

Transit-oriented federalism: Policy ideas and dynamics in Canada's urban transit policy regime

by

William Towns

A thesis
presented to the University of Waterloo
in fulfillment of the
thesis requirement for the degree of
Master of Environmental Studies
in
Planning

Waterloo, Ontario, Canada, 2016

© William Towns 2016

Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners. I understand that my thesis may be made electronically available to the public.

Abstract

Canada remains the sole G8 country lacking a national-scale policy and institutional framework for funding and planning urban transit projects and operations, largely due to a constitutional division of powers granting transit responsibilities to provinces and municipalities. However, Canada's growing municipal infrastructure deficit and the benefits of predictable senior-level transit funding on ridership, urban productivity, and equitable mobility observed internationally have led civic organizations, scholars, and politicians to advocate for the adoption of such a framework in Canada.

Rather than develop a "best-case" national-scale framework for urban transit in Canada, this thesis focuses on the history of federal involvement in urban transit policy-making. This work begins to fill gaps in Canada's planning and federalism literature about the role of "policy ideas" (referring to the organized principles and causal beliefs in which policy alternatives are embedded) in Canada's urban transit "policy regime" (referring to coalitions of actors and institutions from multiple disciplines and jurisdictions sharing tangible interests in a complex policy problem). The overarching research question asks: How have the policy ideas informing the role of the Government of Canada in Canada's urban transit policy regime changed over time? Via a review of historical literature, components of the policy regime in three discrete historical periods are described. These temporal divisions also structure a thematic content analysis of 60 documents produced by federal agencies and their representatives. In this analysis, the policy ideas invoked by federal agents on the subject of urban transit in Canada from 1968 to the present are characterized in accordance with a framework developed by Campbell (1998), involving paradigms, programs, frames and public sentiments. The specific modes of policy change at critical historical junctures in the analysis are also classified in relation to Howlett and Cashore's (2009) framework for understanding policy dynamics. Key findings emerging from this analysis relate to the links between the role of paradigmatic ideas and federal policy change; the unintended consequences of a capital-funding focus in federal programs; an overriding respect for provincial jurisdiction and priorities evidenced in program descriptions and framing statements across analytical periods; and the growing influence of municipal actors in federal transit agenda-setting.

This thesis offers urban planners grappling with transit-related issues insight into the intricacy of federal-municipal relations in Canada, an important consideration given the transit priorities of Canada's newly-elected government. It characterizes the conditions under which policy has shifted in the past, providing a platform to determine how the federal role might evolve to reflect Canada's changing sociopolitical, economic, and environmental landscapes. Indeed, a number of recommendations regarding the appropriate role for the federal government in Canada's urban transit policy regime are presented, including: the creation of a permanent intergovernmental "transit council" with responsibility for overseeing long-term federal programs; the establishment of more stringent funding criteria to limit political influence on project selection; the development of a system for providing ongoing operational support; and the expansion of individual transfers and benefits.

Acknowledgements

First and foremost, I would like to thank my supervisors, Drs. Clarence Woudsma and Jeff Casello of the University of Waterloo's School of Planning, for taking me under their collective wings and providing me the confidence and a platform upon which to research and write for three years. Together and individually, they afforded me innumerable opportunities and challenges, and I'll be forever appreciative of their wits, analytical skills, and frank humanity.

Equally important thanks are owed to my parents – Janet and Bill Towns – for their unconditional love and support. Nothing I've accomplished could have been done without their input and interest. They have also modeled for me the importance of persistence, loyalty, and lighthearted living. For that example, I am forever grateful.

A big salute also goes to my colleagues in the Waterloo Public Transit Initiative – thanks to fellow WPTicians Kevin Yeung, Julie Belanger, Jason Neudorf, Alex Mereu, Adam Fraser, Pedram Fard, Ian Dunlop, Jason Neudorf, Jason Angel, and Kitty Chiu for sharing with me their inquisitive natures, thoughtful companionship, and sharp intellects on transportation issues. A special thank-you also goes to Jenn Giesbrecht, whose advice regarding the content-analytical method and candid feedback improved the final product immeasurably.

Another nod of sincere appreciation is owed to Transport Canada's Environmental Policy Directorate – most notably Kathy Palko and Jenna Craig – for the confidence they showed in me and for the opportunity to gather hands-on experience in the federal public service over the course of my studies. I would also like to thank the Canadian Urban Transit Association (by way of Lauren Rudko) for contributing capital- and operating-expenditure data from the 1950s to the present.

Last, though certainly not least, I extend my eternal thanks to the brilliant and beautiful Jocelyn Beatty, for whom the author has to thank for editing support and his continued sanity over the course of this extended degree. You are my rock in the storm and a wellspring of joy.

Table of Contents

Author’s Declaration	ii
Abstract.....	iii
Acknowledgements.....	iv
Table of Contents.....	v
List of Figures	viii
List of Tables	ix
Chapter 1 : Introduction and Research Questions.....	1
1.1 Urban transit governance issues in contemporary Canadian cities	1
1.2 Overview of related research.....	4
1.3 Introduction to the research questions	6
1.4 Research questions	7
1.5 Research objectives and significance.....	8
1.6 Summary of the introduction.....	10
Chapter 2 : Methods of Analysis in Policy-Idea Research.....	12
2.1 Introduction to the methods	12
2.2 Orienting theoretical perspectives	15
2.2.1 Policy regime theory and structured literature review	15
2.2.2 Theories of policy ideas and content analysis	19
2.3 Data collection and related considerations	25
2.3.1 Identification of sources for the historical literature review.....	25
2.3.2 Data collection for the content analysis	25
2.4 Analysis of policy ideas	29
2.5 Developing key findings and recommendations.....	34
2.6 Limitations.....	35
2.7 Summary of methods.....	36
Chapter 3 : An Historical Literature Review of Canada’s Urban Transit Policy Regime.....	37
3.1 An introduction to urban transit and the federal government in the postwar era.....	38
3.2 Canada’s urban transit policy regime, 1968-1979	39
3.2.1 First-era issues	39

3.2.2 First-era institutions and their interests	41
3.3 Canada’s urban transit policy regime, 1980-2001	49
3.3.1 Second-era issues.....	49
3.3.2 Second-era institutions and their interests	52
3.4 Canada’s urban transit policy regime, 2002-2015	61
3.4.1 Third-era issues	61
3.4.2 Third-era institutions and their interests.....	62
3.5 Summary: The evolving federal role in urban transit	76
Chapter 4 : Content Analysis of Federal Urban Transit Policy Ideas in Canada.....	77
4.1 Introduction to the content analysis.....	77
4.2 Overview of thematic coding	79
4.3 Overview of open coding	81
4.4 Policy ideas, 1968-1979	82
4.4.1 First-era paradigms	82
4.4.2 First-era programs.....	86
4.4.3 First-era frames.....	89
4.4.4 First-era public sentiments	92
4.5 Policy ideas, 1980-2001	93
4.5.1 Second-era paradigms	94
4.5.2 Second-era programs.....	99
4.5.3 Second-era frames	105
4.5.4 Second-era public sentiments.....	109
4.6 Policy ideas, 2002-2015	113
4.6.1 Third-era paradigms.....	113
4.6.2 Third-era programs	117
4.6.3 Third-era frames	121
4.6.4 Third-era public sentiments.....	124
4.7 Summary of the content analysis	128
Chapter 5 : A Discussion of Federal Policy Ideas and Dynamics in Canadian Urban Transit	129
5.1 Introduction to the discussion	129

5.2 How have urban transit policy ideas invoked by the federal government in public policy documents changed from 1968-2015?	130
5.2.1 Comparing paradigms	130
5.2.2 Comparing programs	133
5.2.3 Comparing frames.....	136
5.2.4 Comparing public sentiments	138
5.2.5 Summarizing the evolution of federal urban transit policy ideas.....	139
5.3 Characterizing federal policy change in Canadian urban transit	141
5.3.1 Policy transition, late 1970s to early 1980s	142
5.3.2 Policy transition, late 1990s to early 2000s	143
5.3.3 Federal transit policy post-2015: A changing philosophy?	144
5.4 Key findings	145
5.4.1 Linkages between paradigmatic ideas and policy change	146
5.4.2 Unintended consequences of capital funding initiatives.....	146
5.4.3 Overriding respect for provincial jurisdiction and priorities in framing statements and program descriptions.....	147
5.4.4 Growing municipal influence in federal transit agenda-setting	148
5.5 Summary of the discussion	149
Chapter 6 : Policy Recommendations and Conclusions.....	151
6.1 Policy recommendations	151
6.1.1 Intergovernmental relations: A new mechanism for tri-level decision-making	152
6.1.2 Funding formula: Limiting politics in project selection.....	153
6.1.3 Operational support: Establishing federal links to municipal planning and transit delivery...	155
6.1.4 Leveraging spending and taxation powers: Individual transfers and benefits	156
6.2 Conclusion.....	156
Bibliography	158
Appendix A : Search Terms and Databases.....	169
Appendix B : Content Analysis Document Sample	171
Appendix C : Thematic Codes	176
Appendix D : Open Codes	314

List of Figures

Figure 1: Parent and child nodes used to organize coded ideas in the thematic coding process.....	30
Figure 2: Comparison of revenues and expenses for urban transit in Canada, 1955-1979	43
Figure 3: Sources of operational funding for urban transit in Canada transit funding in Canada, 1980-2001.	50
Figure 4: Sources of capital funding for urban transit in Canada transit funding in Canada, 1979-2001...51	
Figure 5: Funding allocation under the Urban Transportation Assistance Program, 1978-1984.....	54
Figure 6: Design-build-finance-operate-maintain” (DBFOM) project structure.....	64
Figure 7: Sources of operational funding for urban transit in Canada, 2002-2015.....	72
Figure 8: Sources of capital funding for urban transit in Canada, 2002-2013.....	73
Figure 9: Overview and topical breakdown of thematic codes.	80
Figure 10: Open codes for the “1 st Era Paradigms” thematic node.....	83
Figure 11: Open codes for the “1 st Era Programs” thematic node.	87
Figure 12: Open codes for the “1 st Era Frames” thematic node.....	89
Figure 13: Open codes for the “1 st Era Public Sentiments” thematic node.....	92
Figure 14: Open codes for the “2 nd Era Paradigms” thematic node.....	94
Figure 15: Open codes for the “2 nd Era Programs” thematic node.	100
Figure 16: Open codes for the “2 nd Era Frames” thematic node.....	105
Figure 17: Open codes for the “2 nd Public Sentiments” thematic node.....	109
Figure 18: Open codes for the “3 rd Era Paradigms” thematic node.	113
Figure 19: Open codes for the “3 rd Era Programs” thematic node.....	117
Figure 20: Open codes for the “3 rd Era Frames” thematic node.	121
Figure 21: Open codes for the “3 rd Era Public Sentiments” thematic node.	125

List of Tables

Table 1: An overview of the conceptual linkages between the research questions and the analytical methods employed in their investigation.....	13
Table 2: A taxonomy of policy components relevant to the evaluation of policy change.	21
Table 3: A broad taxonomy of policy change.	23
Table 4: A typology of ideas involved and invoked in the policy-making process, shaping policy and public support for selected alternatives.....	24
Table 5: Summary of document types included in the content analysis (n=60).	26
Table 6: Summary of federal organizations cited in the content analysis (n=60).	27
Table 7: Examples of coded excerpts for each thematic category employed in the content analysis.	31
Table 8: Examples of open codes in relation to their thematic coding categories.	32
Table 9: Canada’s urban transit policy regime, 1968-1979.	47
Table 10: Canada's urban transit policy regime, 1980-2001.	58
Table 11: An overview of capital funding programs introduced by the Government of Canada in which urban transit was an eligible investment category, 2002-2015.	68
Table 12: Canada’s urban transportation policy regime, 2002-2015.....	74
Table 13: List of all documents included in the content analysis.	171
Table 14: First-era (documents from 1968-1979) codes applied during the thematic coding process	176
Table 15: Second-era (documents from 1980-2001) codes applied during the thematic coding process	211
Table 16: Third-era (documents from 2002-2015) codes applied during the thematic coding process	268
Table 17: First-era (documents from 1968-1979) codes applied during the open coding process ..	314
Table 18: Second-era (documents from 1980-2001) codes applied during the open coding process	315
Table 19: Third-era (documents from 2002-2015) codes applied during the open coding process.	317

Chapter 1: Introduction and Research Questions

1.1 Urban transit governance issues in contemporary Canadian cities

Urban transit is a critical component of sustainable city-building. Scholars and public agencies alike have long acknowledged transit technologies and services as necessary means to achieve tripartite policy goals for sustainability in metropolitan areas, improving mobility in an equitable fashion while reducing carbon emissions and fostering the intensification of urban form (Kennedy et al., 2005). In contemporary Canadian cities, municipal and provincial planners and policy-makers have made significant long-term commitments to enhance transit's attractiveness, effectiveness, and efficiency. In many of Canada's peer nations, these local efforts receive predictable support from the highest tier of government. In Canada, this is not the case.

Indeed, Canada remains the sole G8 country lacking a national-scale policy and institutional framework for funding and planning urban transit projects and operations, providing service-delivery agencies with stability and continuity in relation to the funding they receive (Canadian Urban Transit Association, 2010b; Hjartarson et al., 2011). The benefits of predictable senior-level transit funding on ridership, urban productivity, and equitable mobility observed internationally have led numerous civic organizations, scholars, and politicians to advocate for the adoption of such a framework in Canada (Buehler and Pucher, 2011; Canadian Urban Transit Association, 2011a; Federation of Canadian Municipalities, 2007; Hatzopoulou and Miller, 2008; Hjartarson et al., 2011).

This advocacy stems from increasingly widespread recognition that the fiscal gap faced by service-providing provincial and local governments – in the realms of both capital funding and operational support – is growing. The absence of stable revenue streams and a clear, consistent policy direction has produced a situation in which funding sources for urban transit might cover initial capital outlays for the purchase and construction of infrastructure, but often fail to meet long-term operational requirements (Canadian Urban Transit Association, 2010a; Hjartarson et al., 2011). This problem has governance dimensions, as urban regions in Canada grapple with two divergent public-sector trends: the need for more regional-scale coordination of transportation and land-use planning (Kennedy et al., 2005), and a broader movement toward the increased devolution of fiscal responsibilities from higher to lower orders of government characterizing the neoliberal public-administrative paradigm (Hatzopoulou and Miller, 2008).

Unpredictable federal engagement is the reality for many policy sectors in Canada with a “local” focus, a direct result of the delineation of responsibilities under the *Constitution Act 1982*, in which provinces are granted sole jurisdiction over the structure and content of municipal governance. Yet the Government of Canada possesses the strongest and most flexible fiscal capacity in the Canadian federation – the federal “spending power,” a residual constitutional clause designed to facilitate intervention in areas external to explicit federal authority via the transfer of funds to individuals and institutions (Bakvis, Baier, and Brown, 2009).

Federal intervention in urban affairs is not without precedent. Structured, long-term involvement in municipal governance dates from the late 1960s,¹ when the Government of Canada initiated a cycle of federal-urban policy development with provinces and municipalities in the context of a broader effort to restructure and “rationalize” federal priorities (Langford, 1976; Oberlander and Fallick, 1987; Spicer, 2011). The Ministry of State for Urban Affairs was the result, existing from 1971 to 1979 and providing support for provinces and municipalities in various forms – including research and resource allocation for transit projects – over its lifespan. Similarly, the Ministry of State for Infrastructure and Communities existed briefly from 2005 to 2006, and while this portfolio has since been reorganized, recent years have witnessed a resurgent *ad hoc* and indirect federal role in matters pertaining to urban mobility. New programs, committees, and departmental mandates suggest that federal engagement in urban transit issues has not remained static over time and continues to shift.

As such, increasingly vocal and diverse pleas for a major change in policy direction present an impetus to investigate the manner by which federal involvement in urban transit policy has changed in the past, and by extension, how it may evolve in the future. This justification is further supported by the growing salience of the need for more sustainable patterns of mobility within cities in North America. Canada’s urban communities have historically relied heavily on public transit for social connectivity and economic stability (Perl and Pucher, 1995). However, the automobile has largely determined the form and character of these cities in the postwar period, and consequences in the realms of traffic congestion, productivity loss, and environmental impacts are growing in severity and prominence on the

¹ The argument can be made that other “urban agendas” were advanced prior to the 1960s, including: the *War Measures Act* following World War I; the *Municipal Improvements Act* during the Great Depression, and the *National Housing Act* in the aftermath of World War II; however, these programs focused primarily on housing and mortgage protection (with some provisions for infrastructure improvements) and did not include an ongoing role for the federal government in local affairs (Bakvis et al., 2009; Sancton, 2008).

public agenda (Blais, 2010; Walks, 2015a). Addressing the interrelated and difficult problems of “automobility” – referring to the physical infrastructure supporting and facilitating car use, as well as conditions of social, economic, and cultural reproduction perpetuated by reliance on automobiles (Walks, 2015a) – require integrated and coordinated action from all levels of government.

Urban transit offers at least partial remedy. However, transit interventions are required at a scale for which few effective Canadian precedents exist, and at which Canada’s fractious governance structure is ill-suited to provide solutions: the metropolitan or regional scale (Anderton, 2010). Awareness of the importance of metropolitan transportation governance is growing in Canada – Toronto, Vancouver, and Montreal each possess institutions structured for this purpose – in tandem with the recognition that urban regions constitute Canada’s 21st-century “economic engines” (Hamilton, 2013). However, these organisations (established, generally, for the purpose of coordinating all modes of transportation across non-traditional jurisdictional areas)² continue to face challenges to varying degrees in the realms of service integration and the mobilization of sufficient public and political support for transit-supportive initiatives (Hamilton, 2013; Schabas, 2013). It may also be argued that these institutional challenges stem from insufficient devolution of powers for revenue-generation and decision-making granted by provincial governments. As such, involving all three levels of government in this emerging level of transportation governance may reduce the propensity for intergovernmental tensions and “finger-pointing”, as well as increase the capacities and effectiveness of these fledgling institutions (Canadian Urban Transit Association, 2010a; Hjartarson et al., 2011). In this tectonic institutional context, establishing an appropriate and long-term role for the federal government remains critical.

Before the research questions underpinning this thesis are delineated, it is important to define its core concepts. “Policy” refers to a set of principles defining a course of action taken by an organization in relation to a given issue (Birkland, 2014). “Urban transit” refers to transportation services operating within a defined urban or metropolitan area which are: available to all who pay fares; provided (or regulated) by the public sector; and operate with fixed routes and schedules (Hanson and Giuliano, 2004). This definition encompasses all vehicular modes (i.e. buses, metros, light-rail systems, bus-rapid networks, commuter rail, etc.) through which these services – as well as the programs and

² Note that these agencies arose in distinct historical and institutional contexts within their provinces and urban regions; differences in their structures, functions, and purposes of all three are explored in greater depth in Chapter 3 (section 3.3.4).

mandates executed by vehicles and labour – are delivered in urban areas. The costs of providing these services include capital and operational expenditures. Capital expenses include the procurement of rolling stock (i.e. trains and buses), as well as land procurement and development costs for terminals, stations/stops, and rights-of-way (Guess, 2008; Hanson and Giuliano, 2004). Operational costs include fuel, vehicle and facility maintenance, and labour (i.e. employee training, salaries, and benefits) (Guess, 2008; Hanson and Giuliano, 2004).

In Canada, fares paid by users of the system contribute primarily to the operational costs of transit delivery, while capital costs are typically borne by taxpayers and – increasingly – private partners (Sancton, 2015). While “economically-optimal” transit policy would see all users pay the full costs of their mobility, Canada’s legacy of public subsidization of transportation activities; the structural realities of “sprawled” urban development; and difficulties in monitoring and recouping non-market costs renders this infeasible in the contemporary Canadian context. As such, public investment in and subsidization of urban transit is widely viewed as a “second-best” method for the achievement of a lower-impact transportation system and more equitable mobility outcomes in Canadian cities (Roschlau, 2008; Schiller, Bruun, and Kenworthy, 2010).

1.2 Overview of related research

It is also pertinent to discuss the means by which previous research (for academic and advocacy purposes) has considered the role of Canada’s federal government as a participant in the urban transit policy sphere. This section presents research and advocacy from the Federation of Canadian Municipalities, the Mowat Centre for Policy Innovation, and the Canadian Urban Transit Association, as well as rationales for these efforts as they relate to this research.

Transit policy reform is a complex undertaking with many possible formulae for success – the wide variety of governance frameworks employed by Canada’s peer nations for transit provision is a testament to this fact (Canadian Urban Transit Association, 2011c; Transport Canada, 2004). As such, it is not clear what form a Canadian national transit policy might take. Canada is a unique country with disparate geography and varied transportation needs, as well as a tradition of strong provincial autonomy relative to other federal countries. Despite the supposed decentralization of municipal funding and policy-making this arrangement entails, federal agencies have played some role in transit planning and funding for decades (Perl and Pucher, 1995), and the Government of Canada has been an

especially critical player in financing capital investments for transit since the turn of the century (Ruffilli, 2010). This involvement is increasingly viewed by Canadian mayors, transit advocates, and academics as integral to the ability of transit systems to accommodate the population growth many Canadian regions are likely to experience by mid-century (Federation of Canadian Municipalities, 2007; Roschlau, 2008). In recent years, these participants in the urban transit “policy regime”³ have called upon the federal government to invoke its aforementioned spending power to supplement existing (largely insufficient) transit funding mechanisms. There is little doubt that a long-term, institutionalized solution that respects the relative revenue-generating capabilities of each level of government is required, as discussed previously.

Over the course of the past decade, two prominent Canadian advocacy organizations have sketched preliminary frameworks for a national transit policy, while another has made repeated calls for the transfer of existing international practices to Canada (Canadian Urban Transit Association, 2011c; Federation of Canadian Municipalities, 2007; Hjartarson et al., 2011). The Canadian Urban Transit Association (2011a) (CUTA) has produced a significant volume of research regarding the substance of a potential federal urban transit policy, drawing primarily on arrangements from peer nations. Despite the introduction of a number of transit-supportive personal tax credits and new federal funding programs for municipalities (in which transit is an eligible investment category) toward the end of the 2000s (primarily the Canada Strategic Infrastructure Fund, the Infrastructure Stimulus Fund, the Building Canada Fund, and the Green Municipal Fund), CUTA continues to argue for a more stable federal role in supporting urban transit in Canada. The organization was particularly vocal during Canada’s 2015 federal election campaign, employing imagery and arguments about automobile congestion in major cities to sway voters towards more transit-supportive party platforms, and surveying all major political parties on plans to address congestion and the growing need for transit infrastructure in urban centres of all sizes (Canadian Urban Transit Association, 2015d).

In line with CUTA’s advocacy, the Big City Mayor’s Caucus of the Federation of Canadian Municipalities (FCM) proposed a “National Transit Strategy” in 2007. Suggested contents include a conditional block transfer of \$2 billion annually from the federal government to municipalities, requiring the demonstrated integration of land-use and transportation planning objectives and strategies by

³ Referring to coalitions of actors and institutions from multiple disciplines and jurisdictions sharing tangible interests in a complex policy problem; this concept is defined and discussed in greater depth in Chapter 2.

recipients, as well as the adoption of auditing mechanisms to ensure funds earmarked for transit capital investment are spent accordingly (Federation of Canadian Municipalities, 2007). In addition, the FCM proposes the introduction of federal incentives for transit use by individuals (including tax credits), as well as financial and staffing support for transit research and development at the municipal level (Federation of Canadian Municipalities, 2007). Another major component of this proposed strategy relates to the provision of different funding “envelopes” for urban regions with populations greater or less than 400,000 (Roschlau, 2008). Upon its release, the FCM’s strategy was debated and considered by the federal cabinet (Roschlau, 2008), but was not implemented (Canadian Urban Transit Association, 2011b).

In a similar vein, the Mowat Centre for Policy Innovation at the University of Toronto released a “blueprint” for a national transit policy framework in Canada in 2011, featuring five key elements. These include: the creation of a single block transfer with a transparent allocation formula to determine recipient cities and transit agencies; reliance upon equitable formulaic inputs in the form of ridership, congestion, and capital requirements; long-term, stable funding horizons; deference to existing provincial accountability arrangements and the absence of onerous reporting requirements to federal agents; and the transfer of complete allocative discretion to regional transportation governance bodies (Hjartarson et al., 2011). The Mowat Centre echoes the concerns of the FCM in some regards while advancing the substance of its proposal in a number of areas – chiefly in the addition of nuance to the application of a funding formula, while acknowledging the need to include regional bodies in transit planning and delivery and retaining a significant role for provinces (Hjartarson et al., 2011).

1.3 Introduction to the research questions

Given the substance and multiplicity of these proposals, this research does not attempt to further develop a “best-case” national-scale framework for urban transit in Canada based on international exemplars or sweeping recommendations about constitutional reform. Instead, this thesis focuses on the history of urban transit policy-making at the federal level in Canada, examining the political and economic forces that have shaped the action (and inaction) of the Government of Canada in this policy sphere. Characterizing the conditions under which policy has shifted in the past provides a platform to determine ways in which it might evolve in the future to reflect Canada’s changing sociopolitical, economic, and environmental landscapes.

To better understand evolution and change within discrete policy sectors, scholars often aim to understand a given set of “policy dynamics,” referring to historical patterns of stability and instability within evolving institutional environments. Traditionally, policy dynamics have been characterised as a “homeostatic” process, in which long periods of stability in policy goals and the instruments for their achievement (ends and means, respectively) are punctuated by “perturbations” caused by the encroachment of external influences on closed institutional systems (Henstra, 2011; Howlett and Cashore, 2009). However, this characterisation has been called into question by some scholars: there is a movement to better capture the diverse and contextual nature of policy change through the expansion of policy-dynamic typologies in the literature. For instance, there is growing recognition that so-called “policy ideas” may influence institutional decision-making as much as traditional modes of change, including external pressures (i.e. macroeconomic forces such as globalization).

“Policy ideas” refer here to the organized principles and causal beliefs in which policy alternatives are embedded, which may be internal to a society or policy domain, or adopted (or adapted) from elsewhere (Béland, 2005; Campbell, 1998). In the age of the automobile in North America, one example is the “intuitive” positive relationship between investment in highway infrastructure (rather than competing modes of mass transportation) and economic growth, a notion that pervaded urban and regional planning throughout much of the 20th century (Vuchic, 1999). Policy ideas, in the context of Canadian urban transit, are used in this research as a vehicle to investigate the reasoning behind specific political actions at pivotal historical junctures.

1.4 Research questions

The primary objective of this thesis is to inform and further the debate over appropriate governmental roles in the financing, planning, and provision of urban transit in Canada. Constitutional responsibilities were established when Canada was a “largely agrarian society” (Oberlander and Fallick, 1987); since then, the scope and scale of urban issues have evolved in line with other developments in technology, society, and the economy. It follows that governance structures might require adaptation to meet the transportation priorities of an increasingly urban society. In light of the aforementioned shortcomings of urban transit governance in Canada, and with the analytical starting point of policy ideas firmly located, a central research question emerges:

- **Primary research question:** How have the policy ideas informing the role of the Government of Canada in Canada's urban transit policy regime changed over time?

Sub-questions emerging from this line of inquiry include:

- **Sub-question 1:** How has the federal government's role in the Canadian urban transit "policy regime" shifted from 1968-2015, and in response to what "triggering" factors (in the context of the policy regime's ideas, issues, institutions, and interests)?
- **Sub-question 2:** How have urban transit policy ideas (paradigms, programs, frames, and public sentiments) invoked by the federal government in public policy documents changed from 1968-2015?
- **Sub-question 3:** How might the federal government modify its role in order to improve transit policy-making and services in Canadian cities?

In short, this thesis aims to assess the contributions of ideas espoused by Canada's federal government to contemporary Canadian urban transit policy, a landscape characterised today by delayed investment in transit infrastructure and operations (Moore, Sachgau Les Perreux, and Mason, 2015); shifting political coalitions at various geographical and institutional scales regarding the form and content of transportation investments (Steinberg, 2013); and the socioeconomic backdrop of significant congestion-driven productivity losses in major urban centres (Dachis, 2011). Perhaps most importantly, the research explores, based on historical precedents and insights, how the role of the federal government within the policy regime might change in order to support the provision of more effective transit service delivery in Canadian cities. In order to move from analysis to recommendations, the findings of the literature review, analysis, and discussion related to both policy dynamics and ideas are integrated – as such, recommendations reflect applicable concepts from the literature, shortcomings of previous federal efforts, and the interests of other members of the policy regime.

1.5 Research objectives and significance

As discussed throughout this chapter, the impetus for this research derives primarily from the growing political appetite for an urban transit policy shift – in many Canadian cities and provinces, attempts to decide upon new funding and planning arrangements for urban transportation options are well underway (Moore et al., 2015), and Canada's recent federal election featured infrastructure, urban transit, and congestion as key themes (Canadian Urban Transit Association, 2015d). The global

environmental context also necessitates a transformative approach to transportation, and more broadly, energy policy. Decreasing fossil fuel reserves (over the long term) and concomitant concerns over energy prices suggest a need to reduce dependence on personal automobiles. More pressingly, the need to intensify human settlement patterns to reduce the environmental and socioeconomic impacts of urban sprawl and automobility on urban quality of life and productivity is growing in salience (Blais, 2010).

However, the significance of this research does not derive from the support it might provide to a given policy agenda. A great deal of research exists to explain the contemporary urban transportation hierarchy in Canadian cities (i.e. the primacy of the automobile), much of which is referenced in Chapter 3, and numerous attempts to sketch a national transit framework have also been made (section 1.3). This thesis does not attempt to duplicate these studies – rather, it attempts to integrate the historical and causal factors influencing transit policy evolution with the systematic examination of policy ideas, discerned through a thematic content analysis of policy documents explicating federal attitudes toward urban transit over time.

To urban planning, both as a profession and an academic discipline, this thesis offers a number of insights. Planners in Canadian cities over the last 20 years have made concerted efforts to improve the coordination of transit and land-use planning processes; however, transit-supportive community visions found in municipal planning documents have often met significant resistance (Blais, 2010). Many of these obstacles relate to a dearth of funding support and political capital (at all levels of government), areas in which the federal government is well-placed in the Canadian institutional hierarchy to contribute. However, the planning and political science literature remain largely silent on the subject of federal involvement in urban transit: while Spicer (2010, 2011) has conducted seminal inquiries into the formal mechanisms of federal intervention in urban affairs over time; Young and McCarthy (2009) have explored municipal issues and federal agenda-setting; and Stoney and Graham (2009) have investigated the dynamism of the federal-municipal organizational landscape, there is very little research in the Canadian planning and political science literature analyzing federal interest and action in relation to other governments on the subject of urban transit. More specifically, there have been no attempts to characterize urban transit policy ideas in Canada, particularly those expressed by a non-traditional actor in the policy sphere (i.e. the Government of Canada). However, given that the influence of policy ideas is often “hidden” (Béland, 2005; Campbell, 1998), this is perhaps unsurprising. As such, this thesis analyzes

urban transit policy ideas in Canada from 1968-2015 – with an emphasis on the activities and outputs of federal involvement – in order to fill this informational gap. This analytical component represents this work's most valuable contribution to planning and federalism literature in Canada, although the recommendations also present substantive means by which the federal role in urban transit might be reconsidered in light of evidence from Canadian history.

While the recommendations relate primarily to the ways in which higher-order governments might more effectively deal with lower orders, it offers urban planners grappling with transit-related issues evidence-based insight into the intricacy of federal-municipal relations in Canada, and attempts to fill a gap in Canadian planning and political science literature surrounding the character of federal involvement in municipal affairs in relation to a specific policy issue.

1.6 Summary of the introduction

This chapter introduced the contemporary state of urban transit in Canada, and literature was reviewed regarding recent attempts to articulate a revised role for the federal government in urban transit policy. The avenues of inquiry through which this research is carried out (involving both policy dynamics and policy ideas) were then outlined, and specific research questions posed. Lastly, motivations for and the significance of this research were presented.

The remainder of this thesis is structured as follows. Chapter 2 outlines the methods applied in the analysis, including theoretical underpinnings, data collection strategies, and interpretive methods. Chapter 3 serves as a literature review of urban transit in Canada, with an eye to providing the reader with useful context: it outlines three discrete periods in Canadian history with reference to scholarly and grey literature, providing a narrative of the federal government's changing role in urban transit from 1968 to 2015 (which is separated into three discrete historical period of analysis). Chapter 4 presents the results of a qualitative, thematic content analysis of federal policy documents on the subject of urban transportation over the historical periods in question, undertaken with the assistance of analytical software (QSR NVivo 11). The dominant themes and ideas emerging from federal transportation policy documents are explored and discussed in relation to each discrete period. Chapter 5 compares the evolution of policy ideas over time, and classifies the modes by which federal policy change has occurred. From this discussion, four key findings are presented. Finally, Chapter 6 offers five substantive

policy recommendations in light of these findings and provides concluding thoughts. In Chapters 5 and 6, the research questions are explicitly addressed and resolved as fully as the analysis permits.

Chapter 2: Methods of Analysis in Policy-Idea Research

2.1 Introduction to the methods

This chapter provides a roadmap for the analysis of policy ideas conducted subsequently, outlining the study's theoretical and methodological underpinnings. Its purpose is to introduce the specific concepts and procedures involved in the identification and interpretation of policy ideas, carried out through a thematic content analysis of federal policy documents on the subject of urban transit in Chapter 4. This chapter also describes the framework in which the structured, historical literature review is nested, situating the examination of policy ideas in its appropriate theoretical context (Chapter 3).

The chief objective of the research – to determine how the Government of Canada's policy ideas have evolved from 1968 to the present vis-à-vis urban transit – is underpinned by two interrelated methods. First, to describe how the federal role in the broader policy community has shifted, historical literature is reviewed, identifying relevant actors, pivotal policy decisions, and developments in global politics and economics in order to provide insight into the divergent circumstances of three distinct temporal periods (described in 2.1.1). Second, the content of relevant government documents is analyzed via a “directed” technique (section 2.3), categorizing the urban transit policy ideas articulated by the Government of Canada over time, and characterizing the nature of policy change in accordance with guiding theoretical frameworks (outlined in section 2.1.2). The specific character of policy dynamics and ideas over time are then discussed in order to resolve the research questions. Finally, policy recommendations to improve intergovernmental roles and responsibilities for urban transit (i.e. best practices in policy “machinery”) are developed, based on the preceding analysis. **Table 1** provides a brief overview of the linkages between this study's research questions (identified in Chapter 1) and methods.

Table 1: An overview of the conceptual linkages between the research questions and the analytical methods employed in their investigation.

Primary research question: How have the policy ideas supporting and informing the role of the Government of Canada in Canada’s urban transit policy regime changed from 1968-2015?	
Research sub-questions (SQs):	Method applied:
SQ1: How has the federal government’s role in the Canadian urban transit “policy regime” shifted from 1968-2015, and in response to what “triggering” factors (in the context of the policy regime’s ideas, issues, interests, and institutions)?	Literature review (Chapter 3): Historical literature review of urban transit in Canada is reviewed; depictions of “policy regimes” are constructed for each analytical period.
SQ2: How have urban transit policy ideas (paradigms, programs, frames, and public sentiments) invoked by the federal government in public policy documents changed from 1968-2015?	Content analysis (Chapter 4): Thematic content analysis of formal policy documents from federal and intergovernmental bodies on the subject of urban transit over each historical period is undertaken, with references to the framework developed by Campbell (1998). A directed coding strategy is applied in the analysis, involving thematic and open coding processes.
Discussion (Chapter 5): The specific nature of policy change observed in each transition between historical periods is characterized in accordance with the framework developed by Howlett and Cashore (2009) to address SQ1 ; the findings of the content analysis are discussed in-depth to resolve SQ2 .	
SQ3: How might the federal government modify its role in Canada’s urban transit policy regime order to improve transit policy-making and services in Canadian cities?	Conclusions and policy recommendations (Chapter 6): Based on the analysis and discussion, means by which the federal government’s role in the urban transit policy regime might be amended are proposed.

Upon this foundation, the chapter proceeds as follows. First, the orienting theoretical constructs supporting the line of qualitative inquiry employed in this work are made explicit, outlining the importance of ideas in understanding the formation and dynamics of “policy regimes,” as well as the epistemological origins of qualitative policy analysis in the realm of historical institutionalism (these concepts are defined in the following sections). The process of data collection involved in obtaining an appropriate analytical sample of documents for use in the thematic content analysis is then described – this includes the delineation of search procedures, terms, and databases, as well as the criteria used in selecting documents for inclusion in the analysis. Finally, a detailed overview of the systematic processes of document “coding” and interpretation used to derive key findings are described. This research is exploratory, meaning that its objective is to establish conceptual understanding around a problem that has not been clearly defined by and by which explanatory (or causal) relationships have not yet emerged

(Bhattacharjee, 2012). As such, the methods have been chosen for their ability to balance systematic analytical procedures with a flexible interpretative process.

Before proceeding with a discussion of theoretical and methodological constructs, however, it is important to briefly explain why content analysis was chosen over other qualitative methods of inquiry (such as semi-structured interviews, grounded theory, etc.) for the purposes of this research. Pragmatism is one reason – the historical nature of the work makes locating participants easier for more recent time periods than others, so content analysis provides a level analytical playing field for all three eras. Secondly, while some documents may be criticized as “speculative” about ideal policy alternatives or non-reflective of the policy outcomes observed in reality, this is an inalienable aspect of the content-analytical approach: the documentary inputs involved in this study provide “snapshots” of the views and biases of government actors and departments at specific historical junctures (Hammond and Wellington, 2013). As such, the sample does not reflect hindsight biases and other factual discrepancies which may arise when events being recalled by interview participants took place many years prior; documents are analyzed for their “interpretive” (or contextual) meaning, rather than their literal depiction of historical events (Hammond and Wellington, 2013; Hsieh and Shannon, 2005). In addition, content analysis is appropriate for this work because existing theories of policy change are well-established in the literature (Hsieh and Shannon, 2005), providing the researcher with significant analytical and theoretical guidance.

There is also significant deductive value in document analysis via the use of a “directed” content-analytical approach (defined in section 2.2) (Hsieh and Shannon, 2005). Through a review of federal documents over time, the intention is to compare and contrast narratives present in the literature (reviewed in Chapter 3) with the ways in which these issues, stakeholder perspectives, and policy alternatives have been portrayed by the Government of Canada (outlined in Chapter 4). As a traditional background actor in the field of urban transit, there are likely to be key differences between these “metanarratives” (Van Eeten, 2007) which may be informative in identifying avenues for realigning and improving intergovernmental relationships and objectives. This final element is elaborated upon in section 2.4.

This is not to say, however, that this research construct is without limitations. The drawbacks and inferential limits of the content-analytical approach are discussed in detail in section 2.5.

2.2 Orienting theoretical perspectives

Broadly considered, this thesis applies an overarching theoretical lens of political economy to the evaluation of urban transportation in the Canadian federation. As defined by Weingast and Wittman (2006), political economy “refers to interdisciplinary studies drawing upon economics, law, and political science in explaining how political institutions, the political environment, and the economic system ... influence each other” (p. 39). In the context of policy analysis, this orienting perspective contends that public authorities and the goods they administer (including urban transit services) arise through a constant process of bargaining among state and societal actors in formal and informal political venues (Gaudry, 1997). In other words, political economy acknowledges the importance of context in understanding historical, contemporary, and possible future institutional arrangements and policy decisions. As such, institutions are conceptualized as amenable to change in tandem with intertwined political and economic landscapes over both the short and long term (Peters, 2012; Weingast and Wittman, 2006).

While political economy is a useful lens through which to conceptualize the origins and implications of Canadian transit policy and funding arrangements from a macro-level, more specific subsets of this theoretical family are better-suited to the study of policy change over time. These include attention to formation and change within the Canadian urban transit “policy regime” (in the case of the literature review), and the application of a theoretical lens of historical institutionalism (in the evaluation of policy ideas via content analysis).

2.2.1 Policy regime theory and structured literature review

In order to grasp the reasons behind specific urban transit policy choices made by Canada’s federal government and chart the evolution of ideas within this realm, the historical patterns of governance within the broader policy community (including provincial and municipal governments, civil society, and private actors) must first be delineated. Theories of “policy networks” have been traditionally invoked in historical policy studies of this nature (i.e. Craft et al., 2013; Henstra, 2011), referring to the linkages and interdependencies between groups of stakeholders on a particular issue, typically featuring “significant stability in their interactions, ... patterns of expectation and predictability in this behaviour, [and] some common values” (Peters, 2012, p. 119). However, policy networks do not allow researchers to “understand the ebbs and flows of policy over time,” in that they focus on regularized interactions and

omit explanations for policy change (Birkland, 2014, p. 158). As such, this research applies a contemporary theoretical alternative to the policy network known as “policy regime theory”, which is well-suited to “boundary-spanning” problems where a single, clear policy community does not exist, despite the presence of similar goals (Birkland, 2014). This framework supposes that actors from various policy “subsystems” (referring to coalitions of organisations with an active interest in a particular policy problem) influence the manner in which an aspect of the public interest is characterized, studied, and addressed; however, actors within these subsystems may have disparate interests and objectives that complicate policy-making (Jochim and May, 2010). As such, the full expanse of subsystems – or the policy regime – involved in the public discourse ought to be considered in complex and dynamic policy areas (Henstra, 2015; Jochim and May, 2010). Policy regimes contain power relationships among a variety of governmental and non-governmental actors; a dominant paradigm through which problems and solutions are articulated; and well-established institutional arrangements mediating power relations (Birkland, 2014).

While these elements generally resist change, stability in the policy regime is said to be disrupted when factors become conducive to change – i.e. alternative paradigms arise, crises of political legitimacy occur, or other factors converge to undermine the dominant policy narrative (these might include cumulative demographic shifts, technological changes, the emergence of successful policy solutions internationally, etc.) (Cohen-Vogel and McLendon, 2009). In other words, a “trigger” event initiates a response or call for greater action from society (i.e. in the form of activism or research), which necessitates a shift in how the problem is conceived of and addressed by the political apparatus – however, these “triggers” can be conceptualized in many ways, an aspect of the broader theoretical framework for policy-idea analysis discussed in greater depth in the following section (2.1.2).⁴ Policy regime theory emphasizes the importance of diverse actors operating at different scales, “mov[ing] us closer to realizing that groups, interests, and ideas are central to thinking about how group politics is organized” (Birkland, 2014, p. 158).

In Canada, urban transit meets the criteria for conceptualization as a policy regime. Multiple disciplines, jurisdictions, and actors from across the nation share broadly-similar policy goals (i.e. to effectively and efficiently deliver public mandates for transit connectivity) and grapple with similar

⁴ Recall that the ways in which ideas within the urban transit policy regime have changed is the primary focus of the content analysis – however, it is important to establish a framework for the literature review that is wholly compatible with the manner in which policy ideas will be subsequently interpreted.

problems in the course of realizing these objectives (i.e. inadequate infrastructure, limited and sporadic funding, the entrenchment of automobile culture, etc.). Despite these similarities, there is little “regularized” interaction among stakeholders at the national scale (Roschlau, 2008) or consensus about how best to provide services and redress transit issues (Hjartarson, Szala, and Hinton, 2011). For example: one subsystem may be concerned with enhancing social equity by improving access to services (i.e. civil society), while others may be concerned primarily with improving the financial sustainability of transit agencies (i.e. municipal and provincial governments). Policy interventions preferred by each of these subsystems may stand in opposition to one another (i.e. lower vs. higher fares; higher levels of subsidization vs. greater privatization). Policy regime theory is viewed as particularly appropriate in the study of urban politics (Jochim and May, 2010), given the wide range of government actors, private interests, and grassroots organisations involved in local governance.

Aspects of the policy regime framework amenable to assessment include *issues* (referring to the broader political, economic, and social forces causing a problem to rise on the public agenda, as well as the range of proposed policy solutions), *institutions* (the formal and informal organizations and mechanisms through which political agents affect or attempt to affect change), *interests* (the agendas held by these institutional actors), and *ideas* (the common or divergent objectives and proposals of participants) (Henstra, 2015; Jochim and May, 2010; Peters, 2012). This research emphasises ideas – which Béland (2005) argues are generally understudied, and Taylor and Eidelman (2010) suggest have been largely absent from urban-Canadian political science discourse – at a discrete level of the governance hierarchy (i.e. the national or federal scale). However, to provide context for the ideas and subsequent policy choices made by the federal government, the literature review is structured to identify the issues, institutions, and specific interests involved in the full expanse of Canada’s urban transit policy regime over time, in recognition of the fact that historical events and the corresponding interests of all relevant actors in the policy regime have shaped federal action (and inaction) (Béland, 2005; Campbell, 1998).

Relevant scholarly and grey literature on the subject of Canadian transit policy is reviewed in Chapter 3, with the intention of conveying a narrative depiction of the evolution of the urban transit policy regime from the late 1960s (when formal federal engagement with provincial and municipal governments on urban issues began in earnest) to the present. In order to organise this information, the history of Canadian urban transit policy is conceptualized in three distinct time periods, with reference

to the issues, institutions, and interests involved in each – the final element of the policy regime framework, ideas, are explored in detail for all three historical periods in Chapter 4 via content analysis.

Discrete policy periods are used to help the researcher make sense of the factors influencing policy change by situating occurrences in their appropriate historical contexts. These analytical periods were chosen following a review of seminal texts on the subject of federal-urban relations in Canada (e.g. Langford, 1976; Oberlander and Fallick, 1987; Spicer, 2010, 2011; Stoney and Graham, 2009; Young and McCarthy, 2009) and prior to undertaking structured data collection for the literature review and content analysis (section 2.2). Note that these periods are not uniform in length – however, the temporal divisions were chosen carefully, and for a number of reasons. First, the “starting point” of 1968 corresponds with the election of Prime Minister Pierre Trudeau, and more generally approximates the establishment of a new public-administrative climate in Canada following the MacPherson Commission of the early 1960s (in which the federal transportation portfolio was dramatically reorganized) and the Glassco Commission of the late 1960s, in which a revamped approach to public administration was adopted throughout the federal public service in response to perceived inefficiencies and the growing complexity of federal responsibilities (Langford, 1976; Oberlander and Fallick, 1987). Stemming from these administrative reforms was a significant shift in federal priorities – more specifically, growing salience of urban issues and advocacy for a more prominent federal role from a number of stakeholders led to the creation of the Ministry of State for Urban Affairs in 1971, giving the federal government a formal avenue into urban policy-making for the first time in Canadian history (Spicer, 2011). In short, this was a period of great transformation in federal-urban relations. The global political landscape was also supportive of this interventionist governance style: while Keynesianism was waning significantly, it was still widely viewed as the purview of central governments to “rationalize” and coordinate the activities of all members of the policy community (Langford, 1976).

The second period of analysis began in 1980 with the dissolution of the Ministry of State for Urban Affairs, which Spicer (2010) suggests ended the “first wave” of federal urban policy development in Canada. This period is considered to have persisted until 2001, as the principles of supply-side economics, new public management, and alternative service delivery came into vogue (and stagnated) in tandem with a broader movement toward neoliberalism (synonymous, ostensibly, with today’s “conservatism” or neo-conservatism) throughout Western democracies (Savoie, 2010). This political tide aimed to reduce (in theory) the scale and scope of government and reduce regulations for the private

sector, particularly at the national level (Savoie, 2010). In this period, there was relatively little federal engagement with urban transit issues – indeed, both the literature review and content analysis illustrate that conceptions of the role and importance of urban transit during these years were very different than in the 1960s and 1970s.

