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TITLE:
EXPANDING THE SKYTRAIN: MULTI-LEVEL GOVERNANCE OF MASS PUBLIC
TRANSIT IN METRO VANOCUVER

Author:
Jan Norgaard Jones

Supervisor:
Anne Mevellec, Ph.D.

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Abstract

Mass rapid transportation has become a hallmark of global cities and reflects the titanic shift from a Fordist economy to a knowledge-based economy. This shift has brought about changes in urban planning with preference for walkability and livability as well as new governance structures to manage the costs of funding these mega-infrastructure projects. This paper takes the two most recent expansions to the SkyTrain, Vancouver's Advanced Light Rapid Transit system, and seeks to understand how the current governance structure in Vancouver resolves conflict between the different levels of government in relation to the SkyTrain. The SkyTrain is argued to be a case of governance as various state and non-state actors are involved in the funding of the transit network. The case studies chosen illustrate multi-level governance since the funding was negotiated by municipal, regional, provincial and federal governments. The paper argues the British Columbian provincial government takes on a leadership role through TransLink, the South Coast British Columbia Transportation Authority. TransLink serves as the forum in which the municipalities can resist the province and attempt to resolve conflicts. The research finds that SkyTrain expansions are motivated by the consensus that Vancouver is a global city and must pursue policies of sustainability to increase its competitive edge in the national and international economy. Finally, the research concludes that the power struggle over TransLink has created democratic deficits and has weak mechanisms to include stakeholders in the decision making process.

Key Words: Governance, Urban governance, Multi-Level Governance, Sustainability, Public Transportation

Chapter 1. Introduction

Urban planning paradigms have shifted from promoting urban sprawl and vehicle traffic towards densification and mass rapid transit to improve major urban centres' sustainability (Filion and Kramer 2012, Filion 2009, Hatzopoulou & Miller 2008; Hutton 2011; Questel, Moos, & Lynch 2012 Berke 2002; Boudreau et al. 2007; Kubler & Tomas 2010). New theories marry environmental protection – making cities livable and walkable – with economic growth. In the global economy, cities have become major contributors to economic growth and their development requires mega-infrastructure projects to keep them competitive (Martin 2013, Kenneth 2012, Bradford 2008; Kubler & Tomas 2010). The high costs of these projects necessitate the involvement of many different actors and levels of government. Public transit systems are mega-infrastructure projects, which purport to bring a variety of benefits to cities such as faster and more efficient transportation, economic growth, and environmental sustainability. In the case of Vancouver, the high cost of constructing light rapid rail requires the participation of multiple levels of government. These projects become contentious policy issues as national, provincial, and federal levels of government negotiate the policy instruments and funding mechanisms. Cities are increasingly the focus of intergovernmental and intra-governmental networks, which result in the formation of projects and institutions that are the confluence of multiple levels of government (Curry 2006; Hooghe & Marks 2001; Smith 2007; Brenner 2004).

This paper will explore the governance of the Vancouver's Advance Light Rapid Transit network known as the SkyTrain. The SkyTrain is operated by Translink, originally known as the South Coast British Columbia Transportation Authority, which covers the entire metro Vancouver region of 22 different municipalities (British Columbia 1998). Two cases studies

selected were the Canada Line and the Evergreen Line. In a brief synopsis the Canada Line was completed and put into operation in 2010 under a public-private partnership (PPP) model to connect the Vancouver Airport and Richmond with downtown Vancouver for the 2010 Winter Olympics. While the Evergreen Line, which will connect the suburbs of Coquitlam with the already existing SkyTrain network, has been under construction since 2013 and it follows a traditional public financing model.

This paper's thesis is that the province, municipalities, regional governments and, to some extent, the federal government partake in the complex power struggle over the funding of the SkyTrain expansion. The various actors are able to find compromises and resolutions to conflicts about the overlapping jurisdictions and inter-scalar governmental levels. It will argue that expansions to Vancouver's rapid rail network is only politically and economically viable with the leadership of British Columbian province. The expansion of SkyTrain has been justified as a sustainable and necessary development for a global city and has not been significantly contested or opposed any of the levels of government involved. In addition, this paper will show that the province delegates power to a second tier transportation agency, thereby avoiding the responsibility of managing the region's public transportation whilst maintaining a large degree of control and the power of veto over the agency. In the power struggle between the province and the municipalities, the province has had to make compromises and concessions in order for the SkyTrain expansions to go ahead. Lastly, I argue that the result of TransLink's governance structure is a chronic democratic deficit since the transportation agency it is far removed from the citizens and stakeholders it affects.

This paper will describe the methodology employed to gather and analyze the information used in the pursuit of this inquiry. I will describe the theoretical background by defining global

cities, governance and multi-level governance and sustainability. I will discuss the background of the case studies by considering the policy actors through the lens of multi-level governance and the motivation for the projects as one of sustainable development in a global city. The last section will summarize the key findings in the conclusion.

1.1 Justification of the importance of Vancouver's public transportation governance and selected theories.

The research question on a broader level seeks to understand how Canadian cities and their transit systems are governed. Within public administration, the question of urban governance is an important topic as it examines all levels of Canadian government. The governance of cities has been shown to involve of all levels of Canadian government; as Horak states, urban politics “is fundamentally influenced by the interaction of multiple domestic scales of governance, and analysts ignore this interaction at their peril” (Horak 2012, 339). This paper's research aspires to incorporate the many formal and informal levels of governance, but it still retains a local perspective. It will provides insight into revealing where power resides in multi-level government relations, how these decisions are made through the conflict resolution of political actors manipulating the current institutions, and lastly examining the motivations and impacts of these mass rapid transit projects.

My research's focus on governance, and its slight emphasis on public policy, reflects previous literature around Vancouver's mass rapid transit network. No published research has applied the concept of governance to the case of Vancouver's public transit. There has been a significant growing literature around the impact that neo-liberal and New Public Management (NMP) reforms have had (Cohn 2008; Smith and Stewart 2005; Siemiatycki 2005). The main themes that these authors argue for is the contentious relationship between the province and the

municipalities which revolves around the province's policies of NPM. As well a large subtheme is a focus on PPPs, which were prominent in many important projects in the last decade for the British Columbian government.

Transit governance is a major issue for Canada's largest cities. Toronto and Montreal have complex, multi-level governance structures that manage mass public transit operations and the funding of future expansions. In Montreal, there are fourteen individual transportation agencies which fall under the provincially run umbrella organization Agence Métropolitain de Transport (AMT). The largest and most important agency is the Société de Transport de Montréal (STM) (Vision 2020, Meloche, 2012; Paulhiac & Kaufmann, 2006). However, the regional governance has been complicated by the agglomeration efforts in the early 2000's under the Communauté Métropolitaine de Montréal. This institution has been criticized for only serving municipal elites and lacking the power and funds to achieve any major reforms (Kubler & Tomas 2010). Montreal's governance is fragmented in part because of the backlash against its agglomeration. In the case of Toronto, the municipal agencies play a more centralized and important role in the governance of the region. The Ontario provincial government has a crown agency called Metrolinx, which has a much stronger mandate than AMT and is not beholden to the municipalities it supports (Kitchen 2008). This difference between Metrolinx and AMT is demonstrated by its conflicts with the Toronto Transit Commission over the Transit City project, which was politicized when Former Major Rob Ford vetoed the first proposal and put forth an alternative plan. The new direction and plan for Transit City did not last long: the Toronto city council overturned the motion and brought back the original above-ground light rapid transit model (Horak 2013). MetroLinx is the only institution involved in the management of

transportation in the Toronto region and pushes its agenda, in some cases against the authorities, with mixed results.

Vancouver's public transit governance model has broad similarities with those in Toronto and Montreal. All three have multiple layers of government involved in the coordination and funding of transportation expansion. The main difference is in how the province and municipal plans integrate. Vancouver is unique because it does not have its own municipal transportation authority like Montreal or Toronto. TransLink attempts to bridge municipal and provincial prerogatives into a single institution. This is done through its mandate to conform its planning to the British Columbian provincial government and Metro Vancouver –formerly the Greater Vancouver Regional District– which is a second tier of municipal government that conducts regional planning for all the municipal governments (British Columbia 2014). TransLink is the forum in which local and provincial governments clash and coordinate over the development of the SkyTrain transportation network and its funding.

In the three cases, Vancouver, Toronto, and Montreal, the relationship between the cities and the province is unequal, with provinces intervening into municipal issues and structures. Three important themes are relevant to the governance of the network (Abbot, 2012; Oberlander & Smith 1993). Firstly, the relationship between the municipalities and cities varies under the unique political and institutional situations, although a power imbalance persists. Secondly, the province has in place transportation agencies that delegate authority and push responsibility away from the province. Translink is similar to Montreal's AMT since it attempts to incorporate representation of the municipalities in order to mediate relations between the municipalities and the province (Smith & Stewart, 2005; Smith 2013). Finally, there has been public, political and economic demand for expansion of the public transit in all three urban centres. For example,

over the last twenty years, Vancouver has transitioned into a global city and begun creating solutions to global city problems (Hutton 2011).

Understanding Vancouver's transportation network is important for a number of reasons, most pressing that there are several additional expansions to the current SkyTrain network being proposed. In the recent municipal election, the Mayors of Vancouver and Surrey both pushed for SkyTrain expansions in their municipalities (Smith 2013). Both mayors argue that these projects will bring important economic, environmental and social components to their cities. The popularity of these expansions is explained by the city's geography and growth. Vancouver suffers from traffic congestion because bridges over the rivers and fjords that dissect the city cause bottlenecks. To make matters worse the region is expected to grow by another million people over the next several decades (TransLink 2013; Hutton 2011). The SkyTrain serves as an integral piece of infrastructure for the Vancouver region. Mass transit allows urban planners to decrease the reliance upon personal automobiles-vehicles, which are major source of emissions, and pursue densification policies. Additionally, the expansions bring economic boons through property development, integrate important financial and research centres into rail network and relieve traffic congestion. The implication is that Vancouver can either leverage or maintain competitive advantage over other cities through a superior public transportation network.

1.2 Research Questions

The research question emerged through an initial inquiry into how Vancouver governs its public transit. The peculiar role of TransLink as an intermediary between the province and the municipalities became the focal point of the research. These two case-studies will be approached in terms of multi-level governance in order to understand the relationship between Federal,

provincial and regional government in the case of SkyLink. Previous literature has argued that TransLink and Canada Line are examples of NPM. The governance model was chosen since it was not previously used and it is useful in understanding how different actors come together to determine transportation policy. The focus on sustainability and the global city helps to understand Vancouver's situation. The two theories are similar in their relevance to the urban planning policies discussed. The paper's research intends to answer the following research question: **How does the governance structure resolve conflict and what are the consequences of the arrangement?** The comparison of the two case studies illustrates that there is a dynamic power struggle between the province, the municipalities and regional government over the management of SkyTrain. The paper finds that the current structure is able to resolve conflicts between provincial and local interests. Expanding the SkyTrain is driven by a consensus of all parties; yet, there is intense disagreement over how these expansions are funded. In the first case study the province exerted a substantial amount of political effort to prioritize Canada Line over other projects favoured by local government. In comparison, the Evergreen Line demonstrates that without provincial leadership the project potentially would not have gone ahead. However, British Columbian leadership was contested by local governments who were able to resist the province's efforts to have implemented another PPP and were able to obtain a traditional public financing of the Evergreen Line. The research illustrates that TransLink struggles with democratic accountability as it is twice removed from voters and stakeholders. In addition, the discourse around the expansion of the transit way ignores social issues of income inequality in favour of token environmental benefits.

Chapter 2. Methodology

This section outlines the paper's research design, procedures, and limitations. The methodological approach of the paper views different lens, or perspectives, as metaphorical tools within the academics tool belt. The research was put into four modes. A different mode was used for each case study: a meta-analysis was conducted for the Canada Line case study from a body of existing academic literature found in academic databases, while for the Evergreen Line searches of local media and government documents were done. The academic theoretical approaches were drawn from searches of the University of Ottawa's library. These theoretical perspectives form the paper's main thesis and position its perspective.

The early beginnings of this paper's research began with the interest in understanding the relationship between the British Columbian government and the regional and municipal governments in the Vancouver region. The determination of the subject was based on the author's previous experience living in Vancouver and interest in sustainable policies. TransLink was selected to serve as a case study because it met the criterion of Vancouver and sustainability. The governance literature was chosen after reviewing planning documentation and media stories as these have not been used in previous literature and are applicable to the case. The case of Vancouver's rapid transit had already been considered as a case of NPM (Cohn 2008; Siemiatycki, 2005; Leo & Enns, 2009). To understand Vancouver's role in international networks on sustainability and motivation for expanding their rapid transit the global cities literature was chosen. After the three literatures were determined the case studies of the Canada Line and Evergreen Line were selected to contrast the different paths they had taken. The experiment of theory validation poses an interesting existential problem to the social sciences

and public administration. As one policy theorist pointed out that the project of attempting to compare different theories “is essentially handicapping how the New England Patriots would do against Manchester United in Indy car racing” (Meier 2009). On the other hand, the issue of “validating a single theory” suffers from the lack of control variables or competitive variables (Piekle 2004). The grand experiment of the social sciences to discover deterministic social rules has been made akin to the quest for the Holy Grail. Roger Piekle warns that the “pursuit of a theoretical Holy Grail introduces pathologies to efforts to make the social sciences relevant to decision making” (Piekle 2004, 215). Public Administration straddles the academic and professional realms. Without going too far down the rabbit hole of subjectivity and post-modernist critiques of objectivity, the paper’s approach is to understand the descriptive power of narrative. The theories employed are understood as conceptual lens or frames, as espoused by Schon and Rein, who show how stories have an impact upon public consciousness and how the discussion orientates facts to its own logic (Schon & Rein 1994). Their research goes on to examine the conflict of different frames and how these actors change their frame/perspective. This paper does not examine the conflict of different frames; rather, it operates on the premise that global cities and sustainability are reigning paradigms and that these theories are used to understand, contextualize and frame the perspective of many policy actors involved. Ideas, or paradigms, are seen as variables within a rough system of causality. Thus, this paper considers the effects of globalization, neo-liberalism and sustainability as discourses, and indirect causality they have upon the actors examined within this paper’s analysis.

