forms of movement the city values. At the policy level, these choices remain opaque.

4.3. Change in Practice

What approach is taken to implement changes on Vancouver streets? Following the passage of *Transportation 2040*, Vancouver City Council has received a few reports on implementation progress, but there has not been a comprehensive update on the actions proposed in the plan. However, this is not to say that no action has been taken; there have been a number of initiatives that have changed the configuration and use of space on streets. But even as they change the city's transportation network, the systems and expectations of mobility that Vancouver's streets deliver on are not being altered.

Arno Shortinghuis, a longtime cycling advocate, is optimistic that multi-modal transportation planning is becoming more mainstream. He sees public support for non-

automobile mobility increasing and a broader political coalition embracing change. The initial construction of a separated bike lane on one side of the Burrard Bridge in 2009 was met with tremendous acrimony, in contrast to a more recent project:

And you compare that to this year, when Council suggested that they were going to put a northbound lane—upgrade the northbound lane, the curb line, to cycling—and make improvements to the Pacific-Burrard intersection, the first thing that happened was Gauthier, Charles Gauthier, the head of the Downtown Business Association, he said, 'god, so what?' The Sun made a—had a nice article: how can anyone be opposed to this kind of progressive thinking, you know. Just: this is great, you know, bring it on. And it's just such a contrast.

But, to take this particular example, the current Burrard Bridge project deliberately preserves the same amount of automobile capacity as currently exists, at considerable effort and expense. A portion of the bridge is being widened to accommodate additional turning lanes. A building has been demolished to increase the footprint of the intersection with Pacific Street (City of Vancouver 2015k: 6-7). Transit priority is not considered, with the project unable to replace a southbound bus stop that was displaced from Burrard and Pacific in 2009 when higher-quality bicycle infrastructure was added (2015k: 12). And, one of the drivers of the current upgrades is that pedestrians have been prohibited from one of the bridge's sidewalks, as bicycles displaced people on foot rather than in cars in 2009. There is a deference to the existing volume, type and nature of automobile movement on the bridge: drivers can expect to make the same turns, travel at the same speed and receive minimal additional delay compared to existing conditions. Other modes must make compromises with each other in the space available.

One of the highest profile projects to have been developed since the Transportation Plan is the proposal to remove the Georgia Viaducts, elevated roads that provide high volumes of automobile movement between the downtown area and the east side of the city. Jeff Leigh sees an opportunity to rethink the mobilities of the city in the replacement transportation networks that are created:

And about halfway through the consulting process, organizations began to focus less on taking [the viaducts] down—we did not have a

big case one way or the other—we wanted to focus more on what replaced it. And taking it down is sort of a binary question, and it got very heated, but what can replace it is an open ended question. And it's wonderful to use some imagination and say: how do we build in principles of complete streets? So we don't replace a high-level viaduct with a low-level viaduct which just happens to be a highway at ground level. You know, if that's all we were going to do, what would be the point?

The political rhetoric on both sides of the viaducts debate gives these roadways symbolic significance: it is "righting a historic wrong" in tearing down the remnants of an urban freeway; it is another salvo in the "war on the car". But, again, what is actually being delivered may vary. The very first "technical finding" promoted on the city's web page for the project tells us that "the new proposed [street] network can accommodate 100% of today's traffic volume. It is also designed to handle future traffic volumes more efficiently" (City of Vancouver n.d.). Whether or not this comprises a "low-level viaduct" in form and aesthetic, it does show that there is an unwillingness to challenge the mobility role of the viaducts for private vehicles.

Vancouver demonstrates how ambitious and comprehensive mobility policy can develop, but also how challenging it is to deliver it. Vancouver's most recent addition to its collection of all-encompassing sustainability strategies is its *Renewable City Strategy*, which proposes the city using only renewable energy by 2050. This strategy continues in the spirit of *Greenest City* as it attempts to reconcile continued economic growth and prosperity with resilience and sustainability. It rhetorically proposes substantially better ecological outcomes of urban life, but in a celebratory manner that does not compel behavioural change. *Renewable City* describes a vision for mobility as follows:

The transportation system that Vancouver is aiming for is not one where freedoms are given up at the expense of environmental benefit, but one where people make sustainable choices because they are the most rational, comfortable, convenient, safe, and enjoyable ways of getting around. (City of Vancouver 2015i: 41)

The freedoms of mobility—not enjoyed by everyone in the city—are difficult to reconcile with goals for sustainability and renewability. Is the City of Vancouver willing to

allocate the most important resource it controls and regulates—land—to enable change? The Strategy repeats many of the actions of the Transportation Plan¹⁴, and goes to spend a great deal of time considering different vehicle technologies, chasing popular notions of innovation. But, still, it does set a priority to "enhance and accelerate the development of complete streets and green infrastructure". An accompanying policy document expands on this action:

Reimagining what road space is used for has led to development of 'complete streets' that provide mobility and public space options for a wide variety of street users, changing how we move, alleviating congestion, and allowing Vancouverites to take important steps to improve their health. (City of Vancouver 2015j: 47)

This statement appears under the heading of "adapting to" change. There is passivity and a presumption of rationality and of equity as transportation choices are provided, not a more active, or justice-seeking, conception of mobility. The construction and configuration of space are a response to a perceived demand, not a deliberate choice about how mobility can be delivered to and allocated among residents.

At this high level, the case of Vancouver shows a city that is still struggling with contradictory impulses: rhetorically aggressive policy to achieve ecological sustainability, but concrete goals that are written to avoid engaging with social inequities in the allocation of resources; a desire for change but an unwillingness to upset the status quo; and a large collection of strategies but rather less action in the areas it has control over. The mobilities of Vancouver remain complex: this is a city that is far from car-dominated, but also one that struggles to challenge the hegemony of automobility.

The next chapters turn to two specific cases to explore these contradictions in more depth. Two neighbourhoods that undertook community planning processes illustrate these issues well and the multitude of voices and ideas that contribute to elucidating and resolving them.

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¹⁴ Interestingly, though on-street transit priority measures are not restated—the emphasis is pointedly on securing funds to build underground rapid transit along the Broadway corridor.

Chapter 5. The West End: Contested Ownership

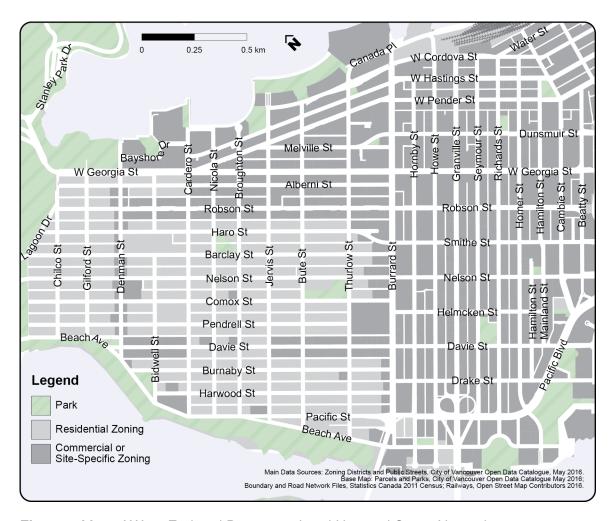


Figure 5 Map of West End and Downtown Land Use and Street Network

The West End Community Plan, completed in 2013, was the first comprehensive neighbourhood plan completed after Vancouver's current Transportation Plan. It is a critical case for understanding how competing demands associated with different forms of movement are considered and evaluated in the allocation and configuration of space,

and for relating local planning processes to higher-level policy targets and actions. It illustrates how different mobilities are constructed and evaluated in discourse, and how local government actors and institutions intervene to shape them.

The West End is the portion of Vancouver's downtown peninsula south of Georgia and west of Burrard Street. Its three main commercial corridors are Robson, Denman and Davie Streets. These streets are the sites of many competing mobilities: they attract shoppers and strollers both from inside the surrounding neighbourhood and from outside; they are lined with interesting places and destinations; they are the main connections between some of Vancouver's densest neighbourhoods and the rest of the city; and, especially on Denman Street, they are streets that many trips pass through on the way to somewhere else. These streets serve not only the residents of the West End but also large numbers of people who visit the neighbourhood for festivals and events.

With limited physical space—all three streets have a continuous 66-foot right-of-way¹⁵—the amount and form of movement that takes place upon them is also limited. The prevailing configuration of these streets is the same throughout their length: sidewalks on each side and two vehicle lanes in each direction, one used for parking and transit stops and the other used for through-movement. No particular accommodation for cycling is provided on the main streets, nor are there any priority measures for transit vehicles. People on bicycles sometimes ride on sidewalks, sometimes on the border between parked cars and the travel lane, and sometimes in the middle of the travel lane; and buses weave in and out of stops and otherwise share space with private automobiles and other vehicles.

This chapter sets out a planning and transportation context for the neighbourhood; documents the changes that have been proposed or taken place through planning projects; and explores the consequences of these projects in terms of the mobilities expressed on the streets today and in future.

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¹⁵ Note, however, that City policy is to expand the Robson Street right-of-way to 80 feet by increasing building setbacks as redevelopment occurs, with the extra space used for wider sidewalks. This is visible in Figure 5 as uneven parcel shapes.

5.1. Neighbourhood Context

The West End is the most densely populated neighbourhood¹⁶ in Vancouver, containing 45 thousand people—seven per cent of the city's population—on about two square kilometres, or less than two per cent of the city's land area.¹⁷ Most of these people are housed in an eclectic collection of older apartment buildings, which are stabilized through city land-use policies to avoid widespread redevelopment. The West End Community Plan notes a number of "core community values": a diverse population, shopping villages, green streets with abundant tree canopy, walkability, cultural spaces and the presence of a number of public facilities (City of Vancouver 2014: 17).

Non-automobile mode share in the West End far exceeds the city's sustainability targets. Proximity to downtown jobs and services means that many trips are short, encouraging high rates of walking. The relative concentration of people in limited space discourages the use of private vehicles. In city surveys, the area has the lowest rate of car ownership in the city, and nearly 80 per cent of daily trips estimated for people in the neighbourhood are made by walking, cycling or transit (City of Vancouver 2016e: 4-3). Nearly half of trips originating in the West End survey zone had a destination in the same zone, with another 20 per cent destined elsewhere in the downtown core (4-22).

These outcomes, though, arise from the area's demographic and physical characteristics as much as from any commitment to sustainable urban life. In received knowledge about Vancouver, the West End is home for large numbers of seniors; of members of LGBTQ communities; of new immigrants; and of single people in their 20s. Some of these impressions are true, though others are changing or need to be understood in a particular context. In the case of seniors, for example, the West End actually had proportionally fewer persons aged 65 and older than the City of Vancouver overall in the 2011 census, but significantly West End seniors tend to live alone—some

¹⁶ More precisely, the most densely populated local area defined by the City; other downtown neighbourhoods may be denser depending on how they are defined.

¹⁷ Statistics Canada, 2011 Census of Population, custom profiles for City of Vancouver, accessed through the City's Open Data Catalogue; and Geographic Attribute File.

15 per cent of all seniors living alone in Vancouver live in the West End. ¹⁸ If there is a unifying demographic fact about the West End, it is that it is home to different people who, for economic or social reasons, seek out reasonably affordable rental housing. Spencer Chandra Herbert, who represents the area in the provincial legislature, emphasizes that sustainable transportation choices in the West End are also economic choices:

Poorer people—many people pay high rents here, so can't afford a car, so it's not always just altruistic 'I just don't want a car'. It's often they just can't afford one, and even paying bus fare is enough of a struggle.

Returning to the theme of mobility as opportunity, Janet Gere, a senior living in the West End, explains how affordable public transit enables access to diverse places and activities across the region, enabling active and connected lives:

It's great to have a bus card that allows you to travel through the three zones just on the one price. You can go anywhere, anytime. It's great for seniors because some of them don't have anything else to do. [...Affordable transit] is fantastic, because just taking—going over to the North Shore is just such a joy, you know.

Gere observes, though, that her perspective is informed by being a relative newcomer to the neighbourhood: for others "this is all second nature to them" and they do not appreciate mobility in the same way. The beauty of exploring different places is supplanted by the ennui that comes with automobile-oriented thinking. Mainstream discourse can take widespread mobility for granted, forgetting that this network capital (Sheller 2011) is not always distributed evenly. In the West End, there is an important redistributive function in providing the possibility of mobility to people who live alone, who may be socially isolated or who may be economically disadvantaged.

Transportation in the West End, however, is not just determined by people who live in the neighbourhood. Robson, Denman and Davie Streets are not only corridors for accessing places outside the West End, but also destinations in themselves, and

¹⁸ Statistics Canada, 2011 Census of Population, custom profiles for City of Vancouver.

pathways to pass through between other places. Spencer Chandra Herbert highlights Denman Street, in particular, as a site of competing claims to ownership of space:

As you see it, every rush hour is jam-packed, so the enjoyment of the street...it doesn't become your street so much anymore, a neighbourhood street. It becomes a street people are passing through and you have to dodge cars as you're trying to get through intersections because they push their way out of intersections into crosswalks and so on.

Conflict between being a place and a passageway is neither novel nor confined to the West End. But the question of ownership—"it doesn't become your street anymore"—shows how it relates to allocating mobility in public space. Stephen Regan, who heads the local Business Improvement Association, describes how Denman Street business success depends on a special knowledge of the multiple "owners" of the street:

...there's not many streets that go end-to-end water-to-water. You've got a park on, literally on one end, and you've got Stanley Park. *The* park. And English Bay, the city's only western-facing sunset plaza. So that's pretty special. [...] So there's a lot of tourism visitation, regional tourism visitation, people coming from other parts of the city.

The West End's streets are seen as festival sites, as an aesthetic experience. This brings demands for place-making strategies and activities. But these can have a disproportionately negative impact on the most vulnerable members of the community by impeding more routine mobility. As Chandra Herbert observes:

So we have car-free day, for example, which is great, but it also then means it's bus-free day, because you can't run the bus down Denman Street. And that really does make it difficult for people with mobility challenges. They just go, 'well, I guess I'm stuck in my home today.' They can get out to the bus stop, but beyond that not much.

For these residents, every day is car-free day, and the event of the same name actually disrupts, rather than celebrates, their own ability to move around their neighbourhood and access the city.

The West End's streets are claimed by multiple owners. They exemplify complex conflicts between places and corridors, between different mobilities expressed in its main streets. These spaces are local-serving but also regional-serving; it is a distinct district but part of the downtown core; and it is not only a local neighbourhood but also a site of festivals and celebrations. Striking a balance between the demands for movement that all these claims engender is challenging. Particular choices about the particular movement about particular publics must be made: "even the best shaped compromise...favours one or other factional interest" (Harvey 1992: 591). The next section explores the particular mobilities that are at issue in the neighbourhood.

5.2. Mobility Networks

5.2.1. Walking

People walk different routes, at different times, for different purposes. Janet Gere describes the pleasure of walking in the summer, taking part in a culture of walking as part of everyday life. Notably, though, this type of walking takes place on local residential streets rather than the neighbourhood's main streets. Spencer Chandra Herbert agrees:

And then our side streets really are pretty quiet. People use them certainly to get places, sometimes searching for parking, but they're an enjoyment in themselves: big trees, homes, you say hello to your neighbours, you know, people walking dogs. It's a pedestrian culture.

As "an enjoyment in themselves", then, the local streets in the West End suggest mobilities that are quite distinct and different from the main streets. There is comfort, there is space and there is a sense of safety and belonging. Traffic calming measures¹⁹ discourage through-movement of vehicles. Bonnie Thiele, another senior in the West

¹⁹ This traffic calming has a complex history, with the city government recently acknowledging and memorializing the intention of traffic diversion to also displace sex workers in the West End. Ross (2010), Bishop (2013) and Kinzel (2014) document this aspect of the neighbourhood's history.

End, notes that she is more likely to encounter her neighbours away from the busier streets. West End residents actually avoid their main streets at times, while visitors will always seek them out. Chandra Herbert singles out Robson Street in particular:

So you talk to locals, they go, 'Well, I don't shop on Robson Street. That's for the tourists and for others.' And so it's got a different feeling to it. So if I look for example and I want to set up my table somewhere to talk to people. I'm more likely to meet neighbours on Davie or Denman than I ever would on Robson.

The local walking culture is also a set of local routines. Chandra Herbert observes that many people walk to work, but that shopping takes on an aspect of local performance. Walking is "part of your life"; it is "a way to see people". And, again, housing and demographic characteristics inform the frequency at which people walk on their local streets. Bonnie Thiele notes in particular that seniors may want to avoid crowds, and that people with mobility aids "just don't go" to crowded places; they're not "sightseeing" the way others might. Chandra Herbert observes economic factors as well:

We don't have extra freezers or a whole bunch of extra closets that you can put stuff if you do a massive shop. A lot more of it is: you buy, you shop a bit more frequently because you have less space. But you also have less ability to carry things so you aren't buying as many major bulk items unless you have access to a vehicle.

Together, these observations suggest that there is a version of pedestrian life that is routine, that is purposeful and that is locally oriented. But as it has throughout its urban history, the West End occupies a dual position as both a residential neighbourhood and an extension of the downtown core. So what of the "tourists and the others" on Robson Street? If locals avoid the area, what motivates the crowds of visitors? Janet Gere observes walking as a distinct tourist activity:

But I think people and visitors like to walk, and they'll walk down Davie Street of course because they want to see what Davie Street's all about, and then they get down and walk up the seawall.

Stephen Regan notes how different types of businesses must work to attract different types of clientele, with implications for mobility. Grocery stores and pharmacies may have a steady, local clientele, but other businesses such as restaurants are different, relying on tourism from the region and beyond. For Regan, this adds up to an effort to promote an urban authenticity:

We're trying to kind of position and brand the West End as one of those neighbourhoods that's, you know, quintessential Vancouver, and Robson Street's got a good reputation.

There are multiple claims to an authentic "West End" experience: a local pedestrian culture that is oriented toward enjoyable, but utilitarian walking; and creating a spectacle that draws people to the street to encourage commerce. There are differential thoughts on each version's staying power and what types of interventions might be needed to sustain them. On the second, Jeff Leigh suggests that the urban spectacle that is Robson Street is encountering new forms of competition:

And I think about what recently got built out at the airport, in terms of a pedestrian mall. MacArthurGlen: I think that's what will happen if we don't build streets that attract pedestrians and people who want a pedestrian shopping experience downtown—they'll end up going to the suburbs for it. When I toured through MacArthurGlen it struck me that this is competition for Robson, this isn't competition for Oakridge [shopping mall]. This is competition for the high street.