The third and final period corresponds with the revival of federal support for transit's capital expenditures in 2002⁵ (Canadian Urban Transit Association, 2009); it also loosely approximates the advent of the short-lived Ministry of State for Infrastructure and Communities and includes the institutions and programs introduced by the administrations of Prime Ministers Paul Martin and Stephen Harper for dedicated transit funding (Urban Transportation Task Force, 2010). While both Liberal and Conservative governments were in power over this decade's span, the manners by which urban transit issues have been approached by federal departments share some commonalities (i.e. program design, criteria for project eligibility, etc.) in line with changing political sentiments and emergent urban and environmental issues in the 21st century. Recession politics and a "rekindling" of Keynesian infrastructure investment followed the global financial crisis of 2008, with implications for the role of urban transit in Canadian cities. While the timing of this thesis is too early to assess Canada's most recently-elected federal government's influence on urban transit, the platform upon which the Liberal Party was elected (by a significant majority) in 2015 – and the significant role for infrastructure funding featured in the budget of Spring 2016 (Government of Canada, 2016) – suggests that Canada may be witness to greater integrated involvement of the federal government in urban transit issues in coming years (Canadian Urban Transit Association, 2015d).

2.2.2 Theories of policy ideas and content analysis

As discussed, this thesis' primary method of analysis involves the aggregation of a sample of publicly-focused policy documents produced by Canada's federal government in order to assess the degree to which policy ideas have evolved and affected the trajectory of Canadian transit policy dynamics at the national level. For the purposes of this analysis, a subset of political-economic theory known as historical

⁵ Note that Roschlau (2008) argues transit issues rose on the national agenda as early as 1998; however, for the purposes of this thesis, 2002 has been chosen as the boundary between two eras primarily because formal federal initiatives with a distinct urban lens were undertaken at that time (i.e. the Prime Minister's Caucus Task Force on Urban Issues, the Ministry of State for Infrastructure and Communities, etc.) (Spicer, 2010). Note, however, that the temporal boundaries applied in this thesis are best viewed as approximate, given the impossibility of identifying the exact moment of change within a policy sphere (Hall, 1993).

institutionalism possesses great utility in understanding and explaining policy ideas. This theory is predicated on the notion that institutions (referring here to organizations, statutes, regulations, and customs) and “policy legacies” (policy decisions made in the past and influencing present policy and legislation) structure the decision-making of political actors, constraining or enabling the consideration and feasibility of various policy alternatives (for example, transit-supportive versus auto-centric programming) (Béland, 2005; Campbell, 1998). Historical institutionalism suggests the range of acceptable political outcomes within a given society and in a particular policy arena – or policy regime (e.g. urban transit) – depends greatly upon the inertia of past decisions and the interests of prominent decision-makers in society (Campbell, 1998). The interactions of these two phenomena normalize processes and outcomes through a constructivist process of policy feedback, resulting in “path dependence,” or the continuation of a pre-existing policy direction (Peters, 2012).

While this theoretical perspective meshes well with the conceptualization of policy regimes, scholars agree that historical institutionalism in application encounters issues similar to those explored in the previous section regarding the differences between policy networks and regimes. Employed singly, historical institutionalism does a suitable job describing processes *ex-post* – it is especially supportive of Lindblom’s (1959) incrementalism – yet fails two critical litmus tests. Primarily, historical institutionalism is ill-suited to the explanation of policy change, in terms of elucidating the *reasons* underlying gradual policy evolution and eventual paradigm shifts (Campbell, 1998; Peters, 2012). Additionally, the means by which institutions are established – or the manner by which society’s normative constraints in a particular area become engrained in the psyches of both decision-makers and publics – has traditionally been absent from historical-institutional analysis (Campbell, 1998). In essence, historical institutionalism, much like policy-network theory, has been criticized for being overly and overtly deterministic (Béland, 2005). As such, two additional considerations must be made in order to validate its use as a theoretical girder of the content analysis.

First, to address historical institutionalism’s difficulty in explaining policy change, the analytical framework employed in this research adopts a conceptual perspective on policy dynamics departing from the simplistic – albeit entrenched – view that policy exists and persists in a state of “punctuated equilibrium,” in which path dependence is broken only by infrequent exogenous “triggering” or “focusing” events (i.e. changing national or global political or economic conditions; this is known as “homeostatic” change) or through a gradual (or incremental) process of social learning in which

essential policy structures remain unaltered (Campbell, 1998; Henstra, 2011; Howlett and Cashore, 2009; Peters, 2012; Wagenaar, 2011; Yanow, 2007). These varieties of policy change undoubtedly exist – for instance, homeostatic policy change occurred in response to the terrorist attacks of September 11, 2001 in New York City, wherein the United States government leveraged the newly-developed “culture of fear” to legitimize actions in the realms of domestic security and foreign policy that would have previously been politically unacceptable (Birkland, 2004; Matsaganis and Payne, 2005). Incremental change, on the other hand, was most famously defined by Lindblom (1959) in describing slow, piecemeal organizational and procedural change within large bureaucracies in response to resource, time, and expertise constraints.

However, there is a greater diversity of policy-change scenarios observed in reality. To provide for this range of circumstances, an expanded taxonomy of policy change is described by Howlett and Cashore (2009). First, however, it is useful to define the six major components of policy. These range from a high level of abstraction to the minutiae of specific regulatory requirements. Goals, objectives, and settings comprise the three aspects of policy “ends” (or aims), while the “means” (or tools) by which policy is implemented involve instrument logics, mechanisms, and calibrations. Definitions and examples for each of these are also provided by Howlett and Cashore (2009), and can be found in **Table 2**.

Table 2: A taxonomy of policy components relevant to the evaluation of policy change (adapted from Howlett and Cashore, 2009, p. 39, Figure 1).

Level of abstraction	High-level abstraction	Program-level operationalization	Specific on-the-ground measures
Policy content			
Policy ends (or aims)	Goals: What general types of ideas govern policy development? E.g. environmental protection, economic development	Objectives: What does policy aim to formally address? E.g. saving wilderness or species habitat, increasing harvesting levels to create processing jobs	Settings: What are the specific “on-the-ground” requirements of policy? E.g. considerations about the optimal size of designated riparian zones, or sustainable harvesting levels
Policy focus			
Policy means (or tools)	Instrument logic: What general norms guide implementation preferences? E.g. preferences for the use	Mechanisms: What specific types of instruments are used? E.g. the use of different tools such as tax	Calibrations: In what specific ways are instruments used? E.g. designations of higher levels of subsidies, the use of mandatory vs. voluntary

	of coercive instruments vs. moral suasion	incentives, public enterprises, public-private partnerships, etc.	regulatory standards
--	---	---	----------------------

In addition to homeostatic and incremental change, policy paradigms can also shift “neo-homeostatically” (wherein goals shift gradually in response to small changes in policy settings until the original goals of the policy are no longer recognizable) – an example is found in Canada’s national agricultural policy landscape, in which federal assistance to farmers was rolled back to such a degree that market-oriented policy goals and state retrenchment had replaced the maintenance of Canadian farmers’ economic status as the sector’s dominant policy goal by the early 1990s (Coleman et al., 1996). Policy change may also be “quasi-homeostatic” (in which broad goals remain stable but objectives change over time in response to factors external to a government or society), as was the case in “lesson-drawing” efforts made in many Western nations in the 1980s, as market-oriented strategies from the international community were incorporated into existing welfare programs, resulting in a shift from “welfare” to “workfare” policy (Rose, 1991). Lastly, “thermostatic” policy change (in which goals are set very broadly, allowing for paradigmatic change as policy objectives and settings evolve incrementally) may occur, as in forestry policy for public lands in the United States’ Pacific Northwest, in which existing institutions remained unchanged, but paradigmatic change in logging practices was prompted by growing scientific and civil awareness to protect endangered species: as a result, the nature of the industry was drastically altered (i.e. a paradigm shift from conservation- to preservation-focused management took place) (Cashore and Howlett, 2007; Howlett and Cashore, 2009).

While the short-term modes of change in these three examples are undoubtedly incremental, the major policy shifts which took place in each instance are not well-explained by purely homeostatic or incremental means. In line with this framework (and in order to triangulate the findings of the structured literature review and content analysis), this research classifies and describes the modes of policy change characterizing the two transitions (in the late 1970s and early 2000s) between the three historical eras in Canada’s urban transit policy regime in Chapter 5. This taxonomy is captured fully in **Table 3**.

Table 3: A broad taxonomy of policy change (adapted from summaries of Cashore and Howlett, 2007; Coleman et al., 1996; Howlett and Cashore, 2009; Lindblom, 1959; Rose, 1991).

Type of policy change	Explanation	Exemplar
Homeostatic	“Punctuated equilibrium”; policy goals change only in response to discrete “trigger” events	Terror attacks of September 11, 2001 spark dramatic change in national security policies in the United States (Birkland, 2014)
Neo-homeostatic	Policy goals shift gradually in response to small changes in policy settings	Canada’s national agricultural policy; shift from farmer- to market-oriented policy goals over time via gradual elimination of subsidies (Coleman et al., 1996)
Quasi-homeostatic	Policy goals remain stable, but objectives change in response to external ideas and factors	International “lesson-drawing” to amend welfare policies results in shift from welfare to workfare (Rose, 1991)
Thermostatic	Policy goals set broadly; paradigmatic change occurs over time as a result of incremental changes to policy settings and objectives (similar to a thermostat regulating heat in a home)	Public forestry policy in the US Pacific Northwest; incremental changes to harvest rates and growing awareness of environmental harms triggered a shift from conservation to preservation (Cashore and Howlett, 2007)

The second issue encountered by historical institutionalism relates to institutional establishment – that is, how new policy-making bodies come into being. To resolve these theoretical issues posed by institutional establishment, Campbell (1998) and Béland (2005) suggest that consideration of the unique and imperative role of ideas in policy-making and agenda-setting is essential and oft-overlooked. In this context, “ideas” refer to both specific policy alternatives and the causal beliefs and worldviews in which these alternatives are inextricably embedded (Béland, 2005; Campbell, 1998). This requires a discursive analysis of the manner by which policy alternatives are framed, rationalized, and debated by governments (Chapter 4).

It is pertinent to differentiate between categories of ideas invoked in these formal documents, given that they represent pragmatic units of policy analysis (Van Eeten, 2007) and useful proxies for (and reflections of) the goals and objectives of governments within a policy area (Yanow, 2007). According to Campbell (1998), there are four types of ideas involved in policy-making, derived from the work of scholars of historical and organizational institutionalism (the latter perspective adding psychological elements of routine-normalization within organizations to the structuralist insights of the former). It is important to note that ideas may be “underlying and sometimes taken-for-granted assumptions residing in the background of policy debates” (i.e. paradigms and public sentiments) but they may also be

“concepts or theories located in the foreground of these debates where they are expertly articulated by [policy-makers]” (i.e. programs and frames) (Campbell, 1998, p. 384). Further, ideas may be “cognitive” in that they describe cause-and-effect relationships as a basis for policy action (i.e. programs and paradigms), or they may be “normative” by invoking values and attitudes in the defense or rationalization of a decision or position (i.e. frames and public sentiments) (Campbell, 1998).

The first order of ideas (referring to concepts and theories invoked explicitly in the foreground of policy debates) involves programmatic ideas (technical policy prescriptions devised by elites to chart clear and specific actions for governments) and discursive frames – the political symbols and concepts invoked by policy-makers to legitimize interventions. The second order of ideas, referring to the underlying assumptions implied within policy debates, include paradigms (the systems of causal beliefs constraining the range of useful solutions readily available to policy-makers) and public sentiments, referring to the dominant assumptions made by the electorate (comprised of a plurality of interests) on a policy topic, constraining the range of politically-legitimate interventions (Béland, 2005; Campbell, 1998). **Table 4** provides a visual overview of this typology, as well as examples of each category in the content of public policy documents.

Table 4: A typology of ideas involved and invoked in the policy-making process, shaping policy and public support for selected alternatives (adapted from Campbell, 1998).

Idea type	(1 st order) Concepts and theories invoked in policy foreground	(2 nd order) Underlying assumptions in policy background
Cognitive	<p>Programs: Ideas as policy prescriptions, assisting policy-makers in establishing clear/specific policy actions.</p> <p><i>Includes tangible plans or proposals for transit-related research, feasibility studies, capital funding, or operational support</i></p>	<p>Paradigms: Ideas as causal assumptions constraining the cognitive range of useful solutions available to policy-makers.</p> <p><i>Includes problem definitions, causal linkages between phenomena, and rationales for action</i></p>
Normative	<p>Frames: Ideas as symbols and concepts; assist policy-makers in the legitimization of policy solutions to the public.</p> <p><i>Includes values espoused in campaign speeches, press releases, and other public statements from bureaucrats and politicians</i></p>	<p>Public sentiments: Ideas as public assumptions constraining the normative range of legitimate (publicly-acceptable) policy solutions available to policy-makers.</p> <p><i>Includes representations of public-opinion polls, focus group outputs, and other forms of public comment</i></p>

The specific ways in which these ideational theories inform the analytical processes of this thesis are discussed in section 2.3. First, however, the process by which documents were identified for inclusion within the literature review and content analysis are described.

2.3 Data collection and related considerations

This section outlines the procedures and considerations employed in the identification and selection of relevant federal documents on the subject of urban transit, comprising the inputs to the historical literature review and content analysis.

2.3.1 Identification of sources for the historical literature review

As discussed previously, this research employs a “structured” approach to the review of existing literature about urban transit in Canada, with an emphasis on the issues, institutions, and interests involved in urban transit policy-making (Chapter 3). In order to identify scholarly and grey literature that effectively describes and analyzes the political-economic landscape of each of the three time periods, a number of systematic considerations for data collection were made. First, a list of search terms (with appropriate Boolean operators) was identified; these terms were then applied to an array of relevant databases from the fields of urban planning, geography, and public administration (lists of both can be found in Appendix A). Documents were then scanned for relevance to Canada’s urban transit policy regime – the emphasis in this section was upon scholarly (i.e. peer-reviewed) literature, although a number of grey literature documents were included (i.e. via the Canadian Urban Transit Association, the Federation of Canadian Municipalities, the Conference Board of Canada, etc.). Note that in selecting documents for the content analysis, criteria for inclusion were stricter – these are described in the following section. Also note that information from documents selected for the content analysis (i.e. those produced by agencies of the Government of Canada) are also cited in Chapter 3 in order to provide context for federal actions as appropriate.

2.3.2 Data collection for the content analysis

The search terms and databases identified in Appendix A were also applied in the search for content analysis inputs. As per the typology of documents relevant to qualitative policy research identified by Yanow (2007), the following varieties of federal documents were deemed appropriate for inclusion:

- Policy documents and legislative records, including bills and their drafts;

- Committee, task force, and commission publications and reports;
- Agency memoranda and correspondences (including those within and between departments); and
- Ministry, department, and agency reports (including both research and annual reports).

The sample was scoped at the first 20 documents yielded by the queried databases per historical period (for a total of 60 documents) – this limit was selected in light of document-access restrictions and time (to both systematically code each document and conduct the analysis over a reasonable timeframe) constraints, but also because it was determined as an appropriate “saturation point” in the document analysis (at which point information – in this case, policy ideas – tended to repeat) (Bowen, 2009; Hsieh and Shannon, 2005). It should be noted, however, that there is no ironclad sample-size standard to which content analyses can be held: as such, the decision to scope the sample is generally left to the researcher’s discretion (Bowen, 2009; Hsieh and Shannon, 2005; Krippendorff, 2004). **Table 5** summarizes the types of documents included in the final sample.

Table 5: Summary of document types included in the content analysis (n=60).

Document type	Number included in content analysis	Percentage of total
Departmental/program report (Annual or otherwise)	8	13.3
House of Commons proceedings	4	6.6
Conference proceedings	3	5
Ministerial address	4	6.6
National Inquiry report	1	1.6
Policy brief	3	5
Policy directive	3	5
Policy evaluation	3	5
Policy recommendation	4	6.6
Press release	1	1.6
Research report	17	28.3
Trade publication	2	3.3
White paper	7	11.6
Total	60	100

Only those documents produced by or for agencies of the Government of Canada – as well as intergovernmental organizations with transit mandates and a permanent federal role, such as the Council of Ministers Responsible for Transportation and Highway Safety – were included in the content analysis. Documents containing the phrase “urban transit” or “urban transportation” were scoped in, regardless of any obvious position on the subject (i.e. documents demonstrating a clear preference

either “for” or “against” a greater federal role in the policy sphere). In order to compile a suitable sample size and temporal range, some federal documents discussing the Government of Canada’s interests and activities in transportation more broadly were included in the analysis (i.e. those containing the phrase “urban transportation” but not “urban transit”). This decision was made primarily due to the fact that urban transit falls outside of explicit federal jurisdiction (as discussed in Chapter 1) – as such, it was generally difficult to locate documents devoted solely to the subject. This was particularly the case during the second era of analysis (1980-2001), an epoch of relatively limited federal engagement in the policy regime. However, all documents discuss the federal role in urban transportation to some degree – where transit in particular does not appear as a topic of explicit discussion, transit issues are conspicuous in their absence (i.e. National Transportation Agency, 1985, 1989). For instance, the now-defunct National Round Table on the Environment and Economy was included as an acceptable federal source, given its stated advisory role in relation to the Government of Canada (National Round Table on the Environment and Economy, 1997). **Table 6** delineates the sample further by specific authorship within the Government of Canada (see Section 2.3). Appendix B provides a comprehensive list of the type and authorship of all 60 documents involved in the content analysis, broken out by historical period.

Table 6: Summary of federal organizations cited in the content analysis (n=60).

Government of Canada Department, Agency, or affiliation	Number of proprietary documents included in content analysis	Percentage of sample produced
Canada Mortgage and Housing Corporation	1	1.6
Council of Ministers and Deputy Ministers Responsible for Transportation and Highway Safety, Urban Transportation Task Force	3	5
Canadian Transportation Agency (Including: National Transportation Agency)	2	3.3
Department of External Affairs	1	1.6
Environment Canada	1	1.6
House of Commons of Canada (Debates)	1	1.6
Infrastructure Canada	1	1.6
Library of Parliament	3	5
Ministry of Finance	2	3.3
Ministry of Industry, Trade and Commerce	2	3.3

Ministry of Public Works and Government Services	1	1.6
Ministry of State for Urban Affairs	17	28.3
Ministry of Transport (Transportation Development Agency)	1	1.6
National Round Table on the Environment and Economy	2	3.3
Office of the Auditor General of Canada	1	1.6
Prime Minister's Caucus Task Force on Urban Issues	1	1.6
Standing Committee on Finance	1	1.6
Standing Committee on Transport, Infrastructure and Communities	2	3.3
Statistics Canada	1	1.6
Transportation Association of Canada	4	6.6
Transport Canada (Including: Transportation Development Centre, Urban Transportation Research Branch, Urban Transportation Showcase Program, and Moving on Sustainable Transportation Program)	12	20
Total	60	100

There are two immediately salient points that may raise questions about this sample and warrant further explanation. First, **Table 5** suggests that research reports (28.3 percent) comprise a large proportion of the document sample. However, given that public reports are commissioned to inform both policy-makers and civil society about policy issues and the merits of various alternatives, it is reasonable to suspect that policy ideas are likely to be well-represented in these documents. **Table 6** and Appendix B, meanwhile, suggest that the Ministry of State for Urban Affairs (MSUA) is over-represented as a source (authoring, by affiliation, 17 of 20 first-era documents); however, as discussed in Chapter 3, MSUA served a coordinative role among other federal ministries and agencies during this period on the “urban dimensions” of federal policy (Oberlander and Fallick, 1987), so it is unsurprising that the database scan yielded almost exclusively MSUA documentation for the first period of analysis.

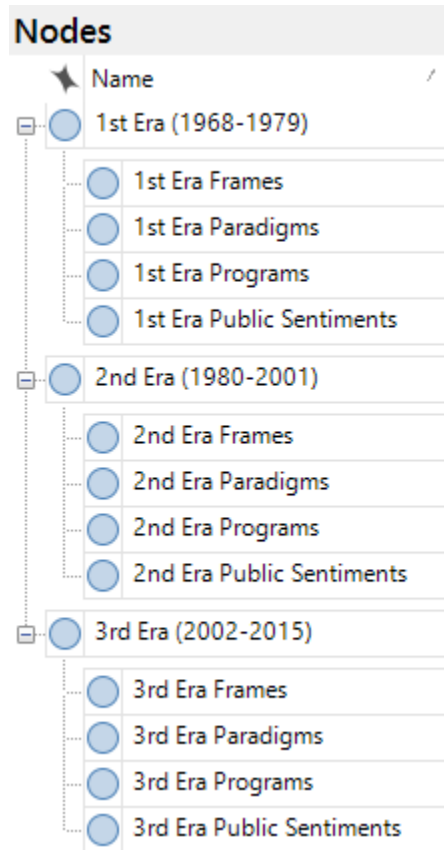
Now that the systematic considerations for the aggregation and identification of content-analysis inputs have been described, the following section outlines the ways in which these documents were coded and the means by which their constituent policy ideas were interpreted.

2.4 Analysis of policy ideas

In this research, a “directed” approach to content analysis was employed, in which theory situated the analytical approach and determined initial categories of codes (Hsieh and Shannon, 2005). Content-analysis software – QSR NVivo 11 – was used to organize documents via the “Externals” tab, and these documentary inputs were further categorized in two interrelated stages: thematic and open coding.

In the thematic coding stage, each document in the sample was manually scanned line-by-line in NVivo to explore the ways in which policy ideas were represented in the text (Hsieh and Shannon, 2005, p. 1283). Campbell’s (1998) categories formed the foundational coding structure (outlined in section 2.1.2) – each variety of policy idea (programs, paradigms, frames, and public sentiments) was assigned a primary or “parent node” in NVivo (more commonly referred to as “codes” in qualitative research [Creswell, 2014; Hsieh and Shannon, 2005]) in relation to its time period. Upon each instance in which a policy idea regarding urban transit (or an analogous/relevant concept) was discussed explicitly or implicitly in the text (i.e. within the 60 federal documents), the most relevant “thematic” code was deployed in line with Campbell’s framework (placed in “child nodes” in NVivo). This involved considerable discretion – it was up to the researcher to determine whether a given passage of text warranted coding, and if so, which code to apply. However, this bias was mitigated via adherence to rigorous definitions for each ideational category (**Table 4**; discussed in greater detail below). **Figure 1** demonstrates the thematic coding hierarchy of parent and child nodes, as displayed in the NVivo interface prior to the commencement of the thematic coding process. Each passage was allocated to a time frame based on the date of the publication in which it was found (“1st Era [1968-1979]”, “2nd Era [1980-2001]”, and “3rd Era [2002-2015]”) and then assigned a “thematic” code within the era in question – programs, paradigms, frames, or public sentiments.

Figure 1: Parent and child nodes used to organize coded ideas in the thematic coding process.



Specifically, each of the “program” nodes included proposals for tangible projects, plans, or operational programs (including research, feasibility studies, etc.), as well as passages proposing the transfer of capital or operational resources to other levels of government, transit providers, or users. The “paradigm” node included statements defining the specific or general problems policy aims to solve, causal linkages between phenomena related to urban transit and transportation, or rationales for action – these were, by and large, located in policy and research documents.

The “public sentiments” nodes focused on information in which public perspectives, opinions, and beliefs have been evaluated, reflecting passages that reference public opinion polls, focus groups, and quotations from other forums for public comment. “Public sentiment” is hardly a monolithic entity in reality – as such, efforts were made during coding to capture the perspectives of competing and convergent public interests (including the positions of advocates, detractors, proponents, and opponents of transit projects as they were articulated by federal agents in each document). As such,

perspectives and values from throughout the policy regime are captured in this node for all periods of analysis.

Finally, the “frames” nodes identified value-laden statements made in press releases, speeches, and other policy documents which attempted to reflect or sway public opinion and consolidate political support for or against policy alternatives proposed or selected within the policy regime – in other words, passages aiming to persuade the reader, be they substantiated or unsubstantiated directly by evidence in the text (Campbell, 1998; Lieberman, 2002). Examples of codes applied in these four categories are provided in **Table 7**, while a full list of thematic excerpts is located in Appendix C.⁶

Table 7: Examples of coded excerpts for each thematic category employed in the content analysis.

Coding category	Example from document sample
Paradigms	“Movement within urban areas should not depend to the extent that it does on the private automobile, which results in congestion, environmental pollution, and denial of adequate transportation to those without cars such as the poor, the handicapped, the elderly and young people. Substantial government assistance is required if public transit facilities are to compete effectively with the private automobile in convenience, comfort, speed and cost. Broadly speaking, the form of the city and the type of transport available are closely related: the spread of sprawling low-density suburbs tends to make dependence on the private automobile inevitable; conversely a more closely-knit urban area may require a commitment to adequate and well-planned transport facilities at an early stage” (1Paradigms14 [Ministry of State for Urban Affairs, 1974, p. 8])
Programs	“A major benefit of efficient urban transportation facilities is realized in capital investment. Stated simply, transit is less capital-intensive than the automobile. Studies conducted in the cities of Vancouver and Halifax in the 1970s indicated that the cost of providing transit facilities to meet travel demands through the 1980s was roughly half the cost of providing facilities for automobiles. Transit means fewer expressways and .access-roads; less parking space; savings on traffic-signaling equipment; and savings on police, fire-fighting and ambulance services” (2Programs7 [Department of External Affairs External Information Program Division, 1981, p. 8])
Frames	“In the past ten years almost every city in Canada has had its transportation study. We have had one learned paper after another analysing our urban transport problems ad nauseam. Yet the average citizen has seen nothing approaching a solution to his problem as he waits for thirty or more freezing minutes, for a bus that is supposed to run every ten minutes, on a morning when his car has failed to start or he has refused to face the hopeless task of digging out his driveway” (1Frames1 [Lewis, 1972, p. 1])
Public sentiments	“A number of stakeholders who met with the Committee in Ottawa took the

⁶ Each thematically-coded passage listed in Appendix C contains a “coding key”. These are used to aggregate thematic codes into emergent or “open” categories and to avoid unnecessary length and duplication in Appendix D. For instance, the first code in the “1st Era Paradigms” node is given the key “1Paradigms1”, while the 56th and final code in this category is denoted “1Paradigms56”. Similar shorthand is used for each of the other thematic categories, as well as the second and third eras of analysis (e.g. 1Frames10 “2PublicSentiments20”, 3Programs30”, and so forth).

	<p>opportunity to express appreciation for the billions in federal contributions to Canada’s transit systems in recent years. These witnesses indicated that the additional federal funds precipitated the undertaking of many important transit projects. Conversely, a representative of the Canadian Taxpayers Federation (CTF) was of the view that federal funding programs had distorted decision-making for transit agencies and had actually delayed necessary projects. The CTF argued that projects such as the Evergreen Line in Vancouver would have been built sooner if the transit agency had not waited for an offer of federal funding” (3PublicSentiments22 [Tweed, 2012, p. 9])</p>
--	---

Upon the completion of this initial coding process, a second round of “open coding” was undertaken, in which all thematically-coded excerpts within each time frame were further analyzed in order to concretely describe policy ideas. Open coding refers to the identification of “concepts or key ideas that are hidden within textual data” (Bhattacharjee, 2012, p. 114) via the determination of sub-categories within the content (Hsieh and Shannon, 2005, p. 1282). During this analytical stage, the researcher undertook a close-reading of thematic codes, and memo-writing was employed to maintain “closeness” to the data (Single, 2010) – short, concise notes helped to determine recurrent themes in the thematic codes for each era. Following memo-writing, a “focused” reading of these memoranda took place, in which the large number of themes identified in the memos were consolidated and summarized into a workable and analyzable group of open codes (Krippendorff, 2004). During the process of analysis in which this final set of open codes was identified – or “emerged” from the data (Bowen, 2009) – tertiary categories were assigned “grandchild nodes” in NVivo for each timeframe, representing substantive descriptions of the policy ideas identified during thematic coding. Examples of grandchild nodes identified within each thematic idea category via the open coding process are listed in **Table 8**, and are described and explored in greater depth in Chapter 4 (each analytical section features a snapshot of its “open nodes”). A full list of all excerpts coded during the open coding process (identified by their coding keys – i.e. “2Paradigms1”, “3PublicSentiments6”, etc.) is located in Appendix D.

Table 8: Examples of open codes in relation to their thematic coding categories.

Coding category	Thematic examples (with coding keys)	Open code applied
1st Era Paradigms	<p>E.g. ““Urban mobility has never before been enjoyed by such a large proportion of the population. On the other hand the modern private car has also contributed to the urban dweller’s increasing sense of isolation and frustration” (Lewis, 1972, p. 1) (1Paradigms1)</p> <p>“We seem to accept the fact that our roads and highways which concern us so much are part of the general revenues. We don't seem to do cost-benefit analyses on these; in this country at least</p>	<p>Recognition of automobile externalities</p>

	<p>we accept them as part of our taxes or our budgets. But as soon as we talk about public transportation, we immediately start counting the cost. And so far, I've been unable to find a proper economic analysis which will compare those two, compare the losses along those roads, the amount it costs us to drive our cars and amortize those cars and the gasoline to use them, not to mention the wear and tear on our nerves and the additional health cost I which is probably hard to quantify" (Danson, 1975, p. 5) (1Paradigms16)</p>	
2nd Era Programs	<p>E.g. "We have committed \$500,000 to provide full support to the Canadian exhibitors at the International Public Transit Expo '81 in Chicago in October. As many of you are aware, more than 16,000 square feet has been leased by the federal government, and will be used by 22 companies to display Canadian technology. We are producing, jointly with the manufacturers, a new film depicting the Canadian experience in urban transit. We are publishing the first catalogue of the industry. And we have a brand-new selling tool – 'Telidon' ... this is the first application of this high-technology system, developed by the federal government ... This is one of the largest marketing assistance projects we have ever undertaken for any industry" (Gray, 1981, p. 8) (2Programs4)</p> <p>"In addition to the urban and transportation planning expertise which has evolved over the years, Canada also possesses a pool of experienced consulting and technical personnel. Canadian specialists, in both the public and private sectors, build, operate and maintain subways, light rail transit services, commuter rail and bus networks and urban bus services. This experience is available to municipalities anywhere in the world on a commercial basis" (Department of External Affairs External Information Program Division, 1981, p. 13) (2Programs8)</p>	Support for domestic transit manufacturers
2nd Era Frames	<p>E.g. "The current environmental and economic climates, more specifically the energy crisis, favour urban transit" (Department of International Trade and Commerce, 1981, p. 19) (2Frames4)</p> <p>"Improvements in transit that attract individuals from the private automobile, as well as land use and transportation planning that leads to shorter trips, fewer motorized trips and increased use of cycling and walking are also seen as essential elements of meeting Canada's commitments to reductions in greenhouse gas emissions, improvements in air quality, and related health impacts, while also helping to conserve energy and reduce dependence on fossil fuels" (IBI Group and Soberman, 2001, p. 6) (2Frames49)</p>	Environmental and sustainability benefits of transit
3rd Era Public Sentiments	<p>E.g. "I've heard a lot of support for is the creation of completely new, targeted Infrastructure funds. This type of new program could help to achieve better results, it is said, by focusing exclusively on a national priority like urban transit or safe water or housing. Again, this is another proposal worthwhile developing together"(Martin, 2002, p. 6-7) (3PublicSentiments1)</p>	Demand for new federal leadership and programming

	<p>“The industry is open to alternative funding sources such as P3s, but the current procurement model restricts the federal government to a maximum of 25% share of the cost in a P3. This often leaves municipalities and provinces with a more substantial share of the initial capital investment up front. As the federal government prepares its next budget, it should consider raising its maximum share of P3 projects from 25% to 33%, especially in cases where no private partners are providing initial capital investments” (House of Commons of Canada, 2014, (p. 4) (3PublicSentiments39))</p>	
--	---	--

Following the thematic and open coding processes, interpretation of the data was carried out by presenting the results of both thematic and open coding within each historical period and for each category of ideas (i.e. programs, paradigms, frames, and public sentiments) in Chapter 4, discussing the substantive themes and content of each period. Comparisons of each category of ideas across the three analytical periods are presented in Chapter 5. From these comparisons, key findings were developed in relation to both policy ideas and dynamics. The following section discusses the specific means by which both key findings and policy recommendations were developed.

2.5 Developing key findings and recommendations

In order to determine the ways in which policy ideas evolved over time, each category of ideas were compared and contrasted over the three analytical periods in Chapter 5 in order to answer the research sub-question asking: “How have urban transit policy ideas invoked by the federal government in public policy documents changed over time?” The framework for policy dynamics is then applied to the transitional periods between historical “eras”, classifying the mode of policy change at each intersection in accordance with Howlett and Cashore's (2009) framework (resolving the second sub-question: “How has the federal government’s role in the Canadian urban transit policy regime shifted from 1968-2015, and in response to what “triggering” factors?”). The content analysis provides the final conceptual element to the descriptions of policy regimes constructed in Chapter 3, permitting the classification of policy change at each historical “transition.” The aim is to describe the manner by which the policy regime has shifted in the past, and by extension, how policy might change in the future.

Key findings represent insights made in relation to the evolution of the urban transit policy regime’s ideas, and dynamics (discussed in Chapters 4 and 5). Van Eeten (2007) suggests that differences between “metanarratives” – in this case, the accounts provided by document-producers at the time of writing as discerned by the researcher, and by the academic community *ex-post* (representing more

holistic and multi-stakeholder viewpoints – are of particular interest to scholars of policy history, given that they represent the interplay of competing views of reality and events. Comparisons of the differences, similarities, and insights of these individual narratives allow researchers to make the “normative leap” from “is to ought” (Van Eeten, 2007).

In the context of this study, comparisons of policy ideas over time; the identification of “underutilized” ideas espoused by federal agencies (i.e. programmatic ideas proposed but not implemented); discrepancies between the “metanarratives” of the literature review and analysis; unaddressed problems across time periods; and shortcomings in federal action as perceived by other stakeholders (identified both in the literature review and in the analytical “public sentiments” nodes) were all instructive in developing recommendations for ways in which the effectiveness of federal involvement in Canada’s urban transit policy regime could be amended and improved. These recommendations are the subject of Chapter 6).

2.6 Limitations

Despite the inclusion of systematic means and theoretical guidance to ensure the reliability, objectivity, and validity of this work, it is impossible to completely remove all sources of bias in qualitative content-analysis research (Creswell, 2014; Krippendorff, 2004). Primarily, limitations include the reality that the document scan could have missed relevant documents – despite the author’s best efforts and an exhaustive list of queried terms and databases, the dated nature of the data or omission of relevant keywords or databases leaves the possibility open. However, via the use of systematic, explicit, and uniform sampling guidelines (Kolbe and Burnett, 1991; described in section 2.2) and by including 60 documents in the content sample, it was the researcher’s intention to minimize the likelihood of this occurrence.

In content analysis, it is also critical that the author disclose the element of subjectivity involved in the coding process. Specifically, the categories of ideas (programs, paradigms, frames, and public sentiments) involved in the thematic coding process are inherently nebulous and are not amenable to categorization based on pre-defined words or phrases (beyond the broad terminology identified in Appendix A). However, operational definitions for coding and interpretation (i.e. the application of Campbell's [1998] framework) were strictly adhered to in order to mitigate this potential.

In sum, this study is designed to infer “analytic generalizability,” in which observations may be applied only to the specific phenomenon in question, or analogous phenomena (Bhattacharjee, 2012). As such, the results of this analysis should not be taken as a definitive or holistic account of the federal government’s role in urban transit policy-making. Rather, the unique contribution of this study (namely the content analysis) is its attempt to approximate the federal government’s view of its own role in the policy sphere as demonstrated over the period from 1968-2015, and to make informed recommendations about the ways in which federal institutions may more effectively contribute to Canada’s urban transit policy regime.

2.7 Summary of methods

This chapter outlined the theoretical underpinnings of this research, as well as the systematic fashion in which the proceeding literature review and content analysis is conducted. The historical literature review relies heavily on a framework for describing policy regimes developed by Jochim and May (2010), while the investigation of policy change draws upon the work of Howlett and Cashore (2009). The content analysis may be considered “directed,” as per the approach outlined by Hsieh and Shannon (2005).

Procedures for data collection were then described, referring primarily to the search parameters (terms) and sources of policy documents (databases) employed. The specific considerations and procedures guiding both thematic and open coding processes were then outlined, and examples of each provided. The methods by which key findings and recommendations were developed were then made explicit – primarily, these “summative” elements were identified by integrating discussions of policy ideas and dynamics, and by discussing sources of agreement and conflict between the findings of the literature review and the content analysis. Finally, limitations of the research (including potential sources of bias and how these were minimized) were discussed. The following chapter constructs an historical narrative of the urban transit policy landscape in Canada from the late 1960s to the present.

Chapter 3: An Historical Literature Review of Canada’s Urban Transit Policy

Regime

This chapter draws upon the policy regime framework (introduced and defined in Chapter 2) in order to describe developments in Canadian urban transit from the late 1960s to the present. The purpose of this structured review of historical and contemporary literature is to situate the role of federal politicians, departments, and agencies in relation to those of other institutional (both formal and informal) “actors” (or stakeholders) within the urban transit policy regime. These include civil-society groups concerned with the provision and improvement of transit services; municipalities and the transit agencies under their purview; provincial governments and their constituent transit-planning and service-delivery organizations; intergovernmental bodies with urban transit agendas; and private-sector entities with material interests in the advancement of transit in cities. The issues defining the decisions of these actors, as well as their interests, are also explored in detail. The final element of the policy regime framework – policy ideas – constitutes the primary focus of this thesis and warrants its own analytical component (Chapter 4). In line with the research questions and objectives, emphasis is placed upon the federal government’s actions within the policy regime throughout this chapter.

As discussed in section 2.2.1, the literature review is carried out in three parts. The first section describes a tumultuous “experiment” in Canadian urban governance (Oberlander and Fallick, 1987) which took place from 1968 to 1979, involving indirect federal involvement in urban affairs, albeit a limited role in urban transit. The second period of analysis was significantly longer (1980-2001), during which intergovernmental relations in Canada generally featured lower levels of cooperation (often referred to as the era of “competitive federalism” [Sancton, 2008; Shaker, 2005]) in tandem with the so-called “neoliberal turn”. The final period of analysis (2002-2015) begins with the advent of direct and ongoing federal transit funding, includes Prime Minister Martin’s “New Deal” for Canadian cities, and extends through the Harper Government’s period of “open federalism” to the present. During each era, it is demonstrated that the roles and responsibilities of the federal government have evolved in tandem with transit’s status as a political tool, as well as the economic and fiscal health of the industry. The following section provides a brief overview of conditions immediately prior to the first analytical timeframe (discussed in sections 3.2-3.4).

3.1 An introduction to urban transit and the federal government in the postwar era

The end of World War II signaled a turning point for North America's transit industry. While ridership on Canada's electric street railways (operating in cities of all sizes in the early 20th century) reached historic highs due to gasoline rationing and materials shortages during wartime (Hanson and Giuliano, 2004; Jones, 2008), the age of the automobile began in earnest upon the resumption of peace. By 1945, the nation's rolling stock of electric railcars and trolleybuses required significant refurbishment (Day, 2015) – under the *Constitution Act 1867* (s. 92), this upkeep was the sole jurisdictional responsibility of provinces and their “creature” municipalities (Sancton, 2008). However, replacement on the scale required was infeasible due to significant provincial budgetary deficits wrought by the demands of wartime spending (Bakvis, Baier, and Brown, 2009); as a result, many provinces and cities elected to provide comparatively cheaper (i.e. less capital-intensive) and more flexible bus services (Day, 2015). A combination of political pressure from North America's powerful auto-manufacturing sector (Walks, 2015c); the consequent increase in the affordability of automobile ownership; a burgeoning middle class; and changing social expectations for mobility and individualism also contributed to the decline of streetcars (Perl and Kenworthy, 2010; Perl and Pucher, 1995) such that by 1959, they remained operational only in Toronto (Day, 2015).

Despite these challenges, Canada's municipal transit authorities continued to operate with moderate success in the post-war period (see **Figure 3**). The Toronto Transit Commission (TTC), for instance, turned a streetcar operating surplus into Canada's first subway line in 1954 (the north-south Yonge line) (Perl and Kenworthy, 2010) – although by 1955, when the complementary east-west Bloor line was constructed, the TTC was able to finance only 45 percent of the cost (Sancton, 2015). As such, political will and incentives for federal involvement in urban transit funding were not yet warranted. In other aspects of municipal affairs, however, the federal government began to apply its spending power (referring to “residual” constitutional authority to transfer money to governments, institutions, and individuals for use in areas beyond federal jurisdiction) in pursuit of “a postwar agenda of social and economic reform” (Verrelli, 2008, p. 6). This included sharing capital costs of municipal infrastructure projects with provinces (typically 50 percent), partially in recognition of the heavy toll taken by the war effort on provincial and municipal resources: as such, scholars refer to the postwar period as an era of “cooperative” federalism (Bakvis et al., 2009). Generally, however, funding for infrastructure was limited to one-off projects and Keynesian stimulus initiatives (Bakvis et al., 2009). Municipal governments

provided the vast majority of operational and capital funding for transit throughout this period (Bunting and Filion, 2010), while the federal government entered the realm of transportation in cities only by playing a (limited) role in funding segments of the Trans-Canada Highway passing through metropolitan areas (Perl and Kenworthy, 2010; Verrelli, 2008).

Perl and Kenworthy (2010) argue that because Canadian municipalities were not forced to adhere to a singular urban policy in the postwar period, cities were able to achieve relatively high population densities and strong transit ridership in city centres. However, federal action in this period did not establish a wholly productive framework for the evolution of Canadian urbanism. The creation of the Canada Mortgage and Housing Corporation (CMHC) and its subsidized/guaranteed mortgages via the *National Housing Act 1944* stimulated low-density development beyond traditional municipal boundaries and rail-servicing capacities (Bakvis et al., 2009; Bunting and Filion, 2010; Walks, 2015a), facilitating the “sprawled” suburban form that remains prevalent in Canada today. Transit in these areas was (and remains) uncompetitive with automobile travel and commute times (Blais, 2010) – as a result, ridership stagnated in the suburbs as the 1960s drew to a close (Cervero, 1986). Simultaneously, social malcontent with the reform and renewal agendas peddled by all levels of government in traditional urban cores grew to a head in the 1950s and 1960s (Bunting and Filion, 2010).

In short, the rapid pace and outward nature of postwar urbanization (and suburbanization) in Canadian cities birthed the conditions under which urban issues emerged onto the national agenda in the late 1960s. In this context, the roles and responsibilities of each order of government in the realm of urban affairs and transit policy lost their previous clarity. A cycle of dispersed residential development was initiated, leading to a smaller tax base in traditional municipal centres and a more fractured municipal system overall. Consequently, public-service quality declined, providing Canadians with further motivation to leave dense urban areas (Bunting and Filion, 2010). The trajectory of urban development in Canada was significantly influenced as a result.

3.2 Canada’s urban transit policy regime, 1968-1979

3.2.1 First-era issues

Urbanization began to alarm decision-makers in the 1960s. The proportion of Canadians residing in urban areas grew from 41 percent in 1941 to 74 percent by 1966 (Statistics Canada, 2011) – within cities, meanwhile, population distribution polarized spatially. High- and middle-income earners moved

to the suburbs, while low-income households remained in traditional downtown areas (Bunting and Filion, 2010; Mendez et al., 2015). Consequent problems related to dilapidated and overcrowded working-class housing; roadway congestion and air pollution; and the social “ills” produced by freight railways in cities were of particular concern (Picton, 2010). As such, and in line with broader ideological movements to “rationalize” urban space, federal, provincial, and municipal governments began a process of urban renewal, ameliorating “slum” conditions by relocating low-income housing to the urban periphery; constructing urban parkways through city centres (bulldozing low-income housing as necessary) to facilitate suburban commuting and remove traffic from downtown streets; and relocating industrial rail lines away from city centres to reduce pollution and provide commercial real estate development opportunities (Basford, 1972; Bunting and Filion, 2010; Picton, 2010; Sancton, 2008). As in the United States, the accommodation of the automobile lay at the heart of these renewal efforts (Jones, 2008).

Simultaneously, urban life in Canada became “politicized” (Tindal, 2013). The social ramifications of urban renewal (namely displacement of low-income residents) drew the particular ire of Canadian civil society (Spicer, 2011); efforts to block urban thoroughfare construction in Vancouver, Toronto, and Montreal were especially prominent (Bunting and Filion, 2010). The escalating social and economic costs of automobile ownership, particularly in relation to shocks associated with the oil crisis of 1974 and the “first wave” of global environmentalism’s concern with pollution and air quality, also became salient in this era (Schiller et al., 2010), resulting in increased ridership and grassroots support for transit (Canadian Urban Transit Association, 1984). Indeed, Spicer (2011) argues that urban advocacy was a primary driver behind the implementation of a formal federal urban agenda, although Oberlander and Fallick (1987) note that growing “academic” recognition of the interdependence of urban well-being and national prosperity also contributed to the decision by newly-elected Prime Minister Pierre Trudeau to investigate means by which federal and urban objectives could be aligned. The Hellyer Task Force was commissioned in 1968 to advise the federal government on the most effective method of urban intervention (with a focus on housing and land-use issues), recommending the establishment of regional planning bodies to integrate land-use and transportation objectives (Sancton, 2008) and hinting at a growing recognition of urban-suburban linkages and interdependencies within Canada’s urban policy community. However, this strategy was deemed constitutionally-infeasible on the basis of infringement into provincial jurisdiction (Sancton, 2008).

Instead, the Ministry of State for Urban Affairs (MSUA) was created via the *Government Organization Act* in 1971 in order to develop and apply “policies to influence the urbanization process” and coordinate the activities of federal line departments deemed to possess “urban dimensions” (Oberlander and Fallick, 1987). Thus began a period of significant and direct federal engagement with cities – and jurisdictional encroachment, albeit indirectly (Sancton, 2008; Spicer, 2010). Over MSUA’s lifespan, “turf wars” became key issues of contention, both among federal agencies and between provincial and federal governments, culminating in MSUA’s disbandment in 1979 (Sancton, 2008). However, in MSUA’s wake, some transit-supportive initiatives were left intact (Canadian Urban Transit Association, 1984). The specific institutions and interests defining MSUA’s “experiment in public administration” (Oberlander and Fallick, 1987), as well as MSUA’s relationship with urban transit, are discussed in the following section.