2.1. Design

The paper has four methods of research employed in the methodology for the two case studies. (1) The websites of Metro Vancouver and TransLink were consulted for their strategic

plans, annual reports and business proposals. In addition, I examine the impact on Metro Vancouver and TransLink of legislation passed by the British Columbia Provincial government. This phase was applicable to both case studies, although more results were found for the Evergreen Line due to its more recent events. (2) In the case of the Canada Line a meta-analysis was used for two reasons. Firstly, preliminary research concluded that there was insufficient documentation to conduct original research, and secondly, a large body of literature already existed on the topic. Searches for academic articles for the tag line “Canada Line” were conducted through the University of Ottawa’s Library search engine, Search +, a service that combines all of the library's physical resources with their extensive online collections and databases. Articles were reviewed and selected in regards to their relevance to the research topic. The research conducted by other authors in these articles was used to forge the background narrative and the factual findings for the Canada Line case study (Leo & Enn 2009; Cohn 2008, Smith 2013; Smith & Stewart 2005; Jones 2012; Oberlander & Smith 2006; Siemiatycki 2005). (3) Searches of local media were conducted to find references to “TransLink/SkyTrain expansion”, and “Evergreen Line” from the time period of 2008 until 2014. For the Evergreen Line there were queries for academic sources but little has been published on the topic during the research phase. (4) Academic sources were consulted to establish a theoretical framework for governance, multi-level governance, and sustainability. These sources were found through queries of University Library database and Google Scholar and Books catalogues.

2.2. Procedures

The first step was a search of all government documents regarding the two cases studies. This involved the methods described above. First a rough timeline was constructed for each case study and then more research was conducted. After the initial research phase, a compilation was

assembled of academic sources on the topic of Canada Line, and their findings were analysed. A similar process was carried out for Evergreen Line, but the sources were found in local media rather than academic collections. Finally, there was a compilation of theoretical literature related to the three approaches: governance, multi-level governance and sustainability. The first three steps compiled the information, while the last step identified relevant themes that were found in the research of the two case studies. The theoretical approaches served as tools to analyze and reach the papers' conclusions.

2.3. Limitations

The research employs second-hand information about the Canada Line combined with a qualitative analysis of government documentation, strategic plans, and relevant newspaper articles. One of the main limitations is the reliance upon research conducted by others. This poses problems such as limits on the ability to draw inferences from these sources. In addition, there are risks of misinterpreting information or replicating existing errors. Inter-governmental relations between local, provincial and federal levels of government are drawn from meta-analysis of existing research of the Vancouver region.

2.4. Summary of the Methodology

The paper's methodology started with a search of government documentation, which then proceeded to a literature review and meta-analysis of academic sources on the Canada Line. This followed by more original research for the Evergreen. Three theoretical approaches were selected, governance, multi-level governance, and sustainability, for analysing the findings. The second step represents the main shortcomings of the methodology due to its reliance upon the work others. There was no formalized method of validating the findings of other authors. The overall approach of the methodology was to identify and highlight techniques that were effective

in understanding the governance of SkyTrain expansion as opposed to testing the validity of methodologies or theoretical approaches.

Chapter 3. Theoretical Approach: Governance, Multi-level Governance and Sustainability

Within this chapter three main theories are discussed; governance and globalization, multilevel governance and sustainability. The table below summarizes these points, and highlights the contribution of the literature in each area to the progression of the paper.

Table 1 - Theoretical approaches in summary

Governance and Globalization
<ul style="list-style-type: none"> • The power dynamic between state, citizen, and economy has changed, effecting how government operates (Rhodes 1996; Stokers 1998; Hirst 2000; Pierre and Peters 2000). • Power is diffused to lower and higher levels of government and governance looks at the inclusion of non-state actor's roles in governing (Krahmann 2003; Slaughter 2004). • In the changes to the global economy urban centres are major centres of economic growth (Newton 2012; Bradford 2002; Courchene 2007; Morgan 2014; Matusitz 2010, Curtis 2011, Janssen-Jansen & Hutton 2011). • Non-state actors and sub-national governments engage in international networks to govern complex policy issues (Allan & Vengroff 2012; Capling & Nossal 2009; Mansfield & Milner 1999; Macleod 2001).
Multi-Level Governance
<ul style="list-style-type: none"> • The governance of cities is no longer within a single level of government's jurisdiction or responsibility and necessitates the cooperation of different levels of government and non-state actors (Garcea & LeSage 2005; Hooghe & Marks 2001; Brenner 2004; Pasternack 2012; Curry 2006; Richardson 2012; Sancton 2006). • In Canada, metropolises represent half of a province's economic and political power, which presents challenges for municipal, provincial and federal relations (Bradford 2002; Bradfrod & Bramwell 2014; Morgan 2014; Newton 2012; Boudreau et al. 2007; Turgeon 2006).
Sustainability
<ul style="list-style-type: none"> • There is a debate over the effectiveness of neo-liberal efforts to incorporate environmental policies; some see it as green wash for economic growth, others see it as progress in combating climate change (Doelle & Munroe 2012; Zeemering 2012; Cook & Swyngedouw 2012; Moore 2012; Holden 2011; Jones 2012). • Within urban planning there has been a paradigm shift from the dispersed suburban model to density-as-sustainability (Hutton 2011; Hatzopoulou & Miller 2008; Quastel & Lynch 2012; Filion & Kramer 2012; Natrasony & Alexander 2005).

The first theoretical topic examined is governance, which asserts that public and private actors share responsibilities in providing services and making policy decisions. One of the key premises of governance is that there are fundamental changes within western economies and neo-liberal ideology is adopted by political and bureaucratic elites who implement reforms that have resulted in a new paradigm of governing. On this premise, governance theorists argue that government is no longer considered a unitary homogenous actor (Stoker 1998; Hirst 2000; Pierre and Peters 2000). This approach has been criticised for overstating the role of non-state actors and the retreat of the state (Smith 2007). Governance, according to Krahmman can be understood as a spectrum between two extremes. On the governance side there is the dispersal of power and fragmentation of the state, while government is the centralization of authority and clear lines of responsibility (Krahmann 2003). Another important issue from the governance debate is that it merges governance from local instances into a larger international context. The emphasis of governance research is on the fragmentation of authority and responsibility; the incorporation of international treaties; and the role of non-state actors on deciding and managing public policy. The governance literature challenges the concept that nation states are the primary decision maker and rather looks at networks of sub-state and non-state actors (Krahmann 2003).

Krahmann's spectrum of governance is continued in the discussion of multi-level governance, which examines the relationship between the inclusion of multiple levels of government and non-state actors. Hooghe and Marks propose a dichotomy between multi-level government and multilevel governance, which is similar to Krahmann`s distinction between governance and government (Hooghe & Marks 2001). The main point of the governance literature is to reveal the fragmentation of government by showing the role that sub-national governments and non-state actors play in the governing of cities. Cities pose challenges to

traditional modes of governance and are the sites of gaps and fractures between various institutions that require cooperation and coordination to resolve. In addition, the transformation of the global economy and concentration of services cities have become more important economically and politically as they continue to grow (Brenner 2004; Newton 2012; Bradford 2004; Tindal et al. 2013).

Lastly, sustainability covers two main topics. The first is the debate about whether sustainability is effective in curbing and combating climate change and environmental damage through its incorporation into neo-liberal ideology (Holden 2011; Cook & Swyngedouw 2012; Moore 2012; Rice 2014; Pasternack 2012; Richardson 2012; Doelle & Munroe 2012; Quastel & Lynch 2012). The second discussion regards the manifestation of sustainability within urban planning, with some commentators making the case that there has been a paradigm shift in urban planning (Hutton 2011; Filion & Kramer 2012; Hatzopoulou & Miller 2008; Grant 2009). In the discussion over sustainability within neo-liberalism, authors such as Holden, Moore and Cook and Swyngedouw argue that it is not effective and robs the movement of its ability to make effective change (Holden 2011; Cook & Swyngedouw 2012; Moore 2012). However, others argue that sustainability has had positive impacts despite its neo-liberal overtones (Zeemering 2012; Rice 2012; Filion & Krammer 2012). Several theories, New Urbanism, Sustainability and Smart Growth, have become dominant ideas within many urban planning centres which often advocate for sustainability as density (Hatzopoulou & Miller 2008; Grant 2009; Quastel & Lynch 2012). Most of the theorists on urban planning see potential for change but have reservations, or tentative outlooks, of the success of the theories in mitigating environmental damage (Grant 2009; Hatzopoulou & Miller 2008).

These theories are representative of a larger body of literature and are used here as tools in the case study of the SkyTrain. This chapter will not attempt to verify the theories, rather it uses them as conceptual tools to provide context and understanding for the larger complex social phenomena that serve to contextualize the behaviour of the actors involved within the two case studies. To avoid replicating existing research, the main purpose of this section is to synthesize the three different literatures to give a holistic and rounded understanding of the expansions to Vancouver's SkyTrain network. Both literatures of global city and sustainability have become tropes that are used within the public discourse to denote a certain urban structure. The two terms have gained popularity in the past thirty years during the transformations of the global economy and understandings of how cities fit into it. The global city literature starts by understanding the transformation of Canadian metropolises in the global context. The second term, sustainability, is unpacked of its different meanings, which include its social, environmental and urban planning contexts. Sustainability has lost its vestiges of radical reform to a more palatable neo-liberal program, is part of a global governance network that conflates sustainability-as-density in urban planning. This paper shows that in the case of Vancouver, governance collapses the phenomenon from the global to the local, where networks are working within larger governance structures on micro issues of transportation planning and funding. This paper will consider the central role that government continues to play within governance and how actors interact in multi-level governance. This then leads into an examination of the theories of how urban planning and mass rapid transportation are governed.

The case of Vancouver's transportation is contextualized within the narrative frameworks of governance and multilevel governance. Governance is the plot device that weaves the narrative together. Multi-level governance literature, specifically within Canada, provides

context for provincial-local relations, such as municipalities being ‘constitutional creatures of the province’ and relative absence of the Federal government. The urban transportation governance literature wrestles with the dilemmas of the most efficient method of resolving conflict and achieving consensus on policy issues. This literature examines the institutional structure for its strengths and shortcomings for deciding policies. Thus, the governance of cities involves international networks and the fragmented responsibility between different levels of government that requires their cooperation and the influence sustainability has had on informing the policy decisions of political actors.

3.1. The impacts of governance and globalization on cities

In order to effectively understand Vancouver’s role in funding transportation, there are two important themes that have influenced modern cities, which are the concepts of global cities and governance. Governance was a theory developed to draw attention to changes within government. These changes included how more non-state actors and other levels of government are brought into the governing process. Central to this literature is attention to the arrangements that are in place around governing and the networks that exist. The second theme follows this point: global cities are products of globalization where they function as the engines of economic growth and their increasing growth poses challenges to the current government structure in place.

SkyTrain expansion in Vancouver is nominally the responsibility of the South Coast British Transportation Authority, known as TransLink (British Columbia 1998), which is jointly governed by the British Columbian provincial government and the regions’ mayors with capital financing from the federal government. It is a classic case of governance where the responsibility is diffused between several public and private actors. The term governance gained its popularity in the 1980’s and exploded in use in the 1990’s with the first wave of authors studying the

reforms within the British government. They argued that the changes of how services were provided and how policy making was made were a drastic departure from the traditional operations of government (Rhodes 1996; Stokers 1998; Hirst 2000; Pierre and Peters 2000). Instead of the vertical hierarchy and direct lines of accountability, the concept of governance conceived decision making process and service provision conducted in horizontal networks. Whereas with government, there was always a clear line of responsibility and the state was usually the main provider of public services. This concept of governance gained traction with certain themes being applicable to integration of Europe and the governing model of the European Union (Curry 2006).

The rise of the term governance coincided with a massive shift within how capitalism and world finance were restructured through technological advances followed by a paradigm shift in thought. Peter Hall argued that there was a paradigm shift in how policy makers conceived the economy. During the late 1970s and 1980s a new wave of economists brought in ideas of monetary economics, which replaced Keynesian economics (Hall 1993). In addition, during this period new advances in telecommunication and micro-processing were revolutionizing how business was conducted. Neo-liberal ideology came to prevail throughout the OECD nations and along with it came the rise of NPM (Hood 1991; Osborne and Gaebler 1992).