It is a stretch of the imagination, perhaps, that a large outlet mall development is comparable to an urban street, but Leigh emphasizes that it is because of the pedestrian experience that is available:

It's not an authentic architectural experience, if you put it that way. It's a little contrived. It's a little Disneyesque. But it's nicer to walk through than Robson Street is. And I'm not sure that Robson Street has stunning architecture either.

For Spencer Chandra Herbert, though, the physical interventions needed on the West End's main streets are more modest and piecemeal, and focused on making local shopping and a local culture possible:

That's about the neighbourhood coffee shop, about the local grocery store. You know, buying local, that values and celebrates the health benefits of being active. That five-minute walk it takes you to get to your grocery store actually is a huge health benefit. And so one thing that we've focused on in the last seven years here is, while I'm provincial, often I've worked municipally to try and get, whether it's a crosswalk put in or a stop sign.

There is little disagreement on any specific point or piece of infrastructure, or on what makes walking *per se* more enjoyable or attractive or safe. But there are different paradigms of walking in the West End, embodying different mobilities. Walkability becomes a selling point, and an experience to cultivate for visitors, even as residents are more concerned with safe crossings and opportunities to meet their neighbours.

5.2.2. Cycling

There are multiple cycling mobility paradigms in the West End: an abundance of recreational cycling associated with the seawall, more utilitarian cycling throughout the neighbourhood, and cycling to shops and services. There are conflicts between cycling and other modes of travel, and ongoing questions about the importance of incorporating cycling into the configuration of the neighbourhood's main streets.

One impression shared by Spencer Chandra Herbert is that cycling rates are actually lower in the West End than other parts of the city. Local shopping and services are accessed by walking, and people turn to transit or private vehicles to travel farther distances. But, when it is available, the experience of free, spontaneous mobility offered by cycling is difficult to compete with:

Take my bike, there's freedom to it. It can be sweaty, because often you have to go up the hills from where I am down here on Denman. But it's fast. The side streets anyways are quiet. It's dangerous on Denman Street [...] So it's a mix of pleasure and just annoyance sometimes. But I love the speed, compared to walking to get through the neighbourhood and to City Hall or other things. Much faster.

Stephen Regan expresses similar feelings about cycling, though observes that these same feelings of freedom and speed can lead to conflict:

I think cyclists—and generally I'm a cyclist too—you're kind of feeling a bit freer, you know, unencumbered. There's not the licensing, there's not the same kind of stick and regulatory framework that covers cycling, so maybe the frame of reference for most people when they get on a bike is a little bit more flexible. I think some cyclists take advantage of that flexibility and low enforcement and they just travel where they want, and that can mix with pedestrians. It's a little bit intimidating for some.

While Regan thinks the actual rate of conflicts is low, this perception is observed by others as well. Janet Gere recounts an experience of conflict with a bicycle:

I was walking through that park in the evening and my brain was somewhere else and I moved and there was a bicycle coming down, and he had to change quickly and he said something, and I usually wouldn't say anything, but I said, 'You could have rang your bell.' Because I was in another world and I forgot about the cyclists coming down this way. So bicycles are something...especially when it's dark, and it wasn't even dark, it was just starting to be dark.

Bicycles encroaching on pedestrians, particularly on sidewalks, is a recurring impression. Chandra Herbert ascribes it to the lack of dedicated space for cycling on the West End's major streets, a cascade of modal conflict:

You know, you've got buses that pull in and out. You've got cars that don't know how to drive with cyclists, people who bike. Sometimes pedestrian conflicts: some cyclists will ride on the sidewalks to avoid the streets because they don't feel comfortable on them, so there can be conflicts there. Some constituents report conflicts with—now, this isn't cyclist related, but scooters—motor scooters for seniors primarily have conflicts on sidewalks. Also, sometimes vehicles, they're just not comfortable being near a bike. I've had people honk at me when I've been doing completely the right thing. Or I've dodged a number of doors being thrown open by vehicles and one time wasn't so lucky.

The map in Figure C.1 in Appendix C shows the existing cycling network in downtown and the West End. As shown, none of the West End's main streets have cycling infrastructure of any kind, and that there is generally a lack of continuous routes

travelling into the downtown core. Arno Shortinghuis summarizes the downtown bike network as follows:

I mean, you've only got two streets—well, three now, maybe—decent cycling streets. Call it two and a half. Well, one and a half. I'm talking about Comox, which isn't finished; Dunsmuir, which only goes part way; and basically the only one is Hornby, I guess, which goes from north to south. And the seawall is pretty good, as far as it goes. Again, it stops at Canada Place, so there's gaps.

HUB Cycling, an advocacy group, has listed Robson Street in particular as desirable for cycling. Jeff Leigh explains:

As we move into the busier streets, people say 'you have a perfectly good cycling route one block off Broadway, why do you need anything on Broadway?' Well, Broadway's where the stores are. [...] I think the same thing exists on Robson.

But, with a limited right of way, building this sort of infrastructure impacts other types of movement. And it again intersects with demographics and social inequities. Bonnie Thiele observes that few seniors in the West End are regular cyclists. And Janet Gere, while understanding the desire for bicycle infrastructure on main streets, is skeptical of the possibility of finding room for it:

And there's a bike store at the bottom of Davie Street for them to rent a bike. But there is no place for them to get on the road. And the same with Georgia, that other one. But I know that people are very angry about the people driving their bikes on the sidewalks. I don't know. I don't know what can be done. How much room have you got? [...] What are you going to take away? Parking? Or are you going to take away buses, and just leave everything to the bikes?

She describes her own answer to these questions as a more "European" model of shared space, in which private vehicles and parking are moved elsewhere and the main streets become walking, cycling and transit-only, without hard divisions between sidewalk and road. But this sort of intervention is a harder sell for others in the neighbourhood. While appreciating the relative ubiquity of bike racks, Stephen Regan sees little interest among businesses for allocating space to bike infrastructure:

But, yeah, certainly on the sidewalks there's congestion, and I think generally businesses aren't looking anytime soon for streams of bikes to be mixing with cars on commercial streets. As people are pulling in, backing into spots, opening their doors—I mean, it's just a really tough environment for that. And then you'd have to build hard infrastructure and dedicated lanes and make it really obvious, and it's kind of: where are the priorities for the streets?

Regan would rather see road space reallocated in other ways, such as experimenting with expanding portions of sidewalks to build patios. And he goes on to point out that bicycling is much more enjoyable on the edge of the neighbourhood than on its main streets:

Especially when there's a seawall. If somebody really wants to get into the West End or get around or—unless they're a commuting exercise, the seawall's generally a lot more pleasant to be, you know, moving around the West End.

There is a general agreement on the issues and conflicts that people on bicycles may encounter, but less accord on how much and where space should be allocated to address them. Ideals for bicycle movement are constructed in different ways: everyday transportation or enjoyable recreation; side streets or main streets; prioritized over other types of movement or not. For those who can access it, the liberating potential of the bicycle is free, fast and active movement; enabling this safely on main streets requires space currently used for other types of mobility.

5.2.3. Transit

The West End's commercial streets emerged into their current character because of the presence of public transit lines: the streetcars on Robson, Denman and Davie gave shape to the neighbourhood's shopping and services. These streets continue to be served by frequent electric trolleybuses, carrying people along the main streets, to the central business district and connecting to broader transit networks beyond. Issues relating to transit also illustrate competing mobilities, between access and speed; between movement and place; and between collective and individual travel. Public

transit enables mobility for many in the neighbourhood, but is disrupted by other claims to space.

Spencer Chandra Herbert observes that the West End's desirability, sustainability and transit history are all interconnected:

I'd just say that the history of transportation in the West End is pretty telling that it was the streetcar communities, which are the densest in Vancouver, also tend to have the best transit and be the most walkable, because that's how they were designed. And it's the newer communities that are the most inefficient because they were designed around individual combustion engines. That's why they wanted to put a highway into the West End in the 60s, 70s, was because: cars. Thank god we stopped that—got a highway that's much more efficient, called the SkyTrain. At least when it doesn't break down.

However, the SkyTrain does not extend into the West End proper. Both Chandra Herbert and Stephen Regan observe it as an "oddity" or perhaps a missed opportunity. Regan observes other downtown neighbourhoods with closer stops:

I would say it's unfortunate but understandable that the West End isn't more directly connected to a high-capacity line, Canada Line, Millennium Line, some sort of high-capacity stop. It's a bit too bad. You could—you can see the benefits for neighbourhoods like Gastown and Yaletown that have that more direct connectivity.

Short of a massive underwater tunnel through English Bay or a circuitous route to the North Shore, though, the West End is not "on the way" to other destinations and therefore will likely never be a regional priority for a rapid transit line. The result is that surface lines must provide the West End's public transit mobility. The neighbourhood's shopping streets are also its main transit arterials, and there is a difficult balancing act between local service and speed. Michael Ohnemus explains some of the tradeoffs:

For me, personally, they are a little bit slow, and there are a lot of stops. But I think considering the urban environment it's to be expected, because there is just a lot of pedestrian activity, a lot of traffic signals. Because it is still in the downtown core, so you can't expect it to be an express bus, and it doesn't behave like that. It really is a local, neighbourhood-serving kind of service.

The relative importance of service speed varies among different people in the neighbourhood. Janet Gere is less concerned about the speed of movement than about safety and comfort on board. She knows people who have been injured or knocked off balance, so appreciates when drivers and passengers are patient and courteous:

If you're in a good mood, and you don't have to be any place in a hurry, you have lots of stories to tell about what happens on the bus. But I'm fine with the bus, and they're very—the bus drivers, you know, they'll say 'a senior coming on with a cane. Make room for her.' Even on the community buses, they do that, so-I don't like to be all that, but what the hell? You get a seat.

Public transit is a shared mobile space, the only one accessible to some whose physical or economic abilities limit use of other modes. But for some, the slow speed of transit service is a negative feature. Chandra Herbert comments:

Well, if you're taking transit, it feels a bit slower. You have to wait more, at least for me, which is frustrating. People are friendly. It's often crowded depending on what bus you're on, and in some cases it's just really clearly much slower than it would take to walk somewhere, at least for me.

Determining what the "right" speed in terms of stops and operations for these services is an ongoing compromise, but in addition there is the question of how the street is configured to move transit service through it. Ohnemus goes on to talk about the configuration of the streets the Robson and Davie lines use:

...they are the slowest routes in the network. And that's just expected given just the geography and considering that there are no bus lanes, no priority signals anywhere on the route that I'm aware of.

Indeed, these services are scheduled to run at less than 10 kilometres per hour most of the day, with Robson Street service going as low as seven kilometres per hour during weekday afternoons.²⁰ Unscheduled delay, usually friction from private vehicles,

²⁰ Based on analysis of TransLink open schedule data dated April 2016.

makes the service even slower. While the service runs frequently and is well used, this can make the West End feel isolated from downtown, from employment and from other parts of the transit network. And this is exacerbated by the city's decision to close a block of Robson Street to transit: many participants commented that this makes travel slower and less convenient. Spencer Chandra Herbert, for example, notes:

Robson Street could and probably will have a problem soon when they shut down Robson Street at the Art Gallery permanently, that caused real havoc for bus riders who were used to getting to the library, or were used to getting to various places in the central Downtown by bus, but then the city changed that and all of a sudden they were being taken ten minutes out of their way and just very inconvenient for a lot of people. For seniors and people with mobility issues primarily.

The West End's particular setting—adjacent to downtown, next to water and a large park, with a high density of businesses, activities, festivals and events—makes mobility to, from and through the area more complex. The closure of the art gallery block is seen by many people outside the neighbourhood as important for citywide placemaking, and some would seek to extend it to cover streets within the West End as well. But the challenge is to identify and prioritize the types of mobility that must take place. Arno Shortinghuis hopes for a full pedestrianization of the length of Robson Street, and Davie Street as well. When asked about the impact on public transit service, he suggests that maybe smaller alternatives should be considered:

I wonder if you could have some kind of pedicab service for people that need it. Yeah, what would that connect to? Davie to—yeah, it could connect to Burrard, say, because Burrard...you just have a pedicab service going from a bus right down Burrard, people get off, take the pedicab service there, and away you go. And why not? Same with Robson.

In fall 2015, transit lines on Robson and Davie Streets were estimated to carry more than 23 thousand people on an average weekday, and nearly as many on weekends (TransLink 2016), requiring a very large fleet of pedicabs indeed. No doubt some people could walk or bike themselves instead, and many would drive private vehicles onto the remaining streets, but the most important outcome would be that more vulnerable residents, in particular, would no longer be mobile. The ability to

spontaneously travel on a frequent bus would likely be replaced with the need to hail or book a trip, and a pedicab that accommodated wheelchairs and scooters would be an interesting construction. Without dwelling on pedicabs *per se*, this would replace the accessible and shared character of public transit with a targeted service.

Again, there are questions of ownership of public space and of the distribution of mobile "network capital". Those who experience the West End's streets from outside see it as a celebration space; they may visit for a festival, or shop or mosey to the beach. But for those who live there, the streets need to retain some capacity for relatively efficient movement. Providing transit mobility in narrow commercial streets can conflict with aesthetic and place-making goals for those streets. But these conflicts can also illustrate an invisibility and a certain amount of inequity: even with slow speeds and frequent stops, Robson and Davie Streets move nearly as many people by bus as by car²¹, but more attention is given to the number of vehicles travelling through. Transit is an essential part of the mobile lives of some people in the neighbourhood, particularly those in some more vulnerable demographic groups, but dismissed entirely by others.

5.2.4. Driving

When asked to identify mobility conflicts in the West End, participants most frequently cited issues with private automobiles—too many, too fast. Though automobile travel makes up a small share of the trips made by people in the neighbourhood, the movement and storage of private vehicles garners a great deal of attention on the West End's streets. There are multiple mobilities of the automobile at play in the West End: there is routine and high-volume movement through the neighbourhood, there is the movement of people who live in the neighbourhood and, again, there is the question of being a destination area for people from outside. The configuration of streets for cars expresses tension between how these different forms of movement are enabled.

²¹ Based on a coarse analysis of City of Vancouver traffic counts and TransLink ridership figures.

For Stephen Regan, an important perspective is that the West End is a destination for people outside the neighbourhood, and that most of the people who visit the neighbourhood are likely to drive their own vehicles to get there:

The number one way people still access, when they're outside of the West End and they access the West End—to visit family, friends, going to culture—was by car. By far it was the number one. And that survey, plus or minus the margin of error—we did use a reputable survey firm; it was an omnibus survey, so we kind of tagged on some to other work they were doing—four-fifths of the population, four-fifths of the respondents said they travel to the West End, they were in the West End, at least once a year. Usually more than once a month, but at least once a year. Sometimes weekly, daily, or they lived in the West End—it was a sample of Metro Vancouver. So if you look at the Metro Vancouver population, [...] four fifths of 2.3 million people are touching the West End at least once a year, often more. Maybe Celebration of Light, maybe they're going to St. Paul's, maybe they're doing other. So that's a pretty big movement. The majority of those, we understand from that survey, are still using a car.

It is less likely that four-fifths of total business transactions or sales volumes in the West End involve people travelling from outside the neighbourhood by automobile, but nonetheless one key mobility question might be the distance that people travel to get there. For Regan, it is important to counter the perception that the West End is hard to get to, and therefore accommodate automobiles with a certain amount of convenience:

...the perception that the West End, and downtown and the West End, are congested. And parking is extremely hard to find, and if you find it it's reasonably expensive, or relatively expensive. So knowing that most people prefer to travel down, or have travelled down here by car, and then that's the dominant perception of the experience, that getting to the West End, whether it's going over the Lions Gate Bridge, or down [Highway] One, or however you get here from wherever you're coming from.

This argument, then, is that if the vitality of the neighbourhood depends upon moving people from across the region, mainly by automobile, then perceptions of congestion or difficulty finding parking discourage visiting and commerce. Janet Gere can empathize with this point of view. Although she does not personally drive, she experiences the effects of driving and parking being challenging:

My daughter came to visit me last night. She parked on Cardero and just kept feeding the meter and feeding the meter. I handed her all my change, and all her change, for three hours of parking. We drove around the block about five times looking for free spots. There's not a lot of free spots in the West End for anybody to park.

Data presented by the City posits that searching for parking adds an extra five minutes to residents' driving, and an extra ten minutes for visitors (City of Vancouver 2016f). The City's goal is to develop a parking strategy intended "to make it easier to find parking...without encouraging more driving overall," proposing initiatives to increase parking supply and decrease demand through pricing and regulation (City of Vancouver 2016f). From a business point of view, Stephen Regan feels that it is reasonable for customers to expect to find parking within a block or two—"sightline to the business"—and is particularly interested in maintaining parking spaces on shopping streets and potentially reallocating residential spaces in adjacent laneways.

But less clear is whether these parking problems are solvable at a large scale. As noted in earlier sections, the main streets in the West End were not originally designed for automobiles *per se*, placing limits on the amount of automobility that physically fits in these spaces. Although participants generally agreed that the streets are already configured to favour cars, a single moving traffic lane does limit vehicle throughput, and a given block on a shopping street is unlikely to have as many parallel parking spaces as it does storefronts. So it is difficult to fathom a scenario in which movement of people in automobiles or the quest for easier parking can be made much more efficient on these streets. The West End does not have enough space for people to expect to be able to drive and find parking, unless nobody else does.

In addition to the mobilities of automobile travel to and from the West End, there is a great deal of movement that passes through it, particularly on Denman Street. Stephen Regan refers to it as a "scenic route" for people travelling between bridges. Participants generally found that this traffic has a negative impact on the neighbourhood. Janet Gere perceives Denman to be a more "crunchy" street than Robson or Davie. Spencer Chandra Herbert, as noted earlier, observes traffic as undoing the local, neighbourly feel of the street: "it becomes a whole bunch of people honking horns trying

to get somewhere." Whether it is a rainy rush hour, or there is a delay on one of the bridges, or simply because it is Friday, this scenario plays out quite frequently. Most participants feel that the West End's shopping streets ought not to be pathways for vehicles passing through on the way to other places. Stephen Regan looks for intentionality in the street's design (emphasis added):

I think generally the commercial streets are busy without being congested. The exception being that bridge traffic that just...there's no way that street was designed to handle that kind of role. So you end up with rush-hour traffic; you end up backed up; and if anything happens on the bridge and that turn lane, it's just—it's gridlock. Which is a bit unfortunate to have a street like that gridlocked. Maybe it adds to the vibrancy, the energy from some perspectives, but I think generally it's a bit of a turn-off.