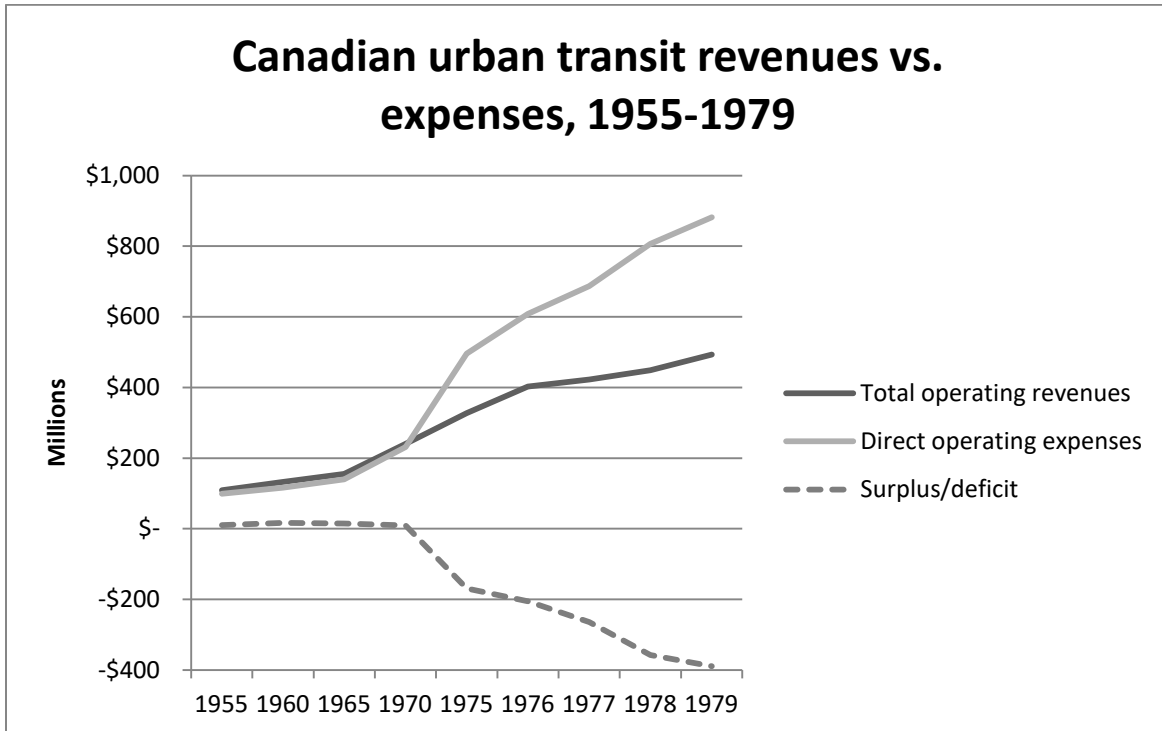
3.2.2 First-era institutions and their interests

As described above, urban civil society’s political clout grew during the late 1960s and into the 1970s. Prominent institutions included the Strathcona Property Owners’ and Tenants’ Association in Vancouver, which opposed downtown demolition and expressway construction; Montreal’s Citizen Movement, which demonstrated against the city’s housing renewal policy; and Toronto’s Confederation of Residents and Ratepayers Associations, which prevented construction of the Spadina Expressway (Spicer, 2011). Many groups favoured investment in public transit as an alternative to road- and highway-building, which they argued would provide greater mobility benefits to a wider constituency and insulate urban dwellers from oil shocks similar to those experienced during the 1970s (Jones, 2008), although it should be noted that some (albeit few) transit projects were also opposed on the grounds of “community disruption” (IBI Group, 1993). Likewise, the Canadian Urban Transit Association (representing the interests of municipal transit authorities and vehicle manufacturers) was at the forefront of the movement for the consideration of transit as an alternative to roadway expansion in the 1960s and 1970s in order to maximize the value and social impact of its membership (Roschlau, 2008). These organizations expressed their concerns to municipal councils, who, in turn, communicated these sentiments to higher orders of government. In Toronto and Vancouver, city councils and their representatives in the Federation of Canadian Municipalities (formed in 1937 via the merger of the Union of Canadian Municipalities and the Dominion Conference of Mayors to provide a national forum

for the coherent expression of municipal interests) began lobbying provincial and federal governments for transit support as early as 1961 (Spicer, 2011).

The transit-specific interests of municipalities and local transit agencies in this era focused on securing financial support for infrastructure and service-expansion projects they were increasingly unable to finance alone (Spicer, 2011). Prior to 1980, capital and operational funding data for urban transit was not collected (Lauren Rudko [CUTA], personal communication). However, in lieu of a detailed breakdown of the sources of capital and operational funding for this period (which is presented for subsequent timeframes), **Figure 2** presents a comparison of total operating revenues and direct operating expenses from 1955 to 1979. These data demonstrate the declining ability of municipal transit authorities to cover the costs of their operations throughout the postwar period and into this study's first period of analysis, as well as the rapidly escalating costs of operation in relation to revenues. The increasing rate of deficit (particularly from 1970 to 1979) can largely be explained by population growth and the need to service increasingly-broad swaths of suburban land; however, fare-box revenues were unable to account for rising operational costs as ridership declined and automobile ownership became increasingly accessible and convenient (Bunting and Filion, 2010). Other reasons for the growing operating deficit include inflation, the expansion of transit services into suburban areas, low fares, and increasing trip lengths (Urban Transportation Research Branch, 1979). Given these deficit conditions, higher-order involvement became necessary in order to provide essential services: indeed, cities across the country (i.e. Calgary, Edmonton, and Vancouver) lobbied for federal support for planned LRT systems during this period, with varying degrees of success (Canadian Urban Transit Association, 1986).

Figure 2: Comparison of revenues and expenses for urban transit in Canada, 1955-1979 (Canadian Urban Transit Association, 2015c). Note that the uneven scale reflects the limited availability of data for the period from 1955-1975: prior to 1975, capital and operating data were reported by transit authorities to CUTA very five years, rather than annually.



Overall, MSUA’s involvement in the urban transit policy regime was tangential, but its transit interests and activities were pioneering and noteworthy. MSUA focused primarily on improving the “effectiveness, responsiveness, and innovative capacity” of the federal government to urban issues (Langford, 1976). However, it possessed no formal budget or direct control over program delivery (Oberlander and Fallick, 1987). As such, its functional scope was restricted to research and coordinating the policy and programming of other federal departments whose activities possessed “urban dimensions” (such as the Ministries of Transportation and Public Works) (Spicer, 2011), meaning that “the only avenue left to the Ministry was the power of its ideas in the decision-making process” (Oberlander and Fallick, 1987, p. 113). These coordinative activities were largely carried out by the Senior Interdepartmental Committee on Urban Affairs (SIDCUA), which involved representatives from 15 federal line departments and acted as the primary mechanism for disseminating MSUA’s policy ideas throughout the federal bureaucracy (Ministry of State for Urban Affairs, 1974).

Despite these material limitations, MSUA's mandate evolved significantly over its lifespan. By 1974, MSUA had leveraged the urban connections and expertise of its personnel to become a vehicle for the transfer of capital funds from federal line departments to municipalities (Oberlander and Fallick, 1987). Urban transit became a focus in the mid-1970s; transit-related research was conducted and commissioned by MSUA's Urban Networks Directorate on transportation-housing inter-relationships, mechanisms for land-value capture through capital investment in transit infrastructure, and methods of improving the economic efficiency of urban transportation (including both roadways and transit systems) (Frankena, 1979; Ministry of State for Urban Affairs, 1979; N.D. Lea and Associates Ltd., 1979). These objectives were shared by other federal organizations: the Ministry of Transport's Surface Policy and Urban Transportation Assistance Branch (SPUTAB) and Urban Transportation Research Branch (UTRB) also conducted research tailored to municipal requests in conjunction with (Urban Transportation Research Branch, 1979).

The most significant outcome of these interdepartmental relationships was the creation of the Urban Transportation Assistance Program. This capital initiative (totaling \$230 million) included two distinct funding categories: projects eligible under the Railway Relocation and Crossing Act (assisting municipalities in removing freight rail from urban centres) and urban transit projects. The latter component allocated funds to provinces and municipalities from 1978 to 1984 for capital purchases related to "commuter rail vehicles, stations and platforms, and required traffic control facilities" (or buses and designated lanes for higher-order transit where commuter rail was infeasible) (Ministry of State for Urban Affairs, 1975b), as well as "paratransit vehicles, construction of maintenance and storage facilities, terminals, shelters and pedestrian walkways ... fare boxes, as well as traffic studies and surveys" (Canadian Urban Transit Association, 1984, p. 62-63). Eligibility for these funds depended on the formulation of tri-level agreements on appropriate growth-management strategies in applicant urban regions (Ministry of State for Urban Affairs, 1975b), and the federal government provided up to 75 percent of capital costs for projects awarded funding based on these criteria (Canadian Urban Transit Association, 1984). This initiative represents the first formal foray into the realm of direct transit funding in the history of Canada's federal government, and as such constitutes an historical "breakthrough" in the context of this research. These expenditures, while developed in the first era of this analysis, were, for the most part made in the second era – as such, specific projects and regional funding allocations are discussed in greater depth in section 3.3.2.

Provincial politics in this era also engaged in reorganization, with significant impact on urban transit services. Canada's first wave of municipal amalgamation was in full force during the 1960s and 1970s (Lightbody, 1999) – many provinces annexed land surrounding major urban centres to create regional (or “upper-tier”) municipalities (reminiscent of Hellyer's recommendations), including the creation of Metropolitan Toronto, the Montreal and Quebec City Urban Communities, Ottawa-Carleton, and a unified Winnipeg (Bakvis et al., 2009; Hamilton, 2013). Transit service delivery was, by and large, made the responsibility of these reorganized municipalities (Langford, 1976). Provinces began to recognize that the social benefits of public subsidies for transit outweighed the costs (economic, environmental, and social) of unbridled roadway expansion (Langford, 1976). In light of transit's deficit situation (**Figure 2**) Ontario became the first province to offer capital support for urban transit in 1971 – by 1978, all 10 provinces had capital assistance programs in place (Canadian Urban Transit Association, 1984).

Provinces (unlike municipalities) were not interested, however, in federal policy direction and financial support (Oberlander and Fallick, 1987). While cooperative with MSUA at first, by the mid-1970s, provincial representatives were unhappy with perceived federal “meddling” in urban land-use planning and transportation projects (Oberlander and Fallick, 1987). As such, provinces began to challenge MSUA's constitutional legitimacy; similarly, federal line departments felt constrained and impeded by MSUA's coordinative activities, and were also complicit in its dismantling (Oberlander and Fallick, 1987; Spicer, 2010). In 1976, MSUA's size and scope was greatly reduced in tandem with a Ministerial change, when Barney Danson was replaced by André Ouellet; the political climate became hostile to federal intervention in urban affairs, and MSUA was effectively shuttered in 1979 (Oberlander and Fallick, 1987). In tandem, SPUTAB and the UTRB were disbanded by the Ministry of Transport as “a result of recent policy changes regarding the federal government's role in urban transportation” (Urban Transportation Research Branch, 1979).

MSUA was inherently an interdepartmental body, due primarily to its lack of a programmatic functionality and independent fiscal resources (Langford, 1976; Oberlander and Fallick, 1987). In order to operate effectively, MSUA leveraged the urban policy community that developed in the 1950s and 1960s, characterized by Spicer (2011) as “state-corporatist”, in which urban activists, municipal councils, and municipal associations advanced actions within the network, while federal and provincial governments determined the direction and duration of policy outputs (Spicer, 2011). Tri-level

conferences on urban affairs became key avenues for policy debate, with major goals related to information-sharing and policy harmonization (Bakvis et al., 2009). These conferences were successful in 1972 and 1973 – however, a third meeting scheduled for 1976 was boycotted by the provinces over their displeasure with MSUA’s evolving mandate and more blatant jurisdictional incursions (Oberlander and Fallick, 1987; Sancton, 2008; Spicer, 2011). Other relevant intergovernmental institutions of this era included the FCM’s Urban Transportation Committee and the Canadian Council of Urban and Regional Research, agencies lacking provincial representation which advocated for higher-order transit support (Langford, 1976). The movement towards the integration of federal and municipal interests – often without provincial support – is a key theme of this era that bears highlighting.

One intergovernmental transit initiative undertaken in Ottawa-Hull from 1974 to 1975 illustrates the collaborative appetite of federal and municipal governments that existed in this era. Municipal transit agencies on both sides of the Ontario-Quebec border, the National Capital Commission (NCC), and MSUA identified the need to reduce automobile congestion during peak hours (particularly in the central business district, home to the majority of the federal public service). The federal government implemented paid parking for employees to incentivize transit use; in tandem, the NCC provided dedicated lanes for buses on local highways from the suburbs, and city transit authorities increased peak hour service. The results were compelling: transit experienced a 33 percent peak-hour mode share increase, jumping to 70 percent of downtown journey-to-work trips following implementation; additionally, ridership on Ottawa’s transit network (OC Transpo) increased from 39 million annual trips in 1972 to 854 million by 1983 (Oberlander and Fallick, 1987). Despite MSUA’s eventual rejection as a formal federal-urban institution for coordinating and delivering transit services, this example illustrates the important intergovernmental strides taken in this era. In particular, it highlights the benefits provided by the coordination of priorities among government agencies in developing solutions to regional transportation problems.

Table 9 summarizes In summary of the issues, institutions, and interests characterizing Canada’s urban transit policy regime from 1968 to 1979, as discussed in this section.

Table 9: Canada’s urban transit policy regime, 1968-1979.

Issues affecting urban transit (cross-cutting)	Societal/governance level	Institutions involved in urban transportation policy-making	Interests specific to urban transit
Traffic-congested inner-city roads and conventional “urban renewal” policy response (c. 1968) (Picton, 2010)	Urban civil society	Urban renewal protest groups (i.e. Toronto’s Confederation of Residents and Ratepayers Association, Vancouver’s Strathcona Property Owners’ and Tenants’ Association, Montreal Citizen Movement)	Abandonment/reversal of urban expressway plans; advancement of transit as an alternative to urban expressways (Spicer, 2011)
Energy crises and increasing costs of automobiles (c. 1974) (Canadian Urban Transit Association, 1984)	Municipal government	Transit authorities under purview of upper-tier (regional) municipalities (i.e. Toronto Area Transit Operating Authority)	Improvement transit efficiency across metropolitan areas, especially within city centres (Langford, 1976; Oberlander and Fallick, 1987) Procurement of direct financial assistance for transit capital investments from both provincial and federal governments (Spicer, 2011)
Rise of the first wave of environmentalism (c. 1969)	Provincial government	Federation of Canadian Mayors and Municipalities Ministers of Transportation (provincial)	Retaining jurisdictional supremacy over urban transportation (Urban Transportation Research Branch, 1979); providing capital support for transit agencies (all provinces provided some level of support by 1978) (Canadian Urban Transit Association, 1984)
Jurisdictional “turf wars” between federal and provincial actors over land-use and transportation responsibilities (c. 1979-1978) (Oberlander and Fallick, 1987)	Federal government	Provincial policy research agencies (i.e. Ontario Urban Transit Research Directorate) Ministry of State for Urban Affairs - Senior Interdepartmental Committee on Urban Affairs - Urban Networks Directorate - Interdepartmental Committee on Urban Transportation Ministry of Transport - Transport Development Agency; - Urban Transportation Research	Advancing provincial support for transit (fiscal and policy) Urban renewal; improving access between major urban centres via highways; coordinating activities of departments with “urban dimensions” (Langford, 1976; Oberlander and Fallick, 1987) Conducting transit-related research tailored to municipal requests (Urban Transportation Research Branch, 1979)

Issues affecting urban transit (cross-cutting)	Societal/governance level	Institutions involved in urban transportation policy-making	Interests specific to urban transit
		Branch (including the Urban Services Systems Group) <ul style="list-style-type: none"> - Surface Policy and Urban Transportation Assistance Branch (Urban Transportation Research Branch, 1979) 	
	Intergovernmental organizations	Tri-level conferences Bilateral organizations with municipal and federal representation, no pro (i.e. Urban Transportation Committee, Canadian Council of Urban and Regional Research Canadian Urban Transit Association	Developing “policy harmony” around urban transit objectives (Oberlander and Fallick, 1987) Securing transit funding for capital projects (Langford, 1976)
	Private sector/ labour unions/ miscellaneous stakeholders		Public investment in transit as alternative to urban roadway construction/expansion (Roschlau, 2008)

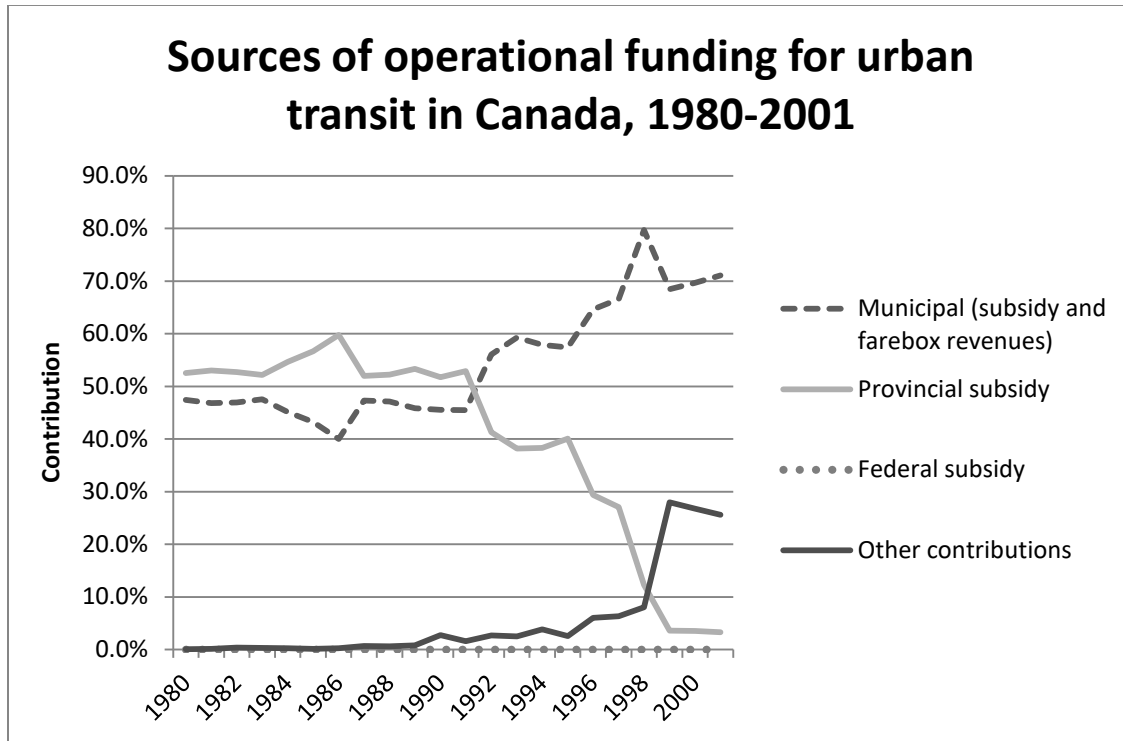
3.3 Canada's urban transit policy regime, 1980-2001

3.3.1 Second-era issues

MSUA's demise was reflective of changing political tides in Canada, and in North America more broadly (Spicer, 2010). Specifically, political neoconservatism – or perhaps more accurately, neoliberalism – took hold throughout the Western world in response to recession and stagflation (Harvey, 2005). Urban transit was not unaffected. While the OPEC energy crisis and the first wave of environmentalism contributed to strong transit ridership in the mid-1970s, the 1980s brought global recession and the rise of “roll-back” and “roll-out” neoliberalism to Canada, in which public-sector austerity and private-sector involvement in the delivery of public services became commonplace (Perl and Pucher, 1995). Throughout North America, governments at all levels scaled back public investment to eliminate deficits, as the Keynesian public policy of previous eras proved unable to control inflation or fuel economic growth (Bunting and Filion, 2010). Simultaneously, governments intensified their focus on roadway expansion, as rates of car ownership rose as concerns over energy supplies were abated by a global “oil glut” in the 1980s (Anderson et al., 1996). In this context, the private automobile established a price advantage over public transit as federal and provincial transit subsidies began a downward trend (beginning in 1985) and agencies raised fare prices to compensate (Canadian Urban Transit Association, 1984). Significant “hidden” subsidies for highways and automobile manufacturers continued throughout the 1980s and 1990s (Vuchic, 1999), which Ralph Nader and other prominent North American political commentators suggest emerged in the prewar period and matured in the immediate aftermath of World War II (at which point auto subsidies became a full-blown “highway complex”) (Fellmeth, 1973; as discussed in section 3.2.1).

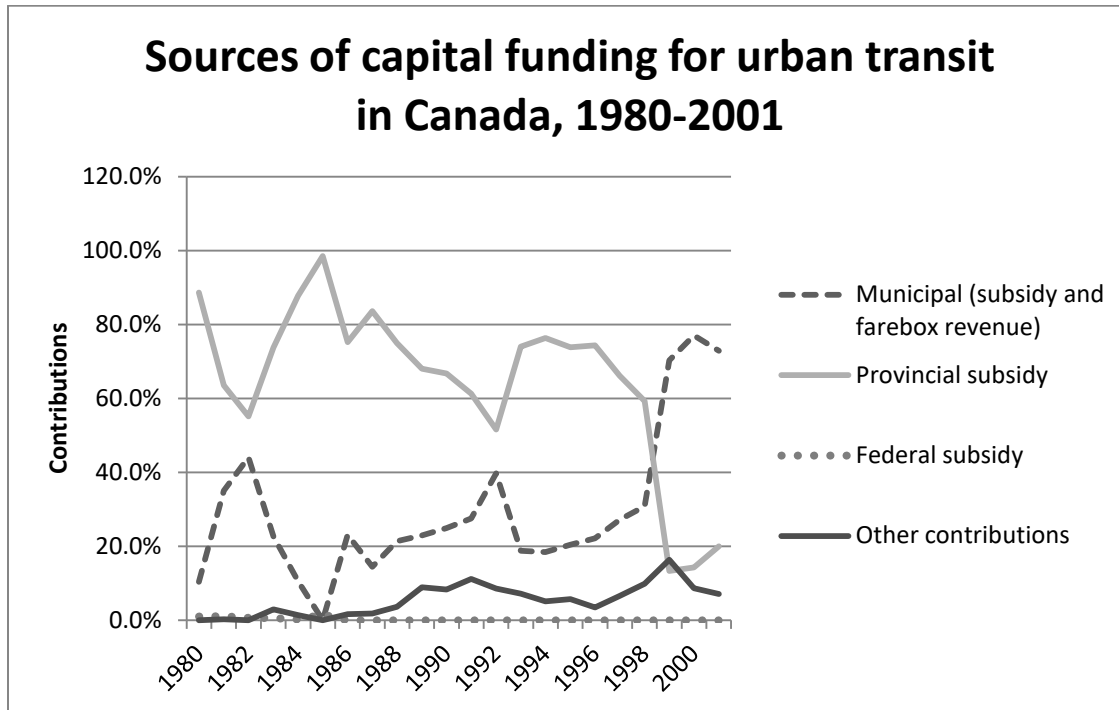
Despite these obstacles, transit experienced some growth in ridership in the early 1980s, which Perl and Pucher (1995) attribute to the federal and provincial capital investments of the previous era and the early 1980s. However, restrictive fiscal policy from both federal and provincial governments in Canada detracted from public transit's cost- and modal-competitiveness in the latter stages of the 1980s, and ridership declined significantly in the 1990s (Perl and Pucher, 1995). **Figures 3 and 4** illustrate these trends in urban transit financing from 1980 to 2001.

Figure 3: Sources of operational funding for urban transit in Canada transit funding in Canada, 1980-2001 (Canadian Urban Transit Association, 2015c).⁷



⁷ Note that “for operating expenditures, ‘other’ contributions include local dedicated gasoline taxes, auto licence fees, and other miscellaneous sources”; “for capital expenditures, ‘other’ contributions include capital reserves, development charge funding and debenture, transportation development levies, and other miscellaneous sources” (Canadian Urban Transit Association, 2013b). All figures are exclusive of debt-servicing contributions.

Figure 4: Sources of capital funding for urban transit in Canada transit funding in Canada, 1979-2001 (Canadian Urban Transit Association, 2015b).



As per these figures, municipal and provincial funding contributions for this period demonstrate an inverse relationship. Dewing et al. (2006) offer an explanation: in line with trends toward austerity and subsidiarity (components of the “New Public Management” administrative paradigm [Savoie, 2010] discussed in greater depth in section 3.3.2), provincial funding for transit trended downwards over this period as responsibilities for program delivery were “downloaded” en masse to municipalities – particularly under Mike Harris’ government in Ontario from the mid-to-late 1990s, which eliminated all forms of capital subsidy in 1998 (Horak, 2012b). However, provinces maintained control over program design and implementation, resulting in a situation in which “municipalities were burdened with new responsibilities, but no additional funding or political autonomy” (Dewing et al., 2006, p. 17). Federal contributions to the transit funding mix (for both capital and operational expenditures) were negligible in this period, as discussed in the following section (3.3.2).

The 1980s and 1990s also witnessed a slow-down in urbanization – from 1981 to 2001, the proportion of Canadians living in urban regions grew only marginally, from 76 to 77 percent (Statistics Canada, 2011). However, suburban growth continued unabated; in some provinces, this was supported by distinctly anti-urban political interests and governance strategies (Filion and Kramer, 2011). While

urban and suburban voters had begun to exhibit partisan polarization in the 1970s – and specifically, a suburban preference for right-wing candidates – this trend grew especially strong in subsequent decades (Walks, 2015b). Despite an unsupportive political environment for transit, “new” environmental issues of the 1980s and 1990s (such as acid rain, climate change, and ozone depletion) brought the concept of sustainable development, as well as anthropogenic climate change and discussion of policy solutions, into sharp focus and the popular vernacular as the 1990s drew to a close (Shaker, 2005).

3.3.2 Second-era institutions and their interests

Urban civil society demonstrated a shift away from the environmental focus of preceding decades in the 1980s, largely in response to the growing economic crises identified in the preceding section. As the economy sagged in response to the “stagflation” of the 1980s, the ability of civil society to gather political momentum for urban issues waned in tandem (Tindal, 2013). Public distaste for the perceived “inefficiencies” of public service delivery grew, and the firebrand version of urban politics of the 1960s and 1970s became muted, although not altogether silenced (Bunting and Filion, 2010). CUTA remained a vocal proponent and researcher of transit issues and the interests of its membership through the 1980s and 1990s (Perl and Pucher, 1995), and a number of third-sector organizations became active in the late 1990s – in particular, the Canadian Policy Research Network, the Conference Board of Canada, and the Canada West Foundation produced research and policy recommendations in support of urban transit as a “third way” between the social objectives of the welfare state and the economic imperatives of neoliberal governance, proposing that these issues might best be addressed in tandem via sustainable city-building initiatives (Steinberg, 2013). However, it was not until the 21st century that these ideas came to fruition in policy outcomes; in general, citizens in the 1980s and 1990s grew increasingly politically independent and more apt to avoid “low-quality” or deteriorating transit service as compared to users in the 1960s and 1970s (Perl and Pucher, 1995). Changing economic conditions as a result of globalization and the consequent shift from a manufacturing- to service-based economy in North America has also been cited as a motivation for shifting consumer preferences in this era, particularly in light of the oil glut of the 1980s and regeneration of North America’s automotive sector following the OPEC crisis of the 1970s (Jones, 2008).

This reduction of grassroots effectiveness in the urban transit policy regime was accompanied (and perhaps influenced) by municipalities assuming a much less prominent role within the federal

apparatus during the 1980s and 1990s. The new fiscal climate of austerity forced many cities to scale back service delivery, including transit (Perl and Pucher, 1995). Indeed, municipalities began to focus on enhancing their competitiveness as a destination for private investment rather than the delivery of high-quality public services (Bunting and Filion, 2010). Lower taxes and greater emphasis on development proximate to highways left little money for transit investment (Tassonyi, 1997). Municipalities were also faced with fiscal “downloading” pressures from provinces, including maintenance requirements for sprawling road networks and transit systems without the commensurate financing power to renew infrastructure (Spicer, 2011) – indeed, **Figures 3 and 4** demonstrate the general trend towards a reduced provincial role in transit financing. The private sector became a more important player in transit as public-private partnerships came into vogue for capital projects, particularly in the 1990s (Siemiatycki, 2011).

Canada’s second wave of municipal restructuring was undertaken by provinces throughout the 1990s (Lightbody, 1999). Largely, this involved the amalgamation of large, multi-tiered municipalities into single-tiered “city regions” – however, the ability of these amalgamated municipalities to effectively balance urban and suburban transportation priorities proved questionable (Hamilton, 2013; Lightbody, 1999; Walks, 2015a). For instance: Ontario’s Progressive Conservative provincial government of the 1990s grew wary of the growing influence of metropolitan regions on the province’s electoral structure, and devolved significant revenue-generating power and planning authority to fragmented and quasi-regional municipalities with little interest in transit provision (Perl and Pucher, 1995). In Ontario, some scholars viewed municipal restructuring as a means to redistribute wealth away from cities, prioritizing the infrastructure and transportation needs of voters and drivers on the urban fringe over those in traditional downtown areas (Filion and Kramer, 2011). When the province created the suburban municipalities of York, Durham, and Peel to surround Metropolitan Toronto, transit planning responsibilities were placed in administrative silos – these new municipal bodies were heavily invested in low-density planning (and the development charges this mode contributed to municipal coffers) and lacked the incentive to enhance urban-suburban transit linkages; as a result, “exclusive visions of urban development” played out adjacently in downtowns and suburbs (Perl and Pucher, 1995). Defenders of these reforms characterize them as an attempt to match local government structure and transportation services with the spatial realities of suburban development (Tassonyi, 1997).

Following MSUA's disbandment, a "policy vacuum" appeared at the federal level vis-à-vis urban transit (O'Brien, 1982). Both federal and provincial governments were in a period of budgetary deficit, and the federal government was interested, primarily, in reducing these conditions (Sancton, 2005). The pillars of federal governance in the 1970s – responsiveness, innovation, and effectiveness (Langford, 1976) – were replaced by the cost-reduction objectives of the "New Public Management" (NPM) and "alternative service delivery" (ASD) administrative paradigms (Bunting and Filion, 2010; Savoie, 2010). As such, this period witnessed a transition from the federal government as a provider of services to an enabler of economic stability via support for the private sector and the removal of regulations (Barnett, 1997); indeed, the promotion of Canadian transit-vehicle and -technology manufacturers became an area in which federal departments and ministers took an active interest (Gray, 1981). In general, incursions into areas of provincial jurisdiction were greatly reduced in the 1980s: ideologically, the election of Prime Minister Brian Mulroney in 1984 completed the movement away from urban involvement initiated by the Trudeau government in 1979 when MSUA fell out of favour with its departmental and provincial partners (Hume, 2015).

However, the federal government did provide some support for transit in this era. Funding under the urban transit component of the Urban Transportation Assistance Program (UTAP) developed by MSUA and implemented by the Ministry of Transport (discussed in section 3.2.2) was spent in this era – the most notable project that received support was Montreal's commuter rail service (Canadian Urban Transit Association, 1986). **Figure 5** presents an overview of the funds allocated to 207 projects via the two constituent components of the Urban Transportation Assistance Program (urban and projects under the Railway Relocation and Crossings Act [RRCA]). Note that urban projects received only 25.4 percent of total UTAP funds, while the remainder was allocated to RRCA projects.

Figure 5: Funding allocation under the Urban Transportation Assistance Program, 1978-1984 (Canadian Urban Transit Association, 1984, p.63).

PROVINCE	URBAN		RRCA		UTAP
	PROJECTS	UTAP \$	PROJECTS	UTAP \$	TOTAL
Nfld.	24	\$ 5.5 M	-	-	\$ 5,555,140
P.E.I.	18	1.1 M	-	-	1,118,123
N.S.	13	8.3 M	-	-	8,286,523
N.B.	14	4.7 M	3	\$ 2.1 M	6,774,000
Que.	2	33.0 M ¹	33	28.6 M	61,487,502
Ont.	-	-	50	82.6 M	82,646,000
Man.	6	5.0 M	2	5.0 M	10,133,859
Sask.	-	-	5	9.1 M	9,131,503
Alta.	-	-	9	18.4 M	18,381,000
B.C.	2	72.5 M	23	24.3 M	24,307,050
Yukon	1	282.0 K	-	-	282,000
N.W.T.	2	140.0 K	-	-	140,125
TOTALS	82	\$ 58.1 M	125	\$170.2 M	\$228,242,825 ²

¹ Includes Montreal Commuter Rail as one project

² \$230 M minus lapses

In addition to these funds, the Department of Regional Industrial Expansion (formerly the Department of Industry, Trade and Commerce) provided a grant of \$60 million in support of Advanced LRT in Vancouver (the SkyTrain) – \$20 million was used in a “demonstration” program, in which design concepts and vehicle performance was tested, while the remaining \$40 million was used to purchase 117 vehicles (Canadian Urban Transit Association, 1986). Hutton (2012) suggests that this funding was a component of the broader federal “regional industrial policy” to support Canada’s transit manufacturers discussed previously, given that a requirement for this funding was the tendering of contracts to Canadian manufacturers (e.g. Bombardier, SNC-Lavalin, etc.). As a result of these funds, capital support fluctuated between 1 and 1.5 percent of transit capital expenditures from 1978 to 198 (Figure 4). In addition, the Canada Infrastructure Works Program (CIWP; jointly managed by provincial and federal representatives) was introduced from 1994 to 1999 to assist municipalities in meeting their infrastructure needs; however, while transit was an eligible investment category under these programs (Rochon, 2002; Shaker, 2005), the impact of the CIWP on transit funding – and indeed, on the condition of municipal infrastructure in general – was negligible (Canadian Urban Transit Association, 2015b).

Despite these federal initiatives (which, in the case of UTAP, were partially the result of decisions and ideas from the previous era) intergovernmental relations were generally unsuccessful in the advancement of urban issues over the majority of this era. The federal government became entangled in “constitutional crises” with premiers through the 1980s and early 1990s (Bakvis et al.,

2009), and involvement in urban affairs took a backseat to more pressing matters of national concern as a result (Sancton, 2008). However, the National Round Table on the Environment and Economy (NRTEE), created in the early 1990s, acted as a voice for the development of revamped urban transportation policy in Canada (NRTEE, 1997). However, the NRTEE was hardly an intergovernmental body – while it featured some provincial representation over its 25-year lifespan (1988-2013), all members were appointed by the Prime Minister and membership was dominated by academics and the private sector (Seidle, 2002). Its interests were, however, generally supportive of urban transit – its policy recommendations revolved primarily around the reduction of greenhouse gas emissions from automobiles and the enhancement of transit’s mode share as an objective related to the policy goal of reducing air pollution and climate change (National Round Table on the Environment and Economy, 2003; National Round Table on the Environment and the Economy, 1995). In a similar vein, the *Canada Transportation Act* Review Panel (CTARP) was an important institution at the end of the era. The CTARP undertook a statutory review of the *Canada Transportation Act* in 2001, reviewing the propriety of existing federal policy relation to all modes of transportation. Specifically, research and consultation with other orders of government, civil society, and academia was undertaken in order to recommend substantive changes to federal transportation legislation, with considerations in its mandate on specific steps to “preserve urban rail corridors for mass transit use” (Flemming, Patenaude, Findlay, Rae, and Waters II, 2001, p. 3).

At the end of the era, however, municipal malcontent with downloading conditions and their impacts on transit came to head in the late 1990s, particularly in big cities. Indeed, Horak (2012b) argues that transit was the “catalyzing” issue behind the establishment of the New Deal for Canadian Municipalities under Paul Martin (discussed in the following section). The City of Toronto was especially vocal in its need for transit funding as the TTC entered a period of “fiscal crisis” in response to the withdrawal of all forms of provincial capital subsidies in 1998. Via the Big City Mayor’s Caucus of the FCM, Toronto spearheaded an inter-municipal lobbying effort for the federal government for the creation of a “multilevel funding scheme” to assist with capital costs.

Table 10 provides an overview of the transit policy regime from 1979-2001. Despite the “urban apathy” displayed by many of these actors during the 1980s and 1990s, the scale of the municipal infrastructure deficit became more difficult for the federal executive to ignore at the turn of the century (Spicer, 2010). For urban transit, sweeping reductions to provincial funding support left the nation’s

transit systems in a dire state. In tandem with greater awareness of the risks posed by climate change and its linkages to personal automobile use, the stage was set for renewed focus on urban transit in the 21st century.

Table 10: Canada's urban transit policy regime, 1980-2001.

Issues affecting urban transit (cross-cutting)	Societal/governance level	Institutions involved in urban transportation policy-making	Interests specific to urban transit
Rise of economic neoliberalism and political neoconservatism (Harvey, 2005)	Urban civil society	Canadian Policy Research Network, Canada (late 1990s)	Very little civil engagement on urban transportation in 1980s; organizations affiliated with business, academia, and social welfare groups coalesced in late 1990s to advocate for more coherent transit goals (Steinberg, 2013)
Growing public mistrust of government and the need for social services (c.1980s) (Bunting and Filion, 2010)	Municipal government	Transit agencies under the purview of amalgamated and upper-tier municipalities (downloading occurred in some regions) Federation of Canadian Municipalities - Big City Mayors' Caucus	Providing scaled-back services in an unsupportive fiscal climate (Perl and Pucher, 1995) Advocacy for higher-order transit support in 1980s and late 1990s (Federation of Canadian Municipalities, 2007)
"Oil glut" and decreasing public subsidies creating significant automobile price advantage (c. 1990s) (Anderson et al., 1996; Perl and Pucher, 1995)	Provincial government	Political executive and the regional transit authorities under their purview (i.e. Greater Vancouver Transit Authority, GO Transit) Provincial transit research organizations (i.e. Ontario's Urban Transit Development Corporation)	Downloading of fiscal support for transit to municipalities (Hamilton, 2013; Perl and Kenworthy, 2010); elimination of deficits (Bunting and Filion, 2010) Advancing Canadian-made transit technologies; supporting domestic transit vehicle manufacturers
Growing infrastructure deficit in line with downloading from federal government to provinces, and from provinces to municipalities (c. late 1990s) (Barnett, 1997; Horak, 2012b);	Federal government	Department of Industry, Trade and Commerce/Regional Industrial Expansion Ministry of Transport/Transport Canada - Urban Transportation Assistance Program (Urban transit component)	Capital support for transit systems (i.e. \$60 million capital grant for construction of Automated LRT in Vancouver); support for Canadian-made transit vehicles and technologies (Gray, 1981) Minimizing costs and jurisdictional interference; research re: public mobility options for disabled persons and

Issues affecting urban transit (cross-cutting)	Societal/governance level	Institutions involved in urban transportation policy-making	Interests specific to urban transit
<p>Tassonyi, 1997) Rise of second wave of environmentalism, concerned with cumulative sources of pollution (i.e. ozone depletion, greenhouse gases) in the wake of the Brundtland Report (c. 1990)</p>		<p>Ministry of Public Works</p> <ul style="list-style-type: none"> - Physical Infrastructure Initiative - Canada Transportation Act Review Panel (c. 2001) <p>Roads and Transportation Association of Canada</p> <p>National Roundtable on the Environment and Economy (est. 1988)</p>	<p>technology/efficiency improvements (Canadian Urban Transit Association, 1986); elimination of deficits (Bunting and Filion, 2010);</p> <p>Reducing municipal infrastructure deficit (transit an eligible but untapped investment category) (Shaker, 2005)</p> <p>Identifying avenues for multi-modal federal transportation policy reform; preserving urban rail corridors for urban transit use</p> <p>Enhancing the technological advancement and efficiency of service delivery; providing research support to provinces and transit agencies (Transportation Association of Canada, 2013)</p> <p>Advancement of sustainable development principles, including modal shift from automobiles to transit in cities</p>
	<p>Intergovernmental organizations</p>	<p>Canada Infrastructure Works Program (1994-1999), implemented by joint federal-provincial management committee</p>	<p>Reducing municipal infrastructure deficit (transit an eligible but untapped investment category) (Office of the Auditor General of Canada, 1999; Shaker, 2005)</p>

Issues affecting urban transit (cross-cutting)	Societal/governance level	Institutions involved in urban transportation policy-making	Interests specific to urban transit
	Private sector/ unions	Private contractors Canadian Urban Transit Association - Government Funding Agencies Committee (est. 1982)	Engagement in public-private partnerships for capital transit projects (c. mid-1990s) (Siemiatycki, 2011) Advancement of transit's modal share and advocacy for higher-order funding (Canadian Urban Transit Association, 1986; Cervero, 1986)

3.4 Canada's urban transit policy regime, 2002-2015

3.4.1 Third-era issues

As witnessed at the dawn of the first era of federal-urban engagement, a change in political leadership catalyzed a major policy shift in the federal government's involvement in urban transit policy in the transition between the second and third eras of analysis. In this case, the rise to prominence of Paul Martin's urban agenda in 2002 and his subsequent election in 2003 stimulated agreement over urban policy goals and laid the foundation for tri-level funding partnerships for transit. The issues underlying this shift revolved around growing concern from urban planners, academics, public-activist groups (and eventually by extension, bureaucrats and politicians) about the quality of urban infrastructure, public subsidies for suburbanization, and functionally-segregated zoning requirements (Blais, 2010; Shaker, 2005). In this context, transit has emerged as a sustainable "fix" for the failures of neoliberalism (which in turn was a response to the Fordist suburban "spatial fix") – namely, expensive, congested, and unsustainable urban environments, and the consequent social and environmental impacts of automobile reliance (Blais, 2010; Steinberg, 2013). The quantification of congestion-driven productivity and quality-of-life costs has also contributed to the growing political acceptability of transit as a viable alternative to the automobile in urban regions (Dachis, 2011; Transit Investment Strategy Advisory Panel, 2013; Urban Transportation Task Force, 2012).

Roschlau (2008) argues for the consideration of two other key issue-based drivers of the ascension of urban transit on the federal policy agenda at the turn of the century. First, growing awareness of climate change and the regulation of greenhouse-gas emissions culminated in the creation of the Transportation Climate Change Table, a working group assembled to inform Canada's ultimately-renege commitments to the Kyoto Protocol – this working group highlighted the importance of public transit as a key component of "any serious attempt to reduce emissions for the urban transport sector" (Roschlau, 2008, p.91). Secondly, a coalition of groups began to advocate for a tax exemption for employer-provided transit benefits – this effort catalyzed interest and debate among both social and environmental advocates. However, these factors and issues do not receive much attention elsewhere in the literature – as such, a more formal transitional boundary between these two eras was selected.

Among this plethora of motivating political factors, the infrastructure deficit (the difference between required infrastructure spending and available funds in the near term) is perhaps the defining issue of 21st century municipal politics, given its ability to unite the interests of civil society and all three

orders of government in Canada (Gill, 2011; Steinberg, 2013). Despite the initiatives and interests discussed in this section, this issue remained significant over the duration of this era. Indeed, transit's share of this deficit – and specifically infrastructure deemed by municipalities to be in “poor” to “very poor” condition – was estimated at \$9 billion in 2015 by the Canadian Infrastructure Report Card (2016) initiative (an independent auditing association of academics and municipal professionals attempting to quantify and approximate the scale of infrastructure deterioration in Canadian communities). This figure represents 17 percent of all public transit infrastructure in Canada (including vehicles, mobile technology, security systems, signalization equipment, and terminal facilities) (Canadian Infrastructure Report Card, 2016). The Canadian Urban Transit Association (2015c), meanwhile, estimates the total at \$18 billion – however, readers should note that this figure was released in advance of the 2015 federal election and is therefore likely to be an “upper-bound” estimate released for maximum political effect.

In light of this complex backdrop, the following section traces the evolution of the urban transit policy regime from the close of the second era and into this final period. As in previous sections, the specific agendas and interests of these actors are explored in depth.

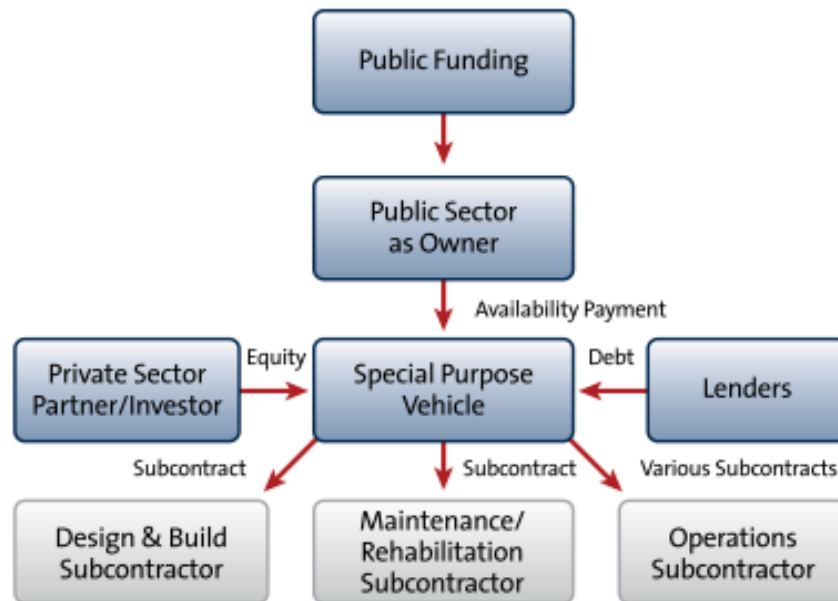
3.4.2 Third-era institutions and their interests

Local urban politics have been reinvigorated in the 21st century. Steinberg (2013) suggests that the urban advocacy of policy think-tanks in the late 1990s entered the mainstream of urban political discourse in the early 2000s, leading to the formation of “infrastructure coalitions” as the interests of local, provincial, and federal governments achieved alignment on the importance of city-building via “sustainable” initiatives (including transit projects and improvements). In tandem, a revival in the efficacy of grassroots urban politics has been witnessed (Tindal, 2013). By way of example, the aggregation of political support for a light-rail transit system in the Region of Waterloo was helped in large part by the support from local activists (Casello et al., 2015). Organizations such as the Mowat Centre, the Conference Board of Canada, and CUTA have also remained vocal in their advocacy for greater intergovernmental cooperation on transit financing (Canadian Urban Transit Association, 2010a, 2011c; Evans, 2007; Hjartarson, Szala, and Hinton, 2011). In contrast, however, Vancouver's failed transit plebiscite in 2015 (discussed in the following section) and recent political (even mayoral) resistance to transit initiatives in Toronto demonstrate that public opposition to transit projects persist (Johnson and Baluja, 2015; Sancton, 2015). As discussed in section 3.2.2, Walks (2015b) argues that

preferences for automobile-oriented policy can largely be explained by “the urban-suburban” divide in lifestyles and political ideology. In addition, Horak (2012a) argues that “local social” forces in opposition to transit investment are often marginalized in favour of the interests of the local business and political community in debates over transit infrastructure, given the capital-intensive and technical requirements of these projects.

Nonetheless, scholars suggest that municipalities and their pro-transit interests have regained some political traction in the federal arena in tandem with growing recognition of cities as the loci of national economic growth (Bunting and Filion, 2010). For instance, the Federation of Canadian Municipalities (and the Big City Mayors’ Caucus in particular) has been vocal in its advocacy for the achievement of a national transit strategy (see Section 1.2), and as alluded to in the previous section, played an important role in advocacy for an increased federal role that eventually culminated in the New Deal (Horak, 2012b). The role of the private sector has not abated either: in particular, the “design,-build-finance-operate- maintain” (DBFOM) model has been used widely in Canadian cities as a form of revised public-private partnership in which private operators assume responsibility for operational costs. In this model, tenders for the establishment of integrated services are sought in which project design, construction, maintenance, and long-term operation are the responsibility of the contractor (Canadian Council for Public-Private Partnerships, 2011). Examples in Canadian urban transit include “VIVA” BRT service in Mississauga and Toronto, as well as the Region of Waterloo’s ION LRT project. The DBFOM strategy serves to reduce the amount of risk and debt that need to be taken by public institutions in transit projects, and transfers significant operating costs to the private sector, offering municipal cost savings (Canadian Council for Public-Private Partnerships, 2011). **Figure 6** presents an overview of the project delivery and operational structure in DBFOM arrangements.

Figure 6: Design-build-finance-operate-maintain” (DBFOM) project structure (Canadian Council for Public-Private Partnerships, 2011).