The concept of governance was refined by Krahmman, who proposes that governance and government should be understood as a continuum. They are conceptual ideals that serve as ends of a spectrum, instead of mutually exclusive concepts. She argues that governance “can thus be understood as the structures and processes that enable governmental and non-governmental actors to coordinate their interdependent needs and interests through the making and implementation of policies in the absence of a unifying political authority.” (Krahmann 2003,

331) Government, on the other hand, is then defined as the centralization of power and authority into the state through a vertical hierarchical bureaucracy. In addition, Krahnmann argues that governance collapses the concept of global, local and national governance into one definition. This single concept of governance encapsulates its similarities at all levels. Previous definitions of governance were within silos or distinguished between corporate uses of the term to international networks (Hirst 2000; Rhodes 1996). The idea of a global governance is further reinforced by Slaughter. She argues that intergovernmental networks that serve as a form of global governance that are able to tackle larger global problems where “[n]etworked threats require a networked response” (Slaughter 2004, 2). Global warming is a prime example of a global governance problem. National governments initially attempted to resolve the problem, however over the past twenty years, since the Kyoto Accord, many actors have perceived it as stagnating and have taken policy into their own hands (Sancton 2006; Jones 2012; Pasternack 2012). There is an international governance on sustainability formed by networks cities to national governments, such as the Local Climate Protection Agreement or the Local Governments for Sustainability (Richardson 2012; Pasternack 2012; Rice 2014). All these networks contribute to a massive interconnected web. The concept of global governance of climate change and sustainability will be explored in more depth in the following section.. The rise of governance has led to a restructuring in state and inter-governmental relations, especially lower levels of government as responsibilities are downloaded to them from national levels of government. These lower levels of government look to international networks for support and ideas in resolving the increased responsibilities and policy problems.

The issue of governance is further challenged and fuelled by the rise of global cities. The transformation of cities into global cities is part of a massive metamorphosis of neo-liberal

capitalism. The term global city has come to denote those urban centers that have a population of over one million people. For example as of 2010, there were over 828 cities with at least one million inhabitants and over half the world's population living in urban centres (Newton 2012: 409-410). This has been discussed under various literatures. For example, the post-industrial society, which was coined by Bell, discusses the processes of change within western capitalism and urbanization (Bell 1976). Other academics like the sociologists Castells also argues that this post-industrial society is one based upon networks of nodes that utilize the advances in telecommunications and microprocessors (Castells 1996).

The rise of globalization and its prolific study and popularity as a concept which either coincides or causes the changes in government. Held and McGrew define globalization as the “historical process which transforms the spatial organization of social relations and transactions, generating transcontinental or interregional networks of interaction and the exercise of power.”(Held & McGrew 1998) Global cities and globalization bring about a focus on global governance (Krahmann 2003; Pasternack 2012). In the new era of globalization, cities are central hubs, or nodes that serve as epicentres for creativity in the new knowledge based economy. These urban centres become known as global city regions that are now seen as the engines of the modern post-fordist economy (Bradford 2002; Courchene 2007; Morgan 2014). Jansen-Jansen and Hutten succinctly describe this change in cities where they “have transitioned from regionally-bounded centres of human settlements to globalizing economic territories and regional ecosystems” (Janssen-Jansen & Hutton 2011: 305). This shift has seen a change in their formation where instead of the cities sprawling out under the industrial model, the post-industrial economy pursues densification through vertical growth (Matusitz 2010; Curtis 2011; Janssen-Jansen & Hutton 2011).

Cities are not alone in the transformation of the economy and government. There has been a turn to local and regional understanding of economics that challenges and dissects the nation state, these theories of new Localism and New Regionalism discuss the rise of geographical and culturally related regions that can be understood as independent segments that can transcend national borders or internal borders into semi homogenous regions (Mansfield & Milner 1999; Macleod 2001). These regions have made efforts to create their own trade agreements with other regions independent of national governments and outside of international trade agreements (Allan & Vengroff 2012; Capling & Nossal 2009).

Cities, within the context of globalization, were initially perceived as paradoxical because advances in information technology made distances redundant. Yet, against many theorists' predictions, cities continue to grow. For a variety of reasons, such as concentration of services, access to international travel, and scale of economies, the relevance of cities in the global economy has grown (Newton 2012; Bradford & Bramwell 2014). Matusitz argues that the role of globalization has brought cities increasingly into competition with one another, but also in coordination with each other to govern and manage themselves. Matusitz posits that the trend of cities becoming similar stems from the exporting and importing of urban planning from each other (Matusitz 2010). Global cities have come to be seen as having essential characteristics or similarities. For this Matusitz proposes a theory of glurbanization to understand this recent phenomenon where "it collapses the global and the local: urban spaces are restructured so that globalization does not become just a top-down hierarchical design whereby the nation-state dictates how things work; rather, globalization is made to happen both from 'below' and from 'above'" (Matusitz 2010, 1). Global cities are simultaneous manifestations of both local and global forces, as well as on trends of becoming similar to other global cities.

Governance establishes that there are actors involved in governing outside the public realm. The inclusion of non-state actors reflects the popularity of NPM within public institutions, but it also reflects larger changes within the political economy and global context. National governments, and sub-national governments, are involved within global governance networks. Global cities are examples that pose problems to traditionally conceived government. Despite provincial government's constitutional power over cities, urban centres' policy problems cannot be constrained to a single level of government. The combination of global cities and governance demonstrate that Vancouver can bridge local phenomenon with the larger global community. As well, the importance of urban centres to economic growth forces the provincial government to either intervene into local politics or devolve financial powers to fund their own operations. These changes upset the previous governance arrangement over cities. The problem of governance, globalization and global cities are sought to be resolved in the next section by multi-level governance.

3.2. Theories of Multi-level Governance

Multi-level governance focuses its examination on cities or sub-national regions that have the inclusion of multiple overlaps of government institutions and governance networks that include non-state actors. There is some debate upon the definition and distinction between multi-level governance and multi-level government. In addition, this literature examines issues of State rescaling at the international level and the role that federalism has played within the Canadian context. The issue of urban transportation is also examined, where the focal point of the debate concerns the role and formation of meso-level regional authorities.

Multi-level governance is the idea that policy problems cannot be solved by any single level of government and instead need the participation of many of levels to be successful. Multi-level

governance, according to Hooghe and Marks, has its history stemming from the combination of two independent theories, federalism and neo-institutionalism (Hooghe & Marks 2001). Hooghe and Marks argue that multi-level governance is a reaction to “the dispersion of authority away from central government—upwards to the supranational level, downwards to subnational jurisdictions, and sideways to public/private networks” (Hooghe & Marks 2001, 4). They propose two types of definitions of multi-level governance. The first concept is close to what is known as multi-level government, where different levels of government interact with each other in a non-hierarchical manner. The second version is more akin to what is known as multi-level governance, which involves multiple state and non-state actors in the decision making process (Hooghe & Marks 2001). One of their main points in their discussion of multi-level governance is how the costs of cooperation will be overcome. The concern of Hooghe and Marks is that with the inclusion of multiple actors, there will be incentive for 'free rides' which will strain the governance arrangement (Hooghe & Marks 2001).

In agreement with Hooghe and Marks, Pasternack suggest that multi-level governance is important for resolving policy problems. Pasternack argues that multi-level governance “looks at how linkages among and between international and domestic; suprastate, state, and substate; and public and private give rise to binding political and economic decision-making, as well as how such decisions reflect these linkages.” (Pasternack 2012, 70) He approaches the multi-level governance debate from the perspective of urban centre. He shows that cities enter into international horizontal networks, which create a form of global urban governance. He asserts that these networks provide aid for municipalities to coordinate with the other levels of government in their local region (Pasternack 2012). His version of multi-level governance includes the parallel international networks for organizing cities.

Curry argues that the separation between multi-level government and governance is not as clear as Hooghe and Marks contend. Curry studies multi-level governance in Europe and North America and defines it "as a theory that envisages political authority as being dispersed among several governmental and non-governmental actors with horizontal and vertical integration of these levels, instead of being concentrated at either the supranational or national level." (Curry 2006, 85) He disagrees with Hooghe and Marks's double definition of multi-level governance, arguing that if policy decisions do not include multi-levels of government, or non-state actors, then it is more likely that this style of integration will happen at the policy implementation stage of the process. Curry responds to Hooghe's and Marks's concern about cooperation costs and argues that actors' linkages between themselves will play a more important role than their preferences (Curry 2006, 12).

Multi-level governance operates slightly differently in Canada than it does in Europe. A series of important policy issues, such as climate change affect urban centres, yet they do not have the sufficient powers to address them (Sancton 2006). The relationship between cities and higher levels of government is complex and mired within federalism. Municipalities are often perceived as pawns stuck within the conflict over jurisdictions between the provinces and federal government (Garcea & LeSage 2005). The source of this conflict dates back to the creation of Canada where they were not included within the original constitution. Their exclusion was seen as a concession to the provinces for their cooperation and participation within Canada (Tindal et al. 2013; Young 2009).

Federalism poses serious problems for the urban networks of Canadian cities. Pasternack argues that the main constraint and weakness of urban centres is the concept of paramountcy. Canadian municipalities are limited in their physical and legal jurisdictions by both the

provincial and federal governments (Pasternack 2012). Canadian municipalities have been popularly referred to as 'constitutional creatures of the province,' which signifies the general inability of cities to enact policies on their own (Young 2009, 106). Pasternack argues that issues which affect urban areas multi-level governance is required to since each level of government lacks the requisite powers to resolve the issue themselves. The issue of urban transportation is that these policy areas straddle the zone between municipal, provincial and federal jurisdictions.

The importance of global cities in Canada challenges the federalism debate because their policy problems often go beyond provincial powers and create unequal power balances. Within the current governmental structure within Canada cities needs continue to change and as they are now the bulk of the provinces' economic growth (Bradford 2002; Morgan 2014; Newton 2012). As illustrated in the introduction, the Vancouver city region consists of more than half of BC's population. This creates a tension between local autonomy and higher levels of government over the management of services and infrastructure, since many Canadian provinces are dominated by a single metropolitan region. These cities are the economic and political centres for both provincial and federal political parties. Thus, most provinces in Canada are engaged in power struggles with their largest urban centres. For example, Toronto and Montreal are two cities that usually determine the election of provincial elections for both Quebec and Ontario. A growing literature notes that intergovernmental relations between large Canadian cities, the provinces and federal government are not as clear as often thought (Bradford & Bramwell 2014; Boudreau et al. 2007; Turgeon 2006).

Bradford argues that current municipal arrangement for cities in Canada is archaic and is in need of reform. He bemoans the lack of coordination between the different levels of governance, arguing that decision makers should "consider the "comparative advantage" of each level of

government in solving urgent problems in the cities" (Bradford 2004, 4). He further argues that Canada should embrace some of the multi-level arrangements that Europe has employed in creating and innovating ways to resolve urban issues. The solution he puts forth is one that is 'place-based', adopting the unique environment of each urban setting. This allows a bottom up approach where local expertise can feed into policy making. However, Bradford admits that the federal government needs to play a leadership role in this initiative that is hindered by inter-institutional rivalry and entrenched bureaucracies. (Bradford 2004)

From the governance and the multi-level governance, it is apparent that the state still plays a pivotal role in providing coordination and leadership in addressing policy issues that span multiple jurisdictions. The nation state continues to retain a key position in the interaction between global governance networks, local governments and regional governments. Krahnmann's universal definition of governance and government is useful in understanding how the intersection of global, local and national interest merges into addressing transportation policy in Vancouver (Krahnmann 2003). The distinction between governance and government becomes blurred with Curry's argument in multi-level governance on policy formation and implementation (Curry 2006). The concept of governance and multi-level governance is key in understanding the complexity of the coordination of the multiple networks and levels of government, which often include non-state actors.

The issue of multi-level governance of urban centres has become a central theme in understanding the rescaling state power. Brenner argues that state rescaling is an important term to understand how governments react to the changes in the economy and his research emphasises the role of sub-state actors and municipalities within the transformations of modern governments (Brenner 2004). Brenner employs the term state rescaling, which he argues that "rather than

treating cities and city-regions as mere subunits of national administrative systems, I suggest that urban policy-broadly defined to encompass all state activities orientated towards the regulation of capitalist urbanization-has become an essential political mechanism through which profound institutional and geographical transformation of national states has been occurring” (Brenner 2004, 2). Brenner argues that the state power is spatially constructed and is transforming through the shift from Keynesian economics towards neo-liberal competition. He argues that competition between urban regions is new reality within the restructuring of the political priorities and economic growth. He continues to suggest that "state and para-state institutions have figured crucially in the planning, financing, construction, management, and promotion of such infrastructure projects-in most cases, by assuming or sharing their major financial risks' by channelling significant public resources into their financing; and by establishing location-and project specific regulatory arrangements to facilitate their implementation, effective operation, and profitability."(Brenner 2004, 246) These considerations are echoed by Horak as he “views transformations in the spatial architecture of urban governance as political responses to macro-level shifts in the spatial structure of capitalism. It thus provides a unified account of the underlying drivers of urban governance reform, as well as a conceptual construct – state rescaling – that can accommodate many different kinds of reform” (Horak 2013a, 312). From Horak’s theoretical perspective there are global trends within urban planning, and an increasing trend of multi-level government interaction on decision making process in the cities.

The case of urban transportation is a clear case of multi-level governance and is a major policy problem facing urban centres. The main focus of this debate is over the structure of the governance mechanism. The issue is the conflict between top down and bottom up approaches to governance. Issues of participation becomes a dilemma as too much of it creates fragmentation

and causes conflict, while centralized command and control often neglect democratic accountability for the sake of efficiency. Another issue is the preference for a regional transportation authority, a second tier regional government, or a network of different agencies. The majority of the literature is in favour of a strong national government intervention into municipal governance (Newton 2012; Horak 2013a; Kennedy et al 2005; Sancton 2008).