Indeed, and interestingly, Vancouver's historic master plans did not intend Denman Street to serve such a role; the Bartholomew Plan of 1948 instead recommended that Chilco and Bidwell Streets be four-lane major streets to "serve as a by-pass, avoiding the business area" (Harland Bartholemew and Associates 1947: 43-44). This was never carried out as such; instead, traffic calming measures on residential streets like Chilco and Bidwell have further concentrated vehicle movement on shopping streets. There is no by-pass. Ideally, some participants would like West End streets, particularly Denman, to lose their status as major vehicle corridors. Spencer Chandra Herbert expands on this:

And maybe it's a study of traffic patterns, of why people use Denman Street—because it's just not Denman, but if Denman's backed up quite often that's also Pacific is backed up, Beach Avenue backed up, and so on. And the Burrard Bridge is a big part of it, because in the mornings it's backed up to get onto that bridge and go toward UBC. In the evenings it's backed up in the other way. And again that needs a major regional transportation plan and changes, but I don't think Denman should be a major commuter street. It should go back to becoming a neighbourhood street, not just a bypass. And I think if that was possible and if we got the traffic numbers down on Denman then we could put in a bike lane, or something like that.

The implied approach, then, is to take steps to reduce traffic volumes, supported by data, and have street design respond accordingly. This is repeated by other participants: more data and more study are needed to understand where cars come from and why they are travelling through the West End. In the absence of these steps, though, participants look to ways to separate pedestrians from moving traffic. On-street parking is seen as a potential way to achieve this. Spencer Chandra Herbert explains:

Sometimes it's so that you don't worry about if you have a kid and you're walking down the street that if they accidentally get too close to the curb you're not worried about a car ripping down the curb lane and clipping them or them slipping or whatever. So having that parking along there as a buffer just leads to a greater sense of safety, I think. It also helps reduce noise. You're not going to get splashed on a rainy day. So it's just a feeling of safety. It also forces the cars quite often to go slower because they can't deke around each other and try and pass each other.

Parking in the West End garners a great deal of attention, and this framing that it can be a pedestrian amenity is repeated in planning documents as well. But it is less clear whether opportunity costs are considered; valuing parking also commits a large portion of the street right-of-way to vehicle use, and may conflict with goals for more space for biking, or wider sidewalks.

In a neighbourhood where very few residents drive, there are nonetheless many visitors who may do so. Local businesses perceive themselves as being regional destinations and reliant on this movement of automobiles. Automobiles are channelled onto the neighbourhood's main streets, reducing their negative impacts in residential areas but concentrating conflicts and competitions for space into narrow rights-of-way. And street parking is perceived as being important for vitality, valued as a buffer from high volumes of moving traffic, and demanding of space as well. Despite all these active claims to space, though, private vehicle traffic is also seen as an inevitability, an external force to be responded to, to be mitigated and—eventually, perhaps, when traffic volumes reduce due to external factors—de-emphasized from the street.

5.3. Planning the West End

5.3.1. Launching a Community Plan

Since the 1970s, Vancouver has seen ongoing and unresolved tensions between city-wide and locally-driven planning priorities, and between different levels of detail that community planning can operate at, resulting in many different models of neighbourhood planning (Whitelaw 2011). The launch of the city's "next community plans" in 2011 represents the latest epoch: the West End, Grandview-Woodland and Marpole plans were to be local expressions of citywide priorities, rather than the more inductive, locally-driven policy-making that took place in previous processes. The rationale for this shift is summarized in a staff report to City Council in 2011: "Vancouver faces a convergence of global, regional and city-wide challenges which collectively threaten our environment, economy, livability and long-term sustainability" (City of Vancouver 2011: 8). Community plans "operate within a policy hierarchy" amidst city-wide, regional and provincial plans and policies.

The report cites transportation is one of those threatening challenges, specifically an urgent need on sustainability grounds to reduce automobile travel:

Much of the city is still too auto-dependent as a result of separated and lower density patterns of land use, and street design which still favours the car, and we have not yet begun to feel the effects of peak oil, which will fundamentally affect how we move around. (City of Vancouver 2011: 8)

So neighbourhood planning is charged with addressing this threat. The expectation, then, is that community plans will no longer identify local challenges; they will provide a framework for responding locally to larger ones. This suggests a much stronger orientation toward change. In the case of transportation planning, this means community plans should demonstrate how a neighbourhood can shift modes of travel and reduce travel altogether (City of Vancouver 2011: 8).

At the outset, the West End was probably the most contentious of the three community plans, owing to controversy over the pace of redevelopment from city incentives to build rental housing. 2010 and 2011 saw a number of attempts at "innovative" engagement approaches, such as a new advisory committee (City of Vancouver 2010b: 9-10). This group delivered its "interim" report in July 2011, ranking priorities based on a community survey. In the case of transportation, survey respondents ranked "access to transit" as their most common concern, followed by "safer intersections" and "traffic calmed streets" (West End Mayor's Advisory Committee 2011: 14). However, the report also noted that further work would need to be done given "the unique nature of the West End with respect to the transportation needs"; that is, that the survey had clarified, rather than resolved, "contradictions between modes used versus issues cited" (2011: 16). In other words, the survey had shown that improvements to some forms of movement would come at the expense of others. To resolve this policy imbroglio, the advisory committee recommended establishing a task force.

City staff responded to the committee's recommendations in March 2012, with a recommendation to refer them further for ongoing consideration. Those that were "solely relevant to the West End" would be considered within the community planning process to be launched, while those relating to broader policy issues would be directed to relevant city-wide, regional or provincial planning processes. As earlier, staff attempted to maintain a fairly narrow focus for the community plan, deferring other mobility-related concerns to other processes. In the case of priorities for transportation improvements within the West End, staff responded with the bullet point: "priorities to be tested as part of the community planning process" (City of Vancouver 2012g: A2).

At the same meeting, City staff brought forward terms of reference to formally launch the next community plans. These were based on staff deliberation, as well as focus groups with neighbourhood organizations. The West End Community Plan terms of reference set out key issues to consider under "transportation and parking": that walk-to-work mode share could be higher; that public realm improvements could be implemented on main streets; that parking availability is limited; and that rush-hour regulations could be removed to enable full-time parking on the neighbourhood's

commercial streets (City of Vancouver 2012f: 9). On this last point, the document elaborates:

Currently rush-hour regulations exist on Davie, Denman and Robson that remove on-street parking to allow for bus prioritization. A review of the current rush-hour regulations may allow additional on-street parking to increase commercial viability while also providing the opportunity to expand sidewalks and enhance the public realm. (2012f: 9)

No other particular objectives or targets were given for transportation. Each commercial street is identified as a planning subarea, with a statement that "planning work will identify opportunities to strengthen the unique character and increase the vibrancy and business viability in the area" (City of Vancouver 2012f: 11-12). Robson Street is described as a regional shopping destination, Denman as a hub for local-serving amenities, and Davie as hub for the LGBTQ community, and the plan was to preserve these roles for each street. As such, the plan would not foreshadow any radical changes to each street's character, and the only specific transportation change to the mobilities of these streets was the potential removal of rush-hour parking restrictions.

At this formal launch of the community plan, then, what had started as a process for delivering fundamental change and progress on citywide imperatives became rather more locally focused after all. While auto-dependence and auto-favouring street design were key challenges when a plan was first contemplated, the response given in the terms of reference were rather limited. As the city government began to develop the plan, the imperatives of preserving street character and protecting business vitality were understood to require more parking. Privileging these particular values and interests—those perceived by business interests, in particular—served to narrow the plan's frame for understanding how it might achieve broader mobility objectives.

5.3.2. Action While Planning

During the West End plan, city staff implemented projects as opportunities arose, promoted as "action while planning". They "[showcased] various public space

enhancements to demonstrate some of the potential improvements that aligned with the emerging plan directions" (City of Vancouver 2014: 17-18). These included adding pedestrian-controlled traffic signals to intersections on Robson and Denman Streets that previously only had marked crosswalks, mural activities and painting a rainbow crosswalk on Davie Street. The largest projects were the elimination of rush hour parking restrictions, and creating a public plaza in the Bute Street right-of-way south of Davie Street.

The terms of reference foreshadowed permitting full-time parking in the curb lanes along Robson, Davie, and the west side of Denman Street. This was implemented as a "pilot" in August 2013; previously parking was restricted in the eastbound direction on weekday mornings, and the westbound direction in afternoons. Lisa Leblanc calls the removal of rush hour restrictions a "clear winner" that achieved its objectives:

It was meant to improve the livability of the street. It was just meant to give back those lanes for parking. It was meant to...there were advantages to the local businesses because there was more consistent parking throughout the day. And it sort of sets you up to enable things like parklets to happen. So when you've got full-time parking in place then you can do a parklet. If you've got rush regs clearly you can't. And it also sort of sets you up if down the road you want to introduce separated bike lanes, you're stripping parking; you're not stripping a travel lane. Lots of advantages. And it just...I mean, it is more pleasant to walk on the street that has pedestrians buffered from moving motor vehicles, even if the buffer is more static motor vehicles.

The emphasis here is on parking being a pedestrian amenity, echoing the comments noted above: as long as there is relatively heavy and fast-moving traffic, then a buffer of some sort is seen as a desirable feature. And, to the point of parking creating opportunities for other uses, the removal of rush-hour restrictions was indeed accompanied by the installation of a "parklet", or sidewalk extension, on Robson Street.

This change also serves to de-emphasize the concept of a "rush hour" and particular types of commuter movement on the street. To the extent that parking does, as is claimed, support local business vitality it asserts an all-day role for commerce. But, the terms of reference for the West End community plan also identified parking

restrictions as a means for (passive) prioritization of transit movement at these limited times. An evaluation conducted by the City of removing the restrictions as a pilot focused on this role, claiming "no significant increase in travel time" for transit vehicles (City of Vancouver 2015h: 9). Average transit travel times were sampled for three days in March 2013 and 2014; while this a small and noisy dataset, the figures reported do show a six-to-eight per cent increase in travel times in three of the four links for which parking restrictions were changed (City of Vancouver 2015h: 10-11). While the actual amount of time added on these short journeys is, on average, likely fairly described as "not significant", this does not ameliorate perceptions of slow speeds for transit in the West End. No more systemic evaluation of overall transit mobility, or any targets for transit mode share or other measurable outcomes, were apparent in the pilot: the status quo was once again neutralized and knowledge about it limited.

The closure of a portion of Bute Street, piloted during the Pride Festival in August 2013, built on a recommendation in the City's overall transportation plan to convert portions of streets to pedestrian plazas. Rainbow-painted picnic tables complemented the rainbow-painted crosswalks at Bute and Davie. Lisa Leblanc describes the Bute closure as a genuinely open experiment in street use and activation:

You know, temporary, really simple cheap-and-cheerful kind of closure, with some programming, but it wasn't always programmed. Lots of data collected, planner-type data around who's using the space, and how much, and how long are they staying, and what are they doing.

But, while a number of events made use of the space for various purposes, and there was general support for the intention of creating more open public space, Stephen Regan found the initial closure was less successful when it was not programmed:

When we closed it as a pilot, it wasn't, you know, it wasn't totally built out, it didn't have the lighting, the monitoring protocols. It didn't have the investment in cleaning and, you know, regular usage and programming. And we found over time that it just got a little bit more negative activity. People would openly do drugs in the area, there'd be people loitering in the space. Which is fine—I mean, people can stay in spaces, but, you know, seven, six hours in a row, kind of occupying a bench, a table, a chair—you know, it just became one of those—you

know, just a place to hang out for up to that period of time. So that may have displaced some other uses, and generally I think the businesses just felt it wasn't contributing to the vibrancy of the commercial street, which that section of Bute is—it's a commercial section of street. So there's a general sense that net contribution, it was actually net negative.

Echoing Blomley's (2011) study of sidewalks, this suggests fairly rigorous requirements for pedestrian space. The implication is that space should be allocated to maximize positive "uses", and that automobile movement made a greater contribution to vibrancy on Bute Street than unprogrammed open space and passive seating.

At the outset of this community plan, global challenges demanded a significant rethinking of streets and transportation to de-emphasize the automobile. But these pilots telegraphed a policy choice to pursue smaller, longer-term "nudges" instead. In the densest neighbourhood in Vancouver, on-street parking is considered a necessary and desirable feature of commercial streets. And maximum automobile movement is the default use of most road space, except for small interventions that should be heavily programmed to demonstrate their value. A plan that was launched with a great deal of controversy and acrimony was on track to finish as a much less contentious process. It achieved this in part by not actively engaging with or proposing substantial changes to the configuration or distribution of mobility among different people in the neighbourhood.

5.3.3. A Complete Community Plan, and Beyond

The current West End plan was passed by Vancouver City Council in November 2013. The "community context" chapter of the plan repeats much of the language from the plan's terms of reference: under transportation, the plan once again states that walking rates could be higher, streetscapes could be nicer and parking could be easier (City of Vancouver 2014: 12). So what policies will deliver on those goals? The plan summarizes itself by promising a number of transportation-related changes, emphasizing improvements to active mobility:

West Enders love to walk! The plan aims to make it easier and more enjoyable for people of all ages and abilities to get around the West End, particularly by walking. Denman, Davie, Robson and Alberni Streets will be improved with wider sidewalks, decorative lighting, enhanced transit accommodation, and new public spaces for the community to enjoy. Enhanced north-south and east-west connections will improve pedestrian and bicycle access within the West End and to the beach, parks and downtown. (2014: 23)

A number of specific actions appear to deliver on these promises, some of which have quickly been implemented. Full-time parking on the commercial streets was made permanent immediately, and new pedestrian crossing lights appeared at a few intersections. A residential parking study was undertaken. But these interventions did not appear to engage with the competing mobilities present on the West End's streets.

The city did develop a permanent plaza at Davie and Bute Streets, completed in summer 2016. Responding to the concerns expressed by the business association and others, the space is heavily programmed and explicitly promoted as an event and activity space. There is an extensive "stewardship" program, with funding to support coordination and use of the space. And city bylaws were amended to define the space as Vancouver's first legally defined "plaza", newly codifying and regulating this concept of public space. There is particular attention in the bylaw to regulating mobility, both by straightforwardly keeping automobiles out, but also by placing limits on the use of the space at night except for being a path to somewhere else:

- (2) No person may cause, permit or allow a motor vehicle to enter or remain upon a plaza, unless otherwise authorized under this By-law.
- (3) No person shall be in or remain in a plaza after [2:00 am]²² and before 6:00 am on the following day, except for the purpose of traversing the plaza. (City of Vancouver 2015f: A1)

²² In the report cited, the restriction on activity begins at 11:00 pm, but by the time the bylaw was actually enacted the hours were changed to start at 2:00 am. It is not clear how this was decided, as no City Council motion changed the draft bylaw, but some local groups were outspoken in criticizing the restrictions on activity (Vancouver Public Space Network 2015).

Interestingly, the question of cycling through the plaza is not formalized or regulated in the report: there is a broad intention to "[maintain] cycling connectivity" along the length of Bute Street, but some ambiguity of how it will interact with different plaza uses.

Further changes were made to other aspects of the transportation network: traffic signals and local diverters on Bute and adjacent streets were modified to preserve local vehicle access. And, finally, the configuration of Davie Street at the intersection with the new plaza space was changed so that the sidewalk was widened in place of the curb lane. With the permanent dedication of curb space to parking, this had no impact on moving vehicles; however, it did force the relocation of a transit stop. Two options were presented in public consultation materials: moving the stop west to the near side of Bute Street and consolidating it with another stop on that same block, promising less sidewalk congestion and closer access to the plaza; or, moving east farther away from the intersection and into a busier section of sidewalk. Although the first option received about twice as much support as the second in surveys (City of Vancouver 2015e: 3), the final design placed the stop in the second position, with no explanation other than the design "will require the bus stop to be shifted slightly eastward" (City of Vancouver 2015g: 8). Both options presumed transit vehicles must pull out of the travel lane to stop, and the one chosen also preserves a pattern of transit service stopping on the far side of every intersection in this portion of Davie Street. No broader consideration for transit access, movement or function along the length of the street is documented.

Further changes to the West End's transportation networks resulted from other processes. In particular, a review of downtown bus services was undertaken, motivated in part by advocacy for a permanent pedestrian plaza at the 800 block of Robson. As noted earlier by interview participants, summertime closures undertaken since 2011 disrupt transit mobility in the West End by forcing a detour away from rapid transit connections and destinations on Granville Street; a transit service that already operates at roughly walking speed now forces less direct travel for most users as well. This review, completed in 2015, found no feasible alternative to the existing rerouting on Burrard Street, but that a transit-only right-of-way could continue to be provided through a plaza space most of the time: a plaza "does not preclude transit service from safely

operating" (TransLink and City of Vancouver 2015b: 22) except for during major events. Within the West End itself, the report called for the city and transit authority to jointly "pursue reviews of travel times and reliability, with consideration of stop spacing, transit priority, and amenities" on all three main West End streets (2015b: 26). And, the report recommended restructuring the transit network on Davie Street, combining the 6 trolleybus and C23 minibus into a single, more-frequent service with larger vehicles along the entire length of Davie Street. More direct service would be provided to rapid transit stations, albeit at the expense of service from Davie Street to Granville Street destinations.

In April, 2016, a City of Vancouver staff report recommended closing the 800 block of Robson Street to all vehicles, including transit service. *Contra* the earlier finding in the transit service review, this report argued that any physical transformation of the space would create an "expectation" of more frequent events, making providing consistent movement of transit vehicles through the space impossible (City of Vancouver 2016b: 8). Not discussed is the impact frequent events might have on walking and cycling mobility through the block, but subsequent reports have continued to emphasize city-building and place-making objectives for the block, claiming all sorts of superlative possibilities:

The design will solidify the role of 800 Robson in the public life of the city as the place to seek entertainment, expression, and enjoyment. It will complete the decades-long transformation of the Robson Square precinct into the celebrated heart of Vancouver. (City of Vancouver 2016a: 10)

For its part, the transit authority prefers to see the block available for transit mobility, and recommended a number of mitigation measures if the closure were to occur. Most notably, these included transit priority measures in areas of "major delay", including Robson Street and Burrard Street (City of Vancouver 2016b: 12). City staff responded to these recommendations claiming to be "supportive" and that the city "would immediately begin more detailed design work" to implement them (2016b: 8). To date, though, no report back or work has been evident. On December 19, 2016, new transit infrastructure enabled the operation of the "new" network of West End transit

services to begin, but no changes have been made to the allocation of space for different forms of movement on the West End's commercial streets.

No additions have been made to the West End's bicycling network since the completion of the West End plan, except for small expansions of protected bike lanes associated with the reconfiguration of the intersection of Burrard and Pacific Streets. The West End Plan identified routes on Bute and Burnaby Streets as potential bikeways (City of Vancouver 2014: 68), portions of which do appear in the city's priority list for new bike routes to 2020 (City of Vancouver 2015b: A1), but there is no specific implementation timeline yet. Perhaps a more significant change is the introduction of a public bike share system in summer 2016: no detailed data are yet available on system use, but there are a number of bike stations located within the West End.