Similarly, provinces introduced and revitalized a number of regional institutions for the delivery of transit services in the early 2000s. The form and specific functions of these agencies differ in many respects, but broadly, organizational goals aim to integrate and coordinate transit service delivery across municipal boundaries. Despite lingering issues regarding the efficacy of these organizations in achieving their integrative goals (Schabas, 2013), provincial interests have been largely cohesive on the subject of urban transit in recent years, and significant emphasis has been placed on the introduction of higher-order light-rail and bus-rapid transit systems, given the inability of conventional bus routes to compete with the automobile for mode share, particularly for commuters in mid-sized cities (Ruffilli, 2010).

While these organizations are similar in many respects, Canada is a nation of regional diversity, and the institutional arrangements for regional transit services are no exception. In Greater Vancouver, the South Coast of British Columbia Transportation Authority (more commonly known as TransLink) is a provincially-mandated, inter-municipal special-purpose body responsible for managing roadways and delivering transit services. 21 mayors and one First Nations’ chief elect an 11-member board of directors, which approves transportation plans, determines municipal funding, sets fare prices, and establishes borrowing limits. As such, it draws upon property taxes, parking fees, and gasoline taxes (a federal transfer) from member municipalities (Sancton, 2015). The organization has a “stormy”

relationship with municipal councils in Vancouver's metropolitan region, stemming largely from the lack of control over transit planning municipalities are afforded in this institutional structure (Sancton, 2015, p. 62). Its power is strong relative to other regional transportation bodies – however, its activities and ambitions remain severely curtailed by funding restraints. While the SkyTrain's Canada Line (approved in 2004 and completed in 2009) received dedicated funding from a number of public and private partners (Transport Canada, 2013), more recent long-term plans have faced opposition. For instance, a plebiscite in the summer of 2015 proposed a 0.5 percent sales tax to fund a \$7.5 billion transit plan in Greater Vancouver; however, the motion was not supported by 62 percent of citizen respondents and failed as a result (Johnson and Baluja, 2015).

In contrast, L'Agence métropolitaine de transport (AMT) – tasked with planning for public transit and delivering commuter rail services in Greater Montreal – can be classified as an intergovernmental special-purpose body (Sancton, 2015). Unlike Vancouver, the provincial government directly appoints four of seven board members, while the remaining representatives are city councilors from Montreal, Laval, and surrounding municipalities. However, it has no coordinative authority over roads and no operational control over transit (this is largely the purview of the Société de transport de Montréal [STM], Montréal's municipal transit authority).

Finally, in order to coordinate regional transit in the Greater Toronto and Hamilton Area (GTHA), the Greater Toronto Transportation Authority was created in 2006 and branded as Metrolinx in 2009. This organization has yet another different organizational structure – it is appropriately characterized as a local special-purpose body, but unlike Montreal, it features no formal municipal involvement (Sancton, 2015). As in Montreal, Metrolinx produces comprehensive transit plans for the GTHA (i.e. 2008's *The Big Move*) and provides regional commuter bus and rail services via the operation of GO Transit, but has no control over highways, road transportation, or municipal transit authorities – these are the responsibility of the Ministry of Transportation for Ontario (MTO) and municipalities (most notably the TTC). While municipalities helped subsidize GO services and sat on the board of directors in the organization's infancy, all 15 board members are now appointed by the province (and none are elected officials), representing an obvious attempt by provincial authorities to reduce the power of local councils to deal with the transportation dimensions of Toronto's significant urban issues (i.e. sprawl, congestion, etc.) (Sancton, 2015).

Beyond transit planning and delivery, provinces have also adopted policies for urban intensification across the country (Hamilton, 2013) and some (with municipal support) have begun to investigate innovative financing mechanisms for transit services, albeit with limited political and public acceptance in Toronto and Vancouver (Johnson and Baluja, 2015; Transit Investment Strategy Advisory Panel, 2013). Examples include Ontario's *Places to Grow Act* (2006), Vancouver's Regional Growth Management Strategy, and Edmonton's Regional Growth Management Plan (Sancton, 2015).

At the federal level, this era witnessed renewed investment and interest in municipal infrastructure was witnessed at levels unseen since MSUA's heyday. As mentioned briefly in section 3.3.1, Paul Martin's Liberal Party injected new political will into the national urban transit policy landscape. During his short tenure as Prime Minister (2003-2006), the federal government embraced tenets of "new localism" and acknowledged the inability of local and provincial governments to redress infrastructure deficits in the absence of renewed federal support (Bakvis et al., 2009), largely in response to coordinated municipal lobbying efforts given the reduction in provincial assistance to transit agencies for capital funding (Horak, 2012b). The Prime Minister's Caucus Task Force on Urban Issues was launched prior to Martin's election, signifying changing political foci in the Liberal Party; with new leadership, a new policy direction and programs under the umbrellas of the "New Deal for Canadian Municipalities" and the Ministry of State for Infrastructure and Communities (MSIC) emerged, applying an "urban lens" to federal activities (Shaker, 2005). Spicer (2010) argues that this incarnation of a federal urban role was more successful than MSUA due primarily to institutional "lessons-learned" regarding a heavy-handed and bi-lateral approach to engagement with cities – under MSIC's framework, provinces were treated more as equal partners than barriers (Spicer, 2010), a contextual approach to governance referred to as "deep federalism" (Bradford, 2007).

MSIC's key programmatic outputs for urban transit include the permanent implementation of the Gas Tax Fund, remitting \$2 billion of the federal gas tax to municipalities (by way of provinces) annually for "sustainable infrastructure projects" (including transit), as well as the Green Municipal Fund, a project endowed by the federal government annually and administered by the Federation of Canadian Municipalities (Roschlau, 2008). Transport Canada also introduced supporting initiatives for MSIC's mandate in the mid-2000s: the Moving on Sustainable Transportation (MOST) initiative and the Urban Transportation Showcase were both aimed at directing the impact of federal transit investments and increasing the attractiveness of transit to Canadian urbanites (Shaker, 2005). At the time, these

actions were significant and unprecedented in their longevity in the limited history of federal action on urban transit.

The election of Conservative Prime Minister Stephen Harper in 2006 ushered in a change of political course, and “deep federalism” gave way to a period “open federalism” in Canada, under which the federal executive vowed to retract their involvement in areas of provincial jurisdiction (Bradford, 2007; Savoie, 2010). In many policy areas, this was the case – however, the decade from 2006 to 2015 has, ironically, witnessed the greatest degree of direct federal involvement in urban transit funding in Canada’s history. While this may seem surprising given the ideological leanings of the Harper Conservatives, Steinberg (2013) suggests the sheer scale of the municipal infrastructure deficit and the increasingly-unified lobbying efforts were heavily involved in creating an atmosphere of “consensual politics” in the urban transit policy regime, in which pro-transit interests (largely local and municipal) became impossible for both provinces and federal actors to ignore. Further, Stoney and Graham (2009) suggest that “visibility” is another key driver of recent federal involvement – investing in transit (and other local infrastructure) has been recognized as a relatively simple means for the federal government to contribute to solving urban problems, while attaining political “credit” for public programming. MSIC was disbanded, although the House of Commons Standing Committee on Transport, Infrastructure and Communities (SCOTIC) was created in 2006 as an avenue through which to study “legislation, policies and programs, and other issues of national importance related to transportation, infrastructure and Canadian cities and communities as well as the operations of Transport Canada and Infrastructure Canada” (Tweed, 2012).

Table 11 outlines federal programs and investments undertaken in this period, demonstrating the existence of numerous instruments and mechanisms providing support and assistance to municipalities undertaking capital projects with federal funds over this period. The federal government also retains a modicum of coordinative responsibility (reminiscent of MSUA’s role in decades past): for instance, Transport Canada’s Transit Programs group manages contribution agreements for projects receiving capital support from these programs outlined in **Table 11** (Transport Canada, 2012). In addition, the Transportation Association of Canada’s Urban Transportation Committee has been heavily involved in conducting transit-related research on behalf of municipalities and provinces since the turn of the century, after a period of greater emphasis on roads and highways in the 1990s (Transportation Association of Canada, 1998). Note that the majority of these programs (with the exception of the Gas

Tax Fund) are contribution: programs, in which the other orders of government are required to provide matching financial contributions (Horak, 2012a).

Table 11: An overview of capital funding programs introduced by the Government of Canada in which urban transit was an eligible investment category, 2002-2015 (adapted from Canadian Urban Transit Association [2009, 2013a]; Federation of Canadian Municipalities [2015]; Infrastructure Canada [2014]; and Tweed [2012]).

Capital funding programs for urban transit introduced by the Government of Canada, 2002-2015				Example projects
Program	Years active	Specifications	Funding spent on transit	
Green Municipal Fund	2002-present (indefinite end date)	Endowed with \$550 million by federal government in 2002 Administered in partnership with the FCM	\$32.2 million (committed funding)	Kitchener, ON: Grand River Transit North Depot Expansion
Gas Tax Fund	2005-present	Transfers \$2 billion annually to municipalities; transit is an eligible investment category	\$1.8 billion (approximate committed funding)	Dartmouth, NS: Metro Transit Bridge Terminal (\$8.4 million in federal contributions)
Transit-Secure Program	2006-2009	Designed to provide on-vehicle and in-station security infrastructure for urban transit	\$80 million	Montreal QC: Surveillance technologies (\$1.68 million in federal contributions); Gatineau, QC: Communication equipment improvements (\$137,595 in federal contributions); Vancouver, BC: Access control measures (\$842,250 in federal contributions)
Public Transit Fund/Public Transit Capital Trust	2006-2010	Funding for capital projects (including rapid transit expansion/renewal, transit stations, rolling stock, etc.)	\$1.3 billion	Calgary, AB: Bus procurement, LRT network improvements
Building Canada Infrastructure	2007-2014	Funding used for up to 50% of eligible project costs for a provincial or a municipal project (although eligible costs are usually split 1/3	\$2.3 billion (approximate spending)	Greater Toronto Area, ON: GO Transit Network

Fund		among funding partners), and 25% for private sector projects. Transit is an eligible category under the Large Urban Centres, Major Infrastructure, and Provincial-Territorial Infrastructure components of the fund		Improvements (\$350 million in federal contributions)
Canada Strategic Infrastructure Fund		\$4.3 billion for large-scale infrastructure projects in support of sustaining economic growth and quality of life for Canadians. Federal government contributes a maximum of 50 percent of total eligible costs. Projects chosen according to regional/national infrastructure priorities (determined in consultation with provinces and territories)	\$600 million (approximate spending)	Toronto, ON: Union Station Signal Improvements (\$92 million in federal contributions); Mississauga, ON: BRT (\$83 million in federal contributions)
Infrastructure Stimulus Fund	2009-2010	\$4 billion allocated for community infrastructure improvements; for transit projects beginning in 2009 and 2010, up to ½ capital costs covered by the program	\$240 million	Toronto, ON: TTC network and facility improvements (approximately \$61 million in federal contributions)
P3 Canada Fund	2009-2014	Targets public-private-partnerships for infrastructure projects; transit as an eligible investment category. The amount of funding support, in combination with any other direct federal assistance, may not exceed 25% of the project's direct construction costs. The level, form and conditions of funding support vary depending on the needs of a given project.	\$175.3 million	Edmonton, AB: Southeast-to-West LRT line improvements (\$250 million in federal contributions)
Public Transit Infrastructure Fund	2016-2020 (indefinite end date)	Establishment of permanent fund for transit projects, reaching a peak of \$1 billion annually by fiscal year 2019-2020. Funding allocated to municipality in accordance with observed ridership figures	N/A (forthcoming) Incoming government pledges \$750 million for transit in 2015 and 2016, and \$1 billion annually beginning in 2019 (2016	N/A (forthcoming)

			federal budget)	
--	--	--	-----------------	--

Some criticisms of these programs exist in the literature. Horak (2012a) argues that the “vague and underspecified” policy goals of these programs allow them to act as discretionary funding sources, which may be used in “politically advantageous ways”, increasing their attractiveness to federal politicians. Criticisms of federal involvement in Vancouver’s Canada Line LRT project, for instance, focused on the role the availability of “unconditional” capital funds in subverting regional transit priorities (Hutton, 2012). Federal involvement was motivated by the “visibility” associated with improving transit prior to the 2010 Olympic Winter Games, and involved “no responsibility and limited risk” for Transport Canada, given that long-term costs were absorbed by regional (i.e. TransLink) and private interests. Hutton (2012) argues that the presence of federal funds convinced the provincial government (despite local support) to build the project in the absence of a selection process (i.e. selecting a partially-underground rail line over other alternatives or alignments). As discussed in the 1980s in the context of SkyTrain funding, federal support again constituted a “regional/industrial policy” given that conditions for support included contracts for eastern Canadian vehicle manufacturers (Hutton, 2012). Hutton (2012, p. 278) concludes that the “blended policy cultures of ‘big government’ and the private sector engaged in megaproject planning that failed to account for the interests of local constituencies.”

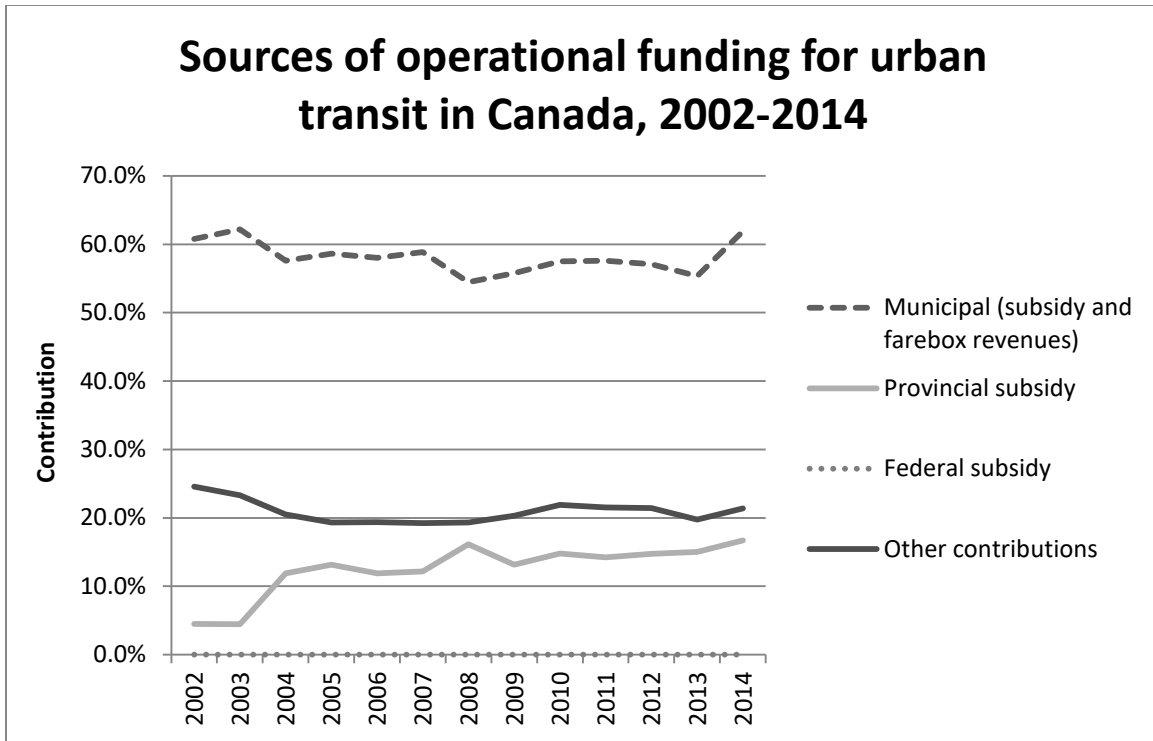
Overall, intergovernmental relations have ebbed and flowed over this era – while MSIC involved significant tri-lateral consultation, “open federalism” resulted in a significant disconnect between provinces and the federal government on a wide range of issues (Savoie, 2010). Nevertheless (and particularly in comparison to the second era), provinces have largely cooperated to advance transit goals. For instance, the Council of Canadian Ministers Responsible for Transportation and Highway Safety (CCMRTHS) – involving both federal and provincial membership – established the Urban Transit Task Force in 2002 to monitor developments in urban transit across the country (Urban Transportation Task Force, 2012), releasing reports in 2005, 2009, 2010, and 2012 outlining both transit needs and opportunities in urban centres across Canada (Urban Transportation Task Force, 2005, 2009, 2010, 2012). The chief concern of municipalities, provinces, and their transit providers revolves around the

short-term and unpredictable nature of recent federal involvement – there is concern that in the absence of legislation enshrining a “fiduciary role” for the federal government on the subject of transit (and cities more broadly), current sources of funding may be the victim of shifting political whims (Federation of Canadian Municipalities, 2007).

Similarly, a private-members’ bill introduced in the House of Commons in 2011 advocating for the creation of a national transit strategy – echoing many of the recommendations of the FCM and other organizations discussed in section 1.2 – led to SCOTIC’s involvement in the debate over the appropriate federal role in transit funding and planning. Over the latter years of this era, SCOTIC carried out a number of consultations with other orders of government and members of the urban transit policy regime on propriety and content of an optimal federal role. The Canadian Taxpayers Federation and the Amalgamated Transit Union joined CUTA and academics in testifying before SCOTIC and the Standing Committee on Finance on this subject between 2012 and 2015 (House of Commons of Canada, 2014; Miller, 2015; Tweed, 2012).

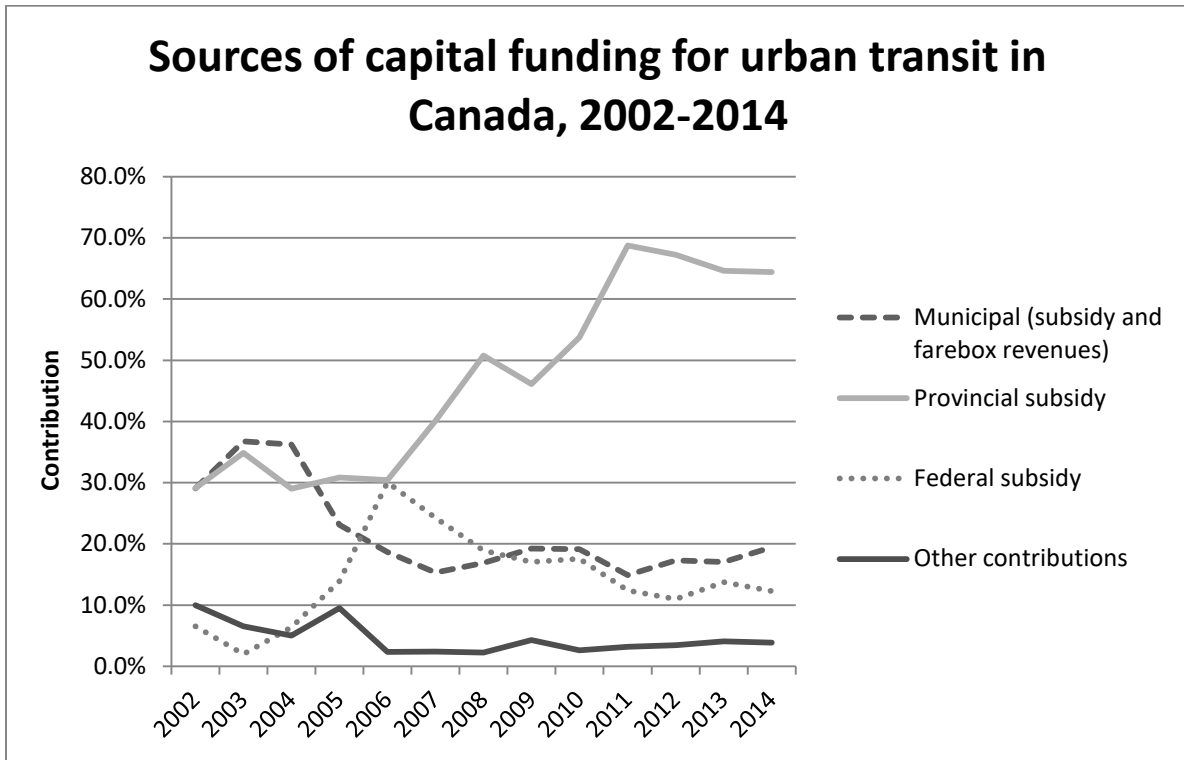
Figures 7 and 8 present sources of transit funding in Canada from 2002 to 2014 (data for 2015 were unavailable at the time of this writing). As discussed, the emergence of a significant federal role in capital funding represents the most drastic change from previous eras. However, despite the growing prominence of urban transit on the national agenda, Hjartarson et al. (2011) argue that the current structure of federal transit policy and support in Canada is patchwork (in that it is confusing for bureaucrats and politicians to navigate), inconsistent (in that annual funding is highly variable and unpredictable), and largely unstructured (in that operators are largely unaccountable to higher orders of government through performance requirements and other reporting measures). As such, civil society, municipalities, and provinces continue to lobby for a more consistent approach to transit policy and funding on the part of the federal government (Canadian Urban Transit Association, 2015d; Roschlau, 2008). Note that while **Figure 7** includes a line denoting federal operational support, this component is illustrative only of the fact that the federal government (as in other areas) did not contribute funding to this domain.

Figure 7: Sources of operational funding for urban transit in Canada, 2002-2015 (Canadian Urban Transit Association, 2011a, 2012, 2013b).⁸



⁸ Note that “for operating expenditures, ‘other’ contributions include local dedicated gasoline taxes, auto licence fees, and other miscellaneous sources”; “for capital expenditures, ‘other’ contributions include capital reserves, development charge funding and debenture, transportation development levies, and other miscellaneous sources” (Canadian Urban Transit Association, 2013b). All figures are exclusive of debt-servicing contributions.

Figure 8: Sources of capital funding for urban transit in Canada, 2002-2013 (Canadian Urban Transit Association, 2011a, 2012, 2013b).



In summary and as produced for previous eras, **Table 12** outlines Canada’s urban transit policy regime as it has evolved into the 21st century, summarizing the issues, institutions, and interests invoked in this final analytical period.

Table 12: Canada’s urban transportation policy regime, 2002-2015.

Issues affecting urban transit (cross-cutting)	Societal/governance level	Institutions involved in urban transportation policy-making	Interests specific to urban transit
<p>Municipal Infrastructure deficit (Shaker, 2005; Spicer, 2010)</p> <p>Urban congestion and consequent productivity losses (Dachis, 2011)</p> <p>Identification of social and economic ills associated with urban sprawl (Blais, 2010)</p> <p>Emergence of climate change (i.e. regulation of greenhouse-gas emissions) as a national policy imperative (National Round Table on the Environment and Economy, 2003; Roschlau, 2008)</p>	Urban civil society	<p>Urban policy community (e.g. Conference Board of Canada, Mowat Centre)</p> <p>Community transit advocacy groups - i.e. TriTAG (Region of Waterloo, ON), Better Transit and Transportation Coalition (Vancouver, BC), Toronto Environmental Alliance (Toronto, ON)</p>	<p>Advancing transit as a solution to social, environmental, and economic issues associated with urban sprawl and degraded infrastructure (Gill, 2011; Hjartarson et al., 2011)</p> <p>Advancing political support for public and active transportation policy and investment in Canadian cities; enhancing urban livability (Casello et al., 2015)</p>
	Municipal government	<p>Transit authorities under the purview of regional municipalities</p> <p>Federation of Canadian Municipalities - Big City Mayors’ Caucus</p>	<p>Containing sprawl (reducing infrastructure servicing costs), natural capital protection, economic development (Hamilton, 2013)</p> <p>Developing and advocating for the adoption of a national transit strategy containing stable, long-term funding sources (Federation of Canadian Municipalities, 2007)</p>
	Provincial government	<p>Regional transportation bodies (AMT, TransLink, Metrolinx)</p> <p>Provincial transportation departments (e.g. Ministry of Transportation Ontario)</p>	<p>Reducing congestion and productivity loss (Transit Investment Strategy Advisory Panel, 2013); reducing infrastructure deficit</p>
	Federal government	<p>Prime Minister’s Caucus Task Force on Urban Transportation; Ministry of State for Infrastructure and Communities (2004-2006)</p>	<p>“Introduc[ing] a new strategy for a safe, efficient and environmentally responsible transportation system [to]... reduce congestion” (Prime Minister’s Caucus Task Force on Urban Issues, 2002)</p>
		<p>House of Commons Standing Committee on Transport, Infrastructure and Communities</p>	<p>“Study legislation, policies and programs, and other issues of national importance related to transportation, infrastructure and Canadian cities and communities as well as the operations of Transport Canada and Infrastructure Canada” (Tweed, 2012)</p>

Issues affecting urban transit (cross-cutting)	Societal/governance level	Institutions involved in urban transportation policy-making	Interests specific to urban transit
	Intergovernmental organizations	Ministry of Infrastructure and Communities; Transport Canada; Infrastructure Canada <ul style="list-style-type: none"> - Gas Tax Fund - Green Municipal Fund - Building Canada Fund - Infrastructure Stimulus Fund - Canada Strategic Infrastructure Fund - Public Transit Fund 	See text for individual program details; aim is to maintain federal influence over urban affairs while minimizing jurisdictional conflict via contribution-based capital funding programs (Spicer, 2010; Steinberg, 2013)
		Transport Canada <ul style="list-style-type: none"> - Urban Transportation Showcase Program - Transit Infrastructure Programs 	Manages contribution agreements for transit projects receiving funding under federal capital infrastructure programs (Transport Canada, 2012)
		Council of Ministers Responsible for Transportation - Urban Transit Task Force	Determining transit investment priorities for provinces and municipalities (Transport Canada, 2002; Urban Transportation Task Force, 2009)
		House of Commons Standing Committee on Transportation, Infrastructure and Communities	Consulting with provinces, municipalities, private sector, unions, etc. on an appropriate
	Private sector/ unions/ miscellaneous	Canadian Urban Transit Association (representing public and private operators)	Advocating for the adoption of a national transit strategy, drawing on elements of existing policy structures in peer nations (Canadian Urban Transit Association, 2010b, 2011b)
		Association for Commuter Transportation in Canada	Increasing public emphasis on transportation demand-management policies by provinces and municipalities (Association for Commuter Transportation of Canada, 2015)
Canadian Taxpayers Federation		Opposition to federal involvement and investment in provincial issues and transit specifically	

3.5 Summary: The evolving federal role in urban transit

This chapter has demonstrated that the role of the federal government in Canada's urban transit policy regime has undergone a process of dynamic evolution over the past 47 years. From the late 1970s until the turn of the century, the federal government's approach to and involvement in transit funding and policy-making has waxed and waned in concert with provincial disengagement and the role of transit as a policy tool to placate or address the needs of constituents at the urban level. Recent developments and increasing financial support from Canada's highest order of government suggest that a more stable role for federal agents in the urban transit policy regime may yet emerge; nonetheless, significant funding gaps persist, and institutional structures remain largely *ad hoc*. This chapter has hinted at some of the policy ideas underlying the decisions made by various orders of government on the subject of transit investment and support – however, it remains to be seen if documentation produced by federal actors over time corroborates, contradicts, or adds new elements to this discussion. As such, the policy ideas invoked by the federal government are explored in significant detail through the use of substantive evidence from 60 policy documents via directed content analysis in the following chapter (and methodologically depicted in Chapter 2).

This represents the analytical crux of this thesis, explicating the paradigms, programs, political frames, and public sentiments that have employed by the federal bureaucracy and political executive in support of policy decisions vis-à-vis urban transit. The goal is to better understand how policy-makers have leveraged the issues, interests, and ideas of other orders of government and relevant institutions to produce the urban transit policy regime described in this chapter via the addition of policy ideas. These four components complete the full theoretical scope of policy regime conceptualization (Jochim and May, 2010). Following this analysis, the specific modes of policy change characterizing the historical junctures between the first and second era and the second and third era are classified, drawing upon Howlett and Cashore's (2009) framework for policy change (Chapter 5).

Chapter 4: Content Analysis of Federal Urban Transit Policy Ideas in Canada

4.1 Introduction to the content analysis

This chapter provides the results of the content analysis of federally-produced urban transit documents. As discussed in Chapters 1 and 2, the objective is to characterize the policy ideas espoused by the Government of Canada and its representatives over three time periods (the urban histories and scholarship of which were the subject of Chapter 3). These ideas – the motivations for political action, the characterisations of problems they aim to solve, and the broad (or narrow) interests they aim to serve – are often silent participants in the public discourse around a policy issue. However, as Béland (2005, p. 2) suggests, a “lack of theoretical interest in the role of ideas is problematic because paying equal attention to ideas and institutions is necessary for the analysis of policy change.” Conceptualizations of urban transit issues, substantive proposals for action, benefits and costs for members of society, and the values of other members of the urban transit policy regime as they have been articulated by federal actors (including politicians, bureaucrats, commissioned researchers, and stakeholders throughout the policy regime) from 1972⁹ to the present are relayed in this chapter. These ideas reflect the “organized principles and causal beliefs” (Béland, 2005) in which the federal decision-making discussed in the previous chapter is embedded. Some of these ideas emerged internally from the experiences of Canadian society, while others have been adopted (or adapted) in recognition of analogous experiences in other jurisdictions.

As discussed previously, urban issues rose on the federal government’s agenda (and the improvement urban transit infrastructure and services emerged as an explicit policy goal) as early as the 1960s (Perl and Kenworthy, 2010). However, tangible and sustained intervention – in terms of both fiscal support and involvement in policy-making beyond a four-year political cycle – waned in the 1980s, and was not witnessed or formalized again until the early 2000s (Canadian Urban Transit Association, 2010a; Roschlau, 2008). This chapter is concerned with discerning the ways in which urban transit issues and solutions were characterized at and leading up to these historical junctures. Utilizing the framework for classifying policy ideas developed by Campbell (1998) and introduced in Chapter 2, this chapter outlines the findings of the content analysis and characterizes policy ideas – including paradigms,

⁹ Note that while the first era of analysis formally begins in 1968 for the purposes of the literature review, the first document identified in this era was published in 1972.

programs, frames, and public sentiments – in the three historical periods introduced in Chapter 3. In Chapter 5, these results are compared and integrated with the review of literature in order to characterize instances of federal urban transit policy change in Canada in accordance with Howlett and Cashore's (2009) framework.

Before the results of the analysis are presented, some caveats to the interpretation of qualitative data (coded in **Appendices C and D**) ought to be discussed. First: in some cases, it is not useful (or even possible) to discuss policy ideas specific to transit in isolation from other modes and broader urban phenomena. As such, urban transit problems and policy alternatives are referenced in relation to a number of other transportation, land-use, and social issues throughout this chapter. For instance, discussions of transit policy ideas often arose in the sample in the context of or in conjunction with urban road and rail policies (e.g. HOV/HOT lanes, tolls, parking strategies, railway repurposing, etc.), fuel taxes and regulations, as well as the broader fiscal climates in which governments operate. As such, there are many instances throughout this chapter in which the implications for transit of a particular passage are implicit rather than stated outright.

A second series of considerations relate to the first iteration of coding (or the “thematic” coding process). While the sample’s 60 documents contain a number of redundant descriptions of issues and proposals, repetitive coding within the same document – and to some extent, among similar documents within the same era – was generally avoided (i.e. redundant nodes for similar programs in different jurisdictions, repetitive definitions of urban problems or policy positions, etc. were not coded). As a result, urban transit was mentioned more frequently than the 670 discrete passages logged in NVivo (and presented in **Figures 9-21**), as only *unique* instances were coded. Also note that codes include *representations* of programs and policies from other orders of government – the focus in this chapter is on how the programs, paradigms, frames, and sentiments espoused by other orders of government have been portrayed by agents and contractors of the federal government, rather than assessing the degree to which motivations of municipal, provincial, and private actors are accurately presented. For instance, “programs” codes do not refer exclusively to policy directions and concrete initiatives implemented by the federal government; rather, the policy alternatives debated over the course of a

policy-making cycle are more pertinent considerations for this research, regardless of whether or not these proposals were adopted.¹⁰

Efforts were also made to code each document as systematically and objectively as possible (see section 2.5 for a more detailed discussion of how sources of bias were accounted for in the research design and execution). Further considerations made during the thematic and open coding processes are briefly described in the following sections; following these discussions, sections 4.4-4.6 present the analytical results from the confluence of thematic and open coding procedures, relaying specific findings in each era. Broader key findings and policy recommendations for improving federal transit involvement are presented in Chapters 5 and 6 respectively.

4.2 Overview of thematic coding

As described in Section 2.3, the thematic coding process involved an intensive “close reading” of all 60 documents included in the sample. This analysis – guided to a limited degree by word- and phrase-frequency queries in NVivo 11 in order to identify relevant sections, particularly in longer documents – resulted in the identification of 670 passages suitable for coding (meeting the definitions of Campbell's (1998) four categories of policy ideas). The 20 first-era documents (those written from 1968-1979) produced 187 codes; the 20 second-era (1980-2001) documents contained 272; and third-era (2002-2015) documents yielded 215. **Figure 9** provides an overview and thematic breakdown of these codes.

¹⁰ This is also relevant for the public sentiments nodes – for the purposes of this analysis, the definition of “public” includes the views, values and preferences of other members of Canada’s urban transit policy regime (e.g. municipal and provincial governments, civil society, etc.).

Figure 9: Overview and topical breakdown of thematic codes (compiled prior to the commencement of open coding).

Nodes			
Name	Sources	References	
1st Era (1968-1979)		20	187
1st Era Frames		11	33
1st Era Paradigms		17	56
1st Era Programs		18	82
1st Era Public Sentiments		6	16
2nd Era (1980-2001)		20	268
2nd Era Frames		16	52
2nd Era Paradigms		18	84
2nd Era Programs		19	97
2nd Era Public Sentiments		10	35
3rd Era (2002-2015)		20	215
3rd Era Frames		15	52
3rd Era Paradigms		17	58
3rd Era Public Sentiments		10	45
3rd Era Programs		19	60

The three eras yielded different numbers of relevant codes – the first and second eras (187 and 268 respectively) in particular. There are two plausible explanations for this disparity. Primarily, first-era documents tended to focus on broad urban issues, as federal agencies in general (and MSUA in particular) grappled with how best to conceptualize and address interrelated transportation, housing, and public health problems. As such, they contained fewer transit-specific or -related passages than those in subsequent eras. Sample documents also became longer in the second era – the page-length of first-era documents averaged 28.3, compared to 55.1 pages for the second era and 46.4 for the third. In short, the latter two eras contained a higher volume of “potential data” than in earlier years. Perhaps it is unsurprising, then, that the distribution of codes mirrors the average length of each sample section.

The thematic coding process also produced higher volume of programmatic and paradigmatic ideas as compared to frames and public sentiments – the three programs nodes totaled 239 codes; paradigms yielded 198; frames accounted for 137; while public sentiments totaled only 96. It is difficult to say concretely why the latter two coding categories (described by Campbell [1998] as “normative”

categories of policy ideas) were so prevalent, but an intuitive hypothesis can be proffered. Policy proposals and research reports, by definition, outline issues at hand and propose relevant solutions (Hammond and Wellington, 2013); indeed, most of the documents in the sample espouse a specific policy direction (i.e. a partnership, action, or project – representing a “program”) in relation to a substantive problem (i.e. congestion, environmental degradation – an aspect of the contemporary “paradigm”). The distribution of codes in the content analysis supports this theory, as paradigmatic and programmatic codes were identified in nearly all documents: programs were coded in an average of 18.7 documents per era, compared to 17.7 for paradigms, 14 for framing statements, and 8.7 for public sentiments. This means that over the course of this research, framing statements – passages containing explicit normative (such as “the Government should...” or “the Ministry ought to...”) or value-laden (e.g. “unless these negative trends are addressed...”, “... the efficient movement of people is crucial for greenhouse-gas reduction”, etc.) language – were less common than those articulating the state of urban transit in Canadian cities in a “taken-for-granted” (i.e. paradigmatic) sense. The articulation of stakeholder positions (i.e. public sentiments) was even less common – however, passages describing the results of consultations and hearings became increasingly frequent as years progressed, with the third era’s 45 public sentiments codes eclipsing the second era’s (35) significantly and the first era’s (16) by a wide margin.

4.3 Overview of open coding

In comparison to the thematic coding process, open coding was undertaken with relatively little theoretical guidance. Rather, Bowen (2009) suggests these codes ought to emerge “organically” in relation to the topics present in the sample in order to reduce the influence of preconceived notions. As such, open coding was highly iterative – while the process is described in detail in Chapter 2, it bears review before the results are presented in the following sections. The first step was an “open” reading of each of the 12 sets of thematic codes, during which “memos” (or detailed notes) were made regarding themes (or content) in the subsets of data. These “open” themes were then translated into tentative sets of grandchild nodes in NVivo 11. Sets of thematic codes were then reviewed again, and each code (assigned a “coding key” in Appendix C) was placed in the grandchild node representing its content most closely. Similar categories (or grandchildren) were then condensed, amalgamated under revised titles, or discarded until the researcher was satisfied that all themes were accurately

represented under each parent node. Despite this paring-down of categories, there were some instances in which codes could, arguably, relate to more than one open coding category: in these cases, the *most appropriate* of grandchild node was chosen at the researcher's discretion.

In sum, 90 grandchild nodes were identified; on average, each thematic parent contains 7.5 grandchild categories (90/12), and grandchildren average 7.4 thematic references per node (670/90). The largest of these grandchildren features 26 references (2nd Era Programs, "Transit governance and programming"), while the smallest categories contain only two (on nine occasions). Throughout sections 4.4-4.6, the grandchild categories of each of the 12 temporal-ideational divisions are presented and discussed in detail. Note that in this chapter, while efforts have been made to capture the spirit of all categories and codes, not all 670 open codes are explicitly cited due to space constraints.

4.4 Policy ideas, 1968-1979

As discussed in section 3.4, this era was characterized by considerable federal "experimentation" in the realm of urban affairs and, to a limited degree, urban transit (Oberlander and Fallick, 1987). The creation of the Ministry of State for Urban Affairs (MSUA) led to the extension of federal programming into the traditional policy-making territory of provinces and municipalities – largely, this was in response to the rise of grassroots politics and the decreasing ability of municipal service-providers to cover the capital and operational costs of suburbanization (Spicer, 2011). Some tangible initiatives emerged, but much of the academic and grey literature reviewed in Chapter 3 contained mainly indirect references to federal attitudes toward urban transit. As such, determining the specific ideas invoked in support of transit-related policy by federal actors in this era required careful analysis of policy documents. Sections 4.4.1-4.4.4 present content-analytical results for each of the four categories of ideas: paradigms, programs, frames, and public sentiments.

4.4.1 First-era paradigms

Paradigmatic ideas, to reiterate, refer to "assumptions constraining the cognitive range of useful solutions available to policymakers" (Campbell, 1998, p. 385). This thematic category deals with how problems are defined, cause-and-effect relationships, and rationales for action as articulated in federal policy documents. **Figure 10** presents the list of eight open codes contained in the "1st Era Paradigms" thematic node.

Figure 10: Open codes for the “1st Era Paradigms” thematic node.¹¹

1st Era Paradigms	17	56
Federal impacts on cities	5	9
Inadequacy of transit services	3	9
Interdependence of urban issues	2	3
Jurisdictional tensions	5	7
Postwar suburban sprawl	6	9
Recognition of automobile externalities	5	9
Transit investment rationales	5	7
Urban decay	3	3

Federal impacts on cities comprise one of four grandchild themes that garnered nine codes. This category refers to rationales for federal involvement in municipal affairs related to the Government’s physical urban footprint and the urban impacts of its programming. For instance, MSUA policy researchers Sunga and Duc (1975) suggested that MSUA’s creation was spurred by “the realization that the federal government is itself a major actor in urban Canada, affecting developments in urban areas to a far greater extent than previously supposed” (1Paradigms19) as well as “the recognition that the urban implications of current federal activities needed to be understood more precisely” (1Paradigms20). These realizations caused MSUA to evaluate the congruency of its programs with “local urban transportation objectives” (1Paradigms32-33), and to assess the feasibility of subsidizing municipal services, including transit (i.e. Frankena 1979; 1Paradigms45). Other codes cited federal responsibilities for vehicle standards and the social consequences of this regulation in cities (i.e. air pollution) as reasons for an active interest in urban transportation (1Paradigms18).

Excerpts (i.e. 1Paradigms51 and 53) from the short-lived Urban Transit Research Board (UTRB) suggest that bureaucrats were aware that the impact of the organization’s transit programming – confined primarily to one-off R&D projects – on urban Canada in the 1970s was limited. Indeed, in its final review of activities, it is suggested that “[t]he problems of urban transportation are not unique to any one country ... Unlike Canada, however, most other countries have a centralized responsibility for urban transportation R&D and it is difficult for Canada to participate in these studies” (1Paradigms55).

¹¹ Note that in **Figures 10-21**, the leftmost column displays the title of the open coding category; the middle column displays the number of documents (out of a maximum of 20) in which the category was identified; and the rightmost column denotes the number of thematic codes assigned to the open coding category. The headings in NVivo 11 were omitted to preserve the conciseness of each figure.

In short, there was optimism in the early 1970s about MSUA's ability to influence urban transit policy; by the end of the decade, however, federal agents had less confidence in their effectiveness. UTRB researchers reflected on their institutional impact by arguing that the institutions impacts on cities were limited by conflicting priorities:

"A research group working as part of the federal government and housed within a line department necessarily has mixed allegiance. On the one hand, the allegiance is to the broad Canadian community. The acknowledgement of that responsibility leads to the conduct of projects which may or may not have any interest or relevance to the parent department. In fact, in some instances the research results produced may be critical of line policies or programs and may be directly embarrassing to the line department" (Urban Transportation Research Branch, 1979; 1Paradigms53).

Postwar suburban sprawl was also cited as a motivator of federal action, referring to the expansion and migration of Canada's urban population into exurban areas in the decades following World War II. Codes in this category involve federal recognition of the long-term fiscal implications of sprawl (1Paradigms36-38), reduced social access to employment and activities (1Paradigms50), and declining transit use in some cities (1Paradigms42). Sprawling development was also referenced implicitly in MSUA's 1977-1978 Annual Report in relation to the "efficiency" of population distribution across the country:

"Each parcel of land needs access, needs links to other parcels, if it is to function in its intended way. The pattern of transport demand is thus directly tied to the pattern of settlement, both nationally and within cities or regions. Some patterns are more efficient than others, in terms of the monetary and other resources consumed and in terms of the benefits yielded" (Ministry of State for Urban Affairs, 1978; 1Paradigms34).

Urban decay policy ideas were also articulated as federal-urban policy catalysts, in which overcrowding in Canada's three major cities were linked to deteriorating public services in the 1950s and 1960s (1Paradigms21, 25). C. Beaumont Lewis (1972) – Director of Planning and Development at the Ministry of Transport's Transportation Development Agency – also suggested that "the root causes of our present and imminent vehicle traffic problems are the growth of human and automobile populations and the almost complete lack of any planned development of our cities in the interest of the people who ... live and work in them" (1Paradigms3). Similarly, the *Inadequacy of transit services* node focuses on the transit-specific impacts of these urban trends. MSUA researchers argued that growing transit operating deficits and plummeting ridership in the late 1960s could be explained not only by

suburban expansion, but also by rising fare prices relative to automobile costs prior to the energy crises of the mid-1970s (1Paradigms41, 43); income growth and the inferiority of transit services to cars in comfort and travel times (1Paradigms40); and a general lack of integration among modes (1Paradigms8). Frankena's (1979) results suggested that subsidies were as much a problem as solution in this context, arguing that servicing low-demand suburban areas did little to improve user experiences (1Paradigms56). A lack of academic interest in transit is also espoused by the UTRB as a reason for the general decline in the extent and quality of transit research and innovation in Canada throughout this era (1Paradigms52).

The *Recognition of automobile externalities* was another major paradigmatic theme driving federal interest in cities, related closely to both sprawl and declining urban quality. Costs imposed by automobiles described in the sample include social isolation (1Paradigms1), traffic congestion, pollution, noise (1Paradigms4 and 77), wasted fuel, and automobile accidents (1Paradigms22). Note that few attempts in this era were made to quantify these costs – Lewis (1972) admitted that the absence of evaluative methodologies of this nature was a hindrance to effective transportation policy-making (1Paradigms6). Frankena (1979) also suggested that road-building to reduce congestion – a common assumption of studies conducted throughout the 1960s – had not proven an effective policy approach (1Paradigms47-48). Barney Danson, Minister of State for Urban Affairs from 1974-1976, provided the following rationale for the involvement of the federal government in urban affairs stemming from automobile externalities:

“We seem to accept the fact that our roads and highways which concern us so much are part of the general revenues. We don't seem to do cost-benefit analyses on these; in this country at least we accept them as part of our taxes or our budgets. But as soon as we talk about public transportation, we immediately start counting the cost. And so far, I've been unable to find a proper economic analysis which will compare those two, compare the losses along those roads, the amount it costs us to drive our cars and amortize those cars and the gasoline to use them, not to mention the wear and tear on our nerves and the additional health cost, which is probably hard to quantify” (Danson, 1975; 1Paradigms16).

In many instances, documents suggested that the *Interdependence of urban issues* (i.e. linkages between housing and transportation inadequacies; 1Paradigms12) necessitated a “synoptic” approach to both urban planning and federal involvement (1Paradigms11; discussed in more detail in section 4.4.2). Duc (1975) argued that the federal government was well-equipped to take a holistic approach

due to “an increasing consciousness” in the federal bureaucracy “of the urban impacts of their actions” (1Paradigms17). Despite the acknowledgement of these urban problems, however, federal agents were also aware of discomfort surrounding the *Jurisdictional tensions* of the era, both between federal and provincial governments and within the federal bureaucracy (as alluded to by the UTRB previously in relation to *Federal Impacts on cities*). While hopes were high for MSUA’s inter- and intra-governmental mechanisms (i.e. tri-level conferences and project agreements) in 1972 and 1973 (1Paradigms10 and 13), they were characterized as largely ineffective by the end of the era (1Paradigms54). However – and despite the provincial resistance to federal encroachment described by Oberlander and Fallick (1987) and Spicer (2011) in Chapter 3 – constitutional respect pervaded the language used by federal agents throughout the era. For instance, Minister Danson stated the following in a 1975 address:

“In my view ... the management of our urban regions and their future shape and form is most appropriately dealt with at the provincial and local level. There are obvious constitutional reasons for this. There are other reasons as well. If we want to preserve and enhance the diversity of our communities and the life-styles that they offer, this choice should reflect the differences in the social fabric and cultural attitudes of a Montreal as compared with a Vancouver, or a St. John's as compared with a Regina” (Danson, 1975a; 1Paradigms26).

Given this perspective and the eventual shuttering of MSUA and the UTRB by 1979, it can be deduced that while federal actors were aware of the consequences of sprawl and automobile-oriented transportation policy, the political structures and attitudes of the era were not conducive to a federal leadership role in the urban transit policy regime at this juncture. However, this is not to say that the federal government made no transit-specific efforts in this era – these are the subject of the following section.

4.4.2 First-era programs

Now that rationales for federal involvement in urban transit have been established, the degree to which programming involved and affected transit can be assessed. As per Campbell (1998), this category of ideas involves “policy prescriptions that help policy-makers to chart a clear and specific course of policy action” (p. 385), and includes tangible proposals and plans, project feasibility and research studies, funding programs, etc. **Figure 11** presents a breakdown of transit-specific and -related programmatic ideas identified in this era.

Figure 11: Open codes for the “1st Era Programs” thematic node.