Leo and Enns attempt to strike a balance between higher levels of government with local knowledge as they argue that multi-level governance is "to strike an appropriate balance between the realization of national objectives, on the one hand, and the achievement of governance appropriate to the requirements of local communities on the other, leaving open the question of which particular constellation of organizational forms is best suited to accomplish a particular task" (Leo & Enns 2009, 94). Through their research, they define two groups. The first is statist-decentralists that seek consensus for decisions and typically include the lowest level of government. The other group is anti-statist public choice, who advocate for efficiencies and fragmentation of jurisdictional authority and the inclusion of market mechanisms. They find that the anti-statist decentralist policy makers exclude service providers from policy decision making process and do not serve the needs of stockholders. The solution to the issue of multi-level governance is the concept of "deep federalism, defined as the formulation and implementation of national policies in a manner sufficiently flexible and responsive to take full account of the very important differences among communities" (Leo & Enns 2009, 94-95). Due to the wide diversity of urban settings, the different constitutional constructions of urban areas in each province, any national urban plan would desperately require a large degree of flexibility.

This flexibility however, is difficult to achieve. In the cases of Toronto and Los Angeles, competing and overlapping regional transportation authorities have led to fragmentation and

continuous conflict. Callahan's examination of Los Angeles' 30 years of public transportation debacle found that a strong central agency can resolve conflict between stockholders, but also be financially accountable. However, in the case of California he identified certain stockholders attempting to sabotage the efforts to bring in public transportation (Callahan 2007). This issue of counterproductive forces are due to the weak decentralized system in the US where state governments do not have as much power as Canadian provinces. That being said, Montreal and Toronto both face similar problems of competing organizations. In the greater Toronto area, three institutions share responsibility of transportation, the Toronto Transit Commission, the regional transit authority Metrolinx and the City of Toronto. These three, along with the province of Ontario are often in conflict over the planning of routes and the cost of the projects (Horak 2013b). Horak found through his research that the conflicts within Toronto were resolved through task specific initiatives, yet "task-specific strategies also come with their own endemic problems. They are prone to breakdown and reversal. Because they are typically only weakly institutionalized (if at all), and because they involve the simultaneous exercise of authority at multiple governing scales, they require a sustained multi-scalar alignment of governing priorities." (Horak 2013a, 325). In comparing Montreal and Toronto, Boudreau et al. found that respective provinces took ambitious efforts to reorganize the cities, but both received backlash from the unpopular reforms. They also found that both cities, more so in the case of Toronto, made efforts to solicit support from the federal government as leverage over the provincial government (Boudreau et al.2007). The cases of Toronto, Montreal and Los Angeles demonstrate that conflict resolution of multiple parties is particularly difficult, even with a strong state intervention into municipal governance.

The issue of governance models for transportation is explored by Kennedy et al, where they have a nuanced approach that explores the benefits and downsides of various models. They argue that transit systems of London and Paris are pinnacle to emulate; however the prevalence of vehicular traffic planning in North America poses problems of public transit adoption as regional transit authorities do not have land use planning powers. Kennedy et al., along with Horak, argue for a holistic approach where transit planning is to be done in tandem with land use planning (Kennedy et al. 2005; Horak 2013b). Urban transportation policy is fraught with several dilemmas. For mass public transit to have increased, ridership requires urban spaces to be planned to be accessible by foot. However, the multiplicity of actors involved in the land use planning poses problems of centralizing power. Regional governments are often opposed by suburban residences. These regional governments lack power since the provincial and federal governments are reluctant to relinquish powers to lower levels of government to conduct efficient planning. In addition, these regional governments are fiscally restrained and often have insufficient public participation in their planning process or governance structure. Strategies of amalgamation have created as many problems as they have solved. Horak notes that “the City of Toronto’s inability to fully use the new taxing powers that it had lobbied so hard to secure illustrates the limits of what we might call ‘asymmetrical jurisdictional rescaling’ in the absence of a city-regional governing authority.”(Horak 2013b, 319).

The debate over multi-level governance and multi-level government is relevant to understanding the role that public institutions play within deciding policy and its implementation. From our previous discussion on governance with the multi-level governance debate, it is clear that public institutions continue to play a central role of coordination and primary authority. In Canada the provinces, municipalities and the federal government need to

mutually cooperate and coordinate resources to resolve many of the complex urban policy problems. The literature notes that in the cases where there is cooperation it is usually either task specific or place based initiatives (Horak 2013a; Bradford 2004). In addition, urban transportation governance struggles to find an optimal balance between public participation and centralization of power for efficiency. Urban governance tries to balance the consolidation of land use planning and transportation planning and create institution that is able to bridge local demands with provincial and/or national government demands. Solutions proposed range from second tier regional transportation authorities to metropolitan governments. These problems and solutions are understood to be symptoms of state rescaling as the various governmental levels struggle to fill the vacuum of state transformations and shifts in the economy.

3.3. Sustainability: The local solution to urban planning

Sustainability has grown in popularity since its introduction into political parlance in the last 1980s. The main concept of sustainability is that economic growth need not have negative effects on the environment. As a result, within urban planning there is an emphasis on creating policies that consider long term environmental factors. There has been substantial debate upon the merits of sustainability, with proponents witnessing cities implementing new and radical environmental policies while others critique it for being co-opted by neo-liberal ideologies and divorced from its contentious social components. This debate continues within the urban planning literature and urban transportation on the effectiveness of the sustainability. The other point of discussion is the paradigm shift in urban planning from urban sprawl to urban densification.

The term sustainability has become a buzzword with many different connotations. It is a term that has had a wide application from public planning, corporate governance, climate change

and social inequality. For the purpose of this paper, sustainability will be defined as the long term life span of projects or systems and includes consideration for the environment, climate change, and economics (Holden 2011; Zeemering 2012; Conroy & Berke 2004; Berke 2002). Sustainability received its popular use in 1987 with the World Commission on Environment and Development, known as the Brundtland Report. The Brundtland report defines sustainability to be based upon three main pillars: economic development, protecting the environment and addressing social inequality. This report was ground breaking because it asserted that development, the environment, and social problems were intertwined concepts and were not mutually exclusive, as was previously considered (Holden 2011). The success of the Brundtland Report led to a whole host of new sustainability initiatives, such as the 1992 Rio Earth Summit and the Kyoto Accord. These events led to new interest in municipalities resolving environmental issues. However, in the 1990's the social inequality component of the Brundtland report was dropped from much of the rhetoric, or only given lip service (Holden 2011). From the late 90s onwards, the banner of sustainability changed to economic growth and environmental protection, while the social inequalities were forgotten. In summary, the idea of sustainability was that long term development had to take the environment into account because degradation of natural resources would preclude any continued existence.

Holden argues that the sustainability movement has been co-opted by neo-liberal logic and ideology. She further argues that the concept of sustainability has lost its power and that the “post-political condition creates a constituency for cross-sectorial collaboration and initiative towards a sustainable ideal by restricting the range of alternatives to those that align with global socioeconomic hierarchies and trajectories” (Holden 2011, 528) According to Holden, sustainability is now used as a ‘feel good exercise’ for policies that are framed as sustainable to

become more palatable to resistant citizens. She goes on to argue that social sustainability is an integral and important component to the sustainability movement and should not be disregarded or ignored. Cook and Swyngedouw go even further and argue for the removal of the term sustainability as it is now “the pivotal ‘empty’ signifier to capture the growing concern for a nature that seemed to veer off-balance” (Cook & Swyngedouw 2012, 1974). The sustainability discussion for the most part ignores these social concepts and the more radical perspectives of environmental concerns. This conclusion is apparent in the case of Vancouver and many other projects.

Other authors have been critical of the sustainability concept as well. Moore disagrees with the effectiveness of the neo-liberal approach to climate change. She asserts that municipality’s efforts to address climate change are predicated on framing pollution measurements (Moore 2012). She argues that the current model of measuring cities’ emissions is insufficient because it only takes into account municipal infrastructure. She found that the current model does not account for the associated costs of environmental damage and the costs that large urban centres have. She proposes an ecological foot print model and argues that this approach “is well suited to orienting a city within its global context because it assesses ecological load by accounting for all land that is required ‘wherever on Earth that land is located’” (Moore 2012, 228). Moore’s solution of global tracking environmental costs is laudable, however the implementation of such a proposal would be very difficult to enact.

The main critiques of the sustainability project from Holden’s perspective is that it has depoliticized itself and no longer contains a social component, which she argues is necessary for policies to be effective (Holden 2011). Moore critiques the current method of measuring sustainability insufficient because cities only measure what they can mitigate. Moore argues that

cities should be more ambitious and she puts forth an ecological foot print model that would be more inclusive (Moore 2012). This critique is relevant to mass rapid transit as these projects are promoted as good for both the economy and the environment, yet do not take on more serious substantive efforts to mitigate pollution or the construction costs.

There larger literature that views municipalities polices on sustainability as positive and often innovative in forming networks to find solutions. For example, cities have been participating in regional and international networks around climate change. Richardson argues that multi-level governance is the most effective model for examining how cities use these climate change and sustainability networks. The research conducted by Eric Zeemering explains how the UN and the World Bank have taken more interest in urban centres and discussions around climate change (Zeemering 2012). He argues that cities are able to engage these international networks and that “cities can develop and advance their internal policies and approaches to sustainability, while also attempting to influence national and global environmental policy debates.” (Zeemering 2012, 122) He points out that the World Mayors met at the same time as the 2009 Copenhagen discussion on climate change. Their meeting demonstrates that cities take the issue of climate change seriously, and also shows their efforts in making progress in contrast to the political backlog of the international negotiations.

Rice has argued that these networks, specifically through her research on the ICLEI network in the North West Pacific cities, have been able to bring substantive change through their reforms. She found that neo-liberal climate policy “is shown to do more than grab the low-hanging fruit of possible mitigation strategies but, instead, should be seen as a form of state restructuring that has important effects on the everyday lives of residents through new arrangements of urban environmental policy and state-centered targets on individual behavior.”

(Rice 2014, 341) Rice goes on to argue that business and environmental groups often are in conflict over sustainability policies, but are able to come to consensus on programs such as carbon governance or electricity efficiencies in city infrastructure.

Sustainability, according to Bulkeley and Schroeder, challenges the traditional unitary state model and blurs the line between public and private dichotomy through the inclusion of multiple state and non-state actors. They employ a combination of neo-Gramsci theories with Foucault's governmentality. They argue that the power struggles are not yet over when it comes to understanding climate change and achieving results. They found that "state/non-state capacity and its effect are produced through the contested development of hegemonic projects/governmental programmes." (Bulkeley & Schroeder 2011, 758) They explained that the conflict over sustainability revolved around the decision making process of which public policy instruments would be employed. Their research finds that urban elites to adopt the hegemonic discourses of sustainability and pursue environmental policies that benefit them. Others examine how sustainability is actually implemented within urban centres. Kennedy et. al. argue that cities are seen as critical actors in combating climate change because they are the most vulnerable to climate change and are one of the largest sources of emissions (Kennedy, Desmoulins, & Mohareb 2012).

The effort of municipalities to pursue sustainable policies is limited because national governments limit their power and are hesitant in enacting national policies. Specifically within Canada, most authors recognize the same difficulties that cities face as discussed within the multi-level governances literature (Pasternack 2012; Jones 2012; Richardson 2012; Sancton 2006). For example, Jones in his comparison of Australia and Canada notes that change often comes from higher levels of government being imposed upon lower levels. His research

demonstrates that in “developing their climate change policies state/provincial governments have tended to impose their will rather than cooperate with local authorities and help provide them with the information and tools necessary to be policy partners.”(Jones 2012, 1251) To make matters worse, in both cases there are no national leadership, which left the regional governments to forge their own individual fragmented policies. This results in regions and cities without a national plan and environmental policies are put in an ad-hoc manner (Jones 2012).

The sustainability governance umbrella at the local level has manifested itself into several urban planning ideas. There are three complimentary theories within urban planning that have greatly influenced how cities are designed. These include New Urbanism, Sustainability and Smart Growth. Each have unique features to them, but they all share the common theme that development does not need to have a negative impact upon the environment, an emphasis on walkability of urban centres, and a mixing commercial and residential spaces to reduce commutes. These three theories propose solutions to the problems of the suburban model. North American cities embrace car culture and suburban sprawl in the 1950s and 1960s. Natrsonoy, Shawn and Don describe this modernist suburban planning paradigm as “increased individualism, a more commodified human existence and the loss of a sense of being a part of something larger than ourselves. Marketing of individualism and freedom ironically led to people being trapped in a suburban lifestyle and dependent upon the automobile.” (Natrasonoy & Alexander 2005, 419) The three planning theories differ in certain ways but share similarities in their providing alternatives to suburban sprawl and advocating for population density and mixed land use.

These ideas of sustainability, combined with the new role that global cities play within economics has led to a shift away from the Fordist style of urban planning, where suburban

centres are exclusively residential with concentrated commercial cores. The changes in urban planning focus on the idea of mixed land use. This coincides with the concept of walkability and livable cities. Hutton describes it as “society is no longer defined by the imperatives of a resource-based economy, with powerful connections to the resource hinterland, but rather by an urban sensibility that has transnational reference points, punctuated by the imprints of an emergent regional economy comprised of employment clusters as well as growing immigrant settlement in the suburbs.”(Hutton 2011, 247) In the new global digital economy, condominiums are replacing the paradigm of the suburban home with a white picket fence. Condos offer the urbanite dream of being situated within walking distance, or through mass rapid transit networks a short commute to any amenity.