On the core commercial streets themselves, reconfigurations with new cycling facilities appears to have been ruled out for the foreseeable future. Asked about advocacy for cycling facilities on Robson Street, and the possible repurposing of space used for parking, Lisa Leblanc does not anticipate many possibilities:

And it's not even a line on a map. And when you look at the West End Community Plan you won't see potential or new and improved walking/cycling facilities on Robson or Denman, I don't think anyway. It's a 30-year plan, but I'm pretty sure that it's not in this planning horizon.

To be sure, fitting the West End's diverse forms of movement into relatively limited public space is an unavoidable geometric challenge, let alone reconfigurations to favour the movement of some modes over those currently favoured. And earlier public concerns over transportation-related issues have perhaps been supplanted by other concerns, such as housing. Still, perhaps the most striking observation to be made about planning for mobility on the West End's commercial streets is how little change is contemplated. On foot, by bike, by transit or by car, in the most densely populated neighbourhood in the city, the choice—deliberately or not—seems to be that the current mobilities of the neighbourhood, the privileging of automobile movement and storage, will continue to be expressed for decades to come.

Chapter 6. Commercial Drive: Incomplete Vibes

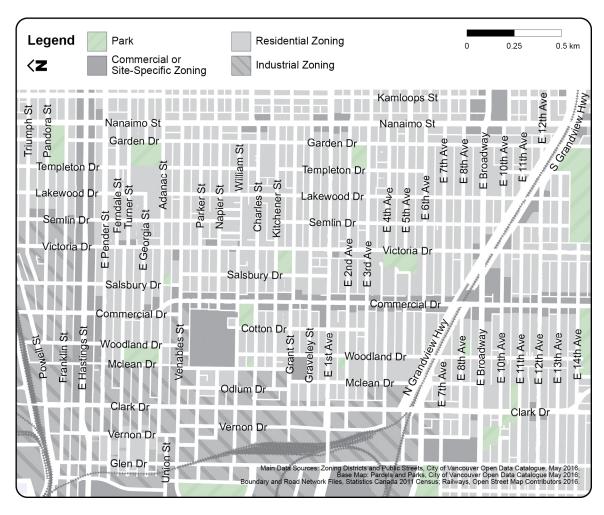


Figure 6 Map of Land Use and Street Network Near Commercial Drive

Commercial Drive is popularly one of the most important sites in East Vancouver's politics of counterculture; of local placemaking; acrimonious political processes; and of asserting alternative economies even amidst homogenizing and

gentrifying economic forces. Many people value the street for its uniqueness, its character and its politics. Aesthetically, economically and socially, "the Drive", as it is widely known, is a special place in many people's mental map of Vancouver.

However, this also makes it a site of conflict between alternative conceptions of mobility. On the one hand, street space is more readily politicized and contested, and there is an opportunity to achieve different outcomes that might not be possible in other neighbourhoods. On the other hand, there is a strong resistance to changing a place that is valued in so many different ways by different people in the city. The Drive is the embodiment of multiple mobility ideals, each fraught with symbolism as they compete for claims to the street. As one piece of popular literature about the city explains:

Commercial Drive is a long, north-south street much narrower than most major thoroughfares in the city, a fact that has engendered a pathological culture of jaywalking that turns the two sides of the road into a piazza. Vancouver's much-celebrated Car-Free Day festivals, when huge blocks of major roads are shut down to automotive traffic and opened to various commercial, cultural, and political community activities, got started on the Drive, a place that barely needed to make such an event official. (Demers 2009: 27)

Aptly, the physical space of Commercial Drive is a historical patchwork of municipal ideals and street configurations. As shown in Figure 6 above, the overall Vancouver street grid pattern is present, but with interruptions. Some of the avenues running east and west have breaks and jogs when they intersect the Drive. Diversions mark the edges of the main business district. The street is wider south of Gravely Street, with an 80-foot continuous right-of-way, and narrower north of Gravely where only a 66-foot continuous right-of-way exists. Sidewalks vary in size and content; crosswalks and bus stops vary in frequency and configuration. The Drive's status as a major automobile thoroughfare has varied through its history. Vancouver's 1928 master plan noted that "Commercial Drive is not a major street" (Harland Bartholemew and Associates 1928: 67), though its update in 1947 did recommend widening its entire length (1947: 48). Other neighbourhood streets have seen different visions as well: parallel Victoria Drive was historically planned to be a six-lane arterial to carry car traffic: instead, it has only been partially widened and was reclassified in the 1990s as a "neighbourhood collector"

street. Intersecting 1st Avenue was historically a desired path to bring automobile traffic to the Drive, but now is seen as a dividing feature in the neighbourhood. Commercial Drive has consistently been the core of the area's businesses and destinations, but it has had a less clear role as the core of its transportation networks.

For the past five years, Commercial Drive has appeared in city planning documents as a short-term priority for creating space for a dedicated bike lane. Local groups have developed alternative street designs and organized campaigns in favour of change. The local business association and many of its members have been profoundly opposed. Broader transportation advocacy groups have taken an interest in the street. Some local groups fear mobility changes as harbingers of social inequity, gentrification and displacement. All of this has taken place amidst a lengthy, involved and contentious community planning process. And so the Drive is a critical case to understand how different types of movement come into conflict and are evaluated and prioritized within the institutions and efforts of local government. Plans in other communities may serve to rule out reconfiguring main streets, but Commercial Drive could turn out differently.

But how differently remains to be seen. In July 2016, the Grandview-Woodland Community Plan was completed and approved by Vancouver City Council. Though it includes the development of a "complete street" on the Drive as a priority, the specific design and configuration are left unresolved. The Plan is very careful to avoid firmly proposing any specific changes to the nature of the street—though a dedicated bicycle lane is a likely priority, it is one of the improvements that "could" be applied—and instead emphasizes the "vibe" of the street as an important planning principle:

The plan recognizes the energy, the identity and "the vibe" that is "The Drive". It ensures that this unique character will remain vital into the future. (City of Vancouver 2016d: 23)

But, as this case study shows, there are many different versions of this vibe, and different understandings of how mobility shapes it. Energy and identity can be slippery bases for urban planning that reproduce uneven mobilities. This chapter explores how the reconfiguration of Commercial Drive has been framed and understood by different

members of the community, and how these understandings are reflected in both the decisions that have been made, and those that have been put off to the future. Commercial Drive is a potential model of more deliberate and more sustainable allocations of mobility, but also a model of the contradictions and challenges that emerge from trying to reconcile many different uses onto a street without critically interrogating the objectives and the intent behind them. As public open houses and reports seek out ways to form a "complete street", there is more work to do to articulate the ways in which the street is currently incomplete.

6.1. Neighbourhood Context

The Grandview-Woodland neighbourhood has a distinctive social character in Vancouver: it is distinguished as a place for urban Indigenous populations; for different waves of immigrant populations, including a historic Italian population; for diverse socioeconomic classes, including a robust labour politics; for members of the LGBTQ community, notably a diverse lesbian-identifying population; for youth, especially for students. Commercial Drive is "co-operative housing, 'family'-oriented space, cultural diversity, less materialistic and greater socio-political awareness and activism, and a subaltern population" (Lo and Healy 2000: 34-35). As in the West End, these perceptions are borne out to varying degrees empirically as the neighbourhood changes: Grandview-Woodland does continue to have a high rate of persons with Aboriginal identity, but in recent years it has had a very small share of its population being new immigrants.²³ From 2001 to 2011, the neighbourhood's overall population shrank by six per cent; it had 18 per cent fewer families with children, with a larger decline in lone parent-led families; and it had a 17 per cent decrease in people speaking non-official languages at home.²⁴ Housing costs are increasing: average rental prices on the east side have increased slightly faster than the city overall.²⁵ While the Drive's tradition of

²³ Based on estimates adapted from Statistics Canada, 2011 National Household Survey.

²⁴ Statistics Canada, 2001 and 2011 Census of Population, custom profiles for City of Vancouver, from the City's open data catalogue.

²⁵ Based on Canadian Mortgage and Housing Corporation Rental Market Survey.

political activism may still be relevant, the voices representing the neighbourhood today appear rather less "alternative", on average, than they have been in the past.

Grandview-Woodland was one of Vancouver's first suburbs: the BC Electric Railway's first interurban streetcar line to New Westminster spurred housing and retail development along its route, including what was then known as Park Drive. The street's name was changed in 1911 to attract investment and development (Walker 1999: 26). Early landowners attempted to market the area as an upscale residential district—hence the invented neighbourhood name, Grandview—but the Canadian Pacific Railway's developments to the west were more prestigious, leaving the east side with an early working class identity: "it was to be Angus Drive not Commercial Drive that would come to represent the epitome of desirable addresses in Vancouver" (King 2011: 12). The built form of the neighbourhood today consists of a number of century-old houses, in various configurations accommodating single or multiple families; and a collection of apartment buildings from different redevelopment epochs over time. It has shifted from a suburban to a decidedly urban identity, and it finds itself facing the pressures of increased property values and costs and the threat of gentrification as urban life becomes more desirable.

The Drive's collection of eclectic and independent shops is held to be part of its character, but this too has emerged from particular histories. Two contradictory but consistent threads have shaped the neighbourhood's history: an emphasis on creating a local-serving, self-contained business district; and a desire to develop a destination street for people from elsewhere. The 1928 Bartholomew Plan for Vancouver proposed a very local-serving role for business districts outside of the downtown core, such as Commercial Drive (Harland Bartholemew and Associates 1928). The list of outright permitted uses proposed by the plan is very short—"retail stores, service or gas stations, public garages, funeral undertaking establishments"—with bakeries, laundry and print shops permitted but subject to restrictions on scale (Harland Bartholemew and Associates 1928: 221). Your local "candy or jam factory" must not be too large. The plan was rooted in a very centralized model of economic development: except for local essentials, businesses and jobs were to be concentrated downtown. But, on the Drive, local shops did compete with downtown to develop a self-sustained community. Even in the 1930s local news trumpeted a "local pride and definite individuality" (qtd. in King

2011: 74). Grandview residents preferred to walk to their local stores rather than drive or take the streetcar into town.

But, people also employed this identity to advocate for infrastructure and connections to capture automobile traffic and bring it to the Drive. A local realtor, followed by the Grandview Chamber of Commerce and eventually a sympathetic Mayor worked to advocate a number of roadway connections to the Drive. These were achieved over time: in the 1930s, the city constructed 1st Avenue as an east-west arterial roadway, including the Grandview Viaduct bridging the False Creek flats, to connect downtown and eastern highways. In the 1950s, the end of streetcar service and the repaving of roads connected Commercial Drive at its south end to Victoria Drive, creating a continuous north-south arterial (King 2011: 78-81,216). To their proponents, these projects ended Commercial Drive's isolation from the rest of the city and the region, but they came with expectations for automobile traffic and mobility that have altered the role of the Drive.

Current debates about mobility enter the picture, then, amidst a complex, changing and heavily path-dependent context. Again, urban professionals are clear that they do not set out to change the street's "vibe". Lisa LeBlanc, for instance, emphasizes that "there's a lot of angst around ensuring that the character of Commercial Drive is retained." But, for some, the "vibe" is in need of a fair bit of change. Jeff Leigh's overall impression of the street is a negative one. Too many people competing in too many ways for too little space adds up to an unpleasant experience by all modes of travel:

I find [Commercial Drive] congested walking, I find it congested cycling, and I find it congested driving. So, I'm not in walking distance of it. When I go there I'm either driving or I'm on bike. It's not a nice place to cycle. I would tend not to; I would tend to cycle one block off of it and know which street I was going to and then come out very close to where I wanted to so I could avoid riding down it. And I think that's the opposite of what Commercial Drive should be. I think it should be a hub of activity, and that we should want people on it, not actively avoiding it.

There is perhaps a fine balance between being a "hub of activity" and being overly congested; Yogi Berra's aphorism that "nobody goes there anymore; it's too crowded" comes to mind. But Leigh's point is that his experience of movement on the Drive becomes focused and choreographed: on a bike, he rides near a pre-planned destination, approaches it from adjacent blocks, and then returns. Commercial Drive is solely the site of discrete destinations, not a place to enjoy as an experience unto itself. If the street's character is sustained by spontaneity and exploration, then the balance of activity is indeed in need of intervention.

Michael Feaver similarly describes the multi-modal frustrations of mobility on Commercial Drive, particularly highlighting the incongruity between large expectations of automobile movement and what the street can actually deliver:

...basically, the street is designed for moving car traffic, but it's not even capable of moving that car traffic all that fast anyway. So the space is there, you get relatively high traffic, or high-speed traffic south of Gravely. There are relatively few crosswalks. There are often, especially southbound, not marked or signalized crosswalks at the location of the bus stops. Also, there's other things that are obvious. So, there's bikes sharing a lane with car traffic. There's the buses not fitting into a lane. The lane width on Commercial Drive is three metres, south of 1st, and the buses don't fit.

There is a template being applied to Commercial Drive, in this description, that does not physically fit into the space available. The imperative of providing multiple lanes of vehicle traffic has overridden safety and accessibility for other modes. But this imperative does not actually result in efficient vehicle movement either. Feaver goes on:

So the choices are, like, the time it takes for people to get places on various modes, the relative comfort, relative reliability of those modes. So I would say that right now the bus service is not that reliable, and so that pushes people to walk, bike and drive. In rush hour, car travel is not that reliable. That pushes people to walk and bike. The conditions on the street are not that amenable to access on bike, and the sidewalks are actually quite crowded. And that pushes people to other modes as well. So there's this relative comfort and ease of each mode and it's affected by fairly obvious, I think, things. I think people just make rational, or semi-rational decisions about it.

This description of Commercial Drive echoes Henderson's description of a "mobility stalemate" in San Francisco (2013): relatively little mobility is actually delivered by space that is nonetheless crowded and conflicted. Commercial Drive is a hub of mobility frustration. Yogi Berra may have been right after all: the overall level of mobility allocated on Commercial Drive is limited by high levels of automobile travel. But this is easier to analyze abstractly than to respond to in urban practice. Lisa Leblanc emphasizes the complexity of Commercial Drive and the challenge of intervening in the configuration of space on the street, emphasizing that there are mobility demands that extend beyond the immediate neighbourhood, and therefore the street cannot solely prioritize local demands for movement. Leblanc goes on to say that there are "a lot of really legitimate competing demands" for space on the Drive. Resolving them while living up to the objective to preserve a particular "vibe" is not a simple project.

6.2. Mobility Networks

6.2.1. Walking

Walking Commercial Drive is a distinct experience of urban public life. There is a series of daily performances along the street: vendors hawk their wares on the bridge over the SkyTrain; assorted artists and musicians make appearances on the street; people hold court in coffee shop patios. A socially, economically and culturally diverse cast of characters wanders the street, visiting shops, encountering neighbours and expressing themselves. If cities are places in which a density of people and activities mandate a life that is public, then this is certainly seen on the Drive. This is a version of Jane Jacobs' "sidewalk ballet" that participants and spectators alike value a great deal. The experience of walking the Drive is a model that developers of newer urban communities attempt, usually unsuccessfully, to recreate. But there are many different types of walking on the Drive, accessible to different members of the community.

As in the West End, the question of authenticity occurs in discussions of walking the Drive. There is a live question of preserving or enhancing this particular sensory experience of walking the street, and a fine balance to be struck. The physical and social space of the Drive is continuously being contested, and the activity on the street can become a marketable spectacle quite distinct from any genuine political expression. One critical writer 20 years ago celebrated many features of the Drive, but pointedly took a rather jaded view of any claims it might make to authenticity:

A postmodern frontier street, Commercial Drive is the stage set for the questioning young person that the mall might like to be but can't, if only because the mall won't allow beggars on the premises. [...] the crowded sidewalks, the Italian and Portuguese and Jamaican shops all become a sort of Leonard Bernstein musical in which young people with high ideals fling open the doors of perception onto a dazzling afternoon. (Serafin 1994: 85)

Serafin observes graffiti rooted in academic theory and muses at the cliques of well-educated *flâneurs* who walk the street. The Drive, in this view, is captured as perhaps a place that people can feel "edgy", and can gather sensory experiences in a way that is engaging but necessarily critical. There is an expectation associated with walking the Drive that a particular experience will be found; the experience of walking is aesthetic and depoliticized.

The local business association prefers to speak of a "brand" identity to be applied to walking the Drive, identifying elements to enhance the pedestrian experience:

...including banners, flowers, directional signage and street furniture. These elements could have a unique and consistent colour and/or style reflective of a 'modern urban village', having evolved from 'Little Italy'. (Urban Forum Associates 2012: 29)

Reconciling all parts of this "urban village" brand, though, is challenging and reflects a continuation of the contradictory threads noted earlier: Commercial Drive is both a self-contained neighbourhood shopping district and a unique destination for people from outside. For many of the business operators on the street, this seems to add up to a desire for wider sidewalks, but not at the expense of on-street parking.

Public consultation and plan materials tend to speak in general terms to the importance of walking on Commercial Drive. Surveys conducted during the Grandview-Woodland community found many people identify Commercial Drive as a favourite walking street for most of its length, but also a least favourite walking street south of 6th and north of Venables (City of Vancouver 2013a: 17). This corresponds to the portion of the street with continuous and active storefronts; this seems to impact people's perceptions of walking even when there is not a drastic shift in the quality or quantity of physical infrastructure for walking across those streets.

The most common point of agreement among participants in this study and in the Grandview-Woodland plan is that the Drive's sidewalks are too narrow for the use they receive. And, indeed, several blocks of Commercial Drive show up in the most recent report of the busiest (weekday, daytime) pedestrian volumes in the city: 7,600 on either side of Broadway; 6,500 at Kitchener Street; 5,600 at Grant Street; 4,800 at 4th Avenue (City of Vancouver 2015a: 20). Interestingly, volumes are typically higher on the east side of the street even though sidewalks tend to be narrower. What this adds up to is friction and conflict when walking the Drive, with multiple consequences for the kinds of amenities that can be provided. Michael Feaver observes that many transit stops, for instance, do not have shelters:

There's not really room on the sidewalks because the sidewalks are too narrow anyway. [...] There's been attempts at solutions to this by, like, extending bulges to the street, for example, at 6th, and that allows them to put a shelter in. That hasn't been done elsewhere.

The result is that, with a few exceptions, people queue at transit stops in limited space while also obstructing people moving on the street, a challenge within the dominant paradigm that pedestrian movement should be unobstructed (Blomley 2011). Further conflicts arise when some people cycle on the sidewalk as it may appear safer than the roadway. The overall picture is of the mobilities of the automobile condensing the space available for all other modes and creating conflicts between them. More generally, as Feaver puts it:

And, basically, the streets were redesigned back in the day, decades ago, for cars, mostly, and car mobility, and they're not really well-designed for the way that they're being used now, and that'll become worse in the future as more people use other modes.