1st Era Programs	18	82
Capital funding initiatives	3	6
Enhancing redistributive benefits	3	8
Federal R&D involvement	5	13
Improving multimodal efficiency	5	9
Interdepartmental and intergovernmental coordination and influence	10	24
Modernizing transit	4	16
Program effectiveness	1	4
Synoptic approach	1	2

The most populated node in this category deals with *Interdepartmental and intergovernmental coordination and influence* – an understandable result given MSUA’s mandate and the overwhelming proportion of documents from this era produced by the Ministry of State or at its behest. The Senior Interdepartmental Committee on Urban Affairs (SIDCUA), the primary mechanism for disseminating MSUA’s policy ideas (Oberlander and Fallick, 1987), was mentioned on numerous occasions in relation to the articulation of programmatic objectives to federal line departments and other orders of government (e.g. 1Programs12 and 27). Proposals for coordination included relationship-building initiatives with local planning authorities (1Programs33) and transit-specific research and development work for provinces, some of which was transit-specific (i.e. the New Brunswick Six-City Transit Study; 1Programs70). Also prominent in this category were tri-level committees and conferences, the first of which assessed the broad requirements of Canada’s municipal governments, while the second involved federal assistance in the preparation of regional multi-modal transportation plans (1Programs11). Ad-hoc regional programming was also undertaken by SIDCUA throughout the era with the involvement of provincial and municipal authorities to varying degrees (i.e. in coordinating the provision of funds for urban revitalization efforts in Halifax and Winnipeg; 1Programs14, 73).

Capital funding initiatives of this era were limited, but included the coordination of transfers through the Ministries of Transport and Public Works, most notably the Urban Transportation Assistance Program (UTAP; introduced in discussed in depth in sections 3.2 and 3.3). While this program was announced in 1975 and enacted in 1978, its implementation horizon extended into the second analytical era (demonstrating the difficulty of establishing effective boundaries for the assessment of policy ideas). Managing urban growth and congestion were cited as political motivators for its adoption – only

commuter services were eligible for investment, although the program involved cost-sharing (1Programs36). Federal funding commitments were substantial – up to 75 percent of total project costs for new systems in grants and 25 percent in loans (although these figures were lower for projects already under construction) (1Programs37). The *Railway Relocation and Crossing Act* (and its association with UTAP) was another programmatic means by which funds were provided directly to cities to “fund and support the planning and implementation of railway relocation and rail traffic rerouting proposed by provinces and municipalities so that expanded rapid transit facilities, housing, recreation facilities, among other projects, can go forward” ((Ministry of State for Urban Affairs, 1975b; 1Programs41).

Federal programming was also concerned with *Enhancing redistributive benefits* via transit improvements, specifically by launching demonstration projects in Canadian cities (i.e. Vancouver) for the separate transit needs of elderly and disabled populations (1Programs 15-20), and producing positional research espousing the geographically-limited benefits of rail transit investments over buses (1Programs60). Programs bent on *Improving multimodal efficiency* also represent attempts to redress urban problems identified in the previous section – these include indirect means to investigate more efficient transit planning practices via the creation of the Urban Service Systems Group under UTRB’s organizational umbrella (1Programs30), as well as proposals directed at municipalities to reduce transit fares, increase parking charges, and levy congestion charges in concert (1Programs45-46, 59, 65, 80, 82). However, methods of implementation for these programmatic ideas were largely absent from the sample.

Federal R&D involvement and *Modernizing transit* also refer to indirect programmatic ideas to enhance federal influence over transit in this era. Federal R&D efforts were largely undertaken by the UTRB or funded and carried out via Ontario’s Urban Transit Development Corporation (UTDC), involving technological development for transit vehicles, guidelines for transit-supportive subdivision design, development of transportation behaviour-modeling, and cost-benefit analyses of transit vs. highway investment (1Programs47-51). Modernization policy ideas suggested the implementation of express bus routes and demand-responsive services (1Programs2); the development of futuristic rail-based “capsules” throughout cities for joint passenger and goods movement (1Programs4); the integration of modes and installation of automated transit payment systems (1Programs56); and the improvement of transit’s operational or efficiency, rather than focusing on increasing capital-intensive investment (i.e. service efficiency) (1Programs67).

As mentioned in section 4.4.1 in reference to the interrelated nature of urban issues, the *Synoptic approach* to planning and programming was in full effect in this era.¹² MSUA's research and coordinative capacities were described as all-encompassing in terms of the urban issues it aimed to address; there was also explicit consideration for research to identify effective programming at the "intersection of citizen participation and transportation" (1Programs10). This approach is embodied in the following passage, in which the process by which MSUA's research program was formulated in 1973 is described:

"The research program must represent the elements that are salient in the urban life of Canada. To emphasize a few, for example, housing, transportation or welfare to the exclusion of others, would impair the capacity for a synoptic view of urban problems and lead to distortions in policy advice. There is an obligation to move on a broad front" (Gertler, 1973; 1Programs9).

Despite the breadth and diversity of ideas reviewed in this section, the UTRB offered reflections on *Program effectiveness*, illustrating awareness of the shortcomings of the federal government's programmatic approach in this era. It was suggested that criticisms of "meddling" in provincial affairs be resolved in future federal programs by extending the horizons over which research is planned (1Programs78), and in summary of its own research efforts suggested that:

"UTRB, if viewed as an experiment, has been successful and has demonstrated that the federal government does have a role in urban transportation research, particularly in the areas of information dissemination and high risk R&D. Trying to perform such roles as part of the line administrations, however, was found impractical. Should the federal government re-enter this field in the future. It is recommended that responsibility for urban transportation research be placed with an independent body where the resources of the federal and provincial governments and industry can be pooled and an ideal research environment can be fostered " (Urban Transportation Research Branch, 1979; 1Programs79).

4.4.3 First-era frames

In contrast to paradigms and programs, frames refer to "symbols and concepts that help policy-makers to legitimize policy solutions to the public" (Campbell, 1998, p. 385). These include the values and arguments used by politicians and bureaucrats to influence the sentiments of stakeholders, highlighting both tangible and intangible benefits in order to validate (or "sell") a given course of action. Coding for

¹² This refers to the analytical process popular in postwar public administration, in which goals are specified, policy alternatives are identified, and all possible consequences are then evaluated (and considered "knowable") (Meyerson and Banfield, 1955).

framing statements primarily involved the identification of normative or value-laden language, as discussed in section 2.4. **Figure 12** presents the seven categories of frames identified in first-era documents.

Figure 12: Open codes for the “1st Era Frames” thematic node.

1st Era Frames	11	33
Automobile primacy	2	4
Benefits of federal-urban involvement	6	6
Benefits of improved intergovernmental coordination	4	5
Social justice through transit	3	3
The need to improve ineffective transit services	3	8
Transportation as a key component of Canadian identity	1	2
Worsening urban conditions	4	5

The *Benefits of federal-urban involvement* were a key theme among this era’s frame codes. Lewis (1972) suggested that the federal government could offer municipalities “well-digested” research and assess transit development opportunities against needs and resources (1Frames8). A stronger federal role was also linked to the enhancement of “cheap and efficient public transit within cities” via its involvement in railway and airport locations (1Frames16). Although specifics are vague, the programs by which this influence was exercised aimed to “promote the clarity, comprehensiveness, economy and foresight” of federal decision-making in the complex and contested urban policy arena (1Frames12). The certainty of these benefits was tempered in some codes, given that “the modalities of municipal cooperation are a matter for each provincial government to determine” (Ministry of State for Urban Affairs, 1976; 1Frames10).

Similarly, codes outlining the *Benefits of improved intergovernmental coordination* espoused the importance of viable working relationships among the three orders of government for the achievement of effective federal urban policy (1Frames11). The transit-enhancing benefits of municipal and federal cooperation on railway relocation are also mentioned in relation to UTAP (1Frames17), while other passages touted the potential for tri-level coordination of land-use and transportation planning to lessen environmental impacts, shrink urban footprints, and reduce energy consumption (1Frames20). Other benefits include reduced strain on municipal (and provincial) staff and budgets by allowing the federal government to conduct research and influence transportation priorities (1Frames30-31).

Improvements to infrastructure and policy were justified by framing *Transportation as a key component of the Canadian identity*, suggesting that Canadians have a moral imperative to improve the efficiency of passenger and goods movement through urban centres in order to safeguard “national wealth” by “modifying” automobile use (1Frames7). The absence of national transportation goals is framed as an obstacle to this end (1Frames2). *Automobile primacy* is also framed as a fundamental value of the 1960s and 1970s, despite its economic (1Frames28) and social costs (i.e. congestion, pollution; 1Frames32). However, Lewis (1972) suggests that the car ought to be viewed as a complement to transit, rather than its enemy:

“I believe that there is no way in North America that we will be able to banish the private car from our cities, and, indeed, most of us would hate to see it abolished unless completely satisfactory alternatives were available. Thus, we must attempt to achieve an optimal mix of private and public transportation and make the car a better ‘citizen’ of the urban environment. In doing this, we may well have to develop some new forms of ‘semi-private’ transportation” (Lewis, 1972; 1Frames3).

The need to improve ineffective transit services was the most frequent framing code in this thematic category – agents suggest that while service deficiencies have long been apparent, “the average citizen has seen nothing approaching a solution ... as he waits thirty or more minutes for a bus that is supposed to run every ten minutes” (1Frames1). Federal representatives also suggested that “conventional” approaches of the era to improving services were flawed, arguing that the benefits of buses outweighed those associated with rail investment for municipalities and users (1Frames24-25); espousing wariness regarding the potential of technology alone to resolve transit issues (1Frames27); and the need to levy “fair” user fees for all modes (i.e. road tolls) (1Frames6). The UTRB also suggested that new funding mechanisms were required to meet this need, implying that municipalities require incentives from higher orders of government (1Frames33).

Federal agents also argued for the need to enhance *Social justice through transit*. These statements framed the construction of radial expressways (1Frames23) and the selection of peripheral affordable housing locations (1Frames21) as exclusionary to select social groups and income brackets. For instance, MSUA’s 1975 annual report posited that:

“In many cities ... movement depends heavily on the private automobile, with the resulting traffic-clogged streets and fume-laden air. At the same time, non-drivers – the poor, the handicapped, the very old and the young – are denied cheap and efficient transportation. Governments recognize that they will have to lend substantial assistance to make public transportation systems as convenient, comfortable, and efficient as the

private car” (Ministry of State for Urban Affairs, 1975, 1Frames13)

Worsening urban conditions represents the framing counterpart to the *Urban decay* paradigmatic node, involving emotive language about “withering” urban areas in response to mismatched growth and decline throughout Canada’s urban landscape (1Frames14). The municipal “fiscal squeeze” was also represented as responsible for imposing environmental and social costs on Canadian cities (1Frames9), as well as responsible for “immense” and “unmanageable” impacts (1Frames14, 18). Danson (1975a) suggests that the types of communities Canadians wanted were jeopardized in the 1970s by the absence of a federal role in urban affairs in the context of rapid urbanization and growth (1Frames15).

4.4.4 First-era public sentiments

Public sentiments refer to “public assumptions constrain[ing] the normative range of useful solutions available to policy-makers” (Campbell, 1998, p. 385). In the context of this research, this category primarily relays the diversity of viewpoints held or demands made – perceived or otherwise – by stakeholders in the urban transit policy regime (primarily other orders of government and civil society). **Figure 13** presents the four categories of public sentiments identified in this era – note that this thematic category was by far the most limited of the 12 thematic parents.

Figure 13: Open codes for the “1st Era Public Sentiments” thematic node.

●	1st Era Public Sentiments	6	16
●	Demand for suburban living and automobility	2	3
●	Demand for transit and planning reform	2	3
●	Opposition to sprawl and automobility	4	8
●	Public influence on federal decision-making	2	2

Demand for suburban living and automobility refers to public values tied directly to the *Postwar suburban sprawl* paradigm and the *Automobile primacy* frame node. Principally, these codes refer to households and citizens valuing “space over accessibility” (1PublicSentiments7), but who also “find it difficult to give up the private automobile in favour of mass transit” – even during energy crises (1PublicSentiments8). As such, some segments of society (i.e. suburban homeowners) were characterized as likely to switch modes only if the comfort and convenience of transit “exceeds that of car travel” (1PublicSentiments10).

On the other end of the political spectrum, sentiments in *Opposition to sprawl and automobility* were also present in this thematic node, referring mainly to the civil-society groups instrumental in preventing urban freeway construction (as discussed in section 3.2.1; 1PublicSentiments1, 3). Anti-sprawl positions included advocacy for and willingness to accept congestion charges and other forms of user-pays tax policies for transportation, which were largely deemed politically unpalatable in light of global energy shortages in this era (1PublicSentiments11, 13, 16). Opponents of sprawl were also paraphrased by Danson (1975a):

“There appears to be fairly general agreement that the trends [towards sprawl and population concentration in three major cities] are unacceptable ... The residents of two of our three largest centres, Vancouver and my own City of Toronto, are showing signs of resisting rapid, uncontrolled growth. So are the residents of other communities. These people are telling us that they would be happy to see more of the future growth spread around to other regions” (Danson, 1975a; 1PublicSentiments6).

A closely related node involves *Demand for transit and planning reform*. These sentiments include pressure for governments to increase the quality, convenience, and speed of services (1PublicSentiments2, 4), as well as greater public participation in transit and transportation decision-making at all levels of government (although particularly in municipal planning) (1PublicSentiments14).

In general, assessing *Public influence on federal decision-making* was difficult in this era – very few instances of public views were espoused in the documents, and those sentiments that were articulated were largely portrayed as unitary in nature. The urban demands of the Canadian public in the 1970s were discerned via “opinion polls, through Members of Parliament, the press and other communication media and through the various community and interest groups” (Sunga and Duc, 1975; 1PublicSentiments5). As the era came to an end, mounting public pressure to reduce federal spending was cited as a chief impetus for the removal of MSUA and the UTRB from the policy regime by the end of the 1970s (1PublicSentiments15).

4.5 Policy ideas, 1980-2001

As discussed in Chapter 3, the second era of analysis featured a withdrawal of federal agents and efforts from urban affairs in general, and the urban transit policy regime specifically, in line with public-sector trends toward downloading, privatization, and the “New Public Management” more broadly. This section attempts to discern how these trends were manifested in the substance and character of federal

policy ideas regarding urban transit in Canada in the policy and research produced by federal agencies in this era. Sections 4.5.1-4.5.4 present content-analytical results for each of the four categories of ideas: paradigms, programs, frames, and public sentiments.

4.5.1 Second-era paradigms

In this era, the paradigmatic views of the federal government on urban issues shifted significantly – no longer was intervention in cities championed by politicians as an appropriate response, and different actors within the policy regime gained prominence. The paradigmatic codes identified in the document sample reflect these changes. **Figure 14** presents the distribution of codes over the 10 open-coded categories for this thematic node.

Figure 14: Open codes for the “2nd Era Paradigms” thematic node.

2nd Era Paradigms	18	84
Budget constraints	5	6
Continuing suburban hegemony	5	10
Declining importance and quality of transit	6	10
Energy shortage and related effects	5	5
Federal R&D trends	1	4
Institutional inertia and barriers to transit improvement	8	19
New Public Management imperatives	7	10
Public-private cooperation	4	6
Resilience of Canadian transit systems	2	3
Sustainable development imperatives	6	11

The shift towards fiscal conservatism in this era (discussed in Chapter 3) is represented in a number of paradigmatic policy ideas in the sample. *Budget constraints* refer to the interrelated effects of global recession and the burgeoning neoliberal administrative paradigm that pervaded national politics in Canada (and most of the Western world) throughout the 1980s and 1990s. Devolution of expenditure responsibilities was especially prevalent in the 1990s – as the Transportation Association of Canada (1997) suggests, “local governments have less money available for transportation, and ... more road and transit responsibilities assigned by the province ... New construction is being delayed and cancelled, and transit budgets are being reduced” (2Paradigms61). The end of federal support for transit subsidies with UTAP’s expiry in 1984 are rationalized as a movement in concert with declining provincial

transit subsidies (2Paradigms69, 79). However, decreasing federal transfers to provinces were also acknowledged as a driver of transit budget constraints throughout the 1980s and 1990s (2Paradigms65). When the Canadian Infrastructure Works Program (CIWP; see section 3.3.2) came into effect in 1997, further provincial spending reductions via the “substitution” of provincial funds with CIWP funding for transit capital projects were described by the Auditor General (2Paradigms66). At the end of the era, jurisdictional overlap and funding differences in priorities among all three levels of government were acknowledged as key issues in Canadian urban transit by Transport Canada (2Paradigms72).

As discussed in Chapter 3, *New Public Management (NPM) Imperatives* refer to the bureaucratic ideas guiding the “business-like” approach to “alternative service delivery” that rose to public-sector prominence in the 1980s (Savoie, 2010). Codes from the 1980s emphasize the need for less regulation; greater reliance on competition; and for the federal government to “facilitate and encourage, rather than obstruct and intervene” in the Canadian transportation sector (2Paradigms14-15). Divestiture of federally-owned transportation infrastructure was another theme that emerged from transportation documents from this era (2Paradigms41), as was the need for less regulation and costs for Canadian transit manufacturers (2Paradigms20). In this context, the Ministry of Transport’s (renamed Transport Canada in this era) role evolved from an operator to regulator, with a reduced role in urban policy-making (2Paradigms84). While these codes illustrate the federal approach to transportation *du jour*, the *Canadian Transportation Act* Review Panel (CTARP; established to review the legislation guiding federal transportation interests and initiatives at the turn of the century) suggested that transit’s status in the context of deregulation was exceptional:

“Transit has become an anomaly in transport policy. Governments at all levels have generally sought to liberalize entry to transport markets, reduce price regulation, and inject a measure of enterprise in publicly owned carriers and infrastructure, yet urban transit is still delivered almost exclusively by municipal agencies. Further, while governments have tried in other transport modes, and in other fields, to make users responsible for the cost of services, urban transit is still funded mainly through direct subsidies” (Flemming, Patenaude, Findlay, Rae, and Waters II, 2001; 2Paradigms76).

Despite the apparent implications of this statement, the CTARP did not view transit subsidies as economically-inefficient. A cost-benefit analysis – a measure to determine investment efficiency and therefore an offshoot of the NPM paradigm – of urban transit in Canada conducted as part of the review process suggested that net benefits (in avoided social costs) of transit subsidies approached \$6 billion annually (2Paradigms80). The CTARP also justified transit subsidies on the grounds that car use is under-

priced in relation to its environmental costs (2Paradigms75). In short, NPM policy ideas did not preclude the federal government from supporting transit services in this era, given urban transit's contribution to national interests; however, via downloading and subsidiarity, the rejection of federal support for transit was both the *de facto* and *de jure* reality.

In a related vein, the trend toward *Public-private cooperation* also represents an extension of NPM into the realm of transit. The relationship between transit-vehicle manufacturers (i.e. Bombardier, New Flyer, etc.) and the federal government was a major focus early in the era, as the "critical role" played by manufacturers in both national and regional economies was widely espoused (2Paradigms7, 9). In 1981, Minister of Trade, Industry and Commerce Herb Gray drew a link between the concerted public-private efforts (from all three orders of government) in this field and the relative "health" of urban transit in Canada as compared to the United States (2Paradigms1, 3). Surprisingly, there was little federal acknowledgement of the role of the private sector in another branch of private-sector cooperation – the delivery of transit projects – in this era's codes (although Siemiatycki [2011] suggests that public-private partnerships [PPPs] were used in the delivery of transit projects in Vancouver, Toronto, and Montreal in the 2000s). The CTARP provided the following summative commentary on private involvement in the Canadian transit industry at the end of the second era:

"Urban transit, including buses and rail transit, is still supplied mainly by government rather than the private sector. Rail transit is generally government-owned and heavily subsidized. The latter reflects both a social policy of providing transportation for those not able to drive and recognition that reducing traffic congestion benefits motorists and reduces the need for new road investment. Commercial motivation has almost no role in the provision of urban transportation. There is a wide gap between the cost of providing urban transportation — whether by car or by transit — and the price paid by users. In addition, the signals conveyed to road users are distorted because of their failure to convey the high social costs of increasing automobile use in urban regions" (Flemming et al., 2001; 2Paradigms74).

There is an argument to be made that *Energy shortage and related effects* influenced transit-supportive policy-making early in this era (as discussed in section 3.3). Despite the fact that major energy crises occurred throughout the 1970s, concerns remained in the national psyche in the early 1980s, voiced by federal agents in the context of oil prices and the concomitant need to reduce auto use and increase the proportion of trips taken by transit (2Paradigms2, 6). By 1985, however, representatives of the Mulroney Government, in the context of the *National Transportation Act* update process, provided a causal link between higher energy prices and lower transportation productivity,

necessitating reduced regulation and taxation, albeit primarily for freight movement (2Paradigms18). In the 1990s, the locus of energy and fuel concerns shifted from import prices to the recognition of peak oil and dwindling global supplies (2Paradigms27, 44).

However, rising global oil prices in the mid-1980s accelerated development in oil-rich Western Canada, and some codes suggest that this contributed, ironically, to the *Resilience of Canadian transit systems* in the 1980s, particularly in Edmonton and Calgary. The Department of External Affairs External Information Program Division (1981) argued that light-rail systems constructed in the 1980s (with municipal planning and provincial funding) in Edmonton and Calgary were immediately successful given their ability to keep these “booming” cities moving (2Paradigms5). Well-planned bus systems in Ottawa and Vancouver were also lauded for their ability to facilitate strong ridership despite the decreasing costs of auto use in the late 1980s (2Paradigms8).

On the other hand, later documents suggest that despite these isolated “success” cases, federal agencies were aware of the *Declining importance and quality of transit* as the era progressed. The preamble to the *National Transportation Act 1985* acknowledges that fewer Canadians travelled by bus and train both between and within cities in the 1980s than in the 1970s (2Paradigms16-17), and the Canada Mortgage and Housing Corporation (CMHC) referred to a “planning paralysis” that characterized the urban transit policy regime from the mid-1980s to mid-1990s (2Paradigms25). Blame for this complacency is laid at the feet of municipal planners unsure of the worthiness of transit investment in decreasingly-dense communities (2Paradigms35), although Environment Canada (1994) suggests that the withdrawal of provincial operating subsidies also contributed to a general decline in transit quality in Canadian cities (2Paradigms38). As energy prices dropped through the late 1980s and 1990s, public investments in roads and consumer investments in larger vehicles are also cited as reasons for low ridership (2Paradigms40, 54) and the declining productivity of Canada’s urban transit agencies (2Paradigms77-78).

This situation is also related to the *Continuing suburban hegemony* of the era, characterized by the CMHC as the result of excessive parking requirements for new developments and insufficient consideration of transit in municipal strategic and land-use planning (2Paradigms29). Also, Canadians’ cultural affinity for large lots and automobiles did not taper off in the 1980s (2Paradigms51). The National Round Table on the Environment and the Economy (1996) (NRTEE) suggested that “government policies at all levels, combined with market forces” (i.e. inexpensive peripheral land,

incentivizing homeowners and businesses to migrate) encouraged investment in roads and air transport at the expense of urban transit and passenger rail ridership (2Paradigms52). The Transportation Association of Canada (TAC) argued that financing issues faced by municipalities and transit agencies in the 1980s and 1990s stemmed directly from sprawling development that was expensive to service, as well as over-reliance on “consolidated and general revenues” for transit provision (2Paradigms59).

Codes demonstrating *Institutional inertia and barriers to transit improvements* were also identified in the sample. The CMHC blamed the “multiplicity of jurisdictions” with interests in cities, making unilateral interest in transit improvement difficult to implement and ineffective (2Paradigms24). TAC also argued that a lack of involvement of transit planners in municipal development approval processes, as well as the absence of a long-term vision for sustainable transportation shared by all governments in Canada, were major barriers to the coordination of efforts in the 1990s (2Paradigms47). In 2001, TAC also suggested in 2001 that provincial and municipal governments tended to prioritize debt financing and tax reductions over transit upgrades in the 1980s and 1990s (2Paradigms73). A lack of municipal power over revenue generation for transit (2Paradigms71); the availability of federal subsidies in the 1980s, encouraging capital-intensive, politically-motivated projects over “lower visibility” operational investments (2Paradigms81); and a lack of full-cost accounting for transportation use (2Paradigms56); are also cited as systemic barriers to transit improvement throughout the sample. The NRTEE summarized jurisdictional barriers as such:

“There is a general lack of integrated decision making about transportation issues among all levels of governments. Economics still drives most transportation decisions of the federal government. There is limited consideration of policies and programs designed to produce combined economic, environmental and social benefits, and so far little sense of urgency about sustainable development (including transportation) evident in the government’s policies and programs” (National Round Table on the Environment and the Economy, 1996, 2Paradigms50)

Federal R&D trends discussed in this era did not differ substantially from those presented in section 4.4.1, although these codes emphasized technological improvement (i.e. computer applications) over other research areas (i.e. efficiency improvements, planning innovations, etc.) (2Paradigms10). In 1985, the Transportation Development Corporation (the renamed successor of the first-era Transportation Development Agency operating under the purview of Transport Canada and carrying out much of the federal transit-related research in this era) reported a “lack of R&D funds, lack of time and staff, a lack of up-to-date information, and a lack of clear R&D policies” (2Paradigms11). There was also

a sense that very little consideration was made for national or regional perspectives in project selection (i.e. those “local” in nature were more likely to be carried out) (2Paradigms12). The TDC also suggested that there was “consensus” in the policy regime that transit R&D was unsatisfactory in the early 1980s both fiscally and in terms of content, a situation the agency argued could have been improved via the integration of local transit agencies and CUTA in project selection (2Paradigms13). There were no mentions of the state of transit R&D through the 1990s in the sample.

Perhaps the most substantial departure in the discourse from the previous era was the emergence of *Sustainable development imperatives* following the Brundtland Report and the rise of “global” environmental consciousness in the late 1980s and early 1990s. These principles involve intertwined economic, social, and environmental ideas, and transit improvements were cited as a link to the development of a more sustainable Canadian transportation network as early as 1993 (2Paradigms23). In laying out its national vision for urban transportation in 1997 and sustainable transportation financing in 1998, TAC suggested that automobility and sprawl were actively detracting from the achievement of sustainability in terms of environmental quality (2Paradigms60) and fiscal stability (2Paradigms64), a sentiment echoed by the CTARP in 2001 (2Paradigms83). Transit’s ability to reduce carbon emissions (2Paradigms39, 43) and improve economic performance (i.e. by reducing congestion) (2Paradigms45, 55) were both cited on numerous occasions as potential motivators of transportation policy reform in Canada during the second era.

4.5.2 Second-era programs

Programmatic ideas identified in this analytical era align closely with the transit-related paradigmatic ideas introduced in the previous section. **Figure 15** presents the distribution of nine open codes within this thematic node.

Figure 15: Open codes for the “2nd Era Programs” thematic node.

2nd Era Programs	19	97
Addressing the transit funding shortfall	2	4
Evaluations of federal support	1	4
New Public Management programming	8	17
R&D support programs	4	6
Recommendations for federal involvement	6	15
Shifting focus away from capital investment	3	6
Support for domestic transit manufacturers	3	7
Sustainable development programming	5	12
Transit governance and programming recommendations	11	26

Unsurprisingly, *New Public Management programming* was a heavily-represented category of programmatic ideas in this era, involving proposals related to the reduction of regulation and the scope of federal intervention. The federal government changed a number of regulations for private carriers in the mid-1980s – while not directly relevant to urban transit, the revamped *National Transportation Act* reduced duties and restrictions imposed on shippers (2Programs20). Program review was also a large component of the federal approach to transportation in the 1980s, in keeping with NPM principles (2Programs19, 21). This type of “performance monitoring” permeated federal transportation policy-making in the 1990s as well. For instance, Transport Canada and Environment Canada introduced similar sets of strategic objectives specifically aimed at determining the degree of “sustainability” in the Canadian transportation system, emphasizing the importance of reduced greenhouse-gas emissions as policy goal, and monitoring progress via a number of transportation indicators (i.e. higher transit mode share) (2Programs43). As in the previous era, there was significant support in commissioned research (e.g. recommendations from TAC and NRTEE) for the adoption of user-pays programming (i.e. HOV lanes, congestion charges) at the local level to reduce reliance on general tax revenues and produce more efficient and environmentally-benign transportation outcomes by accounting for externalities (2Programs28, 86) – however, these ideas were more prevalent in the sample during the 1990s than in the 1980s.

The *Sustainable development programming* node contains similar ideas, but more specifically includes programs referencing the need for more compact, energy-efficient, transit-oriented communities, typically aimed at other orders of government (i.e. 2Programs36-38). In order to increase ridership and reduce automobile impacts, the CMHC identified the need for increased operational

transit funding (via the dedication of parking and gasoline taxes, transfers from capital programs, etc.), although it also acknowledged that these programs were not being widely pursued at any level of government in the early 1990s (2Programs34-35). The NRTEE and TAC also equated the reduction of emissions and the improvement of land-use and transit integration with broad economic gains, as well as improvements to the fiscal health of the Canadian transit industry (2Programs81-84). The Government of Canada's Action Plan 2000 on Climate Change and its component Urban Transportation Showcase Program was listed as a means by which to demonstrate and promote investment in transit – however, it is noted that “any objection by a provincial government to a municipal submission for funding is enough to render that application ineligible” (IBI Group and Soberman, 2001; 2Programs85). Stemming from these initiatives, Transport Canada's “Green Commute” program was a “demand management” measure instituted for employees in the National Capital Region (i.e. Ottawa and Gatineau) to compel federal public servants to take active or public transit to work or telecommute via education and awareness-raising about the environmental impacts of transportation choices (a strategy mirroring those undertaken by other Canadian employers in the 1990s) (2Programs97).

Echoing the preceding discussion of paradigms and Hutton's (2012) arguments about the federal “regional industrial” project presented in Chapter 3, federal *Support for domestic transit manufacturers* was another emergent coding trend in the early 1980s. For instance, \$500,000 was spent the Department of Industry, Trade and Commerce in 1981 to lease space for Canadian manufacturers at the International Public Transit Expo '81 in Chicago (2Programs4). In preparation for the Transpo '86 World Fair (held in Vancouver), the federal government invested \$60 million (of UTAP funds) in Vancouver's adapted LRT system (now known as the SkyTrain), in order to demonstrate the quality of Canadian transit manufacturers to potential buyers from the global community (2Programs1, 8, 12). The success of Canadian transit technologies in Detroit and Portland are also described (2Programs2-3). The reduction of trade barriers was also a programmatic goal explicitly linked to the promotion of Canada's transit manufacturing industry (2Programs5).

Closely related is the *R&D support programs* node, describing research projects prioritized in this era. R&D carried out by the federal government (specifically by the TDC) in the 1980s focused on the development of intermediate-capacity transit options (2Programs6) – however, the majority of Canadian transit R&D in this era were carried out by the UTDC and provincial governments: in 1983, the TDC estimated that only 21 percent of Canadian transit R&D was being undertaken with federal funds,

with the majority being undertaken by provinces (2Programs13-14). These programs primarily focused on computer applications for improving transit efficiency (2Programs9-11). Again, it is unclear from the sample how these trends evolved over the 1990s.

Consistent with this era's focus on program review, *Evaluations of federal support* in the urban transit policy regime were provided in the context of the CIWP by the Office of the Auditor General of Canada (1999), in which transit was an eligible (though little-used) investment category. This program involved bilateral agreements with provinces, in which municipalities submitted funding proposals to provinces, who then forwarded applications to federal agents (2Programs73). However, concerns were raised that this capital support program possessed "little accountability" to taxpayers (2Programs72) in that CIWP projects were approved by both provincial and federal actors with little quantitative or economic justification (2Programs75). Politicization in the project selection process by federal agents was considered by the Auditor General, though it was not deemed an issue in the CIWP given that there was no federal involvement in project nomination. However, concerns were expressed that this lack of oversight resulted in the selection of "sub-optimal" projects (in relation to other, more crucial network components) by provincial and municipal agents with "parochial" or limited interests relating to their political constituencies (2Programs74).

Recommendations for federal involvement in urban transit in this period were significantly different in the context of the NPM administrative paradigm than in the era previous; however, sporadic proposals were made throughout the era. In the 1990s, the Royal Commission on National Passenger Transportation suggested that the federal government take an active role in research and financing for a possible high-speed rail link between Quebec City and Windsor, opening the door for linkages to urban transit systems in cities along the corridor (2Programs23). However, this recommendation was conditional on avoiding the need for public operating subsidies and studies guaranteeing reductions in the need for highway and airport investments. In the mid-1990s (and in the run-up to Canada's involvement in the Kyoto Accord in 1997), the NRTEE recommended the development of a sustainable transportation strategy in concert with provinces, focusing primarily on the development of an international negotiating strategy for greenhouse-gas reduction as well as integrated, intergovernmental support for transit (2Programs51). While emissions-reduction programs were proposed and implemented (i.e. as described in the *Sustainable development programming* node), concrete financial support for transit was generally dismissed as an inappropriate federal mechanism for

jurisdictional reasons (2Programs45). Components of these regulations included a lead role for the Minister of Transport in awareness-raising efforts (2Programs55), and the use of a “common language” by all levels of government around the need for sustainable transportation measures (2Programs56).

The situation evolved somewhat as the turn of the century neared. For instance, TAC presented a vision for urban transit financing in Canada in 1998, promoting dedicated revenue streams, transparency in funding allocation, simplicity in program design, and the use of measurable performance indicators and user-pays principles (2Programs59, 64). The CTARP also supported federal involvement in urban transit given the financing challenges faced by municipalities and transit agencies had emerged by the year 2000. Specifically, CTARP supported the conversion of underused rail rights-of-way to rapid transit corridors (2Programs95), and in regard to funding programs stated the following:

“The Panel does not believe it is necessary or appropriate for the federal government, or governments of the provinces and territories, to specify what measures should be adopted in order to qualify for funding. Instead the Panel suggests that agencies simply be given performance-based incentives ... The Panel recommends that payments to transit authorities be made on the basis of their actual performance in inducing shifts from private automobile use to transit. The Panel suggests a payment per trip, based on mode shift from car (with verification from ridership counts and periodic surveys of new riders to determine alternative modes)” (Flemming et al., 2001; 2Programs94).

Beyond discussions of the federal role, a number of documents also make explicit *Transit governance and programming recommendations* aimed at other members of the policy regime. The “centralizing” (i.e. anti-sprawl) effects of transit projects in Edmonton, Calgary, Montreal, and Vancouver were cited by the Department of International Trade and Commerce in 1981 as exemplars for other Canadian cities (2Programs9), while the Department of External Affairs (1981) suggested that investing in transit capital projects could produce municipal cost savings on road-building and emergency services (2Programs7). In the context of developing a national strategy for sustainable transportation, the NRTEE encouraged municipalities to set targets and reduce emissions via the creation of transit-oriented communities (2Programs57); integrate transit and land-use planning processes at the regional level (echoing the MacPherson recommendations from the early 1960s) (2Programs26, 47, 81); and consistently apply environmental impact assessment and ecosystem-based planning criteria across provinces (2Programs29-30). The NRTEE also suggested harmonizing tax policies for fuel and employer-provided transit benefits across jurisdictions (2Programs46, 52). TAC echoed recommendations pertaining to modal integration, decreasing car use, and the creation of dedicated

transit revenues (2Programs65-67, 69-70), and made unique recommendations regarding institutional arrangements:

“Several changes to current institutional arrangements and practices may be required to develop and implement the new vision: Most municipal departments are structured on vertical lines (planning, transportation, transit, sewer, water, etc.). New methods for horizontal communications may be needed. Where more than one municipality or more than one level of government has jurisdiction in an urban area, a mechanism will be needed to coordinate and integrate their efforts across the region, at least for planning purposes. Public education will be a major key to success. Without it political leaders will not have the mandate to move in the right direction. This can be a very time consuming and expensive exercise, but it is necessary. Checks must be built into the decision making process, to ensure that day-to-day decisions are compatible with the vision and its principles” (Transportation Association of Canada, 1998; 2Programs71).

The Council of Ministers Responsible for Transportation and Highway Safety (CCMRTHS) is named by the CTARP as a critical institution in harmonizing the implementation of transit-supportive policies of this nature at the end of the second era (2Programs96). (Indeed, the CCMRTHS assumed a much more prominent role in the policy regime in the following analytical period.) In relation to funding provisions specifically, the Auditor General’s CIWP review suggested that federal transit funding ought to be carefully considered, in that they may incentivize provinces to reduce their own spending – in other words, the availability of federal support meant that provinces tended to shift spending to the federal envelope rather than supplement their existing spending (2Programs76), although the degree to which transit was affected by this phenomenon is unclear from the report (Office of the Auditor General of Canada, 1999).

Throughout this era, some codes note that *Addressing the transit funding shortfall* remained a programmatic imperative, linked to the escalating costs of service provision in relation to sprawling communities (2Programs77), despite decreasing service hours and increased fares in many systems (which helped to stabilize revenue losses) (2Programs78-79). A House of Commons debate in 2000 discussed the transit-supportive capital funding programs proposed by the federal Liberals at the turn of the century (implemented in the third era) (2Programs80); however, the means by which federal actors suggested the fiscal health of Canada’s transit systems be improved demonstrated a *Shifting focus away from capital investment*, particularly in the era’s early years. In the late 1980s, many transit projects across the country were cut as municipal budgets “froze”, including construction delays in Edmonton’s

LRT and Montreal’s commuter rail system and a busway cancellation in Winnipeg (2Programs27). The situation was summarized in a research paper commissioned by the CMHC as such:

“As effort focused away from major transportation infrastructure projects, more attention was paid to alternative methods of reducing congestion and petroleum consumption, and making more efficient use of existing infrastructure. All levels of government sponsored efforts in the fields of alternative transportation fuels, demand management techniques (e.g. ridesharing and alternative work hours) and traffic system management techniques such as improved arterial and traffic signal control systems and freeway traffic management systems. Since the major driving force behind such efforts was concerns about petroleum dependency, political and general support for these measures tended to ebb and flow with the energy crises. However, the measures provided enough potential and actual benefits in terms of infrastructure efficiency and reduced congestion and emissions to maintain a steady level of support from all government levels” (IBI Group, 1993, 2Programs25).

In the 1990s, TAC suggested that improving the efficiency of existing systems was a more pressing policy goal than capital expansion in a difficult fiscal climate (2Programs68), while the CTARP noted that transit was underemphasized in the CIWP (2Programs88) and provincial capital subsidy programs were largely discontinued in this decade as a result of downloading policies (2Programs89). These trends are borne out in capital funding data presented in **Figure 4** (section 3.3.1).

4.5.3 Second-era frames

Framing statements in the second era related closely to the political climate of austerity and subsidiarity, and private-sector support explored in the previous paradigmatic and programmatic sections. **Figure 16** shows the distribution of framing references for this era over seven open codes.

Figure 16: Open codes for the “2nd Era Frames” thematic node.

● 2nd Era Frames		16	52
● Canadian political culture and urban traditions		4	7
● Environmental, economic, and social benefits of transit		6	11
● Expertise of Canadian transit industry		1	2
● Externalities of sprawl and automobility as motivators of action		6	9
● Importance of New Public Management policy goals		5	12
● Impropriety of national transit policy		3	3
● Transit problem definitions and remedies		6	8

In framing issues and policy solutions to transit problems, a number of appeals were made to *Canadian political culture and urban traditions*. Specifically, these included unlimited personal mobility; automobiles as status symbols; large lots, suburban homes, and opposition to high-density infill development (often in the name of environmental protection); and expectations for access to public transit services, even in low-density suburbs (2Frames21, 27). The NRTEE suggested these entrenched values were problematic, requiring that Canadians change transportation decision-making habits, reframing expectations from “mobility” to “accessibility” in order to avoid significant health consequences from pollution and chronic illness related to sedentary lifestyles (2Frames22, 29). Similarly, Canada’s export-driven economy and high standards of living were also framed as contributors to the nation’s tolerance for distance and driving, to the inevitable detriment of both the environment and economy (2Frames26). The economic competitiveness of Canada’s cities and mid-sized communities – framed as expressions of this Canadian identity – were considered by the NRTEE to be at risk in the context of congestion and sprawl (2Frames40, 47).

Despite the national-scale costs espoused by some federal agencies in this period (i.e. NRTEE, TAC), some codes explicitly and implicitly stated the general *Impropriety of national transit policy*. One statement by a researcher from the Library of Parliament suggested that “[c]learly, the question is whether, in a large and diverse country with strong regional differences and interests, it is possible or indeed necessary to have a national transportation policy” (Christopher, 1992; 2Frames12). Even TAC, in outlining its “vision” for urban transportation in Canada, suggested that given the need for leadership in transit, it is “logical that municipal elected officials do so” (2Frames33). Similarly, the “design of the [CIWP] recognizes that ... provinces and municipalities are responsible for investments in local infrastructure. At the provincial and municipal levels, there is extensive experience in planning, financing and implementing such investments” (2Frames35). In general and prior to the CTARP report, there was little suggestion in the sample that a federally-driven urban transit policy was appropriate for Canada in the 1980s and 1990s.

The *Importance of New Public Management policy goals* were also referenced in support of the programs and as an extension of the paradigm discussed in the preceding sections. The NPM policy approach was justified in the *National Transportation Policy Act 1985 and 1989* for *intra vires* transportation issues as “the way of the future” (2Frames7), emphasizing the need for relaxed regulations in vehicle standards (albeit not at the expense of safety, according to the Minister of

Transport in 1985); the reliance on market forces; and a review of legislation should “problems in isolated cases” arise (2Frames5-11). Budget reductions for urban transit infrastructure were framed by the CMHC in 1993 as a result of “pressure on governments” to reduce deficits and levels of expenditure, despite the preparation of extensive transit-expansion plans in all seven of Canada’s major cities in the early 1990s (2Frames15). In terms of performance measures, the CIWP contained many: these were deemed crucial to the program in order to foster accountability to Parliament, and by extension, the Canadian public (2Frames34). Chief among these were the “employment effects”, which the Office of the Auditor General suggests were made highly visible and publicly-accessible by federal departments in particular (2Frames36-37). Finally, the CTARP suggested the following in relation to privatization and the Canadian transit industry at the end of this era:

“In Canadian conditions, it seems possible that deregulation (permitting entrants to compete with what are currently monopoly transit agencies) and commercialization could encourage innovative and less costly services, such as small buses or shared taxis from less-dense suburbs to interconnections with transit trunk routes. But those possibilities are probably quite limited. More extensive commercialization is constrained by labour agreements, cultural factors (people’s attachment to their cars), and the fact that urban infrastructure tends to favour private automobile use over transit” (IBI Group and Soberman, 2001; 2Frames49).

Given that the federal government strongly encouraged purchases of Canadian transit vehicles both domestically and internationally in the early 1980s (section 4.3.2), it is not surprising that the *Expertise of the Canadian transit industry* is espoused in these codes. Canada’s diverse and challenging geography, topography, and climate were cited as reasons that the quality of Canadian vehicles and transit systems were “universally recognized” (2Frames2), while the “innovative and well-rounded” professional experience of the nation’s transit professionals and manufacturers were touted in trade publications in advance of Public Transit Expo ’81 (2Frames3).

Despite a general federal preference for a limited role in urban transit, the *Transit problem definitions and remedies* presented in this era’s framing statements did not differ significantly from those in the previous era’s documents. The centrality of provinces in the “successful achievements” of Canadian transit systems were cited in 1981 (2Frames1), while the remaining challenges were attributed to geographic and historical differences in Canadian cities, facing different challenges than older, denser European cities with shorter distances between destinations (2Frames23). However, the CMHC argued that “Canadians have retained traditions of urban living”, suggesting that transit may be improved in

congruence with cultural values, at least in major urban centres – a characterization in contrast (or as a parallel to) the “cultural” frames presented earlier in this section. However, “consensus” emerged over the 1990s (i.e. 2Frames45, 52) that stable, long-term funding sources and deterrents to private auto use were needed (2Frames48) if the transit issues stemming from sprawl and automobility were to be successfully remedied. In 2001, a review of its national policy direction commissioned by Transport Canada suggested the following about federal attitudes and future role in the policy regime:

“The most recent Speech from the Throne, which states that the federal government will ‘cooperate with provincial and municipal partners to help improve public transit infrastructure’, singles out urban transit as a new area of federal government interest as do recent statements by the federal Minister of Transport” (IBI Group and Soberman, 2001; 2Frames46).

The *Externalities of sprawl and automobility as motivators of action* node includes, primarily, references to the consequences of greenhouse-gas emissions and climate change that grew in prominence through the 1990s. According to the CMHC in 1993, the “prognosis is grim” for urban transit as a result of congestion and sprawling development (2Frames16), while the automobile was described as a primary culprit of both atmospheric and ground-water pollution (2Frames13), as well as for the geographic divide between residential and employment land uses (2Frames14, 17). Policy reform was framed by the NRTEE as a “requirement” given that sprawl was permitted “only to accommodate population growth and social desires through low-density development on less expensive land” (2Frames28), and due to the hidden costs and environmental externalities imposed by automobiles on society (2Frames35). Congestion as a detractor from urban quality of life was also presented by the CTARP (2Frames50), while the IBI Group and Soberman (2001) argue that meeting transportation needs in urban areas through roadway construction “is no longer practicable from the standpoint of sustainable development, system capability, environmental impacts, liveable communities, and the accessibility to be provided to all groups of society” (2Frames41).

Similarly, a number of *Economic, environmental, and social benefits of transit* were provided in the sample. The orientation of cities around transit (rather than cars) was suggested as a means by which the future consequences of energy crises, recession, and environmental degradation could be avoided or mitigated (2Frames4, 18). Solving global environmental problems (i.e. climate change) was increasingly discussed in relation to local benefits (i.e. air quality improvements, health and lifestyle benefits of transit reliance) as the 1990s progressed (2Frames23-25). TAC’s vision for financing

sustainable transportation in Canada also made reference to these transit-related benefits, as well as those associated with high densities, mobility for dependent and disabled populations, efficient movement and integration of all modes, and reduced commuting (2Frames30). Long-term cost savings for all orders of government stemming from the application of this vision were also presented (2Frames32), albeit with little substantive evidence. Later documents espoused the health, climatic (2Frames42), economic (via the creation of “vibrant local economies”; 2Frames43-44), and convenience benefits (2Frames51) of transit investments.

4.5.4 Second-era public sentiments

Public sentiments in the second era share some similarities to those presented in section 4.2.3, although a wider range of views are presented as compared to the first analytical era. **Figure 17** presents the six open codes identified within this thematic node.

Figure 17: Open codes for the “2nd Era Public Sentiments” thematic node.