Filion and Kramer are proponents of this urban shift and they promote the New Urbanism planning idea through a nodal style of public transit. For densification to have synergies with these ideals of walkability, efficiencies are required through transportation that does not involve congestion of vehicular traffic. They argue that this nodal style of mass transportation can “foster the presence of both origins and destinations in proximity to quality public transit, thus providing excellent conditions for transit use.”(Filion & Kramer 2012, 2251) They also suggest that the popularity of the nodal transportation since it requires less coordination in fragmented administrative arrangements. The incentive is for each suburban region to create a downtown core that is connected to the next one. The marriage of land use planning with transportation is echoed by Hatzopoulou and Miller, who examine the barriers to smart growth. They argue that higher levels of multi-level government institutions, such as cross departmental working groups are integral for sustainability policies to succeed. Within the Canadian context, the provincial regional, and municipal transportation authorities need to coordinate to increase and integrate

policy decisions (Hatzopoulou & Miller 2008). They see Smart Growth as the solution to many of the suburban problems. This process, they assert, involves consulting stake holders such as environmental groups. However, the authors are quite pessimistic about the actual success of smart growth implementation. They have noted that most of the ideals remain in talk and are not actualized (Hatzopoulou & Miller 2008). Grant shares Hatzopoulou and Miller's pessimism on the promises of the new urban theories. She discusses the three urban planning theories and through several case studies demonstrates that urban planners have a poor understanding of smart growth, new urbanism and sustainability (Grant 2009).

The success of sustainability at the local level is highly dependent upon the relationship between city councils and their municipality's bureaucracies. Grant finds that sustainability policies have progress where there is a functioning relationship between city council, developers and planning staff. Grant stresses the importance of municipal politicians having a close relationship with planning staff as often developers can influence the city council to remove the environmental requirements from urban plans (Grant 2009). This finding is also reinforced by Schwartz's research. She examines Vancouver to determine why the city has a strong commitment to sustainability in comparison to other cities. Her research concludes that the "two most important factors seem to be the personal commitments of politicians and staff to addressing climate change and the structure of the bureaucracy." (Schwartz 2012, 165) Other factors such as voters' preferences, engagement of environmental groups or incentives from higher levels of government do not seem to have a negligible impact upon the City's policies (Schwartz 2012). This finding was also in Doelle and Munroe's case study of Halifax. They find that despite the "concerns over the limited jurisdiction of municipalities to their limited political influence either on their own or through local government networks, and the general disconnect

between climate mitigation at such a small scale and the avoidance of climate impacts in the future.”(Doelle & Munroe 2012, 196) The city of Halifax created working groups between municipal staff and city councillors to engage with stakeholders to have innovative ways to mitigate climate change, which was quite successful (Doelle & Munroe 2012). To reap the merits of the sustainability model, there needs to be a functioning relationship between municipal politicians and planning staff.

One major tenant of these three theories is the idea that residents can walk everywhere and are not be dependent upon vehicles. The term has been coined as walkability, which is a major goal for these new urban theories. The term has become a “buzz word for a reversal of modernism’s urban monstrosities: public spaces overtaken by automobiles; long-distance, traffic choked commutes; homogeneous suburbs; and alienation from political process. The city, in this case, is reimagined as a network of villages constituted as such by the craft-like attention its residents (rather than specialists) pay to place-based, cooperatively organized urban design.” (Quastel & Lynch 2012, 1067) The drive for walkability dovetails with urban planning theories and has been a prevalent theme within global cities in the transition to achieving more tangible goals of livability (Grant et al. 2011; Tan et al. 2012)

Sustainability in sum has been brought within the neo-liberal umbrella. The more radical social components of sustainability were discarded as too difficult or politically radical for promoting constrained development (Holden 2011; Cook & Swyngedouw 2012). Sustainability has become a paradigm that has been integrated into the urban planning governance ethos and in the case of larger cities, its main message is the simplified message of density as sustainability (Grant 2009; Hatzopoulou & Miller 2008). For global cities, sustainability has coincided with their growth and concentration of the knowledge economy. High tech industries have gravitated

towards green and sustainable projects and are not pushed out by the higher costs of densifications. The suburban sprawl model has been challenged by the new urban dream of the centrally located condominium within close proximity to all of the services and amenities that residents desire (Quastel & Lynch 2012; Filion & Kramer 2012; Natrasony & Alexander 2005).

3.4. Summary of the Theoretical Approach

Canadian cities are governed by a multitude of forces. The literature of governance discusses and examines the fragmentation of governing. It brings in an attention to international governance networks that interact with regional and sub-national governments. As well it questions national governments hegemony as the supreme power and sees efficiency at the lower or higher levels of the nation level (Krahman 2003). The theory of multi-level governance seeks to understand the network of fragmented authority. The literature has two different interpretations of multi-level government: one of multi-level governance, while the other is multi-level government (Curry 2006; Hooghe & Marks 2001). Another interpretation states that multi-level governance has come to be understood as a symptom of states rescaling to respond to changes in the economic transformation from Keynesianism to neo-liberalism (Brenner 2004; Turgeon 2006; Horak 2013a). Sustainability literature can be seen as a factor in the economic changes from industrial to post-industrial that result in the relative decline of suburbia. Global cities are merging their image with that of the environmentally conscious cities that employ efficient transit systems that are not exclusively reliant upon personal vehicle transportation, which reflect the transitions in the global economy (Hutton 2011; Quastel & Lynch 2012). These changes also correspond with international organizations representing global cities networking to mitigate climate change and promote environmental initiatives (Zeemering 2012; Rice 2014). In

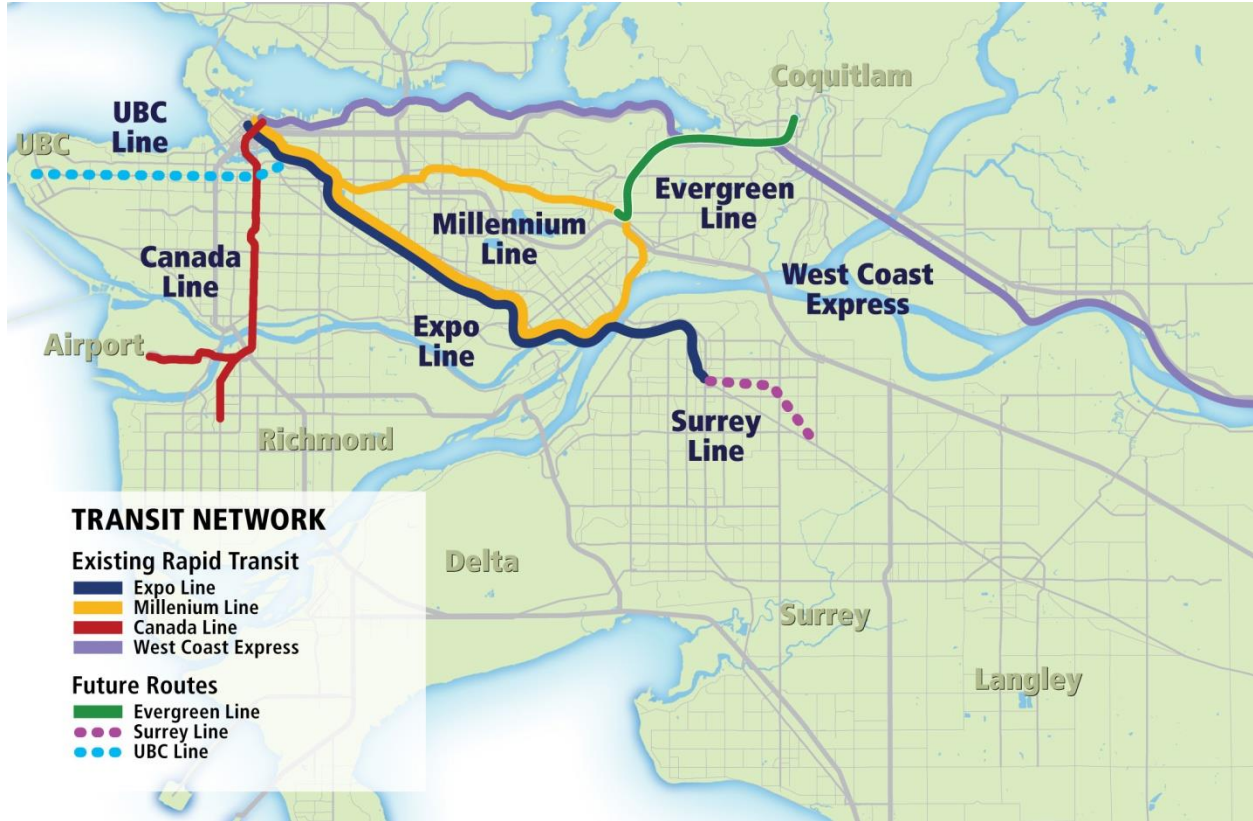
tandem, there are urban planning theories that operate at the national and international level that are disseminated to the local level.

Cities in their continued economic and population growth require multilevel governance since many important policy issues, such as sustainability and urban planning are beyond the power and jurisdiction of municipalities and regional governments (Filion & Kramer 2012; Hatzopoulou & Miller 2008; Jones 2012; Schwartz 2012). In the case of Canada, municipalities are the constitutional creatures of the province, which excludes the possibility of cities resolving complex policy issues by themselves. In its current incarnation, there is an ongoing debate on the role of government in governing urban centres (Pasternack 2012). Most of the literature argues that national governments should provide more leadership through national programs to promote a standard to issues such as sustainability, or social programs (Holden 2011; Jones 2012; Pasternack 2012). Without national support, sustainability programs are done in an ad hoc manner and there is a patch work of different approaches through each regional government implementation (Jones 2012; Horak 2013a). The overall Canadian sustainability structure is weak and is not consistent across the nation nor on policy issues, in part because the national government is reluctant to provide leadership on these policy issues (Jones 2012; Pasternack 2012; Richardson 2012; Filion & Kramer 2012; Hatzopoulou & Miller 2008).

Chapter 4. Background

The two case studies, the Canada Line and Evergreen Line, are understood within an ongoing conflictual relationship between the province and regional governments. This section will cover a brief history of the conflict between the provincial government and the regional governments and of the SkyTrain. The case of the Canada Line demonstrates that the province pushed for a transit line that was not advocated by regional leaders. An ongoing conflict between local politicians and the province led to the province making certain financial compromises to ensure the project proceeded as a PPP and in time for the 2010 winter Olympics. On the other hand, the Evergreen Line was initially promoted by the regional politicians and urban planners. The provincial government, having learnt from its experience in the Canada Line, made legislative changes to lower the influence of local politicians over the TransLink. In addition, the province rejected the first Evergreen Line proposal and redesigned the project; however, the PPP proposed by the provincial government was rejected and the province compromised to go ahead without that model of funding. The leadership of the provincial government is clear that both cases illustrate resistance from municipal leadership can result in compromises.

Figure 1: Map of SkyTrain Transit Network and proposed routes



Source: TransLink: Evergreen website.

The SkyTrain is a fully automated Advanced Light Rapid Transit that follows a combination of above ground causeways and tunnels through the downtown region. The SkyTrain was created for Expo 86 to showcase modern transportation by the BC Transat (Siemiatycki, 2005; Cohn, 2009). Transportation policy at the time was being jointly organized between the BC Transport and the Greater Vancouver Regional District (GVRD), where every decade it produces long term urban plans for the region. These plans set growth targets for population, economics and transportation for the region. Initially, the GVRD had planning power. Due to conflicts with the province over land use, the province officially removed those power in 1983 (Abbot, 2012; Oberlander & Smith 1993). Despite the lack of official power, the GVRD still continued to create regional urban plans, but they were not obligatory for

municipalities to follow. During 1990's the New Democratic Party, (NDP) government had a close relationship with the municipalities and coordinated on the expansions of the transportation networks with urban growth plans (Abbot, 2012; Smith & Stewart, 2005). There was a massive demand for transportation expansion as there was an explosive growth in the region driven by immigration from Hong Kong. Vancouver was attractive due to its already existent Chinese population and safety compared to the uncertainties of China taking over the British colony (Abbott, 2012).

In the late 1990s the NDP government created the Greater Vancouver Transportation Authority Act, now known as TransLink. This new authority was mandated to coordinate with the GVRD to agree upon public transportation planning. To make it more accountable the majority of its board members were appointed by the GVRD (Smith 2013). This new transit authority is an arms' length institution that was initially indirectly controlled by the GVRD. This move has been criticized by Smith and Stewart as creating democratic deficit as the public servants are quite removed from voters and it had ambiguous public accountability (Smith & Stewart, 2005).

In summary, the transportation planning of the Vancouver region has historically been a pawn within a larger conflict between the province and regional governments. The province's removal of the GVRD's power in 1983 established that provincial interests come before local ones. As well, the creation of TransLink created an institution that operates within a multi-level governance setting with competing directions coming from the province and the GVRD. However, Vancouver has experienced substantial growth that strains its existing transportation network and these growing pains are additional incentive for the province to negotiate with the municipalities of the greater Vancouver area.