In this light, no discussion of walking Commercial Drive can leave out its recent history as the origin of Vancouver's Car-Free Day festivals. Matt Hern, who originated the event, notes in one of his books that it included activities, vendors and other elements common to neighbourhood celebration, but with some particular twists to politicize an emphasis on local, neighbourhood-oriented walking:

It was pretty standard stuff, with two key additions. The first is that we politicized every part of the festivals with a car-free, bike-and-pedestrian message. Our back-of-the-shirt message is: Less cars = More community, More Community = Less Cars. The algorithm isn't obscure and people get the message easily. And they come out in force. (Hern 2010: 121-122)

The now annual car-free day festivals are generally regarded in Vancouver as an enormous success and, perhaps, a model for a utopian sustainability. In the Grandview-Woodland plan, consultation materials were replete with photos of the festival, inviting people to consider how the street might be reshaped in the future. Arno Shortinghuis sees a need for permanent car free-streets across the city:

I mean, you look at Commercial Drive, these car-free days they have. And it's just masses of people come from all around just to experience a car-free, you know, have a car-free experience, and it's only one day a year. I mean, the demand is there.

But a paradox appears: the continuing struggle between Commercial Drive's dual roles as local-serving and destination is present here, too. "Masses of people come from all around", indeed, likely far beyond walking (or even cycling) distance. The local, grassroots, political demonstration can easily be lost in a celebration appropriated for other purposes. In his 2010 writings, Matt Hern was confident that the festivals still had a political impact, and were an act of resistance claiming the value of place over the flows of capital, resisting Vancouver turning into a theme park as seen in Las Vegas (2010: 123). More recently, though, he has become more concerned about the gentrifying

impacts of the festivals: people are coming to have an experience that becomes another front for displacement. Now, the Car Free festival organizers retain their explicitly political intent, and continue to emphasize authenticity and local organization (Car Free Day Vancouver n.d.). But perhaps the car-free concept itself has been gentrified and governmentalized somewhat.

Vancouver still struggles to engage with the mobilities of walking, except for in a very organized and regulated fashion. Pedestrian-only spaces in this city with high mobility and limited space seem to require a large justification to exist, such as a full-scale festival model. In 2009, Vancouver experimented with more frequent street closures, including on Commercial Drive, but these were not as successful. An evaluation of the report found concerns about mobility impacts (in particular, disruptions to transit routes), reduced business sales and, interestingly, a disconnect between visitors' expectations and what could be delivered on a weekly basis:

Many expected their on-street experience to be very similar to Vancouver's popular annual one day Car Free Day festival, meaning a high intensity experience with large crowds and a lot of entertainment. (City of Vancouver 2010c: 8)

As such, perhaps a more sustainable model is more incremental, and more attentive to what reconfigurations of the street are possible to achieve. Lisa Leblanc's description of an ideal walking environment on a street like Commercial Drive is more modest, and less disruptive to established orders, but also representing substantive political choices about the mobilities of walking:

Nice wide sidewalks. Fully accessible, with a nice clear path of travel. Wide enough for at least two people to wheel in a wheelchair side-by-side, or walk holding hands. A nice activated streetscape that makes people want to be there: inviting storefronts, things that make people sort of stay on the street and linger and enjoy being there.

People walking on Commercial Drive today experience the latter part of this vision in place, even as the street embodies contradictory identities as place, pathway and destination. It is a place people value and enjoy walking on: it is a place worth

walking to, and interesting enough to stop and look around. But there is consensus that there is not enough space allocated to these functions. The neighbourhood's plural identities and "vibes" are changing rapidly. But, in any imagined future, the everyday sidewalk ballet is likely to continue to be the most important part of the street. Would that its stage were less narrow.

6.2.2. Cycling

Commercial Drive has a high concentration of activity and destinations, and it sits within a neighbourhood with some of the highest use of bicycles for transportation in the city. In the City of Vancouver's most recent mode share survey, people living in the "Vancouver Port" survey zone, which includes Grandview-Woodland and adjacent neighbourhoods, made 17 per cent of daily trips by bike (City of Vancouver 2016e: 4-3). So it is not surprising that the main streets in this area, including Commercial Drive, have been the targets of advocacy for more and higher-quality cycling infrastructure. But even with this high-profile support the importance of cycling on Commercial Drive itself is contested. There is contention about whether the purpose of a bicycle route in the Drive would be to access destinations or to pass through; there is disagreement over the urgency and relative importance of cycling compared to other uses; and there is fear that cycling infrastructure and promotion could upset the character of the neighbourhood. Once again, there is an uncertain "vibe" to Commercial Drive, and it is important to understand why cycling takes on such significance in upholding or undermining it.

At a high level, Michael Ohnemus observes that cycling the Drive is an unpleasant experience that conflicts with other road uses. Cycling at a steady, but slow, rate of speed leads to a game of leapfrog, with bicycles being overtaken by motor vehicles between intersections but then moving up at intersections to start the cycle anew. The expectations that people in cars tend to have about unimpeded and high-speed movement are stymied by bicycles, leading to conflict:

Because obviously the cyclists are the slowest travelling mode on the street, and it does force a lot of people to either get into the centre lane, to be able to pass. So in terms of affecting the flow of traffic, it

does happen. And it is a fairly—not a very pleasant area to ride your bike on, I would say, just because there is no space dedicated for you, there's not even bike boxes at intersections.

This discourages people from riding on the street, forcing circuitous or interrupted routings for people not willing to brave interacting with traffic. Michael Feaver elaborates:

...if someone's going to be commuting home from work to a place near the Drive, they're going to avoid often biking on the Drive itself, and it's going to be difficult for them to go the baker, or meat shop in sequence without going on the Drive itself. That's a challenge for a lot of people because it's not separated, it's not safe for them.

So there is a basic safety argument that, as long as cycling destinations are on the Drive, some form of protected infrastructure is required. There is no particular disagreement with this statement, with even the local business association looking to "recognize cycling as a valid travel mode" (Urban Forum Associates 2012: 6). But, on a street with limited space, giving priority space to one mode necessarily requires taking from another. With narrow sidewalks for pedestrians and narrow lanes in the roadway, someone else will have to give up space. The question is what types of movement by bicycle need to be accommodated and prioritized.

Feaver's description, of chaining local shopping trips, suggests that cycling is focused on local trips to destinations on the street; that is, not necessarily traversing the length of the street. A bicycle lane would help people access businesses and services on the street, likely from a nearby neighbourhood. To others, notably the leadership of the Commercial Drive business association, cycling is a threat to local vitality, as a bike lane "will turn The Drive into a transportation corridor" (Commercial Drive Business Society 2016: 3). Their online petition, and an op-ed in local online media, calls upon the community to "save Commercial Drive from Bicycle Highways":

There are already two parallel streets adjacent to Commercial that feature cycling routes (Woodland and Lakeview [sic] Drives). Upgrading these would not have negative impacts on our businesses, and would come at a lower cost to taxpayers to install. These side streets would also offer safer biking options, especially to children and the elderly who live in the region. (Pogor 2016)

The business association's argument is that, by removing on-street parking, as a bike lane would be sure to do, destination shoppers from outside the region (who, presumably, must drive) would not be able to access neighbourhood businesses. Instead, both bikes and cars alike would pass through the entire length of the Drive, a function that is better served for both modes by using other streets.

However, most higher-profile proposals by the City and advocacy organizations so far only include a bike lane on Commercial on the "wider" portion of the street, south of Gravely Street, and do so by removing a travel lane, not on-street parking. Some cycling advocates do want to see a more robust treatment of the entire length of the street. Jeff Leigh sees Commercial Drive as a key part of a "minimum grid" to enable cycling trips of varying length and purpose:

We're talking about connectivity to other bike routes, so we have to go past 2nd. We need to get down to the Adanac bike route. We probably need to get down to Powell Street, to the new Powell overpass. That's what creates a grid here. That's what makes it useful. And we need to figure out how to find the space through that area. That's Commercial Drive. I'd find some way of doing it.

And the BC Cycling Coalition has campaigned for protected bike lanes on the entire length of Commercial Drive. It proposes a design for the narrower portion of the street that does remove parking on one side of the street (BC Cycling Coalition 2016). It is not clear whether or how transit fits into the plan, with narrow vehicle lanes and no room for bus stops. Michael Feaver is skeptical of the possibility of achieving this:

There would be significant opposition, and maybe even from my own perspective, you know, narrowing the sidewalks. And so you'd have to take parking. But there's still—the street would be still too narrow to do a proper two-way bike path with the required bus lanes.

For Feaver, a compromise solution to the competing priorities for the street may mean that bicycle traffic is indeed routed onto local streets where Commercial becomes narrower, even though this is not necessarily an ideal solution from a cycling perspective. For its part, the business association's reaction does not change with proposals for bike lanes on only the wider portion of the street; indeed, news articles in October 2016 quoted the association using the line of "a bike lane to nowhere" (Robinson 2016), as the proposed end points of Gravely Street and 14th Avenue are both local streets. The business association sees low current rates of cycling (based on self-selected surveys) and therefore does not see people on bicycles as contributing to the local economy.

From another perspective, cycling on Commercial Drive also takes a fraught relationship with the possibility of gentrification and displacement. Lisa Leblanc observes this concern:

A city in the U.S.—basically the quote is 'be careful what you wish for.' Because when you start putting separated bike lanes and higher level facilities onto a street it can gentrify an area. So it can change the character of an area, which is sometimes not a desired byproduct of providing infrastructure. [...] In my opinion, we really risk doing that on Commercial Drive if it's not done right and in a sensitive way.

Particularly given the Drive's identity as a socially and economically diverse place, there is fear among some people in the community that cycling benefits only those who are better-off. Michael Feaver, though, argues that this does not change the mobility imperatives associated with a bike lane; instead, it means that there needs to be a more concerted effort and thought to deliver cycling mobility more broadly:

...the concern that by making this neighbourhood nicer, by putting in bike lanes, making it nicer, it's going to attract a demographic that's going to pay more rent, and that thereby they will be displaced. And so, I hear this and I object to it, because I think that we should be doing these kind of things more widely, and that this shouldn't just be done here, it should be done elsewhere in the city, and we should be striving to make everywhere nicer so that there's no particular, you know, improvement in this area over other areas.

The debate continues. Cycling becomes metonymic, fraught with arguments about the character and nature of a particular street and a particular neighbourhood. But it is not cycling *per se* that is the source of argument; it is what cycling is seen to

symbolize. And it is questions about what space for cycling might displace, physically and socially, that perpetuate the debate.

6.2.3. Transit

Commercial Drive is an important transit street in multiple ways: its anchor at the Commercial-Broadway SkyTrain Station positions it at an interchange for two rail rapid transit lines and a rapid bus line moving people quickly and for long distances; and its length hosts one of the busiest local bus lines in the region. The 20 Victoria runs frequently, stops frequently, and is frequently late, as it travels the length of Commercial Drive. The mobility provided by public transit has always been a central part of the street, providing local service and transporting people to other parts of the city and region. But fitting transit vehicles and operations into the street is rather more contentious. Amidst the possibility of change to the configuration of this street, how does a frequent transit line fit in?

The 20 Victoria moves some 8 million people each year, or about 25 thousand on a typical weekday (TransLink 2016). The busiest portions of the line are the two commercial areas it passes through: Victoria Drive's business district on the south side of the city, and the length of Commercial Drive. But, nonetheless, one point about the mobility that transit provides is that the service could likely carry more people with a more reliable operation. Based on TransLink's metrics, the 20 is also the most "bunched" bus route in the region, and the fourth slowest, travelling at an average speed (overall, all days) of just under 14 kilometres per hour. On Commercial Drive itself, the service is scheduled to take between 8 and 14 minutes to travel the two kilometres between Broadway and Hastings Street, meaning that the service is *expected* to be slower than 10 kilometres per hour each afternoon.²⁶ Michael Feaver argues that this is a key aspect of the street needing attention:

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²⁶ Analysis based on TransLink's fall 2016 published timetables.

...the biggest mobility challenge that there is on the Drive right now is with the bus service, and the street needs to be able to move people relatively quickly, relatively frequently, relatively reliably on the bus, and currently right now the bus service is maybe supposed to be every eight minutes but it's more like three every 24 minutes. So one of the major mobility tradeoffs right now is there's no priority for the buses.

Concerns about the reliability of the service show up frequently in documents and public feedback processes conducted during the Grandview-Woodland community plan. As always, different types of transit service represent tradeoffs, and attempt to meet multiple mobility needs simultaneously. Stops closer together provide more ready access, particularly for more vulnerable passengers, but delay movement for others. Asked whether transit service on the Drive is oriented to local movement within the neighbourhood or over a larger distance, Michael Ohnemus sees both roles, though with local movement limited by the unpredictability of the service:

It's kind of in the middle. Because one thing is, yeah, the stops aren't as close together, so you can't just ride it for a block, you have to ride it for about three or four. And then because it is a little less frequent sometimes you're better off just walking instead of waiting for the 20. And because it is unreliable, it has that huge unreliability factor, I wouldn't want to say...you wouldn't want to wait just to go down the street. You're more likely to be able to walk if you're able. But the 20 does also serve downtown and a lot of...it picks up a lot of residential, and it does serve the SkyTrain, so it does feed different areas.

Where is the interaction between public transit and the Drive's elusive "vibe"? Some relevant data appear in intercept surveys conducted in 2016 by the city and the business association. While these are not particularly robust methods of collecting information, at a high level they show a substantial contribution of people and activity on the street. The city found that 27 per cent of people on sidewalks arrived by transit (as many as driving and bicycling combined). Some 44 per cent of people walked to Commercial Drive, and it is likely not coincidental that this was very close to the percentage of people who were coming from the local neighbourhood (City of Vancouver 2016c: 12). The business association survey similarly found 25 per cent of people arriving by transit (Commercial Drive Business Society 2016).

But this contribution is not necessarily matched in planning attention. The business association's visioning document notes that "it has been noted" that transit service on the Drive is well-used, but gives more attention to aesthetic and social concerns about the SkyTrain interchange at Broadway Station. The only actionable item under transit is to "support a comprehensive plan for the transit node that includes residential densification" (Urban Forum Associates 2012: 25-26). No attention is given to the role, accessibility or movement of transit on the street itself. City plans, for their part, have focused on adding on extra layers of rapid transit—perhaps an express overlay service on the Drive (2012d: 33)—but, again, without a prescription for how either existing service or this new layer might fit into the space available.

Michael Ohnemus outlines the basic challenge in allocating movement: focusing on vehicles as a unit of analysis instead of what they contribute to mobility outcomes:

The 20s are articulated, so you're looking at about 85 people. And they're given the same amount of—they're not prioritized in really any way in any of these situations, and they're treated just like any other single occupant vehicle, which is really unfortunate.

That said, the sporadic service provided by the 20 Victoria is not solely impacted by its treatment on Commercial Drive. The service's design does not have any layover or recovery space on the downtown portion of its trip: a transit vehicle turns around at Robson and Granville and immediately returns toward Commercial and Victoria Drives. Delays encountered anywhere on the northbound trip then cascade onto the southbound trip. Disruptive events such as collisions, fires and protests are probably less uncommon along the 20's route than other parts of the city, but congestion—which is to say, a lack of mobility delivered by a lack of prioritization—is an everyday occurrence and more common downtown than farther away from the city. Given that, Michael Feaver suggests that a more complete "package" of solutions would also contemplate shortening the service to avoid the trip downtown:

So the bus route is too long, and has no priority on the downtown section, except on Granville Street. And the way to fix it is to extend it, instead of going downtown, to go to Cedar Cove and turn around at the PNE or somewhere in that direction [...] So, basically, if you were

going Downtown you would transfer to a B-Line at Hastings and Commercial and there would no longer be this long, slow trip on Hastings Downtown.

This suggests a more deliberate focus on serving local trips, with connections to rapid services at Hastings and Broadway rather than direct trips downtown, but Feaver suggests faster and more reliable service would be a worthy goal from this trade-off: the service would become cheaper to operate at higher frequency.

Michael Ohnemus does observe the beginnings of some elements of passive transit priority measures on Commercial Drive in the form of sidewalk extensions at bus stops, and a wider spacing between stops than applied on other streets. They are not delivered consistently: as in the rest of the city, the current configuration of the street does not contain any bus stops in which automobiles are unable to overtake a stopped bus, so they are limited to a few stops on the "wider" southern part of the Drive with two continuous travel lanes. Still, they perhaps provide a model and a demonstration of the possibilities for future improvements:

For example, there are bus bulges. So the bus does not need to pull over to stop; it just stops in its driving lane. So that helps facilitate—there's no need to merge back in, so that helps with the speed. It also provides a nicer waiting area for the customers, a larger sidewalk, so they're not interfering with the, I guess the through travel on the sidewalk. There's space for them to wait. That is a benefit of that route. And I think the stops there are—not along the whole route, but at least on kind of Commercial Drive north of the station—I think the stops are fairly decently spaced apart from my experience.

Transit embodies the challenges and contradictions of placemaking and urban mobility; the 20 Victoria is at once essential to a very local, small-scale economy and a means to provide access to opportunities across the city. The details of how transit vehicles navigate the contested space of Commercial Drive matter as expressions of what kinds and forms of mobility are prioritized in the city.

6.2.4. Driving

In an op-ed opposing bike lanes on the street, the director of the Commercial Drive Business Society ends with a rhetorical flourish. Objecting to the likely scourge of people speeding down the street on bicycles, and calling for attention to more pressing issues than transportation reconfigurations, he observes: "after all – it's called 'The Drive' for a reason" (Pogor 2016). But there is an important subtext here: the automobile, and the mobility associated with it, is held to be essential to the success of the street, but only in a particular pattern of driving to the street from far away to visit a local business. It's called the Drive, indeed, but perhaps only inasmuch as one can readily *stop* driving and find parking. Or, as the Business Society puts it:

...permanent bicycle lanes will cause The Drive to go from a destination shopping and entertainment district to a transportation corridor that encourages cars to zip through. (Pogor 2016)

Now, reallocating space away from the automobile *per se* is unlikely to encourage high-speed car movement, but the point being made by this group is perhaps that a certain amount of congestion—of friction, of busyness—is seen as a desirable feature. If it is too easy to be mobile, to avoid stopping, then people will not stop. But, even so, the emphasis and the claim that the Drive is a "destination district" simultaneously brings about claims that the uniqueness, and the very vitality, of the space depends upon abundant automobile access:

We are worried that our clients from across the Lower Mainland will stop coming, leading to a reduction in commercial activity, a loss of vital jobs, and ultimately, the end of one of Vancouver's most historically and economically significant regions. And unlike downtown Vancouver, there are no parkades on The Drive that can serve as an alternative for drivers. (Pogor 2016)

The argument is complex, or at least complexly stated, but the utopian ideal seems to be that Commercial Drive must be easy to drive to, if not through. Or, rather, it must be easy to drive to a certain point, but not farther. Again, those who plan the street chase multiple and sometimes contradictory identities: the Drive is an experience; the

Drive is a destination; the Drive is a performance; the driver is the archetypal customer of local businesses. And the stakes are high: beyond talking about preserving a particular "vibe", more recent materials from the business association implore the reader to "keep the Drive alive" (Commercial Drive Business Society 2016).