2nd Era Public Sentiments	10	35
Automobile entrenchment and individualism	6	10
Big-city transit demand	1	2
Energy costs and transit use	2	2
Resistance to user-pays transportation pricing	4	5
Support for federal-urban involvement	2	4
Waning and waxing support for sustainable transportation policy	4	11

If public sentiments in the first era can be generally characterized as transit-supportive (section 4.3.4), then it is no stretch to suggest that the second era featured a greater degree of opposition to transit investment both within civil society and throughout Canada’s urban transit policy regime. *Automobile entrenchment and individualism* were strongly-held sentiments in the national psyche which persisted into the 1980s (2PublicSentiments1). When the price of gasoline dropped in the late 1980s, Canadians adopted car use even more widely for commuting purposes, “thinking nothing of travelling long distances for work, recreation, shopping, and socializing” (2PublicSentiments5) as a result of the lower perceived operating costs of the automobile relative to transit (2PublicSentiments28). As discussed in section 4.5.3, “values and aspirations” for unlimited personal mobility, comfort of transportation services, large suburban lots, rising household incomes, and an aging population were

described by the CMHC, NRTEE and others as responsible for increasing auto use over the era (2PublicSentiments14-15, 19, 26). Indeed, these preferences were borne out by the expansion of suburban communities in Canada at a greater rate than core cities in the 1980s (2PublicSentiments20). Also, many of the “demand-management” programs (i.e. soft measures promoting transit use and telecommuting; see section 4.5.2) undertaken in this period (including those by Transport Canada) were largely unsuccessful as a result of these sentiments, according to the CMHC:

“The key flaw in ... direct demand management methods is that they require incentive, and that incentive is missing in Canadian cities. Canadians value the environment, their pocket-book and their urban amenities, but not highly enough to make the benefits of these practices outweigh the disbenefits in terms of less convenience and flexibility, longer travel times, etc. Unless the sensitivity of Canadians to congestion and pollution increases, the automobile mode becomes significantly more inconvenient in terms of increased costs or congestion, or the ‘payability’ of alternative practices improves, such practices will continue to have only a marginal effect in terms of sustainability” (IBI Group, 1993, 2PublicSentiments11)

The CTARP also noted that despite the gradual introduction of active- and public-transportation policy support from all levels of government in the 1990s, the fact that modal splits in Canadian cities did not change dramatically demonstrated the degree to which Canadians continued to value the “speed, convenience, flexibility, reliability, and comfort” of auto travel (2PublicSentiments31).

There was also significant *Resistance to user-pays transportation pricing* in the 1980s and 1990s. While this may seem counter-intuitive in an era of bureaucratic and political support for neoliberal policy and programming, cheap oil and the values for unlimited mobility described in this section were cited by the NRTEE as reasons for the “political backlash” with which proposals for market solutions to transportation behaviour reform were met in the 1990s (2PublicSentiments17), particularly for “tougher” measures (i.e. carbon taxation) (2PublicSentiments18). Public resistance to tax increases was also cited as both a cause and consequence of deficit reduction programs, decreased transfer payments, and reduced budgets (2PublicSentiments26). Indeed, other social pressures for increased health and social services to accommodate aging populations were also blamed for reduced emphasis on transportation investment in the 1990s (2PublicSentiments27). The CTARP suggested that by the end of the era, however, transit was viewed as an “exception” to user-pays principles (2PublicSentiments32), although other federal organizations (i.e. TAC, NRTEE) referenced in this chapter would likely take issue with this characterization given the contributions of all transit users to operational costs via fare

payments.

Despite this opposition, *Big-city transit demand* remained strong in the 1980s, and provincial (and limited federal) funds were used to upgrade vehicles, commuter services, and metro networks in response to political pressure and organized civil-society action at the municipal level (2PublicSentiments3-4). The *Energy costs and transit use* node also offers some explanatory power for public support for transit programming in the early portion of the era: for instance, ridership nationwide experienced fivefold growth from 1971-1981 in response to spikes in energy prices according to the Department of Industry and Commerce (2PublicSentiments2), while the CMHC argued that opposition to urban freeways and automobile dependency in Canadian cities (discussed in section 4.2.4) was sustained briefly into the 1980s (2PublicSentiments6). However, as discussed by Perl and Pucher (1995) these sentiments weakened along with ridership figures throughout Canada as fuel prices declined in the late 1980s and 1990s.

There was little discussion in the sample of *Support for federal-urban involvement* until the end of the era, when transit advocates in Canada's urban transit policy regime argued before the CTARP that flagging ridership could be increased via fare reductions, the introduction of federal operating subsidies, and tax exemptions for employer-provided transit passes (to match federal parking exemptions) (2PublicSentiments33). Municipal transit providers argued for sustained federal capital support in the early 2000s, as well as a share of federal gas tax revenue, drawing upon a similar model in the United States (2PublicSentiments34), while regional commuting authorities suggested the federal government permit commuter services to share new urban rights-of-way with light-rail services (2PublicSentiments35). Other constituencies in the late 1990s also suggested that the creation of TAC's "national vision" for urban transportation – and the concentration of approximately 80 percent of Canadians in urban environments at the turn of the century – justified the creation of coordinated and long-term sources of federal aid (2PublicSentiments29-30).

Some codes suggested that over the era's 20-year span, Canada witnessed *Waning and waxing support for sustainable transportation policy* and transit more specifically. While cheap oil reduced transit use in the late 1980s and 1990s, the NRTEE and CMHC suggested that the rise of sustainable development policy ideas catalyzed latent environmental concern at the local level in the 1990s (2PublicSentiments7), as "major environmental organizations, transit supporters, and transit operators" recognized established patterns of transportation as a significant contributor to environmental

problems (2PublicSentiments8). These groups began to espouse the importance of transit-oriented city planning, and in some cases enacted educational/promotional “transit revival” programs (i.e. in Montreal and Winnipeg). Although the substance of these proposals were not translated into provincial or federal policy in the 1990s (2PublicSentiments9-10), research conducted for Environment Canada (1994) suggested that public pressure facilitated the adoption of environmental assessment criteria for infrastructure projects, including transit and roadways in the 1990s both provincially and federally. Additionally, the CMHC found that:

“Currently, there is public pressure, on one hand, to continue expanding the road system, and on the other, for more stringent efforts at demand reduction. And, finally, another factor being largely overlooked in the debate is the social impact of the lack of transportation alternatives for people living in these communities” (IBI Group, 1993; 2PublicSentiments12).

A number of conflicting economic arguments were raised in the public realm (and articulated in the sample) to debate the importance of public transit in the context of both budgetary pressures and sustainable development. Some groups suggested that constraining the auto- and road-building industries would cause significant economic harm, while others suggested that greater transit use and concomitant returns in energy efficiency and congestion-reduction would provide net benefits (2PublicSentiments23-25). Ontario’s provincial GTA Task Force argued for the municipal and provincial cost-savings associated with the containment of sprawl, although the NRTEE suggested that the organization’s final report largely glossed over the importance of transit and auto reduction and that its recommendations were largely ignored by the provincial government (2PublicSentiments16). In summary, the NRTEE offered the following statement on the “state of the debate” surrounding the possibility of a transformational shift in the transportation habits of Canadians in the late 1990s:

“The national debate on sustainable transportation is in its infancy. While there is a solid body of literature on the severity of the problems and analysis of potential solutions, there is no sense of urgency in the public, and no national consensus on what actions need to be taken. Despite its profound implications for the future, sustainable transportation is not widely debated among Canadians, and ranks lower than jobs, health care, education or national unity as an issue of national attention” (National Round Table on the Environment and Economy, 1997; 2PublicSentiments21).

4.6 Policy ideas, 2002-2015

As described in Chapter 3 (and in particular, section 3.4), this final analytical era witnessed a remarkable shift in the federal government’s position and role within Canada’s urban transit policy regime. This transition can be largely attributed to the policy ideas that emerged in the 1990s, as discussed in the previous section and in Chapter 3. However, a number of other novel concepts, arguments, and values were described in this era’s federal documents: in order to substantively determine why and how policy changed in this era, these policy ideas require systematic evaluation. As for the previous two eras, sections 4.6.1-4.6.4 outline the substance of these categories in detail.

4.6.1 Third-era paradigms

Many of the paradigmatic policy ideas espoused in this era relate closely to categories from the previous era – in particular, those which grew in prominence in the 1990s (discussed in section 4.5.1). There were, however, a number of differences between the public-administrative climate at the turn of the century and the new imperatives of an increasingly-globalized 21st century world. **Figure 18** presents the distribution of open codes over the eight categories identified within the final paradigmatic node.

Figure 18: Open codes for the “3rd Era Paradigms” thematic node.

● 3rd Era Paradigms		17	58
● Climate change and sustainability imperatives		7	7
● Differing transit needs of large and mid-sized cities		5	5
● Globalization and competitiveness imperatives		5	5
● Growing infrastructure deficit		5	13
● Impacts of economic crises		2	3
● Impacts of federal involvement in transit policy		7	14
● Influence of peer nations		1	3
● Requirement for new intergovernmental partnerships		7	8

Climate change and sustainability imperatives became increasingly important in this era, as scientific and political momentum regarding the anthropogenic nature and serious consequences of the phenomenon gathered support. A survey of national transportation policies in Canada’s peer nations conducted by Transport Canada in 2004 suggested that sustainability had become a key policy objective for national governments, and that most nations were moving to reduce auto use and shift modal

shares toward transit, particularly in large cities (3Paradigms18). Similarly, linkages between urban sprawl and climate change were made by the CCMRTHS' Urban Transportation Task Force in both 2005 and 2009 (3Paradigms24, 33). The sustainable development priorities underpinning a number of transit-related federal programs (discussed in section 4.6.2) were also discussed as necessary given these "policy imperatives" (3Paradigms21, 28). Finally, Transport Canada suggested the following:

"Canada's escalating urbanization and increasing international attention to global warming and sustainable living have raised the Federal Government's interest in becoming involved with urban transit. This commitment comes at a time when provincial funding of the transit industry has decreased to levels that, in many provinces, are not considered sustainable. Recently, federal support for urban transit has been highlighted in the Speech From the Throne, recommendations by the Federation of Canadian Municipalities, the National Climate Change Program, as well as the Federal Budget, which has benchmarked significant funds towards programs for which urban transit qualifies" (Transport Canada, 2002; 3Paradigms7).

Globalization and competitiveness imperatives were also cited extensively as reasons for an increased federal focus on transit in this era. Keeping pace with other G7 nations economically was cited by the Prime Minister's Caucus Task Force on Urban Issues in 2002 as a rationale for developing national transit investment programs (3Paradigms2), while Canada's falling quality-of-life scores in international rankings were listed by Transport Canada in 2004 as an important motivation for increasing federal attention to all modes of transportation (3Paradigms15). Urban congestion and gridlock issues – discussed to a limited degree in both prior eras – were increasingly linked to the competitiveness and economic health of Canadian cities in this period, spanning the discourse produced by representatives of both Liberal and Conservative governments (prevalent in documents from 2005, 2009, and 2012) (3Paradigms25, 32, 50). In a related vein, the *Influence of peer nations* was also cited in relation to the coordination of land-use and transportation planning processes, although these are acknowledged as beyond the scope of practicable federal action in Canada (3Paradigms16-17, 19).

As discussed in Chapter 3, the *Growing infrastructure deficit* came to the forefront of federal consciousness in this era, due in large part to the sentiments of municipal members of the policy regime (discussed in greater depth in section 4.6.4). Transport Canada (2002) blamed the transit deficit on declining operational and capital contributions from provinces and low fares, and identified negative impacts of the bottom lines of transit-vehicle manufacturers (3Paradigms3, 5, 8-9, 11). A TAC research paper from 2003 echoed a common theme from past eras, suggesting that a lack of investment at all

levels related primarily to ongoing fragmentation in infrastructure responsibilities and transportation/land-use planning (3Paradigms12), while TAC advocacy from 2012 suggested that by the late 2000s, municipalities were no longer able to defer infrastructure expansion or cut services, and were in need of additional funding programs (3Paradigms52, 54). However, TAC also suggested that an “overemphasis” on capital programs without commensurate operating funding produced a situation in which governments focused on “high visibility”, capital-intensive transit modes (i.e. rail rapid transit) given their lower annual operating costs (e.g. as compared to bus-rapid transit) “not justified by ridership forecasts, because the capital funding is available and because they offer significant lower annual operating costs” (3Paradigms53). Similarly, the CCMRTHS suggested that aging vehicle fleets in the 1990s and 2000s left little operating funds available for service improvements and upgrades (3Paradigms23); while the organization praised the capital commitments made by federal agents early in the era, it suggested in 2009 that the “roll-out” time associated with these programs exacerbated funding problems and increased the scale of the transit industry’s financial needs from the mid- to late-2000s (3Paradigms31, 37).

The *Impacts of economic crises* of the late 2000s were mentioned briefly in relation to transit in this era’s sample: as in the late 1970s and early 1980s, spiking fuel prices in the late 2000s were cited by the CCMRTHS as reasons for increased transit ridership and provided governments with short-term incentives to focus on these services (3Paradigms34). However, research conducted by the Ministry of Finance about the effectiveness of the Public Transit Tax Credit (described in section 4.6.2) suggested that recession from 2008-2009 may have actually reduced transit usage as a function of greater unemployment nationally (3Paradigms47). The job-creation benefits of infrastructure stimulus projects (in which transit was an eligible category) were also cited as political motivators for federal agents to be involved in the delivery of capital projects (3Paradigms35).

As in the first era, *Requirements for new intergovernmental partnerships* were espoused in many documents. The Prime Minister’s Caucus Task Force on Urban Issues suggested that the scale of budget issues at the turn of the century provided the political impetus to strengthen channels of communication and policy-making among all three levels of government, and that timely action was required before the “opportunity for change” passed (3Paradigms1). Other motivators for developing more effective intergovernmental partnerships included regional uncertainties and discrepancies regarding the unit cost of transit provision; the absence of an effective transportation pricing regime;

and the increasingly-intertwined interests of all three levels of government in cities (3Paradigms14, 20, 22). While the CCMRTHS suggested that the relative contributions of the federal government to transit capital projects in Canada declined from 2007-2010 as compared to the era's early years (3Paradigms41), the willingness of all orders of government to subsidize transit represented "unprecedented" partnership, according to the Standing Committee on Transportation, Infrastructure and Communities (3Paradigms55). Support in the federal bureaucracy for new transit partnerships were provided by Transport Canada at the beginning of the era:

"The availability of long-term sustained and guaranteed funding support for transit agencies would provide the agencies with the ability to plan and commit to vehicle purchases in a stable and predictable environment. This would, in turn, allow equipment manufacturers to invest in their production capability to meet the needs of an expanded market" (Transport Canada, 2002, 3Paradigms6).

The *Differing needs of large and mid-sized cities* for transit services were acknowledged as important qualifiers of this involvement in the sample. The CCMRTHS suggested that disparities existed both within and among provinces (i.e. Ontario vs. New Brunswick), although funding deficits could be considered proportionally if controlling for population and resources (3Paradigms26). Primarily, transit dysfunctions were generally characterized as more pressing in larger CMAs (i.e. 3Paradigms13), requiring the articulation of different policy solutions for large and mid-sized cities despite similarities in the substance of issues (i.e. funding shortfalls, lack of political support, etc.; 3Paradigms4, 30, 42).

The *Impacts of federal involvement in transit policy* were also widely discussed in the sample. The CCMRTHS suggested that an increased federal role in the early years of the era translated into "increased funding, new and expanded transit systems, and growth in ridership", leading to a "dramatic" change in the state of transit funding in Canada by the end of the 2010s, despite lingering issues related to rapidly expanding urban populations and transit demand (3Paradigms29, 38). Reduced environmental assessment requirements passed in the 2009 federal budget were also cited by federal agents as beneficial for the expedience of the Building Canada Fund's transit projects (3Paradigms36). Ruffilli (2010) – representing Canada's Library of Parliament – suggested that federal programming acknowledged the need for cost-sharing and the inclusion of transit as an eligible infrastructure investment category beginning in the 1990s in relation to the cost constraints of provinces and municipalities (3Paradigms43-44). The implementation of the Public Transit Tax Credit for individuals was described by Finance Canada (2011) as an important response to rising transit fares in the 2000s,

given the sensitivity of users to permanent changes in fare levels and in order to complement the growing levels of public investments in Canadian transit witnessed over the decade (3Paradigms45-46, 48-49). Requirements for safety and security improvements and better air quality were also touted as benefits of federal efforts by Infrastructure Canada and the House of Commons Standing Committee on Transport, Infrastructure and Communities (SCOTIC) (3Paradigms51, 56-57).

4.6.2 Third-era programs

At the outset of the era, transit had become a state priority of the federal executive, comprising one of three priority program areas in the Prime Minister’s Caucus Task Force on Urban Issues (2002). As discussed in Chapter 3, this programmatic focus intensified over the era, which featured a number of federal capital funding initiatives and related cost-sharing and policy measures, although the substance and style of program design and delivery evolved in tandem with changes in political leadership. **Figure 19** presents the eight categories of open codes identified in this era.

Figure 19: Open codes for the “3rd Era Programs” thematic node.

3rd Era Programs	19	60
Capital funding initiatives	6	10
Funding conditions	2	3
Intergovernmental mechanisms	7	13
Network expansion initiatives	2	2
Proposed components of an improved institutional framework for transit	10	16
Responses to rising profile of urban and sustainability issues	7	10
Support for soft initiatives	4	6

In light of the paradigmatic *Climate change and sustainability imperatives* and the *Growing infrastructure deficit* ideas identified in section 4.4.2, the federal government issued a number of *Responses to the rising profile of urban and sustainability issues*. In the early 2000s, a Task Force on Urban Communities was created in the Privy Council Office in order to “develop a profile of the federal presence in urban centres,” while line departments were instructed to prepare and submit “sustainable development strategies” (3Programs3). This led to the establishment of the Prime Minister’s Caucus Task Force on Urban Issues, which made a number of programmatic recommendations for federal involvement in urban transit (some of which came to fruition), including the consolidation of all federal programs with relevance to transit into a National Program; the development of transit-supportive tax incentives, such as the National Capital Region’s “Ecopass”; and investment in an intercity high-speed

rail network to integrate with urban transit systems (3Programs5). In 2011 (and as discussed in section 3.4.2), a private-members' bill espousing the creation of a national transit strategy prompted the assessment by the Standing Committee on Transport, Infrastructure and Communities (SCOTIC) in the debate of stakeholder positions on a more concrete federal role in the urban transit policy regime (3Programs50). The capital funding initiatives discussed in the following paragraph are also listed as direct responses to sustainability policy goals and transit funding shortfalls (i.e. 3Programs51). Finally, Transport Canada's MOST program was launched in 1999 (during the second era) but persisted until the mid-2000s, designed to fund education and awareness-raising efforts regarding ways in which the use of active and public modes of transportation could be enhanced in Canadians' daily lives, as well as to better integrate sustainable development into Transport Canada's programs and policies (3Programs27). At the provincial level, regional transit institutions (i.e. Metrolinx, TransLink, AMT; see section 3.4.2) for transit and land-use governance were described by federal agents in relation to their ability to increase the environmental and fiscal sustainability of the transit services they provide (3Programs36, 38).

Examples of *Capital funding initiatives* include those programs discussed in Chapter 3, as well as others that did not come to fruition at the beginning of the era. For instance, the New Deal for Canadian Municipalities and its 10-year infrastructure commitments to be coordinated via the Ministry of State for Infrastructure and Communities were stymied by a change of government in 2006, but were lauded by the Prime Minister's Caucus Task Force as "an important step towards the recognition of urban transit as an area of long-term national investment" (3Programs4). The Canada Strategic Infrastructure Fund was another program preceding both Paul Martin's leadership and Stephen Harper's Conservative government, in which transit was an eligible investment category (3Programs13). The specific funding outlays associated with the capital programs discussed in Chapter 3 are captured in a number of codes (i.e. 3Programs29-35, 52) – to avoid repetition, the specifics of these programs are located in **Table 12** in section 3.4, while codes can be reviewed in Appendix C. From 2006-2011, Finance Canada (2011) estimated that federal contributions to transit capital projects exceeded \$5 billion (3Programs51). The importance of delivering these projects in partnership with the private sector was espoused by the SCOTIC in 2015 (3Programs60).

These federal programs involved *Funding conditions* – however, SCOTIC researchers noted the only criterion in effect for capital funds in the mid-2010s was a stated commitment from funding partners (i.e. provincial and local governments) to cover "operating costs losses in their totality"

(3Programs55). Similarly, the only condition placed on Gas Tax Funds to municipalities was that this remittal be used for projects eligible under the Building Canada Fund (in which transit is the second-largest investment category) (3Programs25). In the 2000s, funding conditions imposed by provinces on local transit agencies were more extensive: these were described by the CCMRTHS along a spectrum including direct assumption of operating responsibilities, targeted payments to agencies for capital or operating expenses, and unconditional grant allocations (3Programs24).

Network expansion initiatives deal with policies guiding the acquisition and repurposing of urban rights-of-way. In the previous era (and discussed in section 4.5.2 and 4.5.4), the CTARP recommended that rail lines no longer used for freight services ought to be offered for sale not only to local governments (as was traditionally the case), but to urban transit operators – this recommendation was accepted by the Ministry of Transport and came into effect in 2002 (3Programs11). Similarly, a Transport Canada educational manual advises municipalities to reallocate road space for dedicated bus lanes to improve transit performance, effectively upgrading bus services from conventional to bus-rapid services (3Programs58) (although this programmatic idea was not tied to any coordinated initiative).

Proposed components of an improved institutional framework for transit were identified throughout the sample in relation to a variety of federal representatives in the policy regime. In a speech delivered in support of his New Deal policy, Paul Martin acknowledged the need to “vacate existing tax room” for municipalities, while describing his government’s wariness regarding the creation of dedicated federal taxes given their inflexibility to changing circumstances (3Programs1) – this position was reinforced, of course, via the dedication of the flexible Gas Tax Fund to Canadian municipalities. Transport Canada in 2002 also suggested that a number of tools could be implemented by lower orders of government in concert with federal transit investments targeted at both large and mid-sized cities, including transit priority measures on urban arterials; flexible zoning, density, and parking requirements in municipal plans (at the community, subdivision, and site planning scales); and systematic consideration of transit in development planning approval processes (3Programs6-7). There was also some discussion about the possibility of “alternative service delivery” transit services provided by private operators (drawing on moderate success and integration witnessed in Australia), although it is suggested that significant study and consultation would be required prior to the approval of these services in Canadian cities (3Programs8). TAC also recommended a number of coordinated programs to be adopted throughout the policy regime, including the dedication of municipal funding sources (e.g.

property taxes and development charges, road user fees, etc.) to transit financing in tandem with senior-level funding support and the creation of regional transit governance structures (3Programs9-10). Identical programmatic components were also identified and described by the CCMRTHS in 2005 (3Programs21, 23, 26). Similarly, research by Transport Canada (2005) identified the importance of establishing effective performance measures for municipalities and transit systems, the selection of effective pricing tools for vehicles, transit, roads, and parking, and the harmonization of regional and provincial transportation plans (3Programs19-20, 56, 59). In 2012, the SCOTIC recommended that the federal government launch an engagement process with provinces and municipalities to construct a long-term transit infrastructure plan (3Programs49).

As a component of such a framework, a number of *Intergovernmental mechanisms* are discussed in the sample more specifically. Paul Martin promised in 2002 to consult face-to-face with a group of mayors selected by the Federation of Canadian Municipalities prior to the preparation of annual budgets (3Programs2). This consultative mechanism did not last into the Harper Government's tenure, under which intergovernmental mechanisms primarily involved flexible capital funding sources (discussed previously) with some scope for targeted, cost-shared interventions. The Public Transit Capital Trust and the Gas Tax Fund were described by the CCMRTHS as the most effective intergovernmental policy mechanisms of the 2000s (3Programs33-34, 39). In describing these and other initiatives of the era, the Library of Parliament noted that the absence of a coordinating policy was countered via cost-sharing agreements for capital programs and bilateral agreements on special initiatives (i.e. regional rapid transit projects) (3Programs40-42).

A number of intergovernmental programmatic components were discussed only in theoretical terms in the sample. For instance, in its review of national transportation policies in peer nations, Transport Canada (2004) suggested that federal involvement in land-use planning "generally mirrors the degree to which the federal government is involved with local government" – in Canada, however, this involvement is limited and characterized as jurisdictional encroachment (3Programs15). Indeed, the divergent (and generally more centralized) constitutional structures of surveyed nations (Switzerland, Australia, New Zealand, France, and the United States) was cited as the primary barrier to the development of linkages between national and local budgeting for transit, although the conditional grant structure in the United States for funding major infrastructure, as well as the federal role in

prioritizing projects present in all surveyed nations, were identified as “instructive” to federal policy-makers in Canada (3Programs16-18).

Finally, federal *Support for soft initiatives* included programs designed to moderate demand for automobile travel and encourage transit use. For instance, the CCMRTHS’ Urban Transportation Task Force operates an information-sharing program for TDM measures across Canadian jurisdictions to promote TDM uptake across the country (3Programs37); TAC suggests that the relatively inexpensive adoption and promotion of TDM of policies represents an important complement to senior-level funding initiatives (3Programs48, 57). In terms of tangible federal programming, the Public Transit Tax Credit was introduced in Budget 2006 to promote transit use by reducing fare costs by approximately 15 percent with the purchase of long-term (i.e. monthly or yearly) transit passes (3Program43-45).

4.6.3 Third-era frames

The means by which the programs identified in the previous section were justified to Canadians in the final analytical era are articulated in this section. The seven categories of open codes identified in the sample are presented in **Figure 20**.

Figure 20: Open codes for the “3rd Era Frames” thematic node.

3rd Era Frames	15	52
Acknowledgement of fiscal imbalance and need for stability	5	7
Climate change as a motivator of action	3	3
Constitutionality of intervention	7	13
Economic improvement-transit investment linkages	9	13
Health and equity benefits	5	7
Risks associated with the status quo	3	4
Variation in transit needs	4	4

There were many passages featuring federal *Acknowledgement of the fiscal imbalance and need for stability* in Canada’s urban transit policy regime. Key statements in this regard include claims that “the country’s infrastructure needs exceed the capacities of the three orders of government” (3Frames2), and that “all orders of government must recognize that amongst competing urban interests ... transit merit(s) a proportional share of new investment” (3Frames16). In addressing the FCM in Hamilton in 2002, Paul Martin suggested:

“The challenges you face were intensified after the fiscal belt-tightening that has taken place in recent years by provincial and federal governments alike. Let’s just take two examples: housing and urban transit. Both present daunting challenges that simply must be tackled in order to secure the quality of life we all desire for the future. But the solutions – that is to say, the development of affordable rental accommodation and the required investment in new transit infrastructure – are simply beyond the capacities of local governments acting alone” (Martin, 2002, 3Frames1).

Similarly, *Risks associated with the status quo* primarily involve appeals to the economic consequences of congestion and fragmentation in the policy regime. Irwin (2003) – representing TAC – suggested that “[i]f the existing funding shortfalls for urban transportation and fragmented governance ... are not addressed in the near future, Canadian urban areas face major environmental, economic and social risks affecting up to 80 percent of Canada’s population directly where they live and work” (3Frames9) following a description of transit issues in the 1990s and early 2000s. The development of competitive and safe cities and the avoidance of “detrimental impacts on the economy and society” are also cited as risks should the transit policy regime continue on its trajectory (3Frames10, 13, 38) – the terminology used to describe these risks is largely consistent from early to late in the analytical period.

In a related vein, the *Linkages between economic improvement and transit investment* were also highlighted in the sample. A number of codes made the economic benefits of “sustainable” transportation investments salient, emphasizing that individuals, households, and communities depend on the economic growth promised via urban transit improvements (3Frames8, 11). In support of the New Deal strategy at the beginning of the era, Paul Martin suggested that:

“What we need to do now is get to work. To move from concept to reality - to strike the New Deal. We’ve all seen good ideas, backed by the best of intentions, crash against the coral reefs of entrenched ways and attitudes. We can’t let that happen here. The stakes are simply too high. The opportunities associated with success too great. More and more of our future together as Canadians will be built – brick by brick, idea by idea – at the local level. Our speed at innovating on the ground – in practices, in financing and in partnerships – will be one of the keys to Canada’s success in a very competitive world” (Martin, 2002, 3Frames3).

In the late 2000s, federal infrastructure stimulus programs were framed as critical if Canada wanted to “emerge from economic crisis with a more modern and green infrastructure” (3Frames25). The time- and cost-savings for auto and transit commuters via the reduction of urban road congestion and improvement of transit capacity were also championed (3Frames29, 33), as were the ability of these programs to help cities attract and maintain commercial investment and “talented people” (3Frames34-

35, 43). Other codes argue that the costs required to transition to more transit-oriented communities would be outweighed by both mid- and long-term gains in urban quality of life and productivity at individual, regional, and national scales (3Frames39-41).

Similarly, *Climate change as a motivator of action* was espoused on a number of occasions. The opportunity to be a “world leader” in low-emission transportation and infrastructure design was framed as attainable given Canada’s “expertise and resources” for innovation (3Frames4). “Urban transportation systems without extensive and well-maintained transit” was also framed as an “undesirable future” for Canadian cities in the context of climate change (3Frames6, 28). According to Transport Canada (2002), the MOST program was able to bring significant public and media exposure to the potential impacts of climate change (3Frames19). The *Health and equity benefits* of transit also featured prominently in third-era documents – reducing the intergenerational impacts of auto use and greenhouse gas emissions were cited by the Prime Minister’s Caucus Task Force in 2002 (3Frames5); improved air quality, mobility for those without the means or access to car ownership were described by the CCMRTHS’s Urban Transportation Task Force in both 2005 and 2009 (3Frames18, 20, 26-27); and the SCOTIC reiterated transit’s benefits for the mobility of dependent populations in 2012 (3Frames42, 50).

In support of the capital programming discussed in the previous section, the *Constitutionality of intervention* was a common theme. As in previous eras, efforts were made in the documents to frame intervention in the context of the federal government’s respect for the constitutional division of powers (3Frames23, 30) – however, a number of passages suggested that the scale of funding problems faced by municipalities (i.e. 3Frames31-32) necessitated greater federal involvement *in cooperation* with both provinces and municipalities, in terms of both funding provision and other collaborative efforts (i.e. “soft” policy measures, such as public education) (3Frames12, 17, 21). The CCMRTHS’ Task Force suggested the following in 2005:

“The challenges faced by urban areas will require not only new funding but also a new partnership amongst orders of governments. Principles that could underlie an effective partnership unanimously supported by provincial respondents to a Task Force survey include: Federal programs should respect provincial and territorial jurisdiction and planning priorities; Federal funding programs should not be contingent upon matching funding from provinces and territories; There should be flexibility in program designs to accommodate programs that meet the needs of the jurisdictions” (Urban Transportation Task Force, 2005, 3Frames15).

In 2012, Infrastructure Canada suggested that funding programs implemented by the Harper Government “recognized that provinces and municipalities are best-placed to develop and implement transit strategies that meet their local needs” and therefore emphasized flexibility and avoided federal involvement in prioritizing or project selection (3Frames37). Infrastructure Canada defended the general lack of funding conditions by suggesting that prescriptions stating that federal funds be used specifically for transit “excluded” communities without transit systems (3Frames45). However, the SCOTIC recommended guidelines for providing some degree of federal influence within the confines of its jurisdictional authority, including the involvement of the FCM in establishing “transit-specific measures” which municipalities must meet to be eligible for funding, such as lowering commute times, creating jobs in the transit industry, measurably improving air quality, and avoiding “displacement” of provincial and municipal resources that would have been otherwise used to fund transit (3Frames44, 48).

In tandem with paradigmatic codes described in section 4.6.1, a number of framing statements alluded to the *Variation in transit needs* across Canada. In respect for diversity in the “physical, social, and cultural geography of Canada’s cities”, Transport Canada (2002) suggested that significant consultation and economic analysis should be undertaken prior to selecting an appropriate transit service in a given locale (3Frames7). The CCMRTHS suggested that these considerations were especially prudent in small communities suffering from population loss, although transit is also framed as “critical to maintaining viable and liveable smaller communities, often providing a much needed transportation option for all residents, but particularly for the elderly and low income residents” (Urban Transportation Task Force, 2009; 3Frames22). Other passages also suggest that variation in transit needs contains social dimensions – while transit may not be practical for some households, or seem inefficient in some communities, the importance in maintaining quality of life for new immigrants and dependents “cannot be overstated” (3Frames36). It should be reiterated, however, that the Government’s position in 2012 (as articulated to SCOTIC by Infrastructure Canada) was firmly that the choice to provide these services via flexible federal funding should be left to provinces and cities (3Frames46).

4.6.4 Third-era public sentiments

This final section of analysis relays the diversity of public sentiments present in the policy regime and the broader public throughout the 21st century. The nine open codes identified in this thematic node are shown in **Figure 21**.

Figure 21: Open codes for the “3rd Era Public Sentiments” thematic node.

3rd Era Public Sentiments	10	45
Attitudes toward user fees and taxation mechanisms	3	4
Demand for coordinated governance	3	5
Demand for jurisdictional respect and flexibility	3	10
Demand for new federal leadership and programming	7	13
Demand for reduced congestion and environmental impacts	3	3
Dissatisfaction with fiscal gap and funding criteria	3	4
Opposition to transit investment	1	2
Preferences for suburban living vs. TOD	2	2
Technology and job creation	2	2

This era witnessed the evolution (and in some cases, reversal) of many public sentiments identified in section 4.5.4. For instance, portrayals of *Attitudes toward user fees and taxation mechanisms* shifted somewhat – in its review of urban transportation pricing options, Transport Canada (2005) suggested that user fees for transit were widely accepted, and that support for road user fees was growing (3PublicSentiments2). Finance Canada suggested that by 2011 awareness of the Public Transit Tax Credit was strong among the Canadian public, helping to fuel support for transit user fees and senior-level investment (3PublicSentiments19). Municipal stakeholders in Canada’s urban transit policy regime demanded tax rebates for railway purchasing for urban transit rights-of-way from the federal government, arguing that these would further incentivize transit-supportive procurement at the municipal level (3PublicSentiments35), while constituencies of transit users argued (successfully) for tax exemptions for employer-provided transit passes early in the era (3PublicSentiments36).

Some of these perspectives can be attributed to *Dissatisfaction with the fiscal gap and funding criteria*. In 2012, the positions of various municipal representatives – including planners, operators, and users – were presented to SCOTIC in the context of its investigation of stakeholder interest in an expanded federal role in urban transit (Tweed, 2012). These codes suggest that municipal resources were growing increasingly insufficient to meet their transit provision and mobility needs, despite the federal support programs introduced in the 2000s and 2010s. Some argued for the imposition of more stringent criteria that funds be used for transit, as well as stipulations that recipients demonstrate stronger cost-recovery plans and the inclusion of social and environmental benefits in cost-benefit analyses underpinning their applications (3PublicSentiments21, 34). Other witnesses testifying before the SCOTIC in 2014 and 2015 also suggested that the ridership growth spurred by federal investment necessitated the continuation of funding and policy support, and that communities and citizens have

demonstrated a willingness to pay (both through taxes and user fees) provided that funds are dedicated to transit and that the funding allocation process is open and transparent (3PublicSentiments38, 43).

Demand for reduced congestion and environmental impacts built on the climate change-focused themes of the previous era's public sentiments, expanding to feature a wider range of issues beyond (though still inclusive of) emission-reduction imperatives. The results of public consultations by the CCMRTHS' Urban Transportation Task Force in 2005 and 2009 suggested that an "extra-jurisdictional" role for the federal government is required in transit given that the economic and environmental issues arising from inadequate services are national in scope (i.e. reduced productivity, pollution, climate change) (3Frames4, 30). Reduced congestion and commute times via transit improvement was also presented by witnesses before the SCOTIC in 2015 as a means to attract higher-paying jobs to Canadian cities (3PublicSentiments42).

However, given the diversity of "publics" with an interest in urban transit, it is not surprising that a number of contradictory positions were articulated by public interest groups in this era's documents. *Demand for new federal leadership and programming* was articulated in the CCMRTHS' 2005 survey, in which it was "generally agreed" that federal agencies should commit to the long-term financial support of the transit needs of both large and small communities – the propriety and flexibility of the Gas Tax Fund was explicitly supported in some codes (3PublicSentiments6, 12-13). Similarly, Transport Canada's (2006) review of its MOST Program suggests that stakeholders were satisfied with the program's goals and instruments, but concerned about its operational horizon, arguing for project funding extensions beyond its two-year limit (3PublicSentiments14-15). Calls for federal actions beyond the provision of flexible and largely unconditional cost-shared programs (e.g. in the realms of operational support and increased public consultation efforts) were presented by the FCM and municipal operators in SCOTIC hearings (3PublicSentiments26, 31, 33). The Amalgamated Transit Union (ATU; representing industry workers) also argued for longer-term federal involvement, as well as the adoption of an amended funding model that in which federal agencies are not restricted to a 25-percent share in public-private partnerships for transit capital projects (3PublicSentiments37, 39). Specifically, CUTA and the FCM argued that this figure ought to be raised to one-third (3PublicSentiments45). Other groups advocated for investment in transit on the basis of opportunities associated with transit's *Technology and job creation* potential: municipalities and transit-advocacy groups were portrayed as particularly supportive of LRT investments given its perception as a "cleaner, more reliable, and more

advanced ‘world-class’ technology,” as well as its higher capital costs (and, therefore, construction requirements) (3PublicSentiments18). CUTA, ATU, and other advocates also argued in 2014 for transit investment on the basis of its economic spinoff effects both in cities and in Canada’s transit manufacturing industry (3PublicSentiments40).

Conversely, *Demand for jurisdictional respect and flexibility* include arguments that federal programs ought to set policy goals broadly enough to avoid restricting differential provincial urban priorities; allow for bilateral and tripartite arrangements, although with a lesser emphasis on “inappropriate” federal-municipal partnerships; and; and allow for allocation of transit funding to other priority areas if necessary (3PublicSentiments5, 7-10) – primarily, these views were articulated by provincial stakeholders early in the era (c. 2005). In 2012, supporting views for the flexibility provided by the Gas Tax Fund were also articulated by representatives of large municipalities (3PublicSentiments25, 27, 29, 44). In the case of the Canadian Taxpayers Federation (CTF), preferences for restraint verged on *Opposition to transit investment* by the federal government in general on the basis of “distortion” of transit agencies’ decision-making processes, resulting in overspending and unnecessary project delays (3PublicSentiments22). The CTF also argued that rather than transfer gas tax funds to Canadian municipalities, federal agents should stop levying GST on fuel altogether to allow for provinces to tax at a higher rate – however, even then the CTF argued that these funds ought not to be used for transit and roads, as users should pay via fares and tolls (3PublicSentiments28). These views were presented in the context of SCOTIC’s 2012 hearings.

Comprising a “middle ground” between these positions were those groups articulating *Demand for coordinated governance*. While “transit expansion plans are welcomed by the public”, some stakeholders felt that the means by which long-term operational costs will be covered in “one-off” federally-funded projects were not adequately addressed among governments in the approval processes for this era’s capital funding initiatives (3PublicSentiments17). Municipal stakeholders in particular argued that coordination of transit planning and funding among governments ought to occur on 25-year horizons, with accountability measures attached (i.e. program review criteria invoked at five-year intervals) (3PublicSentiments23-24). Stakeholders arguing for coordinated strategies, according to the SCOTIC, referred interchangeably to the development of a “strategy” and “policy framework” – transit stakeholders argued for a strategy (i.e. CUTA, FCM), while detractors (i.e. the CTF, the Canadian

Automobile Association) suggested this method would be “overly prescriptive”, and that a policy framework would provide Canadians and cities with greater flexibility (3PublicSentiments32).

As in the previous eras, the debate over *Preferences for suburban living vs. TOD* was also articulated in the document sample, although these codes were not as prevalent in this era. The “motorization” of households was linked to the necessity of “triangular” trips (e.g. home to daycare to work) by the CCMRTHS, and that gains in fuel-efficiency and clean fuels are being outstripped by the “choices Canadians make about location and travel behaviour” (3PublicSentiments3). It can be inferred from this description that these choices are both discretionary and related to the structural nature of contemporary Canadian cities and lifestyles. While preferences for suburban housing remain strong, research by Finance Canada (2011) suggested that the preferences of an aging population for transit-oriented, urban living could shift market demand in years to come (3PublicSentiments20).

4.7 Summary of the content analysis

This chapter presented an overview of the thematic and open coding processes, and described the results of the content analysis of 60 federally-produced documents. The majority of the chapter was devoted to the description of urban transit policy ideas invoked by federal agents over the three analytical periods involved in this research.

It is clear that while the substance of many policy ideas changed dramatically over the 47 years from 1968 to 2015, a number of problem definitions and proposed solutions have remained relatively consistent. Nonetheless, policy change has occurred. The following chapter presents a discussion of these analytical results with the aim of formally addressing and resolving the research questions articulated in Chapter 1 by comparing the specific ways in which each category of ideas has changed over the course of Canadian history, as well as characterizing the specific modes of change witnessed at the two transitional junctures between historical periods. From this discussion, four key findings of the research are presented, while in Chapter 6, a number of policy recommendations stemming from these findings are presented in tandem with concluding comments.

Chapter 5: A Discussion of Federal Policy Ideas and Dynamics in Canadian Urban Transit

5.1 Introduction to the discussion

The analysis conducted in the previous chapter suggests that policy ideas in Canada's urban transit policy regime have undergone significant change over the study period. The analysis also demonstrated that the federal role in this regime has evolved in tandem with social and cultural changes, global and domestic economics, and environmental imperatives, among other factors. However, a direct comparison of paradigms, programs, frames, and public sentiments across the three analytical periods has not yet been undertaken. In addition, the specific modes of policy change witnessed in the regime – in accordance with Howlett and Cashore's (2009) framework – have yet to be classified. As such, the purpose of this chapter is to connect the findings of the analysis to the research questions presented in Chapter 1.

To reiterate, the overarching question guiding this research asked: How have the policy ideas supporting and informing the role of Canada's federal government in Canada's urban transit policy regime changed over time? As discussed in Chapter 1, three specific and "actionable" sub-questions were posed in order to resolve this broad inquiry. The first was investigated via the review of literature in Chapter 3: How has the federal government's role in the Canadian urban transit "policy regime" shifted from 1968-2015, and in response to what "triggering" factors (in the context of the policy regime's ideas, issues, institutions, and interests)? However, given that policy ideas were not analyzed until Chapter 4, it is more logical to address the second question first, which was the subject of the content analysis: How have urban transit policy ideas (paradigms, programs, frames, and public sentiments) invoked by the federal government in public policy documents changed from 1968-2015? In section 5.2, each category of ideas is compared across the three analytical periods in section 5.1 in order to offer summative answers to this question. Following the comparison of each category of ideas across the three analytical periods, section 5.3 integrates discussions of ideas with the issues, institutions, and interests developed in Chapter 3 in order to characterize change in Canada's urban transit policy regime at specific historical junctures and identify important "triggers" in this context.

This chapter attempts to answer these two questions as fully as permitted by the findings of Chapters 3 and 4. The third sub-question – How might the federal government modify its role in

Canada's urban transit policy regime in order to improve transit policy-making and services in Canadian cities? – is the subject of Chapter 6, in which specific recommendations drawing upon the findings presented in this chapter are outlined.

5.2 How have urban transit policy ideas invoked by the federal government in public policy documents changed from 1968-2015?

Addressing this sub-question requires that each category of ideas across the three analytical eras be closely compared and contrasted in order to determine the character of policy-idea change over this study's historical breadth. In each of the following four sections, these comparisons are carried out, illustrating similarities, differences, and cross-cutting themes identified in relation to paradigms, programs, frames, and public sentiments.

It should be noted that some degree of contradiction in the "positions" of federal actors was identified in all eras and categories of ideas. This is not an unsurprising result: the Government of Canada – composed of a shifting array of line departments, crown corporations, politicians, and bureaucrats – is hardly a unitary entity, and its constituent institutions serve a variety of purposes and pursue the public interest in different (and occasionally contradictory) ways. The analysis demonstrated that in terms of paradigms, programs, and framing statements, the views of line departments (i.e. Transport Canada, Infrastructure Canada, Finance Canada) and federal research organizations (i.e. the Transportation Association of Canada [TAC], the National Round Table on the Environment and Economy [NRTEE]) on appropriate transit interventions, policy proposals, and regime roles have been particularly divergent in recent decades. This diversity of ideas and positions necessitated a "messy" analysis in Chapter 4 – however, this complexity can be reduced to a series of critical insights and observations regarding the evolution of federal urban transit policy ideas, which are determined in sections 5.2.1-5.2.4, and summarized in section 5.2.5.

5.2.1 Comparing paradigms

Paradigmatic ideas in each era were outlined in sections 4.4.1, 4.5.1, and 4.6.1. This section compares, contrasts, and identifies other notable differences among the paradigmatic codes identified over the three analytical periods.

In each era, the issues associated with urban sprawl and the externalities of automobiles were emphasized. In fact, causal linkages between these issues and the obstacles faced by transit were remarkably consistent – the impact of suburban sprawl on the viability of urban transit in Canadian cities was the subject of the first era’s *Postwar suburban sprawl* and the second era’s *Continuing suburban hegemony* nodes, while issues associated with low-density land use and automobile dependency were aggregated under *Climate change and sustainability imperatives* in the third era. Similarly, “environmental” motivators of action in the realm of urban transit were listed to some degree in each era. The third-era *Climate change* coding category also shared similarities with the *Recognition of automobile externalities* in the first era, and the second era’s *Sustainable development imperatives* in the second, in that transit was discussed as a tool with which to address anthropogenic climate change caused, at least in part, by ubiquitous car use for personal mobility. The evolution of these paradigmatic categories suggest that the scope of the issues guiding the federal-administrative paradigm on the subject of transit widened in tandem with the trends in global environmentalism discussed in Chapter 3, as the local or “point-source” environmental concerns of the 1970s gave way to the global environmental movements oriented toward sustainable development and climate change of the 1990s, 2000s, and 2010s.

Similarly, budgetary issues faced by transit service providers (and municipalities more broadly) were cited as motivators of action in all eras. The decreasing ability of municipalities to cover transit costs were invoked in support of MSUA’s creation in the *Transit investment rationales* and *Inadequacy of transit services* nodes; in the second era, transit “budget freezes” and “planning paralysis” were both identified in the *Budget constraints* and *Declining importance and quality of transit* nodes, suggesting that transit was largely unable to compete with other municipal priorities and dropping automobile costs in this era of public-sector austerity. In the third era, the *Growing infrastructure deficit* node discussed similar issues, although in this era there was a greater emphasis on the physical deterioration of rolling stock and other infrastructure as compared to the second era, codes for which emphasized the cancellation of projects and budget crises related to reduced provincial support (i.e. downloading; 2Paradigms27).

Despite these inter-era similarities, there were a number of differences in the paradigmatic policy ideas identified in the sample. For instance, the impacts of economic crisis in relation to transit investment and use were portrayed differently in the second era as compared to the first: primarily,

budgetary restrictions of the 1980s were framed by federal agents as a reason to more fully respect jurisdictional bounds given that the New Public Management emphasized the full devolution of fiscal responsibilities to the level of government closest to those receiving the services (i.e. subsidiarity), as discussed in the *New Public Management imperatives* node. In the third era, however, the economic crisis of the late 2000s was cited as a motivator for a number of infrastructure stimulus initiatives (i.e. greater federal involvement), in which capital funding programs for transit accelerated significantly, as depicted in the *Impacts of economic crises* node). While the greater “severity” and length of recessions and deficit conditions in the late 1980s and early 1990s may have played some role in the differences between these paradigmatic statements, the waning of NPM as a pillar of federal public administration (at least slightly) can perhaps be inferred from this markedly Keynesian approach to economic recovery practiced, no less, by Canada’s first federally-Conservative government since 1993.

Another substantive difference in paradigmatic thematic codes relates to the growing importance of global imperatives over time – as discussed in relation to the increasingly-global perspective guiding “environmental” depictions of urban issues discussed previously, linkages between transit and global phenomena were virtually absent in the first era, but were invoked in relation to the *Sustainable development imperatives* node in the second era, and featured prominently in three categories in the third era (*Climate change and sustainability imperatives*, *Globalization and competitiveness imperatives*, and *Influence of peer nations*).