4.1. Canada Line

In 2001, the Liberal Party won a massive election under Gordon Campbell that brought about reforms and new initiatives to the province. Despite its name, the party is a centre right party with neo-liberal ideology (Cohn, 2008; Siemiatycki, 2005; Smith, 2013). One of the major pushes by the Campbell government was to create PPP and a bid for the 2010 winter Olympics for Vancouver (Smith & Stewart, 2005; Cohn, 2009). The bid for the 2010 Olympics also entailed the construction of a new SkyTrain line that would connect the airport to downtown Vancouver. Initially, it was called the Richmond-Airport-Vancouver (RAV) line with a proposed \$1.7 billion budget. Negotiations started in 2003 (Cohn, 2008) and the Liberal government proposed a PPP funding model for the creation of the Canada Line that was Design Build Finance and Operate. This arrangement is where a private firm is contracted to construct, fund and operate the project over a contracted period of time before reverting to public operation (Cohn 2008). The project was funded by various organizations including the Vancouver Airport Authority, provincial government, federal government, TransLink, and private sector consortium (Cohn, 2009). In this situation, the Federal Government played a passive role because the province acted as the middle man between the municipalities and the Federal Government. The province used the offered federal funding package as leverage to put pressure on municipal leaders to contribute to the project (Cohn, 2009; Smith, 2013). The mayors of the Vancouver region were concerned about the costs that would incur local taxpayers and that the GVRD had not made any plans for Richmond to grow (Smith and Stewart 2005). Municipal planners had avoided Richmond as a growth area because of its location on an island in the Fraser delta, which makes it particularly vulnerable to any floods or sea level rises. Planners were worried about the lack of disaster plans in place and did not want to increase the population (Cohn, 2008; Stewart

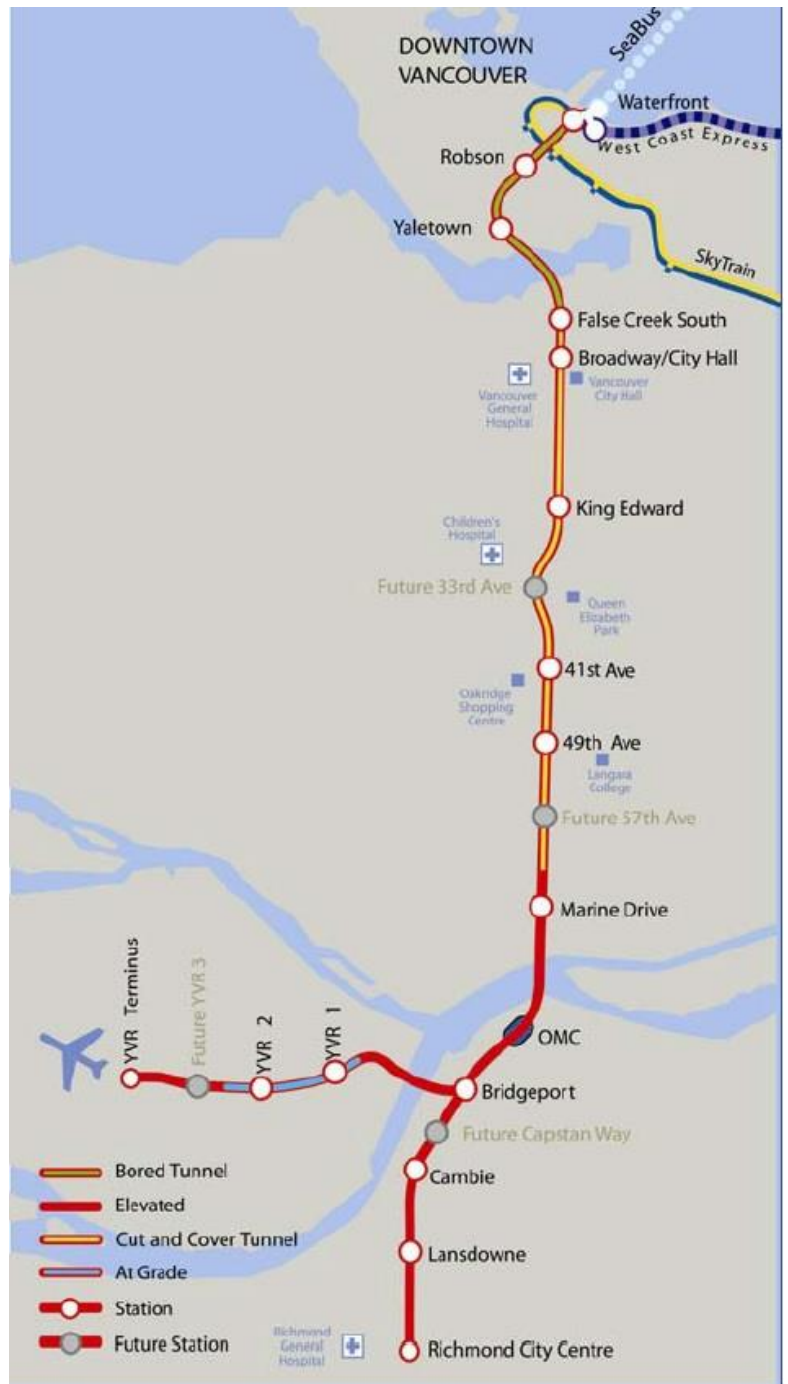
and Smith, 2009). Even with this opposition, one planner interviewed by Hatzopoulou and Miller stated that the “province has always decided that what they are going to do, they are going to do it and they have the money for it anyway even if it is opposite to regional planning objectives.” (Hatzopoulou & Miller, 2008, p. 158)

Several authors investigating the Canada Line noted the clash between local governments and the province of British Columbia. The Liberal Government under Gordon Campbell was governing through NPM principles that instituted market mechanisms (Hatzopoulou & Miller, 2008; Cohn, 2009). The Liberal Government believed in more private participation and that the hiring of select bureaucrats in TransLink played a central role in disseminating the culture of NPM into the elite leadership (Siemiatycki, 2005). Leo and Enns argue that there was a large ideological diffusion between local government and the provincial government. They suggest that the BC Liberals had a very different interpretation of multi-level governance than that of the local governments’ interpretation. In this new situation, the local institutions had to accommodate the market model, such as in the case of the Canada Line, ensuring that it was a private-public partnership (Leo & Enns, 2009).

Table 2: Funding and Timeline of Canada Line

Total Cost:	\$2.05 billion
Government of Canada:	\$450 million
Government of British Columbia:	\$435 million
Vancouver Airport Authority:	\$30 million
TransLink:	\$334 million
City of Vancouver:	\$29 million
Private Consortium:	\$700 million
Events in Timeline:	Date:
First phase of planning by TransLink, the Province, Canada,	2000
Request for Expressions of Interest	2002
Public consultation process	2003
Federal and provincial governments confirm Funding	2004
Translink Board, after voting twice to cancel, approved the project	2004
Construction firm chosen	2005
Construction begin	2005
Completed on budget and 3 months early	2009

Figure 2: Map of Proposed Canada Line 2006



Source: British Columbia 2006

Source: British Columbia 2006

The two levels of government clashed over funding the Canada Line. The business plan proposed by the BC government was rejected multiple times by the municipal leaders who had a veto power on TransLink projects. Translink was the forum that the provincial government was obstructed in passing their proposal (Smith & Stewart, 2009; Oberlander & Smith, 2006; Cohn, 2009). The Board of Directors on TransLink were appointed by local politicians and were resistant to the PPP model for the proposed Canada Line. The province “tried to cajole, financially induce and shame the Board into undertaking” the project (Cohn 2009, p. 35). After several rejections by the board of governors, the provincial government was able to force the passage of the project after repeated attempts in 2004. This was just in time for the project to start so that it would be done on time. The board of governors only accepted the new funding project because the province took on the burden of any cost overruns (Cohn, 2009; Siemiatycki, 2005).

4.2. Evergreen Line

The Evergreen Line was not initially championed by the provincial government. It was part of the GVRD’s Livable Region Strategic Plan growth strategy and was delayed due to the construction of the Canada Line (LRSP 1996). It had been in a planned expansion since the early 1990s (TransLink 2008; Plewes 2006). After the completion of the Millennium line in 2002 Metro Vancouver, the then GVRD, began studies into the expansion of the transit to Coquitlam. The Board of Metro Vancouver went forward with approving the Coquitlam Light Rail Transit Line for \$800 million (Plewes 2006, 3-4). During the design phase the project was pushed back, the competition shifted numerous times from finished in 2009 to 2011 (British Columbia 2013).

Table 3: Funding and Timeline of the Evergreen Line

Evergreen Line total cost	1.431 billion
Government of Canada:	\$586 million
Government of British Columbia:	\$417 million
TransLink:	\$400 million
City of Coquitlam:	\$28 million
Events in Timeline:	Date:
TransLink complete initial consultation and design	2004
Choose Evergreen Line title	2005
Continued consultation and search for funding.	2006
Ongoing delays in design and funding	2007
Redesigned Evergreen Line for more expensive technology for lower operating costs	2008
Mayors' Council vote against the PPP model for funding the Evergreen Line	2009
Mayors' Council approving funding	2011
Contractor chosen and construction begin	2012
Ongoing construction	2015
Project Finish	2016

Source: TransLink 2006, 2008, 2013; British Columbia 2013

Campbell’s government had been frustrated by the resistance of local leaders in TransLink’s board of governors with their negotiations with the Canada Line and how the Evergreen Line was developing. To resolve future conflict, the BC government made amendments to TransLink’s constitution. Smith has argued that the BC government, in response to the resistance by local leaders, branded “the locally-controlled TransLink Board as dysfunctional and incapable of making a decision and introducing Bill 43 – creating a very different, less locally-controlled TransLink governance structure” (Smith 2013, p. 17). The consequence of these reforms was that the role of elected officials in the institution was greatly reduced and ensured that the Board of Governors would have even less abilities to resist provincial plans (Smith, 2013). Initially, the

provincial government proposed a PPP model for funding the Evergreen Line. This announcement was met by protest and resistance by the local politicians. To push the project ahead, the provincial government conceded and changed the project to a traditional financing model (British Columbia 2013). In addition to external resistance, internal departments were not as keen on the PPP funding. In 2010, the BC ministry of Transportation proposed a P3’ model to the British Columbia Treasury Board, but was rejected. The complications resulting from the Canada Line plus the difficulties of integrating an additional partner into an already existing network was deemed too costly (Translink 2013; Smith 2013). In a report by the BC auditor general, it was found that the “procurement decision was simplified because it did not make economic sense to operate and maintain the Evergreen Line as a long-term PPP separately from the rest of the SkyTrain network.” (British Columbia 2013, 4)

Figure 3: Map of Evergreen Line



Source: TransLink Evergreen Website

The provincial government did not approve of the first business case put forward by TransLink. In 2007, a new business case for the Evergreen line was developed. The BC government learnt from their difficulties with the Canada Line and understood that they needed strong leadership to ensure that the Evergreen Line proceeded along with their priorities for the project. The BC Provincial Government's new proposal rejected the previous preference for ground level light rail model that was cheaper in favour for the more expensive existing SkyTrain technology (TransLink 2008). Similar to the Canada Line, this was met with some resistance. The initial proposed completion date went through a series of setbacks and postponement as the provincial government, federal government and local levels of government negotiated how to fund the project. During this process, one political commentator stated that “SkyTrain has been and always will be a political pork barrel where huge sums of taxpayers money are spent on short lengths of metro lines.”¹ The province’s constitutional powers combined with their relationship with federal government enabled them to bring two thirds of the funding for the project. The federal funds were key in establishing the viability of funding the Evergreen Line, as was the case in the Canada Line.

The Evergreen Line is currently under construction; the project’s publicized reasons for construction is connecting the Coquitlam region via mass transit to the downtown core, supporting the local growth management, and “support provincial environmental goals by reducing regional car trips. Meet regional and local environmental objectives to preserve green space. Encourage pedestrian traffic along corridor” (Evergreen Line Website). The official goal of the project mirrors much of the language of urban planning. The Canadian Line was promoted

¹ <http://www.railforthevalley.com/latest-news/zweissystem/the-evergreen-line-farce-continues/>

under the banner of nationalism and Olympic fervour, while the Evergreen Line has lent itself towards sustainability and climate change. The name itself evokes connotations of nature and environmental concerns.

The title and the promotion of the Evergreen Line is a prime example of development under the banner of sustainability being used to promote a neo-liberal infrastructure project. Real environmental concerns, such as emission reduction, are only tacitly acknowledged in the Evergreen Line project. The primary concern is the economic implications of improving the transit time from the Coquitlum suburbs to the downtown core. Condominium developers immediately began plans for construction once the Evergreen Line given the go ahead (Jang 2013). Though much of the literature does not examine this, the financial elites in Vancouver are developers and the expansion of the transportation networks greatly benefits them.

Condominiums have been branded as more sustainable and part of a new urban paradigm where the division of work, play and recreation are now blurred with mixed zoning. New commercial and residential developments remove the costs, in time and energy, from shopping or recreating (Foth 2010).

4.3. Summary of Canada Line and Evergreen Line

The history of conflict between the province and regional leaders can be seen within the two case studies. The province, in the case of the Canada Line, was motivated to push mega projects funded by PPP models. The province was able to have the project approved with their PPP model but at the compromise that they would cover any cost overruns, which was a significant risk for a fiscally conservative government. For the Evergreen Line, the provincial government changed TransLink's constitution to reduce the influence of regional politicians and impose

provincial planning over Metro Vancouver’s planning. However, in this case the provincial politicians vacillated on their efforts to push a PPP model.