There is, though, a fair bit of consensus that Commercial Drive need not be a through-route for private vehicles. Michael Feaver makes an argument that a reduction in automobile traffic on Commercial Drive could actually benefit people driving on the rest of Vancouver's road network:

Because the more light-cycle time that's devoted to left-hand turns off of Commercial onto those streets, off to 1st and to Broadway, the less time there is for higher-capacity movements of east-west traffic on the intersecting arterial. And so by removing car commuter traffic—that doesn't want to go to access things on Commercial—from Commercial Drive, it should actually increase the capacity of the east-west arterial network in east Vancouver.

But there remains a question of balancing reducing this with a desire to maintain some level and type of vehicle access, and transportation professionals see it as a complex problem to resolve. Lisa Leblanc, for instance, reacts to the prospect of removing a vehicle traffic lane by calling for more data:

I think it requires a very detailed technical analysis, so I think it's tens of thousands of dollars worth of consulting input to do a full corridor study to understand how people move to and through and adjacent to Commercial Drive. So all those motor vehicle movements need to be understood, and there needs to be a really good understanding of where those motor vehicle movements might move if a lane were to be reallocated.

As noted earlier, there is a strong hesitation in Vancouver to displace automobile traffic from arterials for fear of neighbourhood impacts. Victoria Drive, intended to be a major automobile artery in Vancouver's early plans, has instead been treated as a neighbourhood street.²⁷ As long as traffic volumes are conceptualized as an external

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²⁷ And, indeed, the Commercial Drive Business Society would be fine with bike lanes over there.

force, then this is a logical concern. But it does force a concentration of different mobilities—and the conflicts between them—to be situated on the Drive itself.

The question of parking takes on a great deal of significance. The business association highlights the impacts its members see with changes to the street. "We can't afford to lose one single [parking] spot," the association quotes a member as saying, with more specific arguments that business vitality depends on the existing parking supply, as does accessibility for people with limited ability to walk (Commercial Drive Business Society 2016). On this last point, Lisa Leblanc has some sympathy:

It's sort of an accessibility thing in my mind, like when I think about people out and about with their elderly relatives or small children or whatever, sometimes it is necessary to drive to some of these destination streets, and it should feel like you're just as welcome driving there as you are using other modes, and you should be able to park in a safe place within a couple of blocks of the destination on the street.

But the overall claim that there is a shortage of parking is difficult to substantiate. Michael Feaver sees abundant parking on and around Commercial Drive:

Although, it should be said that there isn't really a parking problem in the neighbourhood. There are streets without any sort of—for example, across the street right now, that street doesn't have any sort of limitations on its parking. Sort of 5th or 4th, there's absolutely no signage. Permanent free parking. And often quite empty.

And the broader question of what level of vehicle mobility enables the area to thrive remains contentious. Jeff Leigh calls for more evidence-based claims about the economic impact of transportation modes:

You have a competition for space there. So it comes down to understanding how people get to the stores and the restaurants, and what's the business impact going to be of more or less transit, more or less cars, more or fewer cyclists. And I think that the business intercept surveys would actually inform that discussion, instead of us always looking at it from the perspective of 'I'm cutting through this neighbourhood, and I have to be able to move through here at the speed limit in my vehicle.' I'm not sure those people who are doing

that are helping the business owners or the residents of Commercial Drive. I think we should be talking about: what's great street life? What creates energy and activity on the street? And I think far fewer cars would help there.

Subsequently, different business intercept surveys conducted by researchers, the city government and the business association have indeed made competing claims about how important cars are to the area (Commercial Drive Business Society 2016; City of Vancouver 2016c: 12; Slow Streets 2015: 8). But, the perceptions of the essentiality of automobile movement and parking seem to be persistent. Impressions and expectations may drive thought about driving more persuasively than numbers and figures. So what is the "vibe" of the Drive? Its plural and unresolved role as automobile corridor, as destination street and as linear parking lot have emerged through a number of choices, events and more-or-less utopian visions over time. But it is difficult to extract a clear statement about what level, type, speed and experience of movement people in automobiles should be able to expect on Commercial Drive, and absent that the default seems to be unsatisfactory to many.

6.3. Planning the Drive

6.3.1. Citywide Transportation Plans

While all modes of travel on Commercial Drive have received planning attention and various schemes for change, the most recent iteration of debate over the street's configuration began with city plans to add cycling infrastructure to the street. Attention to Commercial Drive as a cycling route has ebbed and flowed through many of Vancouver's community and transportation planning processes over the years. In 1999, the city's overall bicycle plan included a policy that "bicycles should be accommodated on arterial streets where practical, and be included in the planning of new and reconstructed streets" and specifically listed the Commercial Drive-Victoria Drive corridor as a proposed bike route (City of Vancouver 1999: 147-150). However, no action was taken, and no mention of Commercial Drive appears in update reports through the

2000s. As noted in Chapter 4, painted arterial bike lanes were introduced where space permitted without impacting motor vehicle throughput or parking; outside of small spot changes, no substantial space reallocation on arterial streets occurred.

More recently, though, with the development of Vancouver's first physically separated bike lanes downtown, attention has turned to expanding this network to main streets in other parts of the city. In 2010 City Council approved a motion for staff to "report back on options to conduct a trial of a fully separated bike lane or lanes on an arterial street outside of the Downtown core" (City of Vancouver 2010a: 1). While no specific report back took place, this led to the development of plans for an expanded bike network in the city's next overall transportation plan, in 2012. During the development of that plan, though, the focus shifted toward developing a more specific list of priorities and a map of where streets would be modified. As Lisa Leblanc explains, business owners were feeling "blindsided" by transportation projects:

So in an attempt to respond to that, included in the Transportation Plan was a map that showed sort of our near-term: what the routes were that were highly desired by the community, that made sense, that aligned well with the rest of the network. So Commercial Drive was one of those that was identified as a strong desire line. Lots of people had raised it before, recognizing that it's a challenging one to achieve, but knowing that that Commercial Drive corridor is greatly desired.

So the updated transportation plan included a map showing Commercial Drive as a priority for a "low-stress, high-quality" bike route. This map showed potential construction of bike facilities on the Drive in 2013:

The Commercial Drive corridor serves an area with some of the highest existing and potential bicycle ridership, and would serve a busy commercial high street with many important destinations. [The route has] been identified in previous plans, and address some of the highest collision locations. (City of Vancouver 2012c: 66)

However, no action was taken to implement this plan. The local business association developed its own vision in response to the plan, outlining requirements for maintaining vehicle access and parking and de-emphasizing the prospect of bike lanes

on the Drive: "vehicle access should not be unduly restricted or reduced"; "the [Commercial Drive Business Society] however does not support dedicated (separated) bike lanes on Commercial Drive if this means a reduction in on-street parking"; "the CDBS recommends focusing on enhancing [parallel] existing bike routes rather than on Commercial Drive where there are many competing travel modes"; "wider sidewalks should be a priority over cycling lanes" (Urban Forum Associates 2012: 21). The business association did develop an illustration of the potential addition of painted bike lanes, by reallocating a travel lane south of 1st Avenue and narrowing lanes north of 1st Avenue but they emphasized that this was not desirable for their point of view.

In 2013, city staff returned to City Council with recommendations for implementing new bike facilities in the city: Commercial Drive was not included as an immediate priority, but still appeared on the map as a 2014 project. The report deferred to the Grandview-Woodland community plan, then under way, noting that "the plan is scheduled to come to Council by the end of 2013 and will provide guidance for a more specific active transportation corridor consultation regarding the Commercial Drive Corridor in 2014" (City of Vancouver 2013c: 5). As the community plan timeline extended, specific action on the configuration of Commercial Drive was also deferred.

6.3.2. Community Advocacy

In 2014, a community group called Streets for Everyone was formed to advocate for reconfiguring commercial streets to better accommodate multiple modes of travel (Brock 2015). In summer and fall 2014, this group released a design for a proposed redesign of Commercial Drive, which has framed the subsequent debate about the street. Michael Feaver, who was involved in creating the detailed proposal, explains why Commercial Drive could potentially be a model for a rethinking of the configuration of main streets in Vancouver:

So that's basically a consequence of the geometry of this street and its uses and the character of the neighbourhood, the demographics, the people, the transportation trends in the neighbourhood. The actual modal share in the neighbourhood, all these sorts of things. So this, in

the beginning, looked to me like something that might take some time, but could be successful given enough pressure from the neighbourhood.

The project asserts a conception of equity and accessibility to the opportunities and spaces present on the Drive. Feaver explains the name "Streets for Everyone":

'Everyone' is literally everyone in the neighbourhood, everyone in the city who wants to come here. It's not limited by mode or by age or by ability.

Feaver notes that the design the group developed was intended to satisfy a number of requirements: it focuses on the "wider" section of Commercial Drive from Gravely Street to 14th Avenue and proposes a design that does not require moving the street's curbs, in the hopes that a redesign could be achieved quickly and cheaply; and it does not remove parking, in the hopes of satisfying multiple demands for this use. Figure 7 below reproduces one of the renderings of the group's proposal; it can be compared to the photo of existing conditions in Figure D.12 in Appendix D.



Figure 7 Rendering of potential reconfiguration of Commercial Drive (Image: Streets For Everyone, https://streetsforeveryone.org/commercial-drive/)

The key element of the proposal is reallocating space used for one of the two "through" lanes for vehicles to other uses. Although sidewalks are not widened along their entire length, more pedestrian space is created at intersections and bus stops. A physically separated bike lane is installed next to the sidewalk. At intersections,

extended curbs create separated vehicle, bicycle and pedestrian movements in all directions. And, although the proposal does not include an exclusive bus lane, transit movement is prioritized over private vehicles, following a model from a street in Seattle:

So on that street at many intersections they've extended bus bulges and bus stops on bus bulges on platforms, and basically the bus sits in the only travel lane at the stop, blocks traffic behind it. This has a number of effects. So, first of all, it creates a space for people to wait for the bus, provides room for a shelter, provides room for benches and other seating, provides room for wayfinding information, and all sorts of things like that. It also creates a clear space in front of the bus after it stops, so when it pulls out of the stop there's not going to be any traffic in front of it, because there was no way for the traffic to get there.

As noted earlier, this particular expression of mobility priorities, in which private vehicles are physically unable to pass a stopped transit vehicle, is not currently present anywhere in the City of Vancouver. Transportation professionals are skeptical of its achievability on the Drive. Lisa Leblanc, for instance, worries that the volume of traffic will end up delaying transit service instead:

In my opinion, there needs to be a lot fewer cars on Commercial Drive in order for the transit priority that's required to work. I think some careful looks at turn movements and that kind of things are going to need to be required as well. And I think there's some really tricky intersections that need to be designed in a really constrained area.

And Michael Ohnemus calls the design "tight", but emphasizes that there is a political decision about priorities associated with it:

I would say that might be challenging on the 20, because it is one of our busiest routes, and it does have a considerable number of boardings and alightings at each station, or each stop. So it could be...it might be negative for the car drivers, but at the same time: does that matter? I guess it depends who they're trying to appease. And from a transit perspective it might not be that bad.

And, in that light, Michael Feaver emphasizes that the design is consistent with the priorities articulated in transportation and sustainability plans for years:

If that [component of the design] was eliminated the effect on the bus traffic would degrade the bus service. And that is not a goal of the city, so by trying to put passing lanes around bus stops they would make the design worse in the things that they actually care about. I think it's a possibility that they'll consider that, but I don't see any need for it. I don't think that there's a constituency in the neighbourhood that wants this to be a street with fast traffic.

The proposal also shifts the spacing of bus stops, not only to provide faster and more reliable transit service, but also to avoid removing parking. Feaver explains:

And so by having less frequently spaced bus stops, it opens up room for additional parking, which means that overall there would not need to be any loss of parking on the street itself if there was a bike-bus improvement project.

As noted earlier, the proposal only covers the "wider" south portion of Commercial Drive, though other groups, particularly those focused on cycling, continue to advocate for changes on the "narrower" portion as well. If changes are not made to the Drive itself north of Gravely a likely proposal would be to designate an adjacent local street as a bike route. However, Lisa Leblanc notes some concerns about capacity on these streets:

That's not a slam dunk either, because if we're talking all ages and abilities, generally that means 500 to 1,000 cars per day on a local street without separation, and Salsbury has 2,000 plus on many of the sections with parking on both sides and fully occupied. So that part's not without its challenges as well.

Despite the concerns of professional planners, interview participants generally emphasized the success of Streets for Everyone in renewing attention within the neighbourhood and beyond to how arterial streets can be configured for different forms of mobility. The group continues extensive community advocacy, organizing and mobilizing individuals, businesses and groups within Grandview-Woodland. As the next section shows, they successfully informed policy within the community planning process, producing a more deliberate focus on how street design delivers mobility outcomes than has been seen in other city plans.

6.3.3. An Extended Community Plan

Grandview-Woodland followed the opposite trajectory of the West End's community plan: relatively non-contentious at the outset, but extremely so as the plan unfolded. Notwithstanding the intention of the current iteration of Vancouver's community plans to be quick and "nimble" processes, the Grandview-Woodland plan ended up taking more than four years and including a number of complex public processes, such as a citizens' assembly of randomly-selected community members to inform the plan. The subject of how Commercial Drive or other neighbourhood streets were configured was not given explicit attention in the initial terms of reference of the community plan (City of Vancouver 2012b), nor was it a major flashpoint of controversy leading to the extension of the plan, but as interest grew in the subject, consideration for the street was woven through all of these complex processes.

As noted, the prospect of reconfiguring the Drive originated as a city-wide transportation project before being referred to the community planning realm. Early community planning work was fairly non-committal to any specific interventions: a 2013 public consultation document, for instance, notes "different opinions" on the subject of a Commercial Drive bike lane and asks very open, high-level questions about frequency, purposes, routing and experience of different transportation modes. On the subject of reconfiguring the street itself, the document asks participants if they would support reallocating a travel lane or a parking lane for other purposes, and if they would "support removing rush regulations and implementing full-time parking, even if it meant slower traffic and buses" (City of Vancouver 2013a: 23,49).

Later that year, planners presented draft policy recommendations, including adding bike lanes to Commercial Drive: "introduce bike lanes between E 10th and Gravely. Minimize impacts to parking, and explore using parking as a buffer between motor vehicle and moving traffic" (City of Vancouver 2013b: 28). The plan also prioritized a future rapid bus service on the street. However, the plan was deferred after public controversy erupted over the scale and type of densification proposed for the area around the Broadway-Commercial SkyTrain station, and the perception that these plans

did not reflect the views or priorities of people in the neighbourhood. By fall 2013, City Council had delayed the process and committed to creating a citizens' assembly.

The assembly, for its part, did not initially reach consensus about the importance of adding bike lanes to the Drive. Streets for Everyone and others advocated to the assembly for reconfiguring the street, while others, particularly the business association, expressed their opposition. One of its interim reports recommended deferring to a technical process to review the placement of bike infrastructure. Specifically, it argued that the city should "expedite the creation of a multi-stakeholder task force that reviews objective, transparent research to resolve locations of proposed cycling routes" (Citizens' Assembly on the Grandview-Woodland Community Plan 2015a: 6).

Meanwhile, public processes continued in parallel with the citizens' assembly, including a number of geographically-focused workshops. Background materials provided at the Commercial Drive workshop featured the city's claim that "currently, people who walk, take the bus or drive are reasonably well supported, but people who ride a bike to the Drive are made to share the road with high volumes of motor vehicles — which poses a number of safety considerations" (City of Vancouver 2015d: 26). Despite this narrow focus on cycling, for the first time, the phrase "complete street" was used in city documents around the Drive. The materials referenced the 2012 Transportation Plan's call for a bike lane on the Drive, and therefore "[sought] feedback from the community to ensure that this policy is addressed in a thoughtful way — one that balances the needs of all road users, together with the needs of businesses and services along the Drive" (2015d: 26). In the end, participants in the workshop generally agreed with adding a separated bike lane, if it could be achieved without adversely affecting businesses or removing parking.

In the final report of the citizens' assembly, its members had achieved a greater consensus. They expressed shared values for "accessible, efficient, clean, safe and affordable transportation for people of all ages and abilities" (2015b: 19). And the assembly made three recommendations for mobility on the Drive itself:

- 15.1: We believe the City should introduce safe bike lanes (like Union Street's parking-protected bike lane) on Commercial Drive from East 14th Avenue to Graveley Street.
- 15.2: We recommend pedestrian experience improvements, such as wider sidewalks, more parklets, good access to bus stops, better signals, street furniture, trees and safe bike parking on side streets.
- 15.3: We urge the City to improve safety conditions for all users (pedestrians, cyclists, vehicles, and people with mobility challenges), through means such as lowering the speed limit, intersection improvements, lighting, and parking controls. (Citizens' Assembly on the Grandview-Woodland Community Plan 2015b: 55)

And, finally, the Grandview-Woodland Community Plan was completed in summer 2016. As noted at the beginning of this chapter, the plan avoids a commitment or a firm design, but there is a guiding policy around the idea of creating a "complete street". And the concrete actions put forward as possibilities echo the recommendations of the citizens' assembly and also the design put forward by Streets for Everyone, including reallocating space from travel lanes, redesigning intersections, creating new "transit waiting areas" and maintaining parking (City of Vancouver 2016d: 124). After four intense years of planning, and 17 years after it was conceived as a bike route, City Council approved this plan for Commercial Drive, at least at a conceptual level.²⁸

6.3.4. A Street for Everyone?

In fall 2016 the City began public consultation on delivering a "complete street" for Commercial Drive. While, again, no detailed design options are provided, the consultation materials appear to telegraph a design very much like that devised by the community: "there may be potential to reallocate a travel lane in each direction" to achieve a physically separated bike lane and expanded transit waiting areas (City of Vancouver 2016c: 15). The materials continue to rule out changes on the "narrower"

²⁸ For good measure, it also struck a "Neighbourhood Transportation and Parking Stakeholder Advisory Group" through the end of 2018 to review and give feedback on the implementation of transportation-related items in the plan. The exact makeup or role of this group is not yet clear.

northern portion of Commercial Drive, except, as in the West End, to remove rush-hour parking restrictions and permit full-time parking. Design options were to be developed and presented back to the community in early-to-mid 2017; however, as of March 2017 no materials had yet emerged.