A number of other cross-cutting themes and observations emerged from a review of paradigmatic results. For instance, the evolution of intergovernmental relations in the urban transit sphere are discussed in the *Jurisdictional tensions* (first era), *Institutional inertia and barriers to transit improvement* (second era), and the *Requirement for new intergovernmental mechanisms* (third era) nodes. Codes in these categories suggest that a period of cooperation in the early-to-mid-1970s was followed by a virtual absence of regularized interaction between provinces and the federal government (and even quieter federal-municipal channels of communication) on the subject of urban affairs, let alone transit, in the 1980s as a result of provincial retrenchment (echoing the findings of Chapter 3). Beginning in the 1990s, there was a “re-engagement” of provincial and federal authorities (spurred primarily by the *Growing infrastructure deficit*). Generally, these developments mirrored the state of intergovernmental relations in Canada. As discussed in Chapter 3, the 1980s were a period of significant constitutional conflict in Canada, as governments attempted (unsuccessfully) to develop a mutually-

agreeable formula for constitutional amendment (Bakvis, Baier, and Brown, 2009). The temperature of federal-provincial relations cooled by the late 1990s, and the tri-level commitments of Paul Martin's New Deal and the Open Federalism practiced by the Harper Government were both received favourably by provinces (Shaker, 2005; Spicer, 2010) such that federal-provincial relations were greatly improved over the first two decades of the 21st century.

There was also evolution in the means by which the interrelationships of transit issues with broader urban phenomena were portrayed over the historical scope of the analysis. The *Interrelated nature of urban issues* featured prominently in first-era codes, discussing the suitability of federal agencies (i.e. MSUA and the UTRB) to conduct high-level research about the importance of linking transportation and land-use planning processes (ideally at the regional level) and effectively coordinate members of the policy regime; however, codes of this nature were less common in second-era paradigmatic nodes (although certainly not absent, and perhaps most prevalent in the *Resilience of Canadian transit systems* node), before re-emerging in greater force in the *Impacts of federal transit policy* node in relation to the macroeconomic effects (i.e. enhanced productivity via congestion-reduction, job creation, etc.) of transit investment in the third analytical era.

5.2.2 Comparing programs

Programmatic ideas were outlined in sections 4.4.2, 4.5.2, and 4.6.2 of the analysis. As in section 5.2.1, this section discusses substantive differences and similarities among programs, and provides other notable observations across the analytical eras.

A number of similarities among federal programmatic policy ideas in all three eras were evident in the sample. For instance, transit program ideas possessing social dimensions (i.e. initiatives designed specifically to improve accessibility, mobility, and quality of life for urban Canadians) were identified in the first era's *Enhancing redistributive benefits* node, which referenced the need to launch programs targeted to disadvantaged populations (i.e. the physically disabled and elderly; 1Programs16-17); the second era's *Sustainable development programming* node, in which transit and air quality and emissions monitoring were mentioned were discussed in tandem (i.e. 2Programs44); and the third era's *Support for soft initiatives* node, which emphasized the need to make the health, lifestyle, and expenditure benefits of more frequent transit use salient to Canadian households in TDM and transit-marketing programs (i.e. 3Programs37, 57). The recognition of linking land-use and transportation planning

processes via the coordination of institutions in all eras was another cross-cutting similarity (as discussed in relation to paradigms and policy goals in the previous section), although difficulties associated with the implementation of reform (given entrenched jurisdictions and institutional responsibilities) was acknowledged in all eras (i.e. 1Programs66, 2Programs36, 3Programs10).

However, programmatic ideas also differed over the study period in a number of ways. The second era's *New Public Management programming* constituted a significant departure from the *Synoptic approach* characterizing federal action in the first era; while NPM ideas were not cited as directly in third era documents, these programming principles extended into the third era of analysis (i.e. private sector cooperation, user-pays programming, flexible funding allocations in federal programs, etc.). While the application of these principles was associated with a lesser federal programmatic role in the second era, they were equally apparent in the transit-supportive programming of the third era.

Capital funding support demonstrates a similar pattern of “undulating” federal policy ideas over time (i.e. engagement followed by disengagement followed by reengagement). While programmatic ideas recognizing transit funding shortfalls were identified in each era, the absence of ideas in tangible support of this situation were notably absent in the second era. The *Capital funding initiatives* of both the first and third era constitute the most obvious parallels and describe the concrete contributions made by federal agencies in these eras. However, the substance of second-era programmatic ideas to deal with this shortfall, however, constituted an obvious difference or fluctuation in policy ideas dealing with the transit funding question. Despite the extension of the Urban Transportation Assistance Program (UTAP) into the second era of analysis, codes in the *Addressing the transit funding shortfall* and *Transit governance and programming* second-era nodes largely relayed the programmatic steps taken by other members of the policy regime (i.e. municipal and provincial transit providers) to improve the fiscal health of their transit systems via “best-practice” policy ideas (i.e. fare increases, parking lot fees, and the generation of other sources of revenue to counter declining ridership). The only capital program in the second era was the CIWP, in which transit was eligible for investment but garnered little attention from provincial applicants. Criticisms of the CIWP levied by the Office of the Auditor General suggest that the project approval process was loose enough to permit approval of projects with limited economic, social, or environmental justification – while the politicization of funding approval (at least by federal actors) was not considered an issue in this framework given that provinces vetted the municipal nominations prior to explicit federal involvement, doubt was raised about the degree to which

nationally or even regionally significant projects were selected at the provincial and municipal levels (Office of the Auditor General of Canada, 1999). The *Canada Transportation Act* Review Panel (CTARP), as discussed in Chapter 4, also discussed the “unintended consequences” of the federal government’s focus on capital projects, relating to an overemphasis on expensive capital projects with little consideration for how long-term operational costs would be covered. A review of third-era codes and the programs outlined in Chapter 3 reveal that this recommendation was largely ignored in the design of future programs (i.e. in the *Funding conditions* node). However, TAC recalled this advice in 2012 in its review of sustainable urban and regional transportation in Canada, summarizing the results of federal capital support programs as such:

“The emphasis in some cases on capital funding that is unmatched with a comparable increase in funding of operations-related expenditures can lead to suboptimal infrastructure decisions (e.g. over-building of capital-intensive transit modes when not justified by ridership forecasts, because the capital funding is available and because they offer significantly lower annual operating costs). Opportunities to defer infrastructure expansion, through strategies such as peak spreading, are largely exhausted. Commuters – particularly in larger metropolitan areas – have been shifting their trip start and finish times where feasible and peak periods are spreading and intensifying. Average trip times have also approached or exceeded the levels of other major cities in the world, such that our cities’ ability to attract or accommodate growth is at risk” (Transportation Association of Canada, 2012; 3Programs53).

Another difference in programmatic codes among eras relates to the abrupt shift in federal focus from municipalities to the transit manufacturing industry as the locus for federal transit support, particularly from the first to second eras. While there was little mention of the linkages between well-functioning urban transit and the health of Canada’s transit vehicle manufacturers in the first era, the *Support for domestic transit industry* and *R&D support programs* second-era nodes capture the rise in program policy ideas aimed at supporting manufacturers at industry expos and in terms of costly, technologically-driven research efforts.

It is also worthwhile to highlight the degree to which federal programs respected the jurisdictional responsibilities of each order of government since the early years of the first era. Indeed, while federal efforts under MSUA’s umbrella were faced with severe criticism by the mid-1970s – typically by larger, more self-sufficient provinces such as Ontario and Quebec (Oberlander and Fallick, 1987) – the political and bureaucratic leadership of both MSUA and UTRB demonstrate awareness of and respect for provincial concerns over jurisdictional interference. With regard to transit R&D,

representatives of the UTRB, in its 1979 post-mortem, advocated for the creation of an Advisory Board on Urban Transportation with membership from all orders of government in order to ensure transit research priorities reflected the interests of provinces and cities (1Paradigms78). Codes in the first era's *Interdepartmental coordination and influence* node also suggests that despite a boycott of the third and final tri-level conference chaired by MSUA, the first two Tri-Level Conferences offered effective avenues for input from all three orders of government. In the second era, jurisdictional respect was cited as an important component and driving force behind the rolling-back of transportation regulations in general (i.e. 2Programs16, 20), as well as a motivation for the *Shift away from capital funding* in the 1990s discussed previously. Similarly, the views expressed by Infrastructure Canada to the Standing Committee on Transport, Infrastructure and Communities (SCOTIC) in 2012 and 2015 highlighted the department's distaste for "dictating" to provinces how transit-eligible funding sources ought to be spent by municipalities and provinces (located, most notably, in the *Responses to rising profile of urban and sustainability issues* third-era node). It is beyond the scope of this research to assess the degree to which jurisdiction was respected in practice, but it is safe to say that the concerns of provincial stakeholders were, at the very least, paid lip service in federal policy documents in all eras.

5.2.3 Comparing frames

Framing statements used by federal agents in the document sample were analysed for their substantive content in sections 4.4.3, 4.5.3, and 4.6.3. These differed somewhat among the analytical eras – however, as in the discussion of paradigms in particular, there were many noteworthy inter-era similarities. As discussed previously, the causes and effects of insufficient and underfunded transit services have long been acknowledged in the public service (and the academic community from whence much first-era research came); concomitantly, the costs of automobility and sprawl and the benefits of transit as a means to avoid these negative consequences pervaded framing codes in all eras. The first era's *Automobile primacy*, *Worsening urban conditions*, and *The need to improve ineffective transit services* nodes demonstrate these framing strategies most clearly; in the second era, the *Externalities of sprawl as motivators of action* and *Transit problem definitions* include indistinguishable costs of the transportation status quo; while the third era's *Health and equity benefits*, *Climate change as a motivator of action*, and *Linkages between economic improvement and transit investment* nodes build upon these themes by espousing the benefits of mitigating climate change and improving national

economic competitiveness in urban centres. Generally, however, these third-era themes invoked largely the same symbols, values, and concepts related to reduced congestion-driven productivity loss, damaged environmental and ecosystem health, and declining livability of urban regions of the first two eras. As with the discussion of paradigmatic, cause-and-effect statements, the scope of environmental costs greatly expanded in the second and third eras to consider the global implications of transit under-investment and sprawling, autocentric urban development.

As with programs, there was also common language used by politicians, bureaucrats, and researchers across the analytical eras that highlighted the respect held by federal agencies for the constitutional hierarchy underpinning urban transit policy-making and programming in Canada. In the first-era sample, the *Benefits of improved intergovernmental relations* were frequently discussed, as MSUA and others attempted to gather political and public support for a growing *ultra vires* role in urban affairs. In this node, the federal role in research, funding, and “coordinating land-use and transportation planning” was justified based on the basis of “rapidly escalating costs” and the insufficiency of provincial and municipal resources to adequately address the issue – rather than usurping local and provincial priorities, however, these efforts are framed in the context of supporting the stated interests of other governments (i.e. 1Frames20, 30). In the second era, the *Impropriety of national transit policy* node captures a number of similar values espoused by federal agents – these framing codes, however, emphasized the provincial and local expertise in support of a restricted role for the federal government in relation to implementing TAC’s vision for urban transportation and in selecting projects for CIWP applications (2Frames33, 35). The *Constitutionality of intervention* is a related third-era theme, in which federal interventions deemed “necessary” were supported by an emphasis on partnership, collaboration, and the maintenance of traditional jurisdictional roles and responsibilities (i.e. 3Frames5, 14, 21).

In keeping with similarities to the programmatic discussion in the previous section, the benefits of support for Canada’s transit manufacturers became increasingly prominent in the second era, particularly in reference to the *Expertise of Canadian transit industry* node – for instance, a trade publication produced by the Department of International Trade and Commerce (1981) highlighted the familiarity of Canada’s transit industry professionals with “just about every geographic challenge imaginable” (2Frames2). While the federal government largely vacated municipal-level urban transit support in this era, these codes support towards private sector support in the pursuit of transit

improvements. There were very few comparable nodes or codes in the first or third eras, although the importance of involving the private sector more broadly in transit project delivery is noted in the third-era *Acknowledgement of fiscal imbalance and need for stability* node. This node also highlighted, unsurprisingly, the need to redress the mismatch between expenditures and fiscal strength among the orders of government vis-à-vis urban transit – similar funding issues were also captured in the first era’s *Benefits of federal-urban involvement* and *The need to improve ineffective transit services* nodes, as well as the second era’s *Transit problem definitions* node.

5.2.4 Comparing public sentiments

Sections 4.4.4, 4.5.4, and 4.6.4 analyzed public sentiments portrayed in the document sample. For the purposes of this research, these included the views of other governments and participants in the urban transit policy regime. Again, there were a number of commonalities: primarily, all eras featured portrayal of public desires for suburban living and preferences for the comfort and convenience of auto travel over transit use (i.e. *Demand for suburban living and automobilty* [first era], *Automobile entrenchment* [second era], and *Preferences for suburban living vs. TOD*, and *Opposition to transit investment* [third era]).

However, differences among the eras were more prominent than similarities. For instance, the ways in which public attitudes toward user fees and user-pays principles in general shifted between the second and third era were especially divergent – *Resistance to user-pays transportation pricing* in the second era conflicts with the largely supportive *Attitudes toward user fees and taxation mechanism* in the third era. It is beyond the explanatory power of this thesis to assess the validity of this shift in the portrayal of public views – however, the views of the Canadian Taxpayers Federation (as presented to the SCOTIC in 2012) suggested that a desire to restrict federal action and more strictly apply price signals with regard to transit may have indeed grown in prominence (i.e. 3PublicSentiments22).

Perhaps the most immediately salient differences among historical eras relate to the inconsistent degree to which public sentiments were relayed by federal agencies in the course of defining urban problems and proposing substantive policy solutions, as well as the diversity of views presented in each era. As discussed in section 4.2, only 16 public sentiment codes were applied over 20 first-era documents – this represents slightly more than a quarter of the sentiment codes identified in the third era. This underrepresentation was generally in keeping with the synoptic views regarding the

importance of public consultation held by many governments in the postwar period (Davidoff, 1965). Additionally, first-era codes portrayed public sentiments as a singular and “knowable” entity by the federal cabinet (i.e. 1PublicSentiments5), rather than as a diversity of complex and constantly-shifting views held by competing “publics” (i.e. in the *Demand for transit and planning reform* and *Opposition to sprawl and automobility* first-era nodes).

In the second and third eras, however, public sentiments were identified more frequently. While the substance of the coding categories was similar, second-era public sentiments presented a greater degree of nuance beyond individual preferences. For instance, in the second era, the influence of global economic conditions on public support for transit and preferences vs. automobile use were captured to a greater degree than in the first era in the *Energy costs and transit demand* node, despite the fact that energy crises occurred in the 1970s. At the end of the second era and throughout the third, a wider diversity of public interests were espoused in documents, as consultations involving other stakeholders was widely undertaken by the CTARP and SCOTIC. Provincial (and to some degree, municipal) views were also relayed in the third era by the CCMRTHS’ Urban Transportation Task Force in relation to burgeoning federal transit involvement. As discussed in Chapter 4, stakeholders advocating for a federal leadership role in the regime (i.e. *Demand for new federal leadership and programming*) were countered by those suggesting a secondary partnership role (i.e. *Demand for coordinated governance, Demand for jurisdictional respect*), to those (i.e. *Opposition to transit investment*). From this steady increase in both frequency and diversity prominence, it can be inferred that the emphasis placed upon the views of a wider variety of public interests and organizations has grown over the course of the historical study period.

5.2.5 Summarizing the evolution of federal urban transit policy ideas

This section has demonstrated that while federal urban transit policy ideas have evolved over time, the degree of change is not uniform across categories. As such, the question posed in Chapter 1 and at the outset of section 5.2 – “How have urban transit policy ideas (paradigms, programs, frames, and public sentiments) invoked by the federal government in public policy documents changed from 1968-2015?” – has no singular answer. However, it can be addressed in relation to each of the categories of ideas individually.

In terms of paradigmatic ideas, change has been relatively slight – the codes reviewed in this chapter and the one previous suggest that the basic nature of the paradigms in which urban transit decision-makers operate have been consistent since at least the 1970s (i.e. fiscal uncertainty, funding shortages, automobile dominance, and the difficulty of servicing low-density regions of Canadian cities). Environmental motivators of federal action in relation to other participants in the urban transit policy regime expanded in reference to ideas about addressing global climate change and the dealing with the growing scale of Canada’s municipal infrastructure deficit – however, the fiscal problems of provinces and municipalities to provide adequate transit services were widely acknowledged in both first- and second-era documents. Nevertheless, the prominence of both climate change imperatives and the fiscal gap faced by transit providers suggests that shifting paradigmatic ideas played a role in the most recent instance of federal policy change. This connection is explored in greater detail in section 5.3.2.

With respect to programmatic policy ideas, the analysis and discussion suggest that change has been witnessed in terms of the scope of federal offerings. The first era featured federally-driven and collaborative initiatives in the realms of capital funding, research, and demonstration programs (i.e. for separate systems for the disabled); the second era limited direct municipal financing, support for techno-centric demonstration programs, and support for vehicle manufacturers. The third era, in comparison, has witnessed resurgence in capital funding initiatives, as well as expansion into the realms of “soft” programming, including education, transportation demand management, tax credits, and intergovernmental engagement in recent years. The capital support programs of the third era did not depart significantly from the first foray into the urban transit financing – in some ways, fewer restrictions on funding eligibility were applied. For instance, third-era programs do not require the demonstration of integrated transportation and land-use plans across a metropolitan region (although these are commonplace in contemporary Canadian cities). Another change relates to flexibility: the funding envelopes introduced in the 1990s (i.e. the CIWP) and by the Harper government in the 2000s and 2010s permitted far more provincial and municipal latitude in project selection, or whether funds would indeed even be used for transit improvement, than UTAP. Other codes identified in both the second and third eras suggest that the federal emphasis on capital funding to an unparalleled degree (and without related conditions or envelopes for the provision of operational costs) in recent years has had unintended consequences, producing a situation in which the long-term costs of urban transit are not adequately considered in project approval mechanisms.

Framing statements, meanwhile, evolved in concert with the substance of both paradigms and programs. This is understandable – frames, by definition, are used to support programmatic ideas, and the benefits and costs invoked to sway stakeholders generally draw upon the economic, environmental, or social issues (i.e. paradigms) of the time (Campbell, 1998). For instance, frames in the first era focused on the social isolation and local air pollution associated with overreliance on auto travel; as climate change and the infrastructure deficit were increasingly discussed as motivators of action through the latter eras of analysis, concurrent framing statements identified the benefits and costs for various segments of society. Like paradigms, many framing techniques remained similar over time. The framing passages identified in all eras also demonstrate a significant and consistent emphasis placed by federal agents on the jurisdictional respect and “constitutionality” of intervention.

Perhaps the greatest change in policy ideas was witnessed in the character and diversity of public sentiments relayed in the sample. Public and stakeholder opinions were portrayed to a limited degree in the first era, and in more detail in the second era; however, the weight of public interest in the federal decision-making process rose considerably in the third era – the SCOTIC and the CCMRTHS’ Urban Transportation Task Force were especially critical entities in this regard, relaying the multiplicity of stakeholder views on the subject of the appropriateness and character of federal investment in and involvement with urban transit in the 21st century.

It can be concluded that the evolution of federal urban transit policy ideas in Canada from the 1970s to the present has closely mirrored developments in global economics, environmental issues, and the state of intergovernmental relations in Canada more generally. The Government of Canada has applied its spending power in a limited fashion, espousing strong respect for traditional divisions of power in the policy regime. From a political standpoint, there is little risk in upsetting the balance of power within the urban transit policy regime – as the demise of MSUA and subsequent second-era retrenchment indicate, the values of provincial actors hold considerable sway in determining the legitimacy of federal transit interventions.

5.3 Characterizing federal policy change in Canadian urban transit

In light of the analysis conducted previously, it is pertinent now to return to the typology of policy change described by Howlett and Cashore (2009) in Chapter 2. This section will attempt to resolve the following research sub-question: How has the federal government’s role in the Canadian urban transit

“policy regime” shifted from 1968-2015, and in response to what “triggering” factors (in the context of the policy regime’s ideas, issues, institutions, and interests)? The two historical junctures between the three eras will be assessed in relation to the mode of change involved, with reference to the six elements of policy characterizing the first and second eras of analysis.

5.3.1 Policy transition, late 1970s to early 1980s

As discussed in Chapter 3, the federal position in the urban transit policy regime began to shift significantly in 1976 in line with a Ministerial shake-up at MSUA, when Barney Danson was replaced by André Ouellet (Oberlander and Fallick, 1987). Spicer (2011) suggests that the size of the Ministry was gradually decreased leading up to its “shuttering” in 1978, although its status as a funding partner for municipal projects was fully established by the end of its organizational tenure. Indeed, this growing influence was a point of major contention for provinces, who increasingly felt that the federal government was attempting to dictate local priorities to provinces and municipalities (Horak, 2012a; Spicer, 2010). Under Prime Minister Trudeau and the synoptic governing paradigm witnessed in the 1970s, the scope and scale of the government expanded rapidly – prior to the Glassco and MacPherson Commissions of the 1960s, the federal government contained 80 federal departments; by 1980, there were almost 200 (Savoie, 2010). While the “size” of the federal government did not retract under successor governments, the legacy of this expansion and the opposition it bred in provinces was palpable: the Trudeau Government was rejected by Canadian voters in 1979 and again in 1984 (Savoie, 2010). The abandonment of MSUA, UTRB, and the urban transit initiatives in this context were also undertaken in tandem with growing trends toward global fiscal conservatism and the neoliberal administrative paradigm (and specifically, NPM), which emphasized strict jurisdictional respect. As such, federal actors were relegated from the domain of urban transit policy-making, though a modest programmatic role was maintained in support of transit vehicle manufacturers. These are the factors leading to the transition between the period of federal “engagement” and “disengagement” in Canada’s urban transit policy regime as determined by the literature review and analysis, constituting the “triggers” of policy change.

But how can this instance of policy change be characterized in accordance with the framework of understanding introduced in Chapter 2 (Howlett and Cashore 2009)? Classification requires an examination of policy goals. Given that concerns about jurisdictional infringement and growing political

support for “rolling back” government service delivery at all levels, the policy goals of federal agencies vis-à-vis urban transit changed significantly. In the 1970s, these goals were extremely broad, and were perhaps best articulated in MSUA’s Annual Report in 1974:

“Movement within urban areas should not depend to the extent that it does on the private automobile, which results in congestion, environmental pollution, and denial of adequate transportation to those without cars such as the poor, the handicapped, the elderly and young people. Substantial government assistance is required if public transit facilities are to compete effectively with the private automobile in convenience, comfort, speed and cost” (Ministry of State for Urban Affairs, 1974; 1Paradigms14).

While the need for “substantial government assistance” was espoused, the level of government at which this assistance should be provided is not specified. As such, the impact of outside ideas and factors – namely the rise of neoliberalism; the comparatively cheap oil of the 1980s and consequent growth in automobility and suburbanism; and the jurisdictional “turf wars” characterizing Canadian federalism of the 1980s – exercised significant influence on the means by which this policy was carried out. Therefore, it is appropriate to characterise the juncture between the first and second eras of analysis as an instance of “quasi-homeostatic” policy change, in which “policy goals remain stable, but objectives change in response to external ideas and factors” (Howlett and Cashore, 2009).

5.3.2 Policy transition, late 1990s to early 2000s

Similarly, the literature review and analysis suggest that a number of “triggering” elements converged at the turn of the 21st century to raise the profile of urban transit issues on the federal policy agenda. Some were global in scope, such as the rising profile of the need to reduce greenhouse gas emissions to combat climate change, as well as growing recognition of the need to reduce congestion in order to improve economic productivity (constituting environmental and economic components of the sustainable development paradigm). Other influences were domestic: specifically, the growing municipal infrastructure deficit and trends toward provincial downloading – and in particular, the withdrawal of capital subsidies from capital budgets for transit in Canadian municipalities (Horak, 2012b) – created an urban transit “crisis” and spurred significant municipal advocacy for a federal role in transit funding. This advocacy from within the policy regime coincided with a federal leadership transition in the governing Liberal Party from Jean Chretien to the municipally-sympathetic Paul Martin, whose government was actively looking to engage in sustainable development policy-making in accordance with the recommendations of the Transportation Climate Change Table in the wake of the Kyoto Accord

(Roschlau, 2008). These factors culminated in the creation of the Canada Strategic Infrastructure Fund, the New Deal for Canadian Municipalities, and the Ministry of State for Infrastructure and Communities in the early 2000s (Spicer, 2010). The spirit of many of these initiatives persisted following the election of Stephen Harper's Conservative Party in 2006, and many more capital-contribution programs were implemented over the remainder of the third era. Despite the drawbacks of these funding programs discussed throughout this thesis, these factors constitute a federal "re-engagement" in the urban transit policy regime.

Federal policy goals for urban transit in the 1980s until the mid-1990s – to the degree that they can be articulated at all – acknowledged that transit systems ought to be improved; however, fiscal responsibilities for these systems were characterized as an issue best addressed by provinces (Christopher, 1992; Gray, 1981). In contrast, transit-related policy goals were articulated by the Prime Minister's Task Force on Urban Issues in 2002 at the beginning of the third analytical era, suggesting a broad but tangible federal role in the improvement of transit in Canadian cities:

"To build world-class, competitive urban regions, all orders of government must invest in multi-modal transit systems. Canada is the only G7 country without a national transit investment program. Keeping pace with demand will require a commitment to transit infrastructure from all orders of government" (Prime Minister's Caucus Task Force on Urban Issues, 2002; 3Paradigms2).

As such, this shift in federal urban transit policy goals can be attributed to changes in provincial policy settings at the end of the second era (i.e. the lowering and removal of transit subsidies), which catalyzed municipal advocacy and coincided with the rising profile of transit-supportive sustainable development policy ideas. Policy change at this juncture, then, is best characterized as "neo-homeostatic", in that "policy goals shift[ed] gradually in response to small changes in policy settings" (Howlett and Cashore, 2009).

5.3.3 Federal transit policy post-2015: A changing philosophy?

The election of Justin Trudeau's Liberal Party in the fall of 2015 and the subsequent federal budget released in the spring of 2016 merit discussion in the context of this thesis. As discussed in Chapter 1, the election period featured significant – even historic – attention to urban transit issues by all four major political parties (Canadian Urban Transit Association, 2015d), while the victorious party's budget commitments contained significant scope for urban transit investment and improvement (Canadian

Urban Transit Association, 2015a). Transit-specific commitments included the allocation of \$3.4 billion to public transit for the 2016-2017 fiscal year, of which \$1.49 billion will flow to Ontario and \$293 million to Quebec, and representing the first installment of a 10-year, \$60 billion federal infrastructure funding plan (CBC News, 2016a; Government of Canada, 2016). In Ontario, project selection was carried out bi-laterally, and involves commitments to fund up to 50 percent of eligible costs for select projects, a departure from the typical one-third split characterizing the contribution programs outlined in **Table 11** (Vigliotto, 2016).

In this context, it is pertinent to ask if Canada's urban transit policy regime has undergone another round of policy change. The short answer is that it remains too early to tell. However, early indications suggest that few substantive changes to the federal role in Canada's urban transit policy regime have been made. No coordinating strategy involving all three orders of government (let alone regional transit entities) appears forthcoming, and while funds have been allocated to provinces based on ridership figures (as a proxy for determining investment "impact"; Government of Canada, 2016), there are no specific considerations in the lone bi-lateral agreement signed at the time of this writing (between the federal and provincial Liberals in Ontario) that address concerns over the politicization of project selection by higher orders of government, issues raised in this thesis in the context of the CIWP in the 1990s (Office of the Auditor General of Canada, 1999) and the capital-contribution programs of the 2000s and 2010s (Horak, 2012a).

5.4 Key findings

Now that the primary questions of this research have been resolved, key findings from the analysis and discussion can be drawn. Four main findings emerged over the course of the analysis that bear further discussion. These include the linkages between paradigmatic ideas and the two instances of policy change described in the previous section; the unintended consequences of capital-funding dominance in federal programming; the overriding jurisdictional respect for provincial jurisdiction and priorities evidenced in program descriptions and framing statements across analytical periods; and the growing influence of municipal actors in federal transit agenda-setting.

5.4.1 Linkages between paradigmatic ideas and policy change

The discussions of paradigmatic policy ideas across eras (section 5.2.1) and instances of policy change (section 5.3) presented in this chapter demonstrate that this category of policy ideas has exercised significant influence over the priorities of federal actors on the subject of urban transit in Canada. This is a linkage that bears highlighting. While jurisdictional tensions contributed to the waning political appetite for urban policy-making and project-funding at the end of the 1970s, the literature review and analytical sample suggests that the rise of neoliberal ideology in the latter part of the decade and the early 1980s played an equally significant role: indeed, MSUA was at its most impactful in its later years in terms of orchestrating funding and undertaking transit-supportive initiatives (Spicer, 2011). As such, it can be argued that provincial preferences coincided with the advent of a global paradigm (neoliberalism) that did not favour transit investment.

Similarly, paradigmatic ideas in the late second era and early third era acted as a “vehicle” by which to accelerate federal urban transit policy change. Globalization, economic imperatives related to the international competitiveness of city-regions, and climate change featured prominently in paradigmatic codes in this timeframe. The literature review suggests that NPM policy ideas (supporting fiscal responsibility and jurisdictional respect) found significant political traction in the sustainable development paradigm (i.e. GHG emissions reduction, urban productivity, etc.). Similarly, the integrated discussion of ideas, issues, institutions and actors in relation to policy change at the turn of the century suggests that these ideas coincided with supportive municipal and federal political climates, resulting in a shift in policy goals towards federal support for transit services. Again, provincial priorities came to bear in dictating the federal policy response – however, in this instance, municipal advocacy calling for the federal government to fill Canada’s transit funding and policy-making vacuum coincided with transit-supportive paradigmatic ideas. The willingness of the federal political executive at the turn of the century to engage with “innovative ideas” echoes the findings of Savoie (2010) and Stoney and Graham (2009).

5.4.2 Unintended consequences of capital funding initiatives

Another finding of this research relates to the “unintended consequences” of an overt emphasis on capital-intensive transit funding programs across eras. While a number of these criticisms were identified in the literature review (i.e. Horak, 2012a; Sancton, 2015), the analysis suggested that federal

agencies were aware of the drawbacks of providing capital funding without commensurate project selection requirements or operational funding envelopes. As discussed, these issues include the encouragement of politically-motivated projects over “lower-visibility” operational investments and insufficient consideration of long-term costs (3Paradgims53). The consequences associated with an overemphasis on capital assistance programs were first identified the second era. As referenced in section 4.5.1, criticisms of the CIWP levied by the Office of the Auditor General of Canada (1999) suggested that the absence of federal criteria for project selection in this capital program did not guard against the insertion of provincial political preferences over the most pressing needs of local transit agencies. Similarly, CTARP argued that:

“[In Canada], the availability of capital subsidies has allowed transit agencies to adopt capital-intensive solutions, without supporting them with more cost-effective operational solutions — such as unpalatable restrictions on car use” (Flemming et al., 2001, p. 223-224; 2Paradigms81)

These views were echoed by TAC in the third era (as discussed in section 4.6.1), which suggested that “sub-optimal” infrastructure decisions have resulted from capital-centric federal programming, given that the presence of these funds encourage the selection of projects with relatively high up-front costs and relatively low annual operating costs (3Paradigms53). Should capital-intensive modes (i.e. LRT) fail to meet ridership estimates (as is often the case), services cannot be adjusted easily to better meet the needs of the community. While federal agencies argued in the sample that placing conditions such as cost-recovery thresholds on federal capital funding could lead to transit agencies deferring maintenance (i.e. 3Programs25, 55), and that flexible funding allows the federal government to carefully fund select “strategic” projects, the case of Vancouver’s Canada Line outlined in section 3.4.2 (selected for its pre-Olympic visibility over less expensive alternatives and alignments) suggests there is little to distinguish strategic from overtly political funding decisions (Horak, 2012a; Hutton, 2012), to the occasional detriment or subversion of regional transit priorities.

5.4.3 Overriding respect for provincial jurisdiction and priorities in framing statements and program descriptions

As discussed in section 5.2 – particularly in relation to federal programs and frames – the policy documents analyzed in Chapter 4 for all eras shared commonalities in the “lip service” paid to the division of urban transit responsibilities as outlined in Canada’s constitution. While Spicer (2010, 2011)

and Oberlander and Fallick (1987) suggest that provincial interests and opposition to federal-municipal efforts were key determinants of MSUA's fate, documents throughout this era and those from the second and third era were cognizant of the need to adhere to the traditional constitutional hierarchy of Canada's urban transit policy regime. While the outcomes of policy differed – as established in the literature in section 3.3.2 – codes arguing that federal interventions in this era were complementary and deferential to provincial and municipal priorities were captured in the *Interdepartmental and intergovernmental coordination and influence* program node and *Benefits of federal-urban involvement* frames node.

Similarly and as discussed in section 4.5, the dearth of federal transit policy-making and programming in the second era was explicitly referenced in relation to jurisdictional respect, as described in the *Impropriety of national transit policy* and *Importance of New Public Management policy goals* frame nodes. In the third era, and despite the role of municipalities in bringing transit issues to the fore in response to perceived provincial shortcomings, policy documents in advance of Paul Martin's New Deal policy made overt reference to the need to include provinces in the development of a national approach (i.e. in the *Intergovernmental mechanisms* program node). Likewise, the "open federalism" policy approach to urban issues of the Harper Government discussed in Chapter 3 is borne out in third-era *Constitutionality of intervention* frame codes. The most recent federal-provincial transit funding initiatives (outlined in section 5.3.3) demonstrate that provinces continue to exercise significant discretion over project selection and federal funding priorities. Time will tell if this approach yields any meaningfully different (i.e. coordinated, stable, and long-term) policy and programming action involving municipal or regional actors.

5.4.4 Growing municipal influence in federal transit agenda-setting

A final key finding of this thesis relates to the growing prominence of municipal actors (and their "sentiments") in determining the urban transit priorities of Canada's federal government. As discussed, "public sentiments" as broadly considered in the context of this thesis include the positions of civil society, other orders of government, and the private sector – the increasing prominence of public sentiments codes in the third era suggests that interests of a wide array of institutional actors are, at the very least, increasingly considered and relayed in federal policy documents. More specifically, the analysis and discussion of policy change in section 5.3.2 suggest that municipal actors (and municipal

governments in particular) are increasingly influential in the crafting of federal policy positions on the subject of urban transit. While the only public sentiments identified in first-era documents captured simplistic “for or against” perspectives in relation to highway and transit investment, a greater diversity of views were captured in the second era, particularly in relation to the growing transit infrastructure deficit in the 1990s (a dynamic captured in the *Support for federal-urban involvement* public sentiment node). However, these sentiments became influential in the third era: the importance of lobbying efforts in the creation of the New Deal (discussed in section 3.4.1) represents an example of the growing role of municipal associations and advocacy in “diffusing” ideas throughout the policy regime – while federal agents moved into the policy sphere in response to this advocacy, municipalities were more policy-makers than policy-takers in this regard via the coordination of national lobbying efforts via the FCM and the Big City Mayors’ Caucus (Horak, 2012a). Likewise, the diversity of viewpoints relayed by SCOTIC in third-era public sentiments nodes – many of which represented municipal criticisms of and advocacy for an increased policy role to accompany the programmatic focus of federal transit support over the 21st century (i.e. *Demand for coordinated governance, Demand for new federal leadership, etc.*) – suggest that municipal views have been instrumental in bringing transit issues to the attention of the federal government in the 2010s.

This observation meshes with the findings of a recent longitudinal, multi-issue study on the character of “multilevel governance” in Canadian cities, in which Horak (2012a) argues that multilevel governance in Canadian cities is now “fluid, problem-driven, task-specific interaction among a varying set of governmental and non-governmental agents” in which municipalities (i.e. via the Big City Mayor’s Caucus) engage in advocacy (or opposition) for transit capital as a response to or to stimulate local population and economic growth, while the role of the federal government as a provider of financial resources is supplemented by private capital and expertise. Similarly, Sancton (2015) suggests that municipally-driven “policy diffusion” is taking place to a significant degree on issues that transcend individual municipalities, especially when they are difficult or impossible to deal with locally.

5.5 Summary of the discussion

This chapter presented a number of summative elements, including the resolution of two research sub-questions identified in Chapter 1. Paradigms, programs, frames, and public sentiments were compared and contrasted in order to demonstrate the ways in which each category of ideas has evolved from 1968

to the present. Paradigmatic policy ideas were judged to have expanded in relation to the growing importance of global imperatives; programmatic ideas demonstrated a slight expansion of federal transit program offerings; frames demonstrated a similar pattern of evolution to paradigms; and the evolution of public sentiments suggest an increasing emphasis placed on this category of ideas by federal agents in recent years. Modes of policy change at the two analytical junctures – between the first and second and between the second and third eras – were then classified in accordance with the framework identified in Chapter 2: it was determined that the transition to a more subdued federal role in the policy regime in the late 1970s and early 1980s is best classified as “quasi-homeostatic”, while policy change in the early 2000s, in which policy changed in relation to the incursion of new ideas and growing fiscal pressures, can be characterized as “neo-homeostatic.” The recent transit ideas and commitments of Canada’s newly-elected Liberal government were then briefly described, although the timing of this research is too early to assess whether substantive policy change has occurred once more.

From these concluding analyses, four key findings were developed, related to the influence of paradigmatic ideas on policy change at both critical junctions; the detrimental and unintended consequences of an overt federal focus on capital funding programs; the overriding respect for traditional jurisdictional responsibilities and roles that pervaded frame and program codes over all three analytical periods; and the growing influence of municipal interests in urban transit agenda-setting at the federal level. Despite the identification of these research findings, however, one final sub-question remains to be addressed. Drawing on the findings of Chapters 1-5, Chapter 6 offers five forward-looking policy recommendations and concluding thoughts on the evolving role of the federal government in Canada’s urban transit policy regime.

Chapter 6: Policy Recommendations and Conclusions

6.1 Policy recommendations

Canada's urban transit regime, while largely static in terms of its institutional division of responsibility over time, has demonstrated at some junctures that change is possible in response to changing paradigms and the infusion of new ideas (as discussed in section 5.3). This final chapter aims to contribute to the policy debate surrounding the appropriate role for the federal government within this regime, proposing new ideas for discussion based on the insights of the preceding five chapters. More specifically, the purpose of this chapter is to address the final sub-question of this research, namely: How might the federal government modify its role in order to ensure the sustainability (both fiscally and environmentally) of transit in Canadian cities? This involves the proposal of four substantive policy recommendations for consideration by the Government of Canada.

The recommendations that follow need not be considered as a "suite" of actions, to be implemented in conjunction or not at all. Rather, in keeping the spirit of this research, these policy recommendations represent ideas – to be debated, discussed, discarded, or adopted in relation to the priorities of governments and the Canadians they represent. Also note that it is beyond the scope of this work to determine the economic feasibility or specific cost requirements of each option.

A final note regards the "levers" available to the federal government with which it can affect public policy outcomes. This thesis has talked extensively about policy mechanisms and, to some degree, fiscal tools (i.e. applications of the spending power and use of the taxation system) – however, there are a number of other "tools" that might be employed in concert with policy mechanisms and fiscal tools. These include regulatory instruments, referring to legislation, which imposes legally-binding restrictions or requirements on activity: an example is the environmental assessment process, by which infrastructure initiatives (including transit projects) are approved or denied based on a tolerance threshold of environmental harm (Environment Canada, 2015). There are also educational tools, referring to awareness-raising or advertising campaigns by which governments can promote the adoption or modification of certain behaviours (i.e. transit use). The recommendations for urban transit that follow make reference to a number of these types of levers, although there is discussion of policy and fiscal mechanisms as well.

6.1.1 Intergovernmental relations: A new mechanism for tri-level decision-making

The role of municipalities in determining federal transit priorities has grown in the 21st century as compared to the influence wielded by local governments in the 1980s and 1990s (as outlined in section 5.4.4). Additionally, there is little doubt that municipalities ought to make decisions regarding alignment, technology selection, etc., given the familiarity of local planners and politicians with the transit needs of their communities. However, there has been a limited formal role for municipalities in the federal urban transit policy regime since the abolishment of tri-level conferences in the 1970s. A formal tri-level institution would help to keep municipal transit interests “visible” in the federal issue-attention cycle.

As such, the first recommendation of this thesis is that the Canadian Council of Ministers Responsible for Transportation and Highway Safety (CCMRTHS) establish an official Federal Transit Policy Working Group in order to aggregate the perspectives of each order of government on transit issues and policy. While CCMRTHS’ Urban Transportation Task Force currently provides a means by which municipal transit needs and interests are presented to provincial and federal ministers, the Task Force lacks a formal role in policy-making and representation from prominent stakeholders in Canada’s urban transit policy regime. In contrast, the Federal Transit Policy Working Group would have a stronger role in crafting transit-supportive programming than the current Task Force possesses, stemming, perhaps, from an annual review of the efficacy of transit-related programming of the federal government. The findings of this review could be presented by the membership to the Minister of Transport in the form of a “progress report”, drawing on transit metrics from across Canadian urban regions in order to reflect the impact of federal investments, as well as growing areas of need. The efficacy of such an organization would flow from the degree to which federal partners valued Working Group outputs: however, incorporating its recommendations into the mandatory five-year program review exercises already undertaken by Transport and Infrastructure Canada is one mechanism by which this institution could insert itself into federal policy-making and programming.

This entity ought to expand its membership beyond the CCMRTHS’ traditional boundaries (while retaining the “steering” function of its upper-order leadership) in order to include representation from Canadian municipalities (perhaps via the integration of the Big City Mayors’ Caucus of the FCM), as well as Canada’s three regional transit governance bodies (i.e. TransLink, Metrolinx, and AMT) given the exceptionalism of these regions and their importance in Canada’s national urban fabric of Canada. Despite their complex and divergent institutional structures, organizational memberships, and so on,

these institutions constitute an increasingly-important tier of transit governance that has yet to assume a “seat at the table” in federal transit funding policy-making exercises. Representatives from Transport Canada’s Transit Infrastructure Programs group (described in section 3.4.2) could also be appointed in conjunction with the federal Minister of Transport, in order to report on the state of federal-provincial funding implementation, and respond to questions or criticisms from provincial and municipal agents on the execution of its functions.

6.1.2 Funding formula: Limiting politics in project selection

Concerns about the impacts of largely “unconditional” federal funding programs were raised in the sample by the Auditor General’s review of the Canadian Infrastructure Works Program (CIWP) and the *Canada Transportation Act* Review Panel (CTARP). Specifically, these organizations suggested that the absence of strict eligibility criteria for federal funding have the potential to encourage significant “politicking” by provinces in regard to project selection. Conversely, in the review of literature, Horak (2012a) criticized the capital programs of the 2000s and 2010s (which typically require only that recipients commit to covering operational costs over the lifespan of the infrastructure) on the basis of the potential for undue federal influence in the selection of “strategic” over “optimal” transit projects, an observation borne out in relation to Vancouver’s recently completed Canada Line (Tweed, 2012; Hutton, 2012). While the allocation of funding to provinces based on ridership represents an important recent development in federal transit decision-making under Justin Trudeau’s Liberal government (Government of Canada, 2016), there is a clear need to limit the influence of both federal and provincial politicians so that local transit priorities are respected when federal funding is applied within the confines of these bi-lateral agreements.

While overcoming issues with overly-optimistic ridership projections often invoked in support of capital-intensive over more cost-effective, flexible, or socially-equitable alternatives (Transportation Association of Canada, 2012) is a problem beyond the scope of these recommendations, one step towards the removal of politics in federal transit-decision-making might involve the requirement that municipal and provincial representatives demonstrate consensus on the propriety of projects selected for funding on the basis of sound planning evidence. This consensus would need to be demonstrated to federal funding partners prior to signing any transit infrastructure agreement. Coherent and provincially-specific municipal positions could be articulated by a representative of municipalities in a given province

appointed by the Federation of Canadian Municipalities (FCM); this position would then have to be approved by the province, and a memorandum of understanding (MOU) between provincial and municipal parties could be signed. This MOU would then be presented to federal funders as evidence of consensus. While municipalities in each province are likely to compete for project endorsements within this structure, mediation could be undertaken prior to provincial involvement via the rulings of independent provincially-specific independent committees of professional and academic transportation engineers and urban planners familiar with the transit needs of the province or region in question (appointed by the FCM), based on the quality of supporting planning evidence (i.e. ridership forecasts, environmental and economic impact assessments, etc.).

Other requirements might ensure that federal funds contribute strongly to urban transit policy objectives (i.e. congestion reduction, increased transit modal share, etc.) in regions committed to holistically addressing transportation issues. For instance, funds could be allocated only to municipalities that have implemented a formal and comprehensive transportation demand-management (TDM) plan. Schiller et al. (2010) suggest that components of this strategy available to municipalities include many of the incentives and disincentives discussed throughout the analysis (i.e. road pricing, congestion charges, transit-pass provision, parking charges, vehicle restrictions in central business districts, etc.); transit-oriented development strategies (i.e. parking management and reduce requirements, traffic calming, mixed-use development and retrofitting, residential construction near employment centres, etc.), car- and bicycle-share programs; and investment in high-quality active transportation infrastructure investment and traveler information (i.e. websites/wayfinding platforms) in order to improve linkages with transit; among others. Federal funding criteria of this nature might require the implementation of all or some of these components, particularly those with greater potential to influence transportation behaviour change (i.e. pricing signals and vehicle restrictions).

CTARP discussed many of the policy ideas in its report at the end of the second era that came to fruition in federal policy in the third era (i.e. linking the federal gas-tax remittal to transit, involvement in capital funding, etc.), articulating the views of municipal actors and rendering its professional judgment on transit issues. It also espoused the following “unused” policy idea in reference to transit funding criteria:

“The Panel does not believe it is necessary or appropriate for the federal government, or governments of the provinces and territories, to specify what measures should be adopted in order to qualify for funding. Instead the Panel suggests that agencies simply

be given performance-based incentives ... The Panel recommends that payments to transit authorities be made on the basis of their actual performance in inducing shifts from private automobile use to transit. The Panel suggests a payment per trip, based on mode shift from car (with verification from ridership counts and periodic surveys of new riders to determine alternative modes)” (Flemming et al., 2001; 2Programs94).

While CTARP was silent on the means by which modal shift and the per-unit value of associated payments might be determined at the level of an individual project or transit agency, this type of innovative performance-based support bears consideration in the context of enhancing the rigor applied in federal transit funding decision-making. A reward system of this nature would also avoid the issues associated with the application of proposed “cost recovery thresholds” and subsequent deferral of maintenance and upkeep, as articulated by Infrastructure Canada (Tweed, 2012; 3Programs55).

6.1.3 Operational support: Establishing federal links to municipal planning and transit delivery

Another major criticism of recent federal capital-contribution programs relates to the absence of operational funding considerations, as articulated by the Transportation Association of Canada (TAC; 2012) and CTARP (2001). Specifically, requirements that municipalities assume all long-term costs associated with operations incentivizes the selection of projects with relatively high capital costs and low annual operating costs. However, operational costs for these systems remain a source of concern: as discussed in section 3.4.1 in relation to third-era issues, the increase in federal capital funding over the 2000s and 2010s has not alleviated the transit infrastructure deficit (Canadian Infrastructure Report Card, 2016). While fares, provincial subsidies, and dedicated municipal funding streams (i.e. parking and congestion charges, road tolls, etc.) ought to be used to cover operational expenses, the scale of fiscal problems faced by many of Canada’s largest cities (e.g. the projected \$516 million operating deficit faced by the Toronto Transit Commission in 2017; CBC News, 2016b) necessitate innovations in operational support.