Table 4: Comparison of Canada Line and Evergreen Line

	Canada Line	Evergreen Line
Context	The Canada Line was proposed by the new Liberal government, which was pushing an agenda of mega projects funded in PPP’s models, and as a project to meet Vancouver’s 2010 Winter Olympic bid	The project was delayed due to the Canada Line. It was first proposed as a less expensive LRT above ground mode. The locally led planning of TransLink and GVRD were the champions of the project
Funding Model	PPP between provincial, federal, and municipal governments; and regional transportation, Vancouver Airport Authority and private consortium	A public project funded by the provincial government, federal government and TransLink
Justification and rhetoric for construction	Part of new government mandate to have successful PPP mega projects and nationalism of hosting the Olympics	Easing traffic congestion, improving the economy, and facilitating environmental policies
TransLink’s governance structure	With the Canada Line, TransLink still retained its original governance structure, which gave local Mayors more control and influence over the board of governors selection and decision making process	Through difficulties of resolving conflict the provincial government in 2007 modified TransLink’s governance structures and reduced the municipal influence of the Mayors’ Council to only have a veto option.
Multi-level Governance	The version of multi-level governance is clear with the inclusion of the PPP funding model that consists of several levels of public actors a private consortium and the Vancouver Airport Authority	More a case of multi-level government, because private actors are not formally involved in funding the project and it with only public funds.

The justifications of the two projects differed, as the Canada Line was largely motivated by nationalism and enthusiasm to meet the 2010 Olympics deadline. The Evergreen Line,

without a deadline spent a significantly longer time in its planning phase. Its first proposal in 2006 by TransLink and Metro Vancouver was rejected and subsequently redesigned by the province in 2008 and was not finally approved until 2011. This offers an interesting comparison between the Evergreen Line and the Canada Line's start of planning in 2000 and final approval in 2004.

Chapter 5. Analysis

An analysis of the Canada Line and the Evergreen Line suggests that the inception of both projects are different: the Canada Line was championed by the provincial government and pushed against a resistant TransLink led by regional politicians; the Evergreen Line was first proposed by TransLink against a resistant province who responded by redesigning the project and taking over the leadership. The common theme in the two narratives is the pivotal role of the provincial government's leadership. The governance structure around SkyTrain expansion is characterised as on the government side of the governance-government spectrum outlined by Krahmman (2003). More specifically the two cases are clearly multi-level governance; however the role of non state actors differs in the two cases. In the Canada Line, it is more multi-level governance because consultants played an important role in adding credibility to the project and a private consortium were major funders in the PPP. On the other hand, the Evergreen Line can be viewed as multi-level government since NGO's and private firms played minor roles in the project. In widening the scope, the influence of sustainability upon urban planning is demonstrated through its institutionalization within various cities and the regional governments. Many of the cities are part of international organizations. These networks and embedded policies influence the organizations' preference for mass rapid transit. The overlapping governance networks on the SkyTrain benefit both the BC government, as it removes it from being responsible for the contentious issue of transportation management, and condominium developers, who profit as the transit opens more areas to develop. The consequences of this is that TransLink has weak democratic accountability and the subsequent development and gentrification of areas around the SkyTrain stations displace the local residents.

Previous literature around Vancouver's mass rapid transit network has not made the claim that it is applicable to the concept of governance. In the past, authors have mostly examined the impact neo-liberal and NPM reforms have had (Cohn 2008; Smith and Steward 2005; Siemiatycki 2005). The main theme pointed out by these authors is the contentious relationship between the province and the municipalities. For example, Cohn argues that NPM was applicable in understanding the province's preference for a PPP in the Canada Line case. Also, he argues this for several other mega projects that were undertaken at the same time (Cohn 2008). Smith and Oberlander argue that the province has meddled within municipal affairs for its own benefits and is not seriously interested in improving the democratic deficit that plagues Vancouver's municipalities (Smith & Oberlander, 2006). Siemiatycki, in his analysis of the Canada Line, found that the provincial government pursued policies of market mechanisms and competition (Siemiatycki, 2005). As argued by others, the Liberal government was institutionalizing their neo-liberal ideas into many of their projects and embedding into provincially controlled institutions. The implications for TransLink was that instead of giving locals more power, these reforms have "meant that local officials are beholden to the stipulations attached to financial contributions by senior levels of government." (Siemiatycki 2005, 69) Siemiatycki finds that elites in the BC government were interconnected and certain bureaucrats played important leadership roles in promoting the PPP component of the Canada Line (Siemiatycki 2005).

In both cases, Provincial Government funding played a pivotal role in the leadership of the SkyTrain expansions. Also, the premier and senior provincial politicians became involved in the development of these mega projects (Cohn 2008). In the case of the Canada Line, the local levels of government resisted the expansion and business model because its costs were not within

their planned budget. The Evergreen Line was initially pushed by local government and without provincial support, but it was not proceeding very quickly since it lacked both provincial and federal government funding. After the provincial government redesigned the project, funding was secured through the province's own contribution and through the federal government since the BC Liberals, with their conservative approach, have had a close relationship with the Federal Conservatives party (Smith 2013).

For the Canada Line the Provincial Government decision was informed by consultant firms, who provided the appearance of credibility and transparency. Siemiatycki concludes that it was "ironic that many of the organizations, institutions and players involved in the RAV project embrace the neoliberal paradigm that views competition as critical to enhancing efficiency and quality. Yet, the RAV project planning framework virtually limited the competition of ideas to those which supported a private–public partnership." (Siemiatycki 2005. 81) The role of the consultants adds credibility and authority to the province effort to push their PPP funding structure. This credibility obscures the client relationship of where the consultants are often hired to implicitly confirm their client's objectives.

The two case studies examined show both as examples of governance. In the Canada Line, it is clear that the inclusion of private parties and many other different levels of government in the project demonstrate the complex diffusion of financial responsibility to state and non-state actors. What is important in this case is that the central state actor, the provincial government, is orchestrating the project through the auspice of TransLink. The role of the private actor, even in the case of the Canada Line, is officially subordinate because public authorities are still the ones responsible for service provision and policy decisions. This is not inconsistent with Krahmman's conception of governance which is quite flexible (Krahmann 2003). The Canada

Line is further into the governance spectrum than the Evergreen Line since the former included more partners and a larger portion of funding from private partners, who were responsible for its operation.

From the debate over multi-level government and governance there is no general consensus on its definition and use. Both projects were funded by local, provincial and federal government, which demonstrates the multi-level government component. Within the multi-level governance literature a distinction between multi-level government and governance is made, as stated by Marks and Hooghe (Marks & Hooghe 2001; Pasternack 2012). Curry provides an alternative understanding: if a decision is made in the policy level stage that does not include multiple actors, multi-level governance will occur at the policy implementation stage (Curry 2006). The two case studies are interesting because they can both be understood as multi-level governance and government as Curry argues. In the case of the Canada Line, with its PPP model and the inclusion of consultants, it is a case of multi-level governance. On the other hand, the Evergreen Line did not opt for the PPP funding model and is thus more a case of multi-level government since it is dominated by public sector partners.

The two case studies also follow certain themes from the policy cycle and other policy theories. In both cases, Kingdon's policy window is applicable. For the Canada Line, the policy window was created through the confluence of the landslide government win in 2000 and the successful bid for the 2010 Winter Olympics (Cohn 2008; Kingdon 1984; Keeler 1993). The Canada Line had been an idea for expansions in regional planning, but had been pushed down in priority due to concerns of flooding in Richmond, which is on a river delta. On the other hand, the Evergreen Line was slated as the next expansion within the urban plans in Vancouver, but was interrupted by the Canada Line. The expansion of the SkyTrain to Coquitlam had been in

discussion for over 20 years as its plans predate the 1996 Livable Region Strategic Plan (LRSP 1996). In this case, the BC government had to wrest control of the project from the locally led TransLink and champion it. The provincial was able to provide leadership and align policy windows that the regional leadership could not do, such as federal funding and their own funding for the project to go forward.

Outside of the governance discussion, the roles of urban planning and sustainability literatures are also relevant in the larger public transportation governance network. These two concepts are influential in the design and motivation for pushing the two projects. The decision making process of these SkyTrain expansions are highly contentious debates. The policy formation portion of them is, however, not nearly as contentious. From early planning by Metro Vancouver, the projected growth patterns have had a consistent argument that expanding the public transportation is necessary to incorporate the expected million new residents (LRSP 1996). The paradigm of mass transportation fits within the thinking of the regions planning staff. Sustainability is clearly an idea that has struck hold in both TransLink and MetroVancouver planning staff. Both websites have sustainability policies and sections within their websites (Metro Vancouver Website, TransLink Website). While these two regional authority's sustainability programs are not as ambitious or embedded within their bureaucracy as the City of Vancouver's is, they are nonetheless important and reflect the importance of green cosmopolitan policies for the region.

The planning staff from the respective regional cities is involved in international sustainability networks, which reflects the importance of sustainability and its influence on policy. The governance of sustainability in the Vancouver region is a network of many different actors. The primary actors are the planning staff of the various municipalities as well as the two

regional governments: Metro Vancouver and TransLink. These levels of government have been found to rely upon larger regional, national and international networks to aid in the policy formation of sustainability (Christopher, Demoullin, Mohareb 2012; Zeemering 2012; Bulkeley & Schroeder 2012). For example, Vancouver signed the 2010 Mexico City Pact as a member of the World Mayors Council on Climate Change. Signing members are part of a voluntary initiative committed to “the reduction of emissions, adaptation to the impacts of climate change and fostering city-to-city cooperation.” (World Mayors Council Website). Several of the prominent municipalities in the region, including Metro Vancouver are members of the International Council for Local Environmental Initiative’s Local Governments, for sustainability Canada (ICLEI Website). This organization aids municipalities in Canada by serving as a forum to discuss strategies and network that disseminate sustainability resources (ICLEI Website). In addition, Vancouver is a member of the C40 Cities Climate Leadership Group, which is a high profile organization that networks to reduce greenhouse gases. This organization is relatively new since its inception in 2006 when the Mayor of London partnered with the Clinton Climate Initiative (C40 Website).

Sustainability efforts are embedded within the regional governments and municipalities in the region with Vancouver serving as the pioneer of environmental policies. Burch, in her research on the city of Vancouver found that it was the institutionalization of sustainability within the municipal government’s bureaucracy that had the most important impact in maintaining those policies (Burch, 2010). Burch's findings are consistent with the sustainability literature where most successful policies were a result of positive relationships between politicians and planning staff work groups or sub-committees (Grant, 2009; Doelle & Munroe, 2012). Grant found that local level planners are not as aware of the distinctions between the three

popular urban planning theories, New Urbanism, Smart Growth and Sustainability (Grant 2009). As well, Schwartz's research on the Vancouver's sustainability program is quite revealing into the municipal planning. Schwartz argues that the success of sustainability policies was because it was embedded and institutionalized within the organization. As previously mentioned, both TransLink and Metro Vancouver have made efforts to embed and institutionalize sustainability into their organizational structure and their planning (Metro Vancouver Website, TransLink Website). The region is typified by a high degree of attention to sustainability with the City of Vancouver as the main driver. Vancouver's campaign to become the greenest city by 2020 reflects the desire of municipalities to be competitive on the global stage to attract firms and talented individuals to stay in the city.

The influence that these networks have on Vancouver's sustainability and transit policy is not linear, but nonetheless there is an impact. The Livable Region Strategic Plan developed by Metro Vancouver in 1996 has been updated and influenced by Vancouver's green policies (Hutton 2011). Also, Vancouver has consistently been highly ranked internationally as a livable and green city. For example, the Global Green Economy Index ranked Vancouver at 4th in world. The GGEI ranks cities on factors of "leadership & climate change, efficiency sectors, markets & investment and environment & natural capital."(GGEI 2014, 9) Vancouver's high rankings in standards of living and livability are contributing factors to the green ethos that permeates through the regions policy community (Tan et al. 2012). The Livable Region Strategic Plan includes a strong emphasis on sustainability, where its "task is to help maintain regional livability and protect the environment in the face of anticipated growth." (LRSP 1996, 8) This included a variety of different options from expanding public transit focused on decreasing reliance on vehicles and increasing population density. It is clear that the multi-level governance

of Richardson, Rice and Pasternack includes these other tiers of networks that are outside the traditional hierarchy of government (Rice 2014; Pasternack 2012; Richardson 2012).

However, the governance network according to Bulkeley and Schroeder included private sector elites in controlling the discourse around the discussion of sustainability (Bulkeley & Schroeder 2012). In Vancouver, mass transportation has been an integral part of the region's urban planning in its effort to decrease vehicle transportation and increase densification. Bulkeley and Schroeder discuss how elites took part in the policy debate. Their theoretical approach incorporates Foucault's governmentality and Neo-Gramscian hegemony to argue that elites were able to create consensus on the sustainability issues which appears to have been the case in the two case studies. Despite the Liberal's governments conservative values and rhetoric. The Evergreen Line was promoted as a green initiative as good for the environment (Translink website). In addition, the federal Conservative Party has been well known dismissal of climate change policies and sustainability was still complicit in funding a nominally environmentally friendly project (Pasternack 2012). However, it is unclear how private sector elites participated in the policy decision making process. Within Canada, the existence of ministerial responsibility at the provincial level diminishes the official role that private actors play in the public discourse. Or at least obscures their influence upon provincial politicians and officials. The influence of NGOs could not be determined in either of the two case studies. There are tentative conclusions made through inference of other's research. For example, Schwartz's research on Vancouver municipality found that the motivation for sustainability policies stemmed from its institutionalization into the bureaucracy and Schwartz concluded that NGOs were a negligible factor (Schwartz 2012).