The process appears likely to eventually result in a bike lane on a portion of Commercial Drive, although groups such as the local business association continue to organize opposition to the idea. Some of the details of how different mobilities will be constructed on the Drive are less clear: if the City is not willing to place bus stops in a single travel lane, for instance, then a nominally "complete" street could make transit service slower and less reliable at the expense of automobile throughput. Different intersection treatments could impact how much pedestrian movement benefits from changes. And deliberately allocating public space to different forms of movement does reframe how the street is claimed by people walking, not to mention acts of protest or events: if the Drive's "pathological culture of jaywalking", as observed by popular writers, is part of its "vibe", then barriers and buffers between sidewalk, bike lane, parking and vehicle movement represent a different paradigm. These are the details that will indicate what exactly is being "completed" on this street.

Commercial Drive could represent a new "constellation of mobility", different from what Vancouver has seen to date, albeit still filtered through the imperatives of vehicle travel and parking. Many participants believe that the unique characteristics of the neighbourhood—its diversity, its politically active citizens, its pre-existing examples of politicizing street space—are what have enabled this to occur. But others in the neighbourhood nonetheless see a threat of gentrification and change. As noted earlier, Michael Feaver thinks that, in order to avoid this, reconfiguring the Drive has to lead to a larger-scale shift in how street space is constructed across the city:

...if the worst thing that happens in making these changes is that we've made the neighbourhood too nice, I think that that means that that kind of change should happen very broadly. That's a reason for other people elsewhere to want to have this happen there too.

Commercial Drive is one place in Vancouver where substantive change can happen, but it must not be the only one. This case, though, also shows that it took extraordinary community effort and an exhausting set of processes to achieve (likely) change in this part of the city; a citywide shift in mobility paradigms may be a more difficult achievement. And achieving this without contributing to displacement and economic inequity requires very careful attention to how different forms of incomplete mobility are constructed and realized by different groups in the community. On a street with a great deal of multi-modal transportation, and friction and competition over space, the way in which these mobilities are perceived to construct a neighbourhood "vibe" remains uncertain.

Chapter 7.

Discussion: Mobilities, Sustainability and Space

The allocation of space for movement, or the absence of movement, on Vancouver's main mixed-use streets is contested and sometimes contradictory, reflecting the multiple mobilities constructed and operated upon them. These streets are products of a history—often deliberate, but sometimes not—of concentrating many different forms of movement within the same spaces. In 2016, Vancouver's high streets deliver a high amount and diversity of types of movement, but the overall allocation and regulation of space upon them nonetheless privileges the movement and storage of private automobiles over different forms of walking, cycling and moving public transit vehicles. While this is not consistent with the overall policy targets the city government has set out—nor with the urgency ascribed to its sustainability goals—it is consistent with an approach taken to move toward sustainability gently, and without disrupting the social or economic status quo of the city or its communities. Vancouver's mobility politics explicate how local governments are still challenged to make deliberate, integrated policy choices about the allocation of resources, opportunities and access in the city. They take on this role and its justice implications in a piecemeal and tentative fashion, while also being steeped in long traditions of technocratic service provision and technical standards often taken for granted (Blomley 2011: 36-37). The mobility systems in Vancouver do not equitably distribute mobility or its benefits to people in the city, and the political choices that result in this are often neutralized and made invisible.

The data presented show, first, how space allocated to movement can be depoliticized and decontested. Particularly in the case of the West End, a desire to preserve street character and business vitality ruled out any substantive change to the mobilities present and privileged on its main streets, despite numerous examples shared by key informants of their desire for alternative configurations or prioritizations to take

place. A plan that originated with an imperative for a dramatic reconceptualization of how mobility is enabled and allocated ended by making no interventions to its main streets except for allowing more full-time parking. Wishes for reconfigurations—wider sidewalks, bike lanes, transit priority, less traffic—disappear beneath more opaque imperatives, or perhaps fear of disrupting a successful neighbourhood. And, as Spencer Chandra Herbert observes, it can be difficult to argue that transportation in the West End is an urgent priority:

...when my folks complain about bus service or delays or travel a lot of people roll their eyes, because we've got incredible transit compared to Surrey. So being able to take 'good' and make it 'excellent' is less of a priority, it seems, for some, when you've got 'poor' or 'horrendous' in many other places.

Mobility is a social resource, one that enables access to place and opportunity in the city, and broader questions of mobility justice across the urban region are certainly important for policy. But urban streets in core neighbourhoods are also important sites of study for understanding how mobility politics is expressed. This research project has also shown ways in which urban street space can be re-politicized and re-contested: a major effort on the part of community members on Commercial Drive may lead to a reconfiguration of the street that asserts a different paradigm. Specific advocacy and organization has forced—and continues to force—public discourse that links broader policy goals with their implementation, and that asks how allocations and configurations of public space reproduce and challenge different mobility paradigms.

Urban policy—and the research collected for this research project—tends to focus on modes of travel and how their mobility networks are constructed. But these modes should be considered for how they represent broader mobility questions. Cresswell (2010: 17-31) describes the concept of "constellations of mobility", the "kinetic hierarchies in particular times and places" that make real the power relationships of enabling or impeding different forms of movement. So this chapter now turns to understanding what "constellations of mobility" are observed in these cases, and what the implications are for how urban spaces are constructed.

7.1. A Mobility Politics in Vancouver

7.1.1. Mobility Allocation and Illusory Choices

A central, but rarely explicit, policy choice made by cities is the total amount of movement for which space is provided. As cities turn to making more sustainability-focused policy, an imperative emerges to reduce the total amount of movement drastically: "we are simply going to have to travel less," as one writer bluntly concludes a lengthy analysis of transport policy (Hamilton 2003: 59). Locally, a recent article has called for Vancouver to shift its sustainability goal from "Greenest City" to "Slowest City", to reject imperatives of growth and consumption and movement in favour of a hyperlocal, service-industry-embracing, relaxed city (Beers and Condon 2012); the authors are somewhat tongue-in-cheek about the illustrations they use, but quite sincere about the concept of a slower, less mobile urban life.

But this imperative, appealing in general terms, quickly finds itself challenged by equity and justice objectives. One aspect of Cresswell's framework—the "starting point"—observes that people do not always move by choice, but out of necessity (2010: 22). In the profoundly inequitable metropolitan conurbations we live in today, a "slowest city" may be enjoyed by the relatively affluent, but many people who work in service occupations find it hard to find housing within a short distance of their workplace. Amidst trends of urban gentrification and the suburbanization of poverty, the alternative to travelling frequently and for long distances is not a relaxed, sustainable life of leisure, but a loss of income and opportunity. And there are other social cleavages and considerations as well: within Vancouver's transportation surveys, women have consistently been more mobile than men, reporting more trips more often (City of Vancouver 2016e: 4-13). Interview participants spoke of family imperatives for more vehicle travel. For some seniors, particularly those living alone, mobility is what prevents social isolation. "Network capital" is a key resource, and its allocation has justice-seeking implications (Sheller 2011).

Substantively limiting overall mobility may be desirable if mobility is taken to be an asocial and apolitical concept, but in isolation of other major economic and spatial choices it has the effect of privileging the already-privileged. Ironically, it has the same effect as constructing spaces to favour the automobile: in a dense urban environment, the car's inefficient consumption of space for movement and storage serves to limit the total amount of mobility available—this is the "mobility stalemate" concept described by Henderson (2013) and referenced in these case studies. Of course, reducing the negative impacts of car travel on other aspects of the urban environment—noise, emissions, a rejection of public life—are also compelling policy imperatives. But the literature and cases studied here show profound inequities in the resources that make mobile lives possible. The way to achieve both equity and sustainability goals, to deliver both more mobility and more sustainable mobility, is the development of much more robust networks that favour other forms of movement, particularly public transit for its accessibility to all²⁹ and its versatility in delivering a variety of people's movements collectively.

And this does require a more deliberate redistribution of space in the city. Currently there is a rhetoric of "choice" in Vancouver's transportation policies: as described in Chapter 4, overall strategies for the city speak of enabling options, of expanding the variety of ways people can travel. But these choices are often illusory, and travel "is as much the result of constraint as it is of choice" (Martens 2017: 28). Choices can be illusory, and can accrue inequitably as well: trends toward more carshare schemes, for instance, can expand the travel choices of those who already have multiple options while impeding mobility for those who do not. The West End plan, by avoiding change to how space is allocated, avoids a redistribution of mobility among its population. Without more intentional statements about how social and environmental

²⁹ To be sure, it cannot be taken for granted that public transit is accessible or inclusive: while public buses no longer feature explicitly segregated spaces, there are many people who encounter forms of oppression and unsafety, such as racialized or gendered aggression, in transit spaces. Physical accessibility to people using wheelchairs is a relatively recent addition to transit vehicles, and economic inequities and stigma around fare payment are also pressing issues. Still, the essential mobilities of public transit within dense cities—shared, unplanned movement—make it a uniquely efficient and accessible way to enable mobile urban lives.

objectives can be reconciled, this framing of mobility policy in terms of personal choice serves to hide the collective policy choices that must be made.

7.1.2. Challenging but Essentializing the Automobile

Speed, rhythm and routing are the next elements of Cresswell's mobility politics framework, and the prevailing mobilities of the automobile generally privilege movement that is fast, smooth and direct. These are probably the most evident and explicit points of contention on Vancouver streets: nobody wants their particular street to be a thoroughfare, even if some business owners feel that they depend upon people travelling efficiently from far away. The historic transformation of Vancouver's main streets into automobile arterials is notable for a contradictory politics of these elements of mobility: historic plans quite deliberately embraced the car as a fast and liberating tool and planned these streets based on the number of vehicle lanes they could hold; however, these same plans are notable studies of bypasses that were never built. The result seen today is streets whose design elements—lane width, speed limit, controlled intersections—seem to encourage rapid and unimpeded driving, with other interventions—frequent stoplights, curb extensions—providing a contrary statement.

When interview participants observe a lack of intention in their street's design, it reflects this contradiction. Vancouver provides a great deal of mobility in a relatively small space, with a disproportionate share of this space consumed by automobile travel and storage. Vancouver's policy choices not to pursue urban freeways, and to discourage through-traffic outside of its arterial road network, contribute to commercial streets becoming the fastest and most direct vehicle routes for many journeys. Denman Street and Commercial Drive were to be local-serving streets, with automobile traffic concentrated elsewhere, but the parallel routes were never built. There is a paradox in these policies: Vancouver has challenged the car, more so than most of its peer (North American) cities, but still struggles to challenge the mobilities of the car.

This is visible when informants describe the conditions under which space could be allocated away from the car: if traffic volumes drop, someday; if a major infrastructure

project provides an alternative; if some rapid technological change results in a new mobility paradigm. Reducing vehicle traffic on Denman Street is understood to require some new infrastructure to accommodate its car volume somewhere else, or a far-off major investment in new transportation infrastructure to the North Shore. Having private vehicles travel at the same rate as a bus on Commercial Drive would require a very detailed traffic study. There is widespread support for reducing the volume, speed and movement of automobiles, but it is contingent on external forces, not a political choice embodied within the construction of the street. Current levels of automobile movement seem essential, inevitable and neutral. In public transit policy, Vancouver is fixated on securing a new rapid transit line under Broadway, justifying this technology and alignment preference in part on the grounds of enabling easier movement on the street itself (City of Vancouver 2012a: 34-35). At the same time, the city government rejects reserving space for the existing bus service on the street.30 The message is that the automobile volume on Broadway is fixed, as is the importance of space for vehicle parking: therefore, the right-of-way required for surface transit must therefore come at the expense of walking and cycling.

One of the consequences is this is seen in the fraught role automobile parking plays in Vancouver's mobility politics. In particular, allocating space for vehicle storage is framed as a pedestrian amenity, a buffer from high-speed traffic that makes walking safer, quieter and more pleasant. To the extent that this is true, it also implies that the high-speed traffic needing a buffer is an inevitability that cannot be changed, again essentializing the automobile. There are many cycles at play: on a simple level, abundant parking may encourage more driving to take place, perpetuating the need for a buffer. But it also more broadly reinforces a politics of mobility in which business owners

All-day bus lanes are rejected because "impacts to local businesses and parking revenues are significant", though these impacts are not quantified (TransLink and City of Vancouver 2015a: 28).

and planners feel that commercial vitality depends upon nearby parking spaces³¹, even if evidence in the form of surveys or use data suggest otherwise.

The consumption of space by vehicle movement and storage serves to rule out opportunities to reconfigure streets to provide for other forms of movement, except for very small targeted interventions: in the West End, wider sidewalks or bicycle infrastructure or transit priority space are unlikely to ever be delivered on the length of main streets in the foreseeable future. There is a waiting game, in many senses, as it seems that any more substantive reallocation of space is contingent upon yet-unknown future transformations.

7.1.3. Authentic and Symbolic Streets

Cresswell also speaks of the experience of mobility, illustrating the politics of this element with a description of the explicit class separation on intercontinental air travel. In first class a passenger experiences more space, nicer food, more oxygen, more toilets per person, massage, limousine service, media on line" (Cresswell 2010: 25). While urban mobilities are perhaps less explicitly class-segregated than airplane flights, the experience of different forms of movement varies a great deal on Vancouver's streets. Sometimes class is invoked: writers affectionately (or not) refer to the 20 Victoria as a "proletariat chariot" (Gill 2015). Even if the working class have been largely displaced to the suburbs by now, the back of the 20 bus is far removed from a first-class flight. It is interesting to observe the marketing of some cycling initiatives, such as Vancouver's new bike-share system, and to contrast the experience and demographic being targeted. But perhaps the most visible disparity in mobility experience is evident in how walking is conceived of and valued on different streets.

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³¹ Note, though, that business owners and advocates do also argue that parking spaces are essential for loading and deliveries by vehicle. This project does not address this concern, being focused on the movement of people rather than goods, but the argument made that space should be allocated more deliberately can also be applied to commercial traffic; providing a loading space can be a distinct policy question from providing a parking space.

Walking can be constructed in multiple ways: it is a necessity, or it is a routine, or it is an act of leisure. Because walking generally requires a greater investment of time than other modes, those who walk must have the time to invest. On Vancouver's commercial streets, the type of walking that is favoured is linked to leisure, pleasureseeking and consumption; it is a crafted experience. The "pedestrianism" that, as Blomley documents, has prioritized pedestrian flow on sidewalks is finding new expression in efforts to enliven and animate streets for people on foot: the overall paradigm of depoliticizing and objectifying claims to the sidewalk remains intact (Blomley 2011: 54). Interview participants living in the West End reported that their more local expressions of walking often take place on neighbourhood streets, rather than the main streets; they avoid Robson and Davie unless they are shopping. But the emphasis in city planning documents is placed on the main streets, adding amenities like lighting, seating and other items of interest to enhance the experience of walking. It is a construct, and one that encourages the visiting *flâneur* over the local resident trying to walk to work. When interview participants hold up Vancouver's airport outlet mall as a model for the pedestrian experience on Robson Street, it expresses a preference for this very cultivated, sensory experience.

On Vancouver's main streets, though, lasting reallocations of street space to promote walking and public life have been a more difficult sell. Vancouver's car-free events have been successful as events, and their organizers continue to attempt to impart a political message about mobility and an invocation to make lasting change. But in terms of public policy, the festival model has now become a requirement for a car-free space to be established: it seems in Vancouver's prevailing mobility politics to be an all-or-nothing affair. The creation of new car-free spaces in Vancouver comes with requirements for extensive programming and frequent events; they are destinations to come to and then walk around. And, as noted in the case studies, the removal of all other forms of mobility, particularly transit, from a street may have disproportionate impact on those whose lives are already (and always) car-free.

Urban streets are always sites of spectacle, to a degree. But it seems easier to achieve symbolic outcomes—festivals, celebrations, a heavily curated presentation of what walking can be—rather than authentic and inclusive public space in Vancouver's

streets. The private automobile remains the default user of public street space; the criteria for reallocating space away from the car remain quite strict.

7.1.4. Complementary Outcomes, Conflicting Mobilities

The final component of Cresswell's constellations of mobility is friction—why mobility stops or is interrupted. He cites examples of people being turned back at borders, or intercepted and searched at airports (Cresswell 2010: 26). But, in the urban streetscape, friction is seen in the conflicts between people's movement, between different forms and modes and purposes and rhythms of moving. Friction in cities is most visible in the form of congestion: movement stops and starts and stops again as people compete for space. In Vancouver's transportation networks, certainly all modes of travel experience this type of friction. But a more important aspect of this in divining a mobility politics for the city is seen in the mobility conflicts that arise between more sustainable modes of travel: walking, cycling and transit.

Walking, cycling and transit have complementary mobility outcomes, in the sense that they combine with each other to produce a robust and accessible sustainable transportation system. But the mobilities associated with these modes can differ quite a bit, and conflicts in the allocation of space arise easily. Interviewees who walk on narrow sidewalks find themselves in conflict with people cycling on the sidewalk instead of the roadway. Bicycles and transit vehicles progress in a sometimes dangerous game of leapfrog down the street. Bicycles are small, nimble and individualistic³², giving their riders a sense of unencumbered freedom. Buses are large vehicles needing space to turn and stop, and riders must travel with everyone else at a collective speed and rhythm. Intersections can be particularly acute sites of multi-modal conflict. Interview participants in both case studies describe how these conflicts can cascade.

³² There are, however, many examples of collective bicycle travel: group rides and events, or well-known "critical mass" protests that assert a larger claim to space by travelling together. But the mobilities of the bicycle are still individualistic in that the routing, speed and rhythm of travel by bicycle are individually determined.

So, given that, advocacy can become focused on single modes and removing the friction that afflicts them specifically, rather than on the overall sustainability outcomes sought for. Some people interviewed for this project preferred to walk and saw bikes as a nuisance to them. Some people advocating for bicycle mobility had little time for public transit. In 2017, consideration of reconfiguring Commercial Drive is likely to bring these conflicts to the fore, or at least make them more overt than before. City documents have shifted in focus from adding a bicycle lane to Commercial Drive to advancing notions of a "complete street", but there remains a struggle to clearly articulate the incomplete features of the street and how mobility is allocated on it. There is a danger that this more comprehensive consideration of the street will be lost if the particular deliverable of building a bike lane becomes the sole focus of debate.

It is important to consider why friction arises between walking, cycling and transit mobility, and it relates to the automobile still being the default user of space. When the starting assumption of a street is that private vehicles must have a lane for travel and space for parking in each direction, then there is simply not much room left to fight over on many of Vancouver's main streets. Or, as one Seattle-based blogger observed, in discussing the various promises and possibilities of autonomous vehicles and new paradigms of automobile-based transportation, that there is a more fundamental question to be asked:

...when you strip away the requirement that humans be encased in metal (autonomous or otherwise), you suddenly see not a scarcity of space and a surplus of people, but instead a scarcity of people and a surplus of space. (Shaner 2016)

The social apparatus of automobility—the expectation of immediate, fast and flexible private movement—consumes vast amounts of space and limits how many people can access the city. As long as these mobilities of the automobile are not fundamentally challenged, there will a limit on the amount of space that can reasonably allocated to walking, cycling and transit. Sidewalks will be narrow, bike lanes will be discontinuous, and buses will weave in and out to avoid delaying cars. And, as a result, there will be friction and competition between those modes instead of a more integrated, sustainable transportation system.

7.2. Processes and Planning

Like all cities, Vancouver remains a contradiction as it tries to develop its collective future: its aggressive and superlative sustainability goals not always matched by their implementation; there is an abundance of policies and actions but challenges in prioritizing them; and there are sometimes opaque links between objectives at different scales. Like any local government, though, the public policy "system" is anything but. A multitude of actors and a cacophony of voices make for a very non-linear relationship between objectives and outcomes; there is difficulty in adjudicating competing claims to resources; and there is a bias toward opportunistic, rather than strategic action. In that light, a reallocation of space to support a reallocation of movement is a challenging notion, and it is important to acknowledge that Vancouver's existing transportation plans do represent a great deal more than has been achieved in many other places.

But, still, there is room in the city for processes and policy analysis that are more deliberate in how they consider the mobilities embodied in the allocation of spatial resources. What is evident in these case studies is that there are assumptions, particularly about automobile movement, that are not necessarily supported empirically yet accepted as starting points. There is not a full discussion of how mobility is allocated in terms of equity and access to the city. Aesthetic, impressions and unstated expectations shape policy more than defensible evidence or redistributive choices. And so there is not always a full understanding of challenges, trade-offs or opportunities. Recent transportation projects, including the Commercial Drive "complete street" project, have developed public consultation materials that do provide more data and policy context than previous projects. This is a promising trend, and an opportunity to foster a more sophisticated conversation about movement among participants and citizens—starting, as critical literature suggests, with a more robust articulation of what makes streets "incomplete".

If cities are innately public constructions, the collective imaginings of the people who comprise them, then there needs to be a way to make mobility both a more collective practice but also a more public creation. If Vancouver can make visible the

choices, both implicit and explicit, that are found in the allocation of space in the city, then there is an opportunity to promote a broader understanding of what a more sustainable city could—and will—be.

7.3. Conclusion: Moving Targets

The case studies presented in this project have demonstrated that there are multiple mobility politics at play in discourse and debate surrounding Vancouver's multimodal mixed-use streets, but that the assumed mobilities of the automobile are still predominant in how they are configured. There is an unquestioned assumption that moving or storing cars is the default use of street space, except for sidewalks, and other modes must fit in as able without disrupting this paradigm. The result is that mobility choices are not allocated equitably or efficiently in the city; that automobile use is challenged but the expectations of automobility are not; and that conflicts arise between sustainable modes of travel, obviating their complementary equity-seeking and impact-reducing outcomes.

Planners in Vancouver chase moving targets: the city is, on the one hand, an exemplar of non-automobile mode share; but, on the other hand, the city is reluctant to materially take space away from the automobile for fear of impacting people in neighbourhoods or reducing overall mobility in the city. It aspires for sustainability in bold terms, but is reluctant to take concrete steps that challenge existing social and economic orders. The mobility systems that have enabled the automobile are difficult to dislodge, and certainly beyond the scale of city government to achieve unilaterally, but there is room for more deliberate and intentional policy than is currently being delivered. And claims of automated vehicles changing the policy objectives are misplaced, just because they cannot scale to provide mobility justly or equitably at scale. As Jarrett Walker observes (emphasis in original), "some things stop working when everybody buys them. [...] it's mass adoption of cars that makes them ruinous to a dense city and to the liberty of its citizens" (2016). Driverless cars are still cars, and some of the revolutions on offer are a distraction, at best, from important policy questions of urban mobilities.

Fully articulating what just mobilities and a just city entail is a more complex question than this project can fully answer, but Martens offers a compelling starting point: "a transportation system is fair if, and only if, it provides a sufficient level of accessibility to all under most circumstances" (Martens 2017: 215). Conventional transportation planning is rooted in a particular ideal of fairness, but one that assumes that the status quo is a neutral baseline against which policies can be measured. A more just transportation system should instead, echoing Martens, focus on people's capability for movement and access. This project has noted multiple instances of this tension—efforts to "complete" streets without understanding how they are currently incomplete for many people; efforts to enable more "choice", but for those who likely already have sufficient access to transportation systems; and sustainability interventions that symbolically disrupt some aspects of the existing system of automobility while materially disrupting the mobile lives of the most vulnerable. This project has argued more a more just (re)distribution of mobility—enabling maximum mobility benefits and minimizing harms through a much more explicit challenging of the pre-eminence of the automobile.

But justice is not only about distributive outcomes: Cook and Butz invoke Iris Marion Young to argue that mobility justice requires "just institutional actions and decision-making processes about mobility issues" (Cook and Butz 2016: 403). This project, in documenting the complexities of local planning processes and the way they can obfuscate political choices behind technical standards, or privilege the needs of certain actors within governing regimes. Mobility justice at street level needs to more actively consider which voices and needs are excluded from conventional processes, and requires transportation professionals to work more actively and explicitly to enabling more democratic institutions and processes.

As an in-depth case study of particular projects, this project can only tenuously explain overall urban mobility politics. Its narrow focus on transportation modes used for moving people within cities also excludes important aspects of urban and interurban mobility that inform space allocation policy choices, as well as the broader systems, materials and objects than enable automobility. Further research could explore these additional aspects, as well as fruitfully comparing mobility politics in different cities to understand the factors that might give rise to different conceptions and values of urban

transportation. Further efforts to conduct ethnographic research, particularly into the mobility experiences of more marginalized populations in cities, is also important as urban and suburban dynamics continue to shift; this research focused more on the perspectives of decision-makers and advocates whose contributions tended to be more abstract and high-level. As well, more quantitative analysis of the efficiency, performance and accessibility of different street configurations and mobility systems—while not diminishing the importance of studying mobility politics—would help operationalize this research more readily to inform public policy. As the urban realm does think about streets as contestable, collective imaginings, there is a need for foundational research to ensure that the resulting policy discussions are grounded in empirical evidence.

Various forms of movement define cities; they are places, but mobile places, ever-changing, re-imagined by a fleeting collective of people who find themselves sharing limited space. More sustainable, equitable, efficient or public mobility will not be achieved because of technological change, but by collective choices to allocate shared resources differently. The complexities of local government and local politics can make this difficult, time-consuming and opaque. But cities are also sites of opportunity, and perhaps the only hope to begin a more sustainable future.

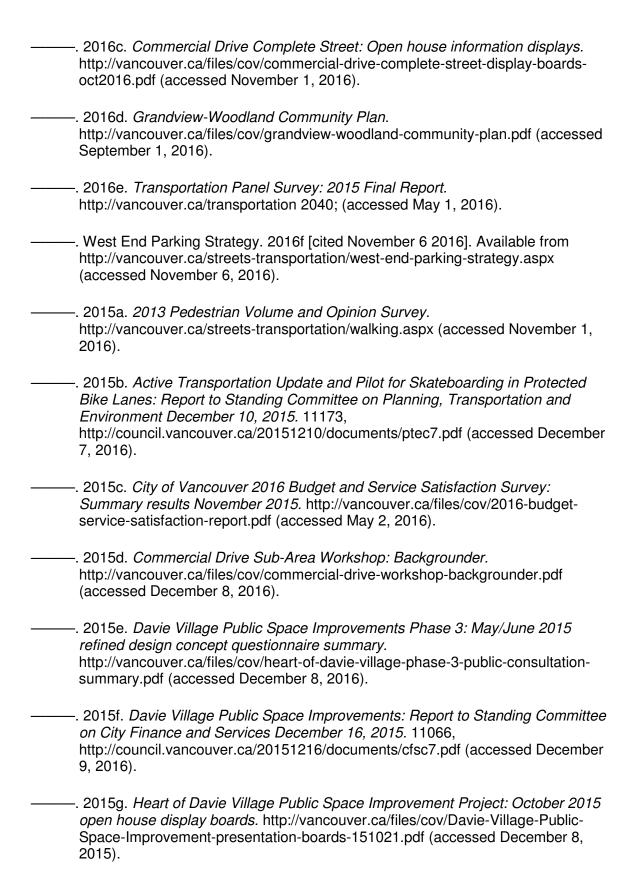
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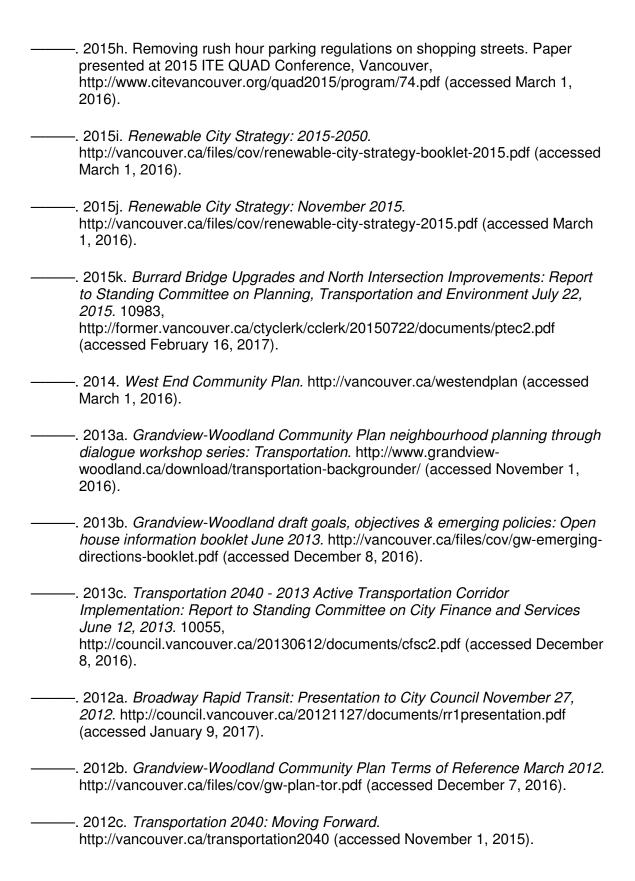
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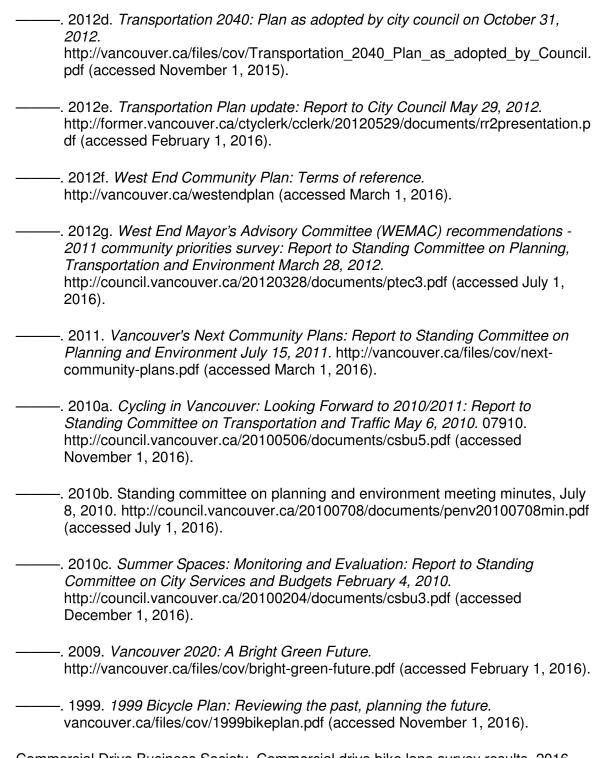
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Appendix A.

Guiding Questions for Semi-Structured Interviews

A standardized interview structure was created using the guiding questions below. However, individual participants responded to questions in different ways or brought up specific points that anticipated intended questions and/or led to different follow up questions. Participants' differing backgrounds and perspectives led to different emphases in each interview.

Table 1. Interview Questions

Could you tell me about yourself and how you've been involved in transportation discussion in this area?

How do you personally move around in this area?

Where are people in this area going when they're on this street? Where do they need to go, and where do they want to go?

What determines how people in this area get around?

What does it feel like to travel on this street by foot? By bike? By bus? By car?

Do different ways of getting around come into conflict with each other on this street? Are there ways to avoid these conflicts?

Does the way the street is designed favour some ways of getting around over others?

Does this affect some groups of people differently than others?

Would you change how the street works to prioritize different ways of getting around?

This street has recently been through a planning process. How were these issues talked about through that process?

What do you think was considered when the final plan was made?

Thinking about the future, what do you see changing about how people get around?

Do you think that there will need to be changes to how the street works?

Is there anything else you would like to say?

Is there anyone else that I should talk to?

Appendix B.

List of Interview Participants

The table below lists the persons who agreed to participate in semi-structured interviews relating to transportation projects in Vancouver. All consented to being identified in this project by name. To contextualize their contributions, a brief description of their involvement in transportation discourse and policy is included; however, as noted in the Methodology chapter, participants were interviewed with the understanding that they were speaking solely on their own behalf, and no permission was sought or obtained from their employers or affiliated organizations.

Table 2. Interview Participants

| Name | Involvement | Date Interviewed |
|-------------------------|-----------------------------|-------------------|
| Spencer Chandra Herbert | Politician | December 7, 2015 |
| Michael Feaver | Streets Advocate | December 10, 2015 |
| Janet Gere | Community Member | November 6, 2015 |
| Lisa Leblanc | Transportation Professional | December 16, 2015 |
| Jeff Leigh | Cycling Advocate | November 12, 2015 |
| Michael Ohnemus | Transportation Professional | November 19, 2015 |
| Stephen Regan | Business Advocate | January 14, 2016 |
| Arno Schortinghuis | Cycling Advocate | November 12, 2015 |
| Bonnie Thiele | Community Member | November 6, 2015 |

Appendix C.

Additional Maps

West End

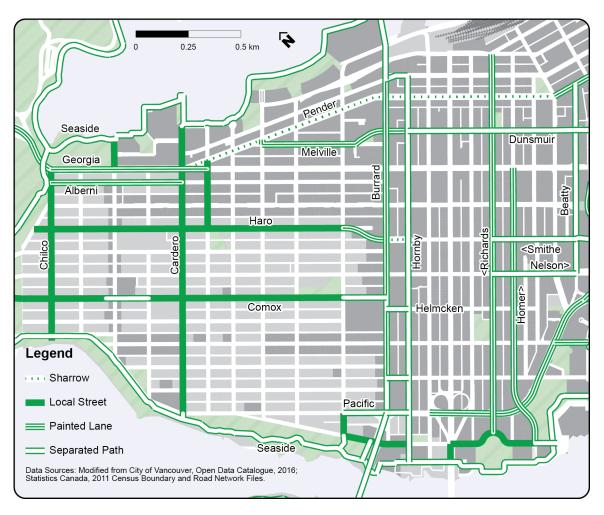


Figure C.1 Map of West End and Downtown Cycling Network, December 2016

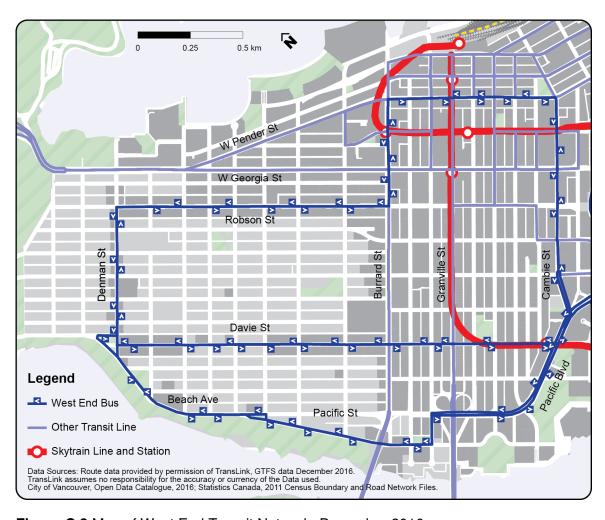


Figure C.2 Map of West End Transit Network, December 2016

Commercial Drive

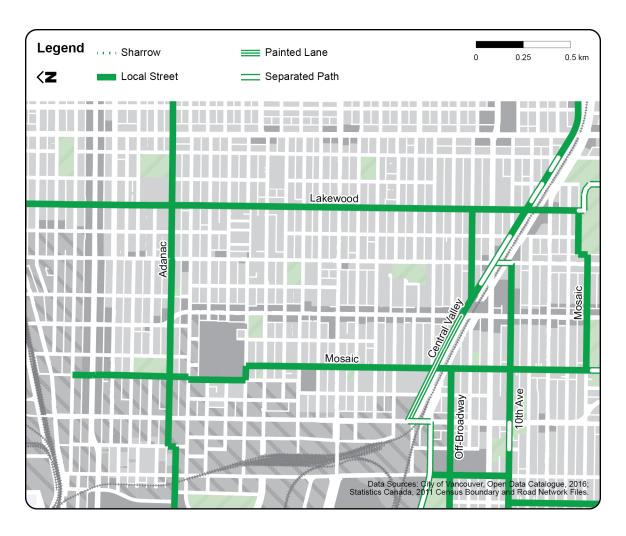


Figure C.3 Map of Cycling Network Near Commercial Drive, June 2016



Figure C.4 Map of Transit Network around Commercial Drive, 2016

Appendix D.

Contextual Photographs

West End



Figure D.1 Sidewalk scene on Robson Street, June 2016



Figure D.2 Haro Street, June 2016



Figure D.3 Guerilla cycling warning sign on Robson Street, June 2016



Figure D.4 Transit service delayed by private vehicles, June 2016



Figure D.5 Full community bus, June 2016



Figure D.6 Portable billboard advertising City parking survey, July 2016

Commercial Drive



Figure D.7 Busy sidewalks on Commercial Drive, October 2016



Figure D.8 Riding the Drive, October 2016



Figure D.9 Sidewalk cycling on Commercial Drive, October 2016



Figure D.10 20 Victoria bus pulling out of stop, October 2016



Figure D.11 Bus service "bunching" on Commercial Drive, October 2016



Figure D.12 Commercial Drive at 1st Avenue, October 2016