Not all cities in the region have prioritized sustainability. The municipalities on the periphery have growing suburbs due to undeveloped land and have much different urban planning strategies. In the logic of global cities, the suburbs have lower environmental standards to attract industrial enterprises and other businesses that are not attracted to the clean sustainable aesthetic of the downtown core. The logic is that the suburbs are not competing with Vancouver, but rather with each other on which region will attract more residents and firms to provide employment. For example, Surry is resistant to the dominant planning paradigm in Vancouver and has struggled to adapt to this model of destiny as sustainability. Natrasony and Alexander argue that in the case of Surry suburban sprawl is still the reigning ideal, which the authors argue is a lack of holistic planning. The consequence of this style of planning means that it is working “towards isolated efficiencies within discipline and sector specializations, our holistic sense of the built environment has largely been lost. Planners move land uses, engineers move cars, transit planners move people, law enforcement officials remove people and developers move money.” (Natrasony & Alexander 2005, 431) Surry is a prime example of the urban planning strategy to forgo a coherent urban plan for sprawling development and industrial growth.

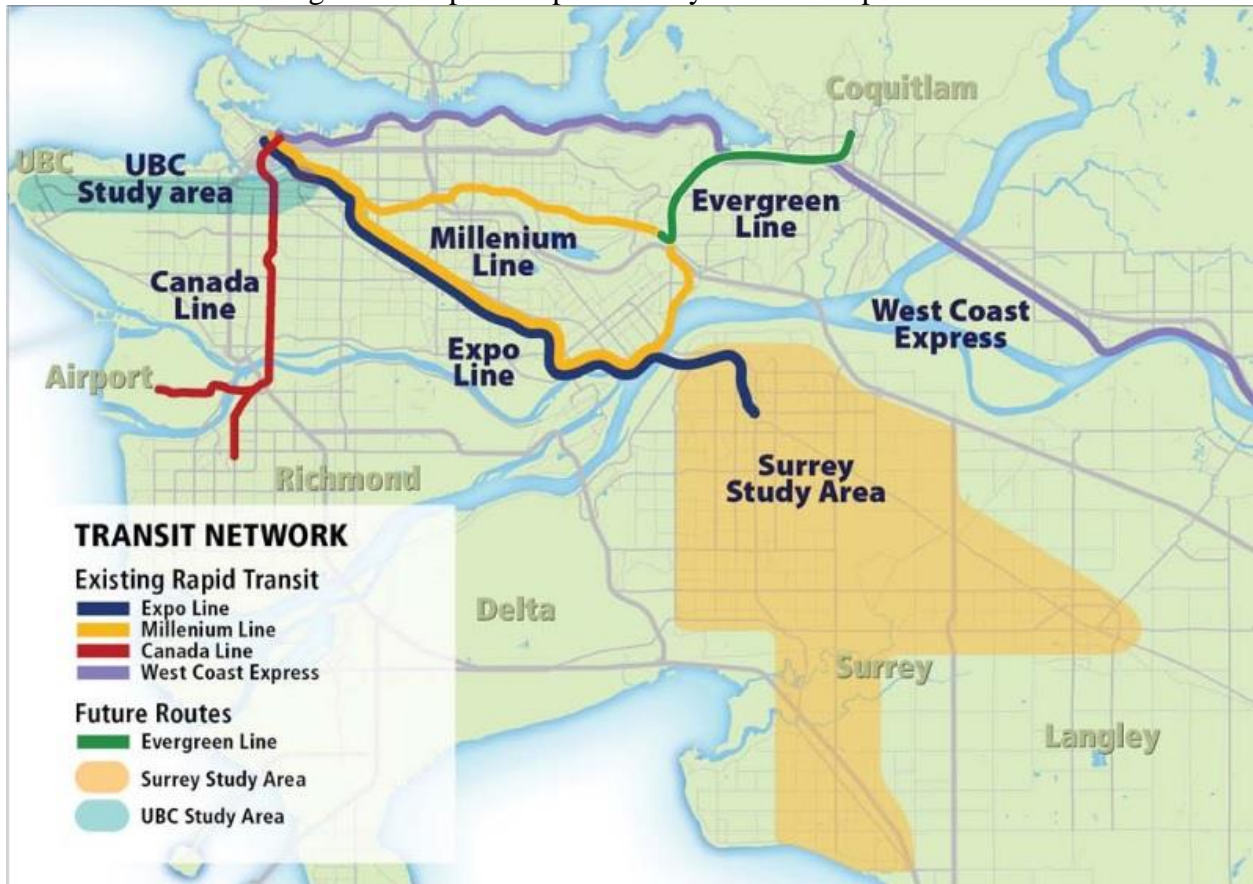
The research was not able to determine a specific role of the private sector in the decision making process. Consideration was given to the fact that Vancouver’s economy is largely dominated by a strong development industry around condominiums. It is unclear if property developers influenced politicians, but there little doubt that developers are benefitting from the SkyTrain expansions as there is a growing literature around Transit Orientated Development (TOD) in the Vancouver region. In 2013, after the announcement of the Evergreen Line, developers rushed to start condominium towers to sell on the premise of quick transit to Vancouver's downtown. A news report from the *Globe and Mail* interviewed a developer who

stated that “condo projects are being done on the expectation that rapid transit will serve Coquitlam.” (Jang 2013) As well, companies such as 'Home in the City' have entire sections that catalogue condominiums that are close to SkyTrain stations (HomeInTheCity Website). To further illustrate this point, Foth demonstrates in her study of demographics around SkyTrain stations since 1981 to 2006 that SkyTrain stations increased densification and housing prices pushed away poorer inhabitants in the process of gentrification. She concludes that the “SkyTrain contributed to the development of TOD in the form of high-density residential hubs, but the building of the transit system alone did not bring about change; it was dependent on other factors, such as public incentives, rezoning, and a favourable economy which spurs private development interest” (Foth 2010, 50). Foth’s research reinforces the governance paradigm around transportation where different levels of government and the private sector come together to increase densification. In addition, the research of Vujevic on TOD’s found similar findings that condominium developments increased population in walkable areas around transit stations over the period from 2001 to 2006 outside of Vancouver’s official city limits (Vujevic 2009).

Despite the differences in the two case studies, their governance structure has several negative consequences: little accountability mechanisms to stakeholders; discourse of sustainability neglects serious debate; and local residents are displacement by development. TransLink’s lack of accountability reflects the fears that early theorists had of governance (Hirst 1999; Rhodes 1996; Pierre & Peters 2001). The transportation authority was modified in 2007 to a new governance structure resulting in the municipal control of TransLink being reduced where the Mayor’s council appointed only 9 pre-selected nominees to the Board of Governors (Bill 43, 2007). This new arrangement was soon found to be insufficient. The structure was recently changed in June 2014, where the Mayor’s council has been given more powers. These changes

included the Mayor's Council given the responsibility of oversight over satisfaction of services, the power to conduct inspections, and the removal of the Regional Transportation Commissioner (Bill 22, 2014). The issue is that TransLink is removed from its stakeholders. The 21 members of the Mayors Council serves as a mitigating force within TransLinks governance structure and often oppose the provinces efforts to control the organization. Yet, the province retains ultimate power because it can modify the governance structure. Also TransLink must keep its plans in accordance with “provincial transportation and economic objectives.” (British Columbia 2014) This clause enables the province to intervene into TransLink’s planning process and, in particular, influence the decision making process around SkyTrain expansions. In both cases of the Canada Line and the Evergreen Line, the provincial government exerted its power to ensure that its policies were chosen as opposed to the policies developed by TransLink and Metro Vancouver. This finding is consistent with literature on municipalities that regional and municipal governments are creatures of the provinces (Tindal et al. 2013; Stewart & Smith 2006; Smith 2013). The provincial government benefits from TransLink being a transportation authority as it removes the SkyTrain from being a salient election issue for provincial elections. The province retains the ability to intervene into TransLink policy when their policies diverge, yet the province does not have to bear the brunt of the financial short falls like the projected 5 billion deficit that TransLink is facing in operating costs over the next 30 years. This includes an estimated 18 billion in upgrades and additional expansions (Translink 2013, 10). The province is still involved but has dispersed the authority of its responsibility to a multiplicity of state and non-state actors that obfuscates the policy decision making process.

Figure 4: Map of Proposed study areas for expansion.



Source: TransLink, 2013

The other issue with the governance structure is that there are points of contention between the two levels of government over how SkyTrain expansions are to be funded, which ones go in which order and the most efficient route/where the stops will be. Vancouver's path dependent trajectory is towards densification-as-sustainability and the continued demand for additional SkyTrain expansions. There are currently plans for multiple expansions. These include a line to University of British Columbia in Vancouver and expansions of the current SkyTrain in Surrey - these are highlighted in the two "Study Areas" in the map above. Also proposed, but not on the above map, is a line out to Simon Fraser University and Burnaby Mountain (TranLink 2013, 10). Bulkeley and Schroeder's argument reinforces the hegemonic discourse around the application of sustainability transportation policy (Bulkeley & Schroeder 2011). These

expansions will be touted as contributing to the region's sustainability plan that also promotes growth. This conception of sustainability has been criticized as being co-opted by neo-liberalism. Moore argues that the current model of climate action and sustainability does not measure or capture the real costs of these policies such as the effort it takes outside the urban area or global trade to make this transportation viable (Moore 2012). However, others argue that neo-liberalism has positive aspects as it can lead to improvements of institutionalizing sustainability into the governance structure (Rice 2014; Doelle and Munroe 2012; Bruch 2010; Jones 2012; Schwartz 2012).

Another criticism of the SkyTrain expansion is the ignored social component that it impacts. The current understanding of sustainability does not take into consideration the social inequalities that this regime produces. The impact of the SkyTrain expansions from the TOD demonstrates that it is effective in creating densification around stops. The urban planning departments of the affected municipalities have reinforced this by favouring condominium development, which has the effect of displacing the previous residents (Foth 2010). The inclusion of these towers brings about a gentrification process that is hotly debated in Vancouver. Specifically, the issue of affordable housing has become extremely contentious debate around housing and condo prices that are pushing lower income families to the periphery of the Vancouver region (Foth 2010; Vujevic 2009). These implications are outside of this analysis but are pertinent issues intricately related to the sky train governance regime.

In summary, the analysis of the governance of Skytrain expansion can be viewed from several different perspectives. The analysis provides several vignettes to understand the complex networks involved in the projects life span. The two case studies differ in regards to governance and multi-level governance. The Canada Line leans more heavily to the governance side of the

spectrum while Evergreen Line has more characteristics of multi-level government. The important finding from this comparison is that despite these differences the provincial government was found to be the main actor pushing the agenda for expansions within the governance structure. The broader international governance of sustainability was shown through the participation of the region's municipalities in international organizations like ICLEI, and the efforts they take to embed sustainability policies within their operations. The research was unable to determine the role that NGO's played in this governance network, similarly with the private sector, aside from the PPP as noted in the Canada Line. However, the analysis found that condominium developers are clear beneficiaries of SkyTrain expansions and the density-as-sustainability strategy for urban planning. This marriage of neo-liberal economic growth with environmental policies comes at the expense of local populations that are displaced by the rezoning and construction of condos near SkyTrain stations. Lastly, the current governance arrangement benefits the provincial government as they have delegated responsibilities to TransLink. However the province has retained a veto power. The lack of democratic accountability of TransLink serves the province for deflecting negative attention of contentious policies; as well as TransLink's democratic deficit hinders any reforms from a potentially disgruntled public.

Chapter 6. Conclusion

The Vancouver transportation system is a local site where globalization forces of changes converge. The city's infrastructure and layout reflect the shifts in the neo-liberal economy from industrialization to service industries. Vancouver's urban planning paradigm has merged environmental concerns and the economy with the new re-conception of global cities. The SkyTrain is premised upon a vision of Vancouver as a walkable, livable city that competes on the international level to attract world class talent. The old suburban values of separating work, residential and pleasure are avoided. Instead, the urban planners prefer a mix of recreational, residential and commercial zoning that is not predicated upon vehicle commuting. This development of neo-liberalism continues the post-political trend of breaking down the traditional barriers in society. The physical and geographical divide between public and private are reduced and altered in this new paradigm.

This transportation governance network includes a large variety of stakeholders. The formal parties' involved, provincial, federal and municipal governments contribute to the funding of the project. In addition, developers, environmental groups, and the urban planning community all implicitly influence and benefit from the expansion of the SkyTrain. The demand for SkyTrain expansion was seen as a post-political topic, which was not open for debate. Rather, its implementation was the focal point of contention between the parties. The most fought over issue was which level of government would assume the costs of the projects overruns. The main power struggle is between the municipalities and the province through TransLink. The Liberal's icy relationship with the municipalities and their preference for NPM styles of projects avoided consensus building with the municipalities and Metro Vancouver.

The province used a top down approach to achieve its policy goals over municipality's resistance. The consequences of this approach lead to a situation of acute deficit in democratic accountability. The change in the TransLink constitution removed it even further from its stakeholders. The province benefits from this by divesting its transportation responsibilities to this organization, yet ensuring that it does not deviate from or conflict with provincial policies. However, the organization's inefficiencies and costs are ultimately the burden of region's citizens. The main stakeholders have little voice in the organization's operations and will ultimately pay for its chronic deficit.

The neo-liberal framing of Vancouver's transportation as a post-political issue robs it of its social salience to tackle larger issues such as social justice, environmental concerns and citizen engagement. The current governance and operation mirrors the theories of governance and multi-level governance, sustainability and the deficiencies of both theories. Sustainability is employed as a framing device to promote a simplistic model of suitability. Vancouver developers, in the name of economic growth, silent the voices of opposition by gentrifying neighborhoods and pushing poorer populations to the periphery of the urban centre - out of sight in an elaborate cleaning exercise that is implemented through a disjointed network of governmental actors invested in benefiting from these mega infrastructure projects.

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