As such, this thesis recommends the provision of operational funding to accompany federal capital investments, with separate funding “envelopes” for large and mid-sized cities. Eligibility and competition for these funds could be determined via a framework built around CTARP’s demonstrated “modal shift” performance recommendations, as outlined in section 6.1.2. This requirement might also incentivize municipalities to champion projects and land-use development strategies that are most effective in reducing automobile use, rather than those promising the most lucrative political returns. An

operationally-focused program would work to align the interests of municipal planners and transit advisers with the interests of a federal funding program that contains no scope for discretionary or overtly political support. However, a significant barrier to the implementation of a system of this nature relates to the reliable quantification of “shifted” users (as discussed in the previous section).

6.1.4 Leveraging spending and taxation powers: Individual transfers and benefits

The final recommendation of this thesis relates to the expansion of federal programming within the confines of the taxation system and the targeted application of the federal spending power via the transfer of funds to individuals and households demonstrating pro-transit behaviour. As demonstrated in section 4.6.2, the Public Transit Tax Credit has been widely viewed by federal agents and the general public as an effective tool (Finance Canada, 2011). However, the existing taxation program (which permits claims of monthly and annual passes only), might be expanded to permit claims for individual fare payments in order to reward and incentivize even occasional transit use.

In addition, payments to individuals might also be used as a policy “carrot” to reward households for pro-transit decision-making. For instance, households of two or more owning only one car could be eligible for incentive payments of a value equal to the environmental and economic externalities of removing one vehicle from the road (distributed in a similar mold to the Universal Child Care Benefit distributed under the Harper Government from 2006-2015). While a benefit scheme of this nature would require careful economic assessment and equity considerations beyond the scope of this research, the value of this benefit ought to be set sufficiently high to more than cover the supplementary costs of mobility via public and active modes of transportation.

6.2 Conclusion

This thesis has posed and answered a number of questions about the role of the federal government in Canada’s urban transit policy regime. Specifically, the relationship between policy ideas and policy change has been explored in great depth, yielding insights related to the motivations, consequences, and potential of federal transit policy-making and programming in Canada. The recommendations presented in this chapter represent ideas stemming from the cumulative insights of the analysis. There is a clear need for an institution to coordinate policy-making – it is the view of this researcher that a tri-level oversight agency ought to harmonize the existing political structures of the CCMRTHS with

increasingly-relevant regional transit governance bodies, and enhance the CCMRTHS' institutional capacity to make meaningful policy recommendations. Similarly, funding formulae ought to be amended to ensure federal, municipal and local politics are not permitted to trump sound transit planning, at least when funds are provided by the nation's taxpayers. There is also a need to support the growing operational needs of transit agencies – as such, envelopes of this nature ought to be developed with the involvement of all three orders of government, conditional upon local commitment to enhancing transit mode shares. Finally, further supportive action via the application of the spending power and the federal tax system could be applied to incentivize transit use among Canadian citizens, expanding the Public Transit Tax Credit program and introducing targeted household benefits for reducing automobile ownership.

It is the author's hope that the insights presented over the course of these six chapters will serve to educate and inform policy-makers at all levels and stations within the regime. This thesis is particularly relevant to municipal and federal agents grappling with how best to conceptualize the needs of the other – it is likely, given the scale of the transit infrastructure deficit and the considerable financial responsibilities for education, health care, and numerous other public services borne by provinces, that the intersection between federal and municipal governments will continue to be increasingly important in efforts to enhance the fiscal and environmental sustainability of Canadian cities in decades to come.

Bibliography

- Anderson, W., Kanaroglou, P., and Miller, E. (1996). Urban form, energy, and the environment: A review of issues, evidence and policy. *Urban Studies*, 33(1), 7–35.
- Anderton, K. (2010). The need for integrated institutions and organizations in transport policy. In *Integrated Transport: From Policy to Practice* (pp. 55–74). New York, NY: Routledge.
- Association for Commuter Transportation of Canada. (2015). Our mission, our vision. Retrieved from <http://www.actcanada.com/about>
- Bakvis, H., Baier, G., and Brown, D. (2009). *Contested Federalism*. Don Mills, ON: Oxford University Press.
- Barnett, R. (1997). Subsidiarity, enabling government, and local governance. In P. Hobson and F. St-Hilaire (Eds.), *Urban Governance and Finance: A Question of Who Does What* (pp. 59–80). Ottawa, ON: The Institute for Research on Public Policy.
- Basford, R. (1972). *The urge to relocate railways: Where the need is*. Ottawa, ON.
- Béland, D. (2005). Ideas and social policy: An institutionalist perspective. *Social Policy and Administration*, 39(1), 1–18.
- Bhattacharjee, A. (2012). *Social Science Research: Principles, Methods, and Practices*. University of South Florida Scholar Commons. Retrieved from http://scholarcommons.usf.edu/oa_textbooks/3
- Birkland, T. (2014). *An Introduction to the Policy Process: Theories, Concepts, and Models of Public Policy Making* (3rd ed.). New York, NY.
- Birkland, T. (2004). “The world changed today”: Agenda-setting and policy change in the wake of the September 11 terrorist attacks. *Review of Policy Research*, 21(2), 179–200.
- Blais, P. (2010). *Perverse Cities: Hidden Subsidies, Wonky Policy, and Urban Sprawl*. Vancouver, BC: UBC Press.
- Bowen, G. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40.
- Bradford, N. (2007). *Whither the federal urban agenda? A New Deal in transition*. Research Report f/65 - Family Network. Ottawa, ON.
- Buehler, R., and Pucher, J. (2011). Making public transport financially sustainable. *Transport Policy*, 18(1), 126–138.
- Bunting, T., and Filion, P. (2010). Epochs in Canadian urban development. In T. Bunting, P. Filion, and R. Walker (Eds.), *Canadian Cities in Transition: New Directions in the Twenty-First Century* (4th ed., pp. 19–38). Don Mills, ON.
- Campbell, J. (1998). Institutional analysis and the role of ideas in political economy. *Theory and Society*, 27, 377–409.
- Canadian Council for Public-Private Partnerships. (2011). *Public-Private Partnerships: A Guide for Municipalities*. Retrieved from http://www.p3canada.ca/~media/english/resources-library/files/p3_guide_for_municipalities.pdf

- Canadian Infrastructure Report Card. (2016). *Canadian Infrastructure Report Card: Informing the Future*. Retrieved from http://www.canadainfrastructure.ca/downloads/Canadian_Infrastructure_Report_2016.pdf
- Canadian Urban Transit Association. (1984). *Government funding policies for urban transit in Canada, 1983-1984*. Toronto, ON.
- Canadian Urban Transit Association. (1986). *Government funding policies for urban transit in Canada, 1986* (Vol. 7).
- Canadian Urban Transit Association. (2009). *Enabling the future: Federal transit investments across Canada*. Retrieved from <http://www.cutaactu.ca/en/publicationsandresearch/resources/IP32E.pdf>
- Canadian Urban Transit Association. (2010a). *Bridging the gap: The federal role in transit investment*. Retrieved from http://www.cutaactu.ca/en/publicationsandresearch/resources/Issue_Paper_38_E.pdf
- Canadian Urban Transit Association. (2010b). *Canada's transit policy framework: A consensus emerges*. Retrieved from http://www.cutaactu.ca/en/publicationsandresearch/resources/Issue_Paper_37_2E.pdf
- Canadian Urban Transit Association. (2011a). *2010 Transit Stats: Summary of Canadian Transit Statistics 2010 Operating Data*. Toronto, ON. Retrieved from [https://members.cutaactu.org/Statistics/Statistics \(EN\)/Summary of Canadian Transit Statistics - 2010 Operating Data.pdf](https://members.cutaactu.org/Statistics/Statistics (EN)/Summary of Canadian Transit Statistics - 2010 Operating Data.pdf)
- Canadian Urban Transit Association. (2011b). *Making headway: Towards a national transit policy framework*. Retrieved from <http://www.cutaactu.ca/en/publicationsandresearch/resources/M19162Englowres.pdf>
- Canadian Urban Transit Association. (2011c). *National transit policy frameworks: What will Canada learn from other countries?* Retrieved from http://www.cutaactu.ca/en/publicationsandresearch/resources/Issue_Paper_40_E2.pdf
- Canadian Urban Transit Association. (2012). *2011 Transit Stats: Summary of Canadian Transit Statistics (2011 Operating Data)*. Toronto, ON. Retrieved from [https://members.cutaactu.org/Statistics/Statistics \(EN\)/Summary of Canadian Transit Statistics - 2011 Operating Data.pdf](https://members.cutaactu.org/Statistics/Statistics (EN)/Summary of Canadian Transit Statistics - 2011 Operating Data.pdf)
- Canadian Urban Transit Association. (2013a). *Federal, provincial and territorial public transit funding programs in Canada, July 2013*. Toronto, ON.
- Canadian Urban Transit Association. (2013b). *Summary of Canadian Transit Statistics (2013 Operating Data)*. Toronto, ON. Retrieved from [https://members.cutaactu.org/Statistics/Statistics \(EN\)/2013 Summary of Canadian Transit Statistics.pdf](https://members.cutaactu.org/Statistics/Statistics (EN)/2013 Summary of Canadian Transit Statistics.pdf)
- Canadian Urban Transit Association. (2015a). *2015 Federal Budget - Public Transit Highlights*. Toronto, ON. Retrieved from http://www.cutaactu.ca/en/public-transit/publicationsandresearch/resources/Budget_Highlights_for_Public_Transit-EN.pdf
- Canadian Urban Transit Association. (2015b). *Canadian Regular Transit Government Funding*.
- Canadian Urban Transit Association. (2015c). *Canadian Regular Transit Operating Data, 1955-2014*.

- Canadian Urban Transit Association. (2015d). CUTA Election Survey Responses and Party Platforms. Retrieved from http://www.cutaactu.ca/en/public-transit/publicaffairs/Election-Responses.asp?utm_source=cuta_public_website&utm_medium=banner&utm_campaign=election_responses&utm_content=EN
- Casello, J., Towns, W., Bélanger, J., and Kassiedass, S. (2015). Public engagement in public transportation projects: Challenges and recommendations. *Transportation Research Record: Journal of the Transportation Research Board*, 2537, 88–95.
- Cashore, B., and Howlett, M. (2007). Punctuating which equilibrium? Understanding thermostatic policy dynamics in Pacific Northwest forestry. *American Journal of Political Science*, 51(3), 532–551.
- CBC News. (2016a). Federal, Ontario Liberals sign \$1.49 billion transit funding agreement. Retrieved from <http://www.cbc.ca/news/canada/toronto/infrastructure-ontario-1.3731947>
- CBC News. (2016b). Mayor John Tory, Gord Perks clash over impact of budget cuts on TTC. Retrieved from <http://www.cbc.ca/news/canada/toronto/mayor-john-tory-gord-perks-clash-over-impact-of-budget-cuts-on-ttc-1.3658273>
- Cervero, R. (1986). Urban transit in Canada: Integration and innovation at its best. *Transportation Quarterly*, 40, 293–316.
- Christopher, J. (1992). *Transportation in Canada: Current issues*. Ottawa, ON.
- Cohen-Vogel, L., and McLendon, M. (2009). New approaches to understanding federal involvement in education. In *Handbook of Education and Policy Research: A Handbook for the American Educational Research Association*. Mahwah, NJ: Lawrence Erlbaum.
- Coleman, W., Skogstad, G., and Atkinson, M. (1996). Paradigm shifts and policy networks: Cumulative change in agriculture. *Journal of Public Policy*, 16(3), 273–301.
- Craft, J., Howlett, M., Crawford, M., and McNutt, K. (2013). Assessing policy capacity for climate change adaptation: Governance arrangements, resource deployments, and analytical skills in Canadian infrastructure policy making. *Review of Policy Research*, 30(1), 42–65.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Dachis, B. (2011). *Congestive Traffic Failure: The Case for High-Occupancy and Express Toll Lanes in Canadian Cities*. Toronto, ON.
- Danson, B. (1975a). *Notes for an address: "An Urban Strategy for Canada" to the Conference Board of Canada. Remarks by the Honourable Barney Danson*. Winnipeg, MB: Ministry of State for Urban Affairs.
- Danson, B. (1975b). *Text of an address delivered by the Honourable Barney Danson, PC, MP, Minister of State of Urban Affairs to the National Joint Conference of the American Society of Planning Officials and the Community Planning Association of Canada*. Vancouver, BC: Ministry of State for Urban Affairs.
- Davidoff, P. (1965). Advocacy and pluralism in planning. *Journal of the American Institute of Planners*, 31(4), 544–555.

- Day, J. M. (2015). Urban Transportation. *The Canadian Encyclopedia*. Retrieved from <http://www.thecanadianencyclopedia.ca/en/article/urban-transportation/>
- Department of External Affairs External Information Program Division. (1981). *Urban Transportation: The Canadian Experience*. Ottawa, ON.
- Department of International Trade and Commerce. (1981). *Urban Transit Solutions*. Ottawa, ON.
- Dewing, M., Young, W. R., and Tolley, E. (2006). *Municipalities, the constitution, and the Canadian federal system*. Ottawa, ON.
- Duc, G. (1975). *Description of selected federal urban-relevant programs*. Ottawa, ON.
- Environment Canada. (1994). *Transportation material for the urban chapter*. Ottawa, ON: Ministry of the Environment.
- Evans, L. (2007). *Moving towards sustainability: City-regions and their infrastructure*. Ottawa, ON. Retrieved from http://rcrpp.ca/documents/49099_EN.pdf
- Federation of Canadian Municipalities. (2007). *Federation of Canadian Municipalities: National Transit Strategy*. Ottawa, ON.
- Federation of Canadian Municipalities. (2015). Transit and Transportation. Retrieved from <http://www.fcm.ca/home/issues/transit-and-transportation.htm>
- Fellmeth, R. (1973). *Politics of land: Ralph Nader's study group report on land use in California*. New York, NY: Grossman Publishers.
- Filion, P., and Kramer, A. (2011). Metropolitan-scale planning in neoliberal times: Financial and political obstacles to urban form transition. *Space and Polity*, 15(3), 197–212.
- Finance Canada. (2011). *Evaluation of the Public Transit Tax Credit*. Ottawa, ON.
- Flemming, B., Patenaude, J., Findlay, G. M., Rae, R. K., and Waters II, W. G. (2001). *Vision and Balance: Report of the Canada Transportation Review Panel*.
- Frankena, M. (1979). *The Economics of Urban Transportation*. Ottawa, ON.
- Gaudry, M. (1997). *The new political economy of transportation: Towards institutional reform*. Montreal, QC.
- Gertler, L. (1973). The research program of the Ministry of State for Urban Affairs. In *Annual Meeting of the Canadian Council of Urban and Regional Research* (p. 30). Montreal, QC: Ministry of State for Urban Affairs.
- Gill, V. (2011). *Tapped out: Efficiency options for closing the municipal infrastructure gap*.
- Government of Canada. (2016). *Investing in Infrastructure to Create Jobs and Prosperity for the Middle Class: Building Strong Cities Through Investment in Public Transit. Growing the Middle Class: The 2016-2017 Federal Budget*. Ottawa, ON: Government of Canada.
- Gray, H. (1981). *Notes for a speech by the honourable Herb Gray, PC, MP, Minister of Industry, Trade, and Commerce, to the 76th Annual Meeting of the Canadian Urban Transit Association, Hotel Loews le Concorde, Quebec City, Monday, 22nd of June, 1981*. Quebec City, QC.

- Guess, G. (2008). *Managing and Financing Urban Public Transportation Systems: An International Perspective*. Budapest, Hungary: Open Society Institute.
- Hall, P. A. (1993). Policy paradigms, social learning, and the state: The case of economic policymaking in Britain. *Comparative Politics*, 25(3), 275–296.
- Hamilton, D. (2013). *Measuring the Effectiveness of Regional Governing Systems*. Springer.
- Hammond, M., and Wellington, J. (2013). *Research Methods: The Key Concepts*. Oxon, UK: Routledge.
- Hanson, S., and Giuliano, G. (Eds.). (2004). *The Geography of Urban Transportation (3rd edition)* (3rd ed.). New York, NY: The Guilford Press.
- Harvey, D. (2005). *A Brief History of Neoliberalism*. New York, NY: Oxford University Press.
- Hatzopoulou, M., and Miller, E. (2008). Institutional integration for sustainable transportation policy in Canada. *Transport Policy*, 15(3), 149–162. Retrieved from <http://linkinghub.elsevier.com/retrieve/pii/S0967070X07001102>
- Henstra, D. (2011). The dynamics of policy change: A longitudinal analysis of emergency management in Ontario, 1950–2010. *Journal of Policy History*, 23(03), 399–428. doi:10.1017/S0898030611000169
- Henstra, D. (2015). The multilevel governance of climate change: Analyzing Canada’s adaptation policy regime. In *Annual Meeting of Canadian Political Science Association 2015*.
- Hjartarson, J., Szala, M., and Hinton, K. (2011). *Putting Canada on track: A blueprint for a national transit framework*. Mowat Centre for Policy Innovation: Toronto, ON. Retrieved from http://mowatcentre.ca/wp-content/uploads/publications/37_putting_canada_on_track.pdf
- Horak, M. (2012a). Conclusion: Understanding multilevel governance in Canada’s cities. In M. Horak and R. Young (Eds.), *Sites of Governance: Multilevel Governance and Policy-Making in Canada’s Biggest Cities* (pp. 339–370). Montreal, QC: McGill-Queen’s University Press.
- Horak, M. (2012b). Multilevel governance in Toronto: Success and failure in Canada’s largest city. In M. Horak and R. Young (Eds.), *Sites of Governance: Multilevel Governance and Policy-Making in Canada’s Biggest Cities* (pp. 229–262). Montreal, QC: McGill-Queen’s University Press.
- House of Commons of Canada. (2014). *Standing Committee on Finance, Monday, October 20, 2014, FINA, Number 049, 2nd Session, 41st Parliament*. Ottawa, ON: Library of Parliament.
- Howlett, M., and Cashore, B. (2009). The dependent variable problem in the study of policy change: Understanding policy change as a methodological problem. *Journal of Comparative Policy Analysis: Research and Practice*, 11(1), 33–46.
- Hsieh, H., and Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–88.
- Hume, C. (2015). Why Canada’s cities — especially Toronto — struggle for the federal government’s attention. *The Toronto Star*. Retrieved from <https://www.thestar.com/news/gta/2015/10/15/why-canadas-cities-especially-toronto-struggle-for-the-federal-governments-attention.html>
- Hutton, T. (2012). Multilevel governance and urban development: A Vancouver case study. In M. Horak and R. Young (Eds.), *Sites of Governance: Multilevel Governance and Policy-Making in Canada’s Biggest Cities* (pp. 263–298). Montreal, QC: McGill-Queen’s University Press.

- IBI Group. (1993). *Urban travel and sustainable development*. Ottawa, ON.
- IBI Group, and Soberman, R. (2001). *National Vision for Urban Transit to 2020*. Ottawa, ON.
- Infrastructure Canada. (2012). *Infrastructure Spotlight: Improving public transit for the 21st century*. Ottawa, ON.
- Infrastructure Canada. (2014). Infrastructure Canada Programs. Retrieved from <http://www.infrastructure.gc.ca/prog/index-eng.html>
- Irwin, N. (2003). Urban transportation: An essential factor. In *Proceedings of the 2003 Annual Conference of the Transportation Association of Canada* (pp. 1–15). St. John's, Newfoundland and Labrador.
- Jochim, A., and May, P. (2010). Beyond subsystems: Policy regimes and governance. *The Policy Studies Journal*, 38(2), 303–327.
- Johnson, L., and Baluja, T. (2015). Transit referendum: Voters say No to new Metro Vancouver tax, transit improvements. *CBC News*. Retrieved from <http://www.cbc.ca/news/canada/british-columbia/transit-referendum-voters-say-no-to-new-metro-vancouver-tax-transit-improvements-1.3134857>
- Jones, D. (2008). *Mass Motorization and Mass Transit*. Bloomington, IN: Indiana University Press.
- Kennedy, C., Miller, E., Shalaby, A., Maclean, H., and Coleman, J. (2005). The four pillars of sustainable urban transportation. *Transport Reviews*, 25(4), 393–414. doi:10.1080/01441640500115835
- Kolbe, R., and Burnett, M. (1991). Content-analysis research: An examination of applications with directives for improving research reliability and objectivity. *Journal of Consumer Research*, 18, 243–250.
- Krippendorff, K. (2004). *Content Analysis: An Introduction to its Methodology (2nd Edition)*. *Journal of the American Statistical Association* (Vol. 79). Thousand Oaks, CA: Sage Publications, Inc.
- Langford, J. (1976). *Transport in Transition: The Reorganization of the Federal Transport Portfolio*. McGill-Queen's University Press.
- Lewis, C. (1972). Research directions in urban transportation. In *Canadian Federation of Mayors and Municipalities/Ministry of Transport Seminar on Urban Transportation* (p. 30). Montebello, QC: Ministry of Transport.
- Lieberman, R. (2002). Ideas, Institutions, and Political Order: Explaining Political Change. *American Political Science Review*, 96(4), 697–712.
- Lightbody, J. (1999). Canada's seraglio cities: Political barriers to regional governance. *Canadian Journal of Sociology*, 24(2), 175–191.
- Lindblom, C. (1959). The science of “muddling through.” *Public Administration Review*, 19(2), 79–88.
- Martin, P. (2002). *Speech by the Honourable Paul Martin, Minister of Finance for Canada, to members of the Federation of Canadian Municipalities*. Hamilton, ON. Retrieved from http://www.urbancentre.utoronto.ca/pdfs/elibrary/Martin_FCM-Speech_May_2002.pdf
- Matsaganis, M., and Payne, J. (2005). Agenda setting in a culture of fear: The lasting effects of

- September 11 on American politics and journalism. *The American Behavioural Scientist*, 49(3), 379–392.
- Mendez, P., Moos, M., and Osolen, R. (2015). Driving the commute: Getting to work in the restructuring automobile city. In A. Walks (Ed.), *The Urban Political Economy and Ecology of Automobility* (pp. 103–128). New York, NY: Routledge.
- Meyerson, M., and Banfield, E. (1955). *Politics, Planning, and the Public Interest*. Glencoe, IL: The Free Press.
- Miller, L. (2015). *Updating infrastructure in Canada: An examination of needs and investment (Report of the Standing Committee on Transport, Infrastructure and Communities)*. Ottawa, ON.
- Ministry of State for Urban Affairs. (1974). *Annual Report, 1973-1974*. Ottawa, ON.
- Ministry of State for Urban Affairs. (1975a). *Annual Report, 1974-1975*. Ottawa, ON.
- Ministry of State for Urban Affairs. (1975b). *Capital assistance program for urban transportation announced*. Ottawa, ON.
- Ministry of State for Urban Affairs. (1976). *Annual Report, 1975-76*. Ottawa, ON.
- Ministry of State for Urban Affairs. (1978). *Annual Report, 1977-1978*. Ottawa, ON.
- Ministry of State for Urban Affairs. (1979). *Land Value Capture*. Ottawa, ON.
- Moore, O., Sachgau Les Perreux, O., and Mason, G. (2015, June 9). Canadian cities caught between crumbling infrastructure and growing calls for transit. *Globe and Mail*. Toronto, ON.
- N.D. Lea and Associates Ltd. (1979). *Transportation/Housing Interrelationships: Pilot Study*. Ottawa, ON.
- National Round Table on the Environment and Economy. (1997). *State of the debate: The road to sustainable transportation in Canada*. Ottawa, ON.
- National Round Table on the Environment and Economy. (2003). *Environmental quality in Canadian cities: The federal role*. Toronto, ON: Government of Canada.
- National Round Table on the Environment and the Economy. (1995). *Report of the Transportation and Climate Change Collaborative: A Strategy for Sustainable Transportation in Ontario*. Toronto, ON.
- National Round Table on the Environment and the Economy. (1996). *Sustainable Transportation in Canada (Background)*. Ottawa, ON.
- National Transportation Agency. (1985). *Freedom to Move: A Framework for Transportation Reform*. Ottawa, ON.
- National Transportation Agency. (1989). *Freedom to move in Canada's new transportation environment*. Ottawa, ON.
- O'Brien, A. (1982). The Ministry of State for Urban Affairs: A Municipal Perspective. *The Canadian Journal of Regional Science*, 5(1), 83–94.
- Oberlander, P., and Fallick, A. (Eds.). (1987). *The Ministry of State for Urban Affairs: A Courageous Experiment in Public Administration*. Vancouver, BC: The Centre for Human Settlements, University of British Columbia.

- Office of the Auditor General of Canada. (1999). *Report of the Auditor General of Canada, Chapter 17: Canada Infrastructure Works Program Phase II and Follow-up of Phase I Audit Table of Contents*. Ottawa, ON.
- Perl, A., and Kenworthy, J. (2010). The Canadian City at a Crossroads between “Passage” and “Place.” In T. Bunting, P. Fillion, and R. Walker (Eds.), *Canadian Cities in Transition: New Directions in the Twenty-First Century* (4th ed., pp. 191–209). Don Mills, ON: Oxford University Press.
- Perl, A., and Pucher, J. (1995). Transit in trouble? The challenge posed by Canada’s changing urban mobility. *Canadian Public Policy*, 21(3), 261–283.
- Peters, G. (2012). *Institutional Theory in Political Science: The New Institutionalism (3rd Edition)* (3rd ed.). London, UK: Pinter.
- Picton, R. M. (2010). Selling national urban renewal: The National Film Board, the National Capital Commission and post-war planning in Ottawa, Canada. *Urban History*, 37(02), 301–321. Retrieved from http://www.journals.cambridge.org/abstract_S0963926810000374
- Prime Minister’s Caucus Task Force on Urban Issues. (2002). *Canada’s Urban Strategy: A Blueprint for Action (Final Report, Prime Minister’s Caucus Task Force on Urban Issues)*.
- Rochon, J. (2002). *Federal Funding for Urban Transportation: A Transport Canada Perspective*. Winnipeg, MB.
- Roschlau, M. (2008). Public transport policy in Canada and the United States: Developing political commitment from the federal government. *Research in Transportation Economics*, 22(1), 91–97. Retrieved from <http://linkinghub.elsevier.com/retrieve/pii/S0739885908000188>
- Rose, R. (1991). What is lesson-drawing? *Journal of Public Policy*, 11(1), 3–30.
- Ruffilli, D. (2010). *Federal Support for Bus Rapid Transit and Light Rail Transit Systems in Canada*. Retrieved from <http://www.parl.gc.ca/content/lop/researchpublications/2010-64-e.pdf>
- Sancton, A. (2005). The Governance of Metropolitan Areas in Canada. *Public Administration Development*, 25, 317–327.
- Sancton, A. (2008). The Urban Agenda. In H. Bakvis and G. Skogstad (Eds.), *Canadian Federalism: Performance, Effectiveness, and Legitimacy* (2nd ed., pp. 314–333). Don Mills, ON: Oxford University Press.
- Sancton, A. (2015). *Canadian Local Government: An Urban Perspective* (2nd ed.). Don Mills, ON: Oxford University Press.
- Savoie, D. (2010). *Power: Where Is It?* Montreal, QC: McGill-Queen’s University Press.
- Schabas, M. (2013). *Review of Metrolinx’s Big Move*. Toronto, ON.
- Schiller, P., Bruun, E., and Kenworthy, J. (2010). *An Introduction to Sustainable Transportation: Policy, Planning, and Implementation*. London: MPG Books, Ltd.
- Seidle, L. (2002). *The federal role in Canada’s cities: Overview of issues and proposed actions*. Ottawa, ON. Retrieved from <http://www.urbancentre.utoronto.ca/pdfs/home/debates/CPNRFederal.pdf>
- Shaker, P. (2005). *More than money: The New Deal for Cities and a federal urban lens*. Toronto, ON.

Retrieved from http://www.urbancentre.utoronto.ca/pdfs/elibrary/CCPA_New-Deal-Cities_2004.pdf

- Siemiatycki, M. (2011). Urban transportation public – private partnerships: Drivers of uneven development? *Environment and Planning A*, 43(7), 1707–1722. Retrieved from <http://www.envplan.com/abstract.cgi?id=a43572>
- Single, P. (2010). *Demystifying Dissertation Writing*. Sterling, VA: Stylus Publishing, LLC.
- Spicer, Z. (2010). Institutional policy learning and formal federal-urban engagement in Canada. *Commonwealth Journal of Local Governance*, (7), 99–119.
- Spicer, Z. (2011). The rise and fall of the Ministry of State for Urban Affairs: A re-evaluation. *Canadian Political Science Review*, 5(2), 117–126.
- Statistics Canada. (2011). Population, urban and rural, by province and territory. Retrieved from <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo62a-eng.htm>
- Steinberg, J. (2013). The “consensual” politics of transit infrastructure policy in Kitchener, Ontario. In *Canadian Political Science Association Conference*. Victoria, BC.
- Stoney, C., and Graham, K. a. H. (2009). Federal-municipal relations in Canada: The changing organizational landscape. *Canadian Public Administration*, 52(3), 371–394. doi:10.1111/j.1754-7121.2009.00088.x
- Sunga, P., and Duc, G. (1975). *MSUA and the federal government*. Ottawa, ON.
- Tassonyi, A. (1997). Financing municipal infrastructure in Canada’s city-regions. In P. A. Hobson and F. St-Hilaire (Eds.), *Urban Governance and Finance: A Question of Who Does What* (pp. 171–200). Ottawa, ON: The Institute for Research on Public Policy.
- Taylor, Z., and Eidelman, G. (2010). Canadian political science and the city: A limited engagement. *Canadian Journal of Political Science*, 4, 961–981.
- Tindal, R. (2013). *Local Government in Canada* (8th ed.). Toronto, ON: Nelson Education.
- Transit Investment Strategy Advisory Panel. (2013). *Making the move: Choices and consequences*. Retrieved from <http://www.mto.gov.on.ca/english/news/backgrounder/transit-review-panel.shtml>
- Transport Canada. (2002). *Urban Transit in Canada: Taking Stock*. Ottawa, ON.
- Transport Canada. (2004). *Review of international urban transportation policy frameworks, strategies, and governance models*. Ottawa, ON.
- Transport Canada. (2005). *Urban Transportation Showcase Program - Urban Transportation Pricing Options*. Ottawa, ON.
- Transport Canada. (2012). Transit Infrastructure Programs. Retrieved from <https://www.tc.gc.ca/eng/programs/surface-menu.htm>
- Transport Canada. (2013). *Transportation in Canada 2013*. Ottawa, ON.
- Transportation Association of Canada. (1997). *Financing Urban Transportation*. Ottawa, ON.
- Transportation Association of Canada. (1998). *A New Vision for Urban Transportation*. Ottawa, ON.

- Transportation Association of Canada. (2012). *Sustainable funding for urban/regional transportation in Canada*. Ottawa, ON.
- Transportation Association of Canada. (2013). *Transportation in Canada: Transforming the fabric of our land*. Ottawa, ON.
- Tweed, M. (2012). *Study on transit in Canada: Report of the Standing Committee on Transport, Infrastructure and Communities*. Ottawa O.
- Urban Transportation Research Branch. (1979). *A review of the experience and activities of the Urban Transportation Research Branch 1974-1979*. Ottawa, ON.
- Urban Transportation Task Force. (2005). *Urban transportation in Canada: Needs and opportunities*. Ottawa, ON.
- Urban Transportation Task Force. (2009). *Urban transit in Canada: Taking stock of recent progress*. Ottawa, ON.
- Urban Transportation Task Force. (2010). *Recent Developments in Transit in Canadian Cities, 2010*. Ottawa, ON.
- Urban Transportation Task Force. (2012). *The High Cost of Congestion in Canadian Cities*. Ottawa, ON.
- Van Eeten, M. (2007). Narrative Policy Analysis. In F. Fischer, G. Miller, and M. Sidney (Eds.), *Handbook of Public Policy Analysis: Theory, Politics, and Methods* (pp. 251–269). Boca Raton, FL: CRC Press.
- Verrelli, N. (2008). *The federal spending power* (No. 10). Kingston, ON.
- Vigliotto, M. (2016, April 20). Local transit, federal lessons. *The Hill Times*. Ottawa, ON. Retrieved from <https://www.hilltimes.com/2016/04/20/local-transit-federal-lessons/58386>
- Vuchic, V. (1999). *Transportation for Livable Cities*. New Brunswick, New Jersey: Centre for Urban Policy Research.
- Wagenaar, H. (2011). *Meaning in Action: Interpretation and Dialogue in Policy Analysis*. Armonk, NY: M.E. Sharp, Inc.
- Walks, A. (2015a). Driving cities: Automobility, neoliberalism, and urban transformation. In A. Walks (Ed.), *The Urban Political Economy and Ecology of Automobility* (pp. 3–20). New York, NY: Routledge.
- Walks, A. (2015b). Driving the vote: Automobility, ideology, and political partisanship. In A. Walks (Ed.), *The Urban Political Economy and Ecology of Automobility* (pp. 199–220). New York, NY: Routledge.
- Walks, A. (2015c). *The Urban Political Economy and Ecology of Automobility: Driving Cities, Driving Inequality, Dr.* (A. Walks, Ed.). New York, NY: Routledge.
- Weingast, B., and Wittman, D. (Eds.). (2006). *The Oxford Handbook of Political Economy*. Norfolk, UK: Oxford University Press.
- Yanow, D. (2007). Qualitative-Interpretive Methods in Policy Research. In F. Fischer, G. Miller, and M. Sidney (Eds.), *Handbook of Public Policy Analysis: Theory, Politics, and Methods* (pp. 405–416). Boca Raton, FL: CRC Press.
- Young, R., and McCarthy, K. (2009). Why do municipal issues rise on the federal policy agenda in

Canada? *Canadian Public Administration*, 52(3), 347–370.

Appendix A: Search Terms and Databases

This appendix presents a list of search terms and databases consulted during document search and selection process, as described in Chapter 2.

Search terms:

- Federal AND transportation OR transport OR transit;
- Federal AND transportation OR transport OR transit AND Canada;
- Federal funding AND transportation OR transport OR transit AND Canada;
- Federal funding AND transportation OR transport OR transit;
- Federal policy AND transportation OR transit OR transport AND Canada;
- Federal policy AND transportation OR transit OR transport;
- Finance AND transport OR transportation OR transit AND Canada;
- Finance AND transport OR transportation OR transit;
- Fiscal federalism AND transport OR transportation OR transit AND Canada;
- Fiscal federalism AND transport OR transportation OR transit;
- Funding AND transport OR transportation OR transit AND Canada;
- Funding AND transport OR transportation OR transit;
- Governance AND transport OR transportation OR transit AND Canada;
- Governance AND transport OR transportation OR transit;
- Infrastructure AND transport OR transportation OR transit AND Canada;
- Infrastructure AND transport OR transportation OR transit;
- Institutions AND transport OR transportation OR transit AND Canada;
- Institutions AND transport OR transportation OR transit;
- Institutional integration OR policy integration AND transportation OR transit AND Canada;
- Institutional integration OR policy integration AND transportation OR transport OR transit;
- Institutional arrangements AND transit OR transport OR transportation AND Canada;
- Institutional arrangements AND transit OR transport OR transportation;
- Mass transportation OR mass transit AND Canada;
- Mass transportation OR mass transit;
- Ministry of State for Urban Affairs AND urban transportation;
- Ministry of State for Infrastructure and Communities AND urban transportation;
- Metropolitan transportation OR metropolitan transit AND Canada;
- Metropolitan transportation OR metropolitan transit;
- Public transport OR transportation OR transit AND Canada;
- Public transport OR transportation OR transit;
- Regional AND transport OR transportation OR transit AND Canada;
- Regional AND transport OR transportation OR transit;
- Sustainable AND urban transport OR transportation OR transit AND Canada;

- Sustainable AND urban transport OR transportation OR transit
- Transport OR transit OR transportation AND Canada;
- Transport OR transit OR transportation AND policy AND Canada;
- Transport OR transit OR transportation AND policy;
- Urban transportation OR transport OR transit AND Canada;
- Urban transportation OR transport OR transit AND Canada.

Databases queried:

- Canadian Research Index;
- Canadian Periodical Index;
- Canadian Surface Transportation Research Database (TAC);
- Canadian Urban Transit Association (CUTA) Members' Library;
- Council of Ministers and Deputy Ministers Responsible for Transportation and Highway Safety website;
- EconLit;
- Elsevier;
- Environment Abstracts;
- GeoBase;
- Google Scholar;
- House of Commons (Canada) Committees;
- Journals of the House of Commons of Canada;
- Library of Parliament;
- National Round Table on the Environment and Economy (archives);
- Primo;
- Transportation Association of Canada (website);
- Transportation Research Record Metapress (TRID).

Appendix B: Content Analysis Document Sample

This appendix presents the documents identified through keyword/database search produced by the Government of Canada and its constituent institutions in each of the three historical eras references throughout this thesis (documents for the years 1968- 1979, 1980-2001, and 2002-2015). The process by which documents were identified and selected is outlined in Chapter 2.

Table 13: List of all documents included in the content analysis.

1968-1979			
Year	Title	Author (affiliation)	Document type
1972	<i>Research directions in urban transportation</i>	Lewis, C. (Transportation Development Agency, Ministry of Transport)	Conference proceedings
1973	<i>Annual Report: 1972-1973</i>	Ministry of State for Urban Affairs	Departmental/program report
1973	<i>The research program of the Ministry of State for Urban Affairs</i>	Gertler, L. (Ministry of State for Urban Affairs; Annual Meeting of the Canadian Council of Urban and Regional Research)	Conference proceedings
1974	<i>Annual Report: 1973-74</i>	Ministry of State for Urban Affairs	Departmental/program report
1974	<i>Comparison of public transit systems</i>	Ministry of State for Urban Affairs	Research report
1974	<i>Public transit and the needs of disadvantaged groups</i>	Ministry of State for Urban Affairs	Research report
1975	<i>Annual Report: 1974-75</i>	Ministry of State for Urban Affairs	Departmental/program report
1975	<i>Description of selected federal urban-relevant programs</i>	Duc, G. (Ministry of State for Urban Affairs)	Policy brief
1975	<i>Notes for an address: "An Urban Strategy for Canada" to the Conference Board in Canada</i>	Danson, B. (Minster of State for Urban Affairs)	Ministerial address
1975	<i>Text of an address delivered by the Honourable Barney Danson, PC, MP, Minister of State of Urban Affairs to the National Joint Conference of the American Society of Planning Officials and the Community Planning Association of Canada</i>	Danson, B. (Minster of State for Urban Affairs)	Ministerial address
1975	<i>MSUA and the federal government</i>	Sunga, P. and Duc, G. (Ministry of State for Urban Affairs)	Policy brief

1975	<i>Capital assistance program for urban transportation announced</i>	Ministry of State for Urban Affairs	Press release
1975	<i>MSUA: What it is, what it does</i>	Ministry of State for Urban Affairs	Policy brief
1976	<i>Intra-urban mobility in Montreal, Toronto and Vancouver</i>	Kirkland, J. (Ministry of State for Urban Affairs)	Research report
1976	<i>Annual Report: 1975-76</i>	Ministry of State for Urban Affairs	Departmental/program report
1977	<i>Annual Report: 1976-77</i>	Ministry of State for Urban Affairs	Departmental/program report
1978	<i>Annual Report: 1977-78</i>	Ministry of State for Urban Affairs	Departmental/program report
1979	<i>Transportation/housing interrelationships: pilot study</i>	N.D. Lea and Associates, Ltd. (Ministry of State for Urban Affairs)	Research report
1979	<i>The Economics of urban transportation</i>	Frankena, M. (Urban Transportation Research Branch, Transport Canada)	Research report
1979	<i>A Review of the Experiences and Activities of the Urban Transportation Research Board, 1974-1979</i>	Urban Transportation Research Board (Transport Canada)	Departmental/program report
1980-2001			
Year	Title	Author (affiliation)	Document type
1981	<i>Notes for a speech by the Honourable Herb Gray, PC, MP, Minister of Industry, Trade, and Commerce to the 76th Annual Meeting of the Canadian Urban Transit Association , Hotel Loews le Concorde, June 22, 1981</i>	Herb Gray (Ministry of Industry, Trade, and Commerce)	Ministerial address
1981	<i>Urban transportation: The Canadian Experience</i>	Department of External Affairs	Trade publication
1981	<i>Urban transit solutions</i>	Ministry of Industry, Trade, and Commerce	Trade publication
1985	<i>Freedom to Move: A Framework for Transportation Reform</i>	National Transportation Agency	Policy directive
1985	<i>Urban transit research and development: Inventory of projects and value analysis</i>	Transportation Development Centre (Transport Canada)	Departmental/program report
1989	<i>Freedom to move in Canada's new transportation environment</i>	National Transportation Agency	Policy directive
1992	<i>Transportation in Canada: Current Issues</i>	John, C. (Library of Parliament)	
1993	<i>Urban travel and sustainable development: The Canadian experience</i>	IBI Group, prepared for Canada Mortgage and Housing Corporation	Research report

1994	<i>Transportation material for the urban chapter</i>	IBI Group, prepared for Environment Canada	Research report
1996	<i>Sustainable Transportation in Canada (Background)</i>	National Round Table on the Environment and the Economy	White paper
1997	<i>Financing urban transportation</i>	Transportation Association of Canada	Research report
1997	<i>State of the debate: The road to sustainable transportation in Canada</i>	National Round Table on the Environment and the Economy	Research report
1998	<i>A new vision for urban transportation</i>	Transportation Association of Canada	White paper
1999	<i>Canada Infrastructure Work Program: Phase II and Follow-Up of the Phase I Audit</i>	Office of the Auditor General of Canada	Policy directive
2000	<i>Factors affecting urban transit ridership</i>	Kohn, H. (Statistics Canada)	Research report
2000	<i>Measuring progress: Toward the new vision for urban transportation</i>	Transportation Association of Canada	White paper
2001	<i>National Vision for Urban Transit to 2020</i>	Soberman, R. (Transport Canada)	White paper
2001	<i>Vision and Balance: Report of the Canada Transportation Review Panel</i>	Flemming, B., Patenaude, J., Findlay, G., Rae, R., and Waters, W. (Ministry of Public Works and Government Services)	White paper
2001	<i>Sustainable Transportation: The Canadian Context</i>	Transport Canada (Contribution to the dialogue at the Ninth Session of the United Nations Commission on Sustainable Development, April 16 to 27, 2001)	Conference proceedings
2001	<i>Commons Debates, December 10, 2001: Transit</i>	House of Commons of Canada	House of Commons proceedings
2002-2015			
Year	Title	Author (affiliation)	Document type
2002	<i>Speech by the Honourable Paul Martin, Minister of Finance for Canada, to members of the Federation of Canadian Municipalities</i>	Martin, P. (Ministry of Finance)	Ministerial address
2002	<i>Urban Transit in Canada: Taking Stock</i>	Transport Canada	Research report
2002	<i>Canada's Urban Strategy: A Blueprint for Action (Final Report, Prime Minister's Caucus Task Force on Urban Issues)</i>	Prime Minister's Caucus Task Force on Urban Issues	Policy recommendation
2003	<i>Legislative History of Bill C-26: Transportation Amendment Act</i>	Johansen, D. (Library of Parliament)	Research report

2003	<i>Straight Ahead: A Vision for Transportation in Canada</i>	Transport Canada	White paper
2004	<i>Review of international urban transportation policy frameworks, strategies, and governance models</i>	Transport Canada	Research report
2005	<i>Urban transportation in Canada: Needs and opportunities</i>	Council of Ministers and Deputy Ministers Responsible for Transportation and Highway Safety, Urban Transportation Task Force	Policy recommendation
2005	<i>Urban Transportation Pricing Options</i>	Transport Canada, Urban Transportation Showcase Program	Research report
2005	<i>Monitoring Progress Toward Sustainable Urban Transportation</i>	Transport Canada, Urban Transportation Showcase Program	Policy evaluation
2006	<i>An Evaluation of Transport Canada's Moving on Sustainable Transportation Program</i>	Transport Canada, Moving on Sustainable Transportation Program	Policy evaluation
2009	<i>Urban transit in Canada: Taking stock of recent progress</i>	Council of Ministers and Deputy Ministers Responsible for Transportation and Highway Safety, Urban Transportation Task Force	Policy recommendation
2010	<i>Federal Support for Bus Rapid Transit and Light Rail Transit Systems in Canada</i>	Ruffilli, D. (Library of Parliament)	Research report
2010	<i>Recent Developments in Transit in Canadian Cities, 2010</i>	Council of Ministers and Deputy Ministers Responsible for Transportation and Highway Safety, Urban Transportation Task Force	Policy recommendation
2011	<i>Tax Evaluations and Research Reports: Evaluation of the Public Transit Tax Credit</i>	Ministry of Finance	Policy evaluation
2012	<i>Improving bus service: Modest investments to increase transit ridership</i>	Transport Canada	Research report
2012	<i>Sustainable funding for urban/regional transportation in Canada</i>	Transportation Association of Canada	Research report
2012	<i>Study on transit in Canada: Report of the Standing Committee on Transport, Infrastructure and Communities</i>	Tweed, M. (House of Commons Standing Committee on Transport, Infrastructure and Communities)	House of Commons proceedings
2012	<i>Infrastructure Spotlight: Improving public transit for the 21st century</i>	Infrastructure Canada	White paper
2014	<i>Standing Committee on Finance, Monday, October 20, 2014, FINA, Number 049, 2nd Session, 41st Parliament</i>	House of Commons of Canada, Standing Committee on Finance, Monday, October 20, 2014, FINA, Number 049, 2 nd Session, 41 st Parliament	House of Commons proceedings

2015	<i>Updating infrastructure in Canada: An examination of needs and investment (Report of the Standing Committee on Transport, Infrastructure and Communities)</i>	Miller, L. (Chair, Standing Committee on Transport, Infrastructure and Communities)	House of Commons proceedings
------	--	---	------------------------------

Appendix C: Thematic Codes

Table 14: First-era (documents from 1968-1979) codes applied during the thematic coding process.

1st Era Paradigms	Lewis, C. B. (1972). Research directions in urban transportation. In <i>Canadian Federation of Mayors and Municipalities/Ministry of Transport Seminar on Urban Transportation</i> . Montebello, QC: Ministry of Transport.	1Paradigms1: “Urban mobility has never before been enjoyed by such a large proportion of the population. On the other hand the modern private car has also contributed to the urban dweller’s increasing sense of isolation and frustration” (p. 1)
		1Paradigms2: “Transportation is not the key to the solution of all urban problems, but it is ... an important element of the city structure and solutions cannot be proposed without consideration of the general problem of the urban dynamic. Transportation, together with modern communications, has provided the warp and the weft along which our modern cities have been allowed to sprawl. Without transportation, the modern city could not continue to exist” (p. 3)
		1Paradigms3: “The root causes of our present and imminent vehicle traffic problems are the growth of human and automobile populations and the almost complete lack of any planned development of our cities in the interest of the people who choose, or who are obliged, to live and work in them” (p. 5)
		1Paradigms4: “The automobile is used for 50% to 60% of all trips to and from the central business districts of Canadian cities and for 97% of all urban passenger miles travelled. Less than the remaining 3% are accomplished by public transit. Therefore, it is apparent that particular attention must be directed to the private car if any appreciable amelioration of present urban traffic conditions is to be achieved. While the provision of improved public transport can relieve some city transportation problems, it is by no means the panacea some propagandists would have us believe. The history of public transit systems in North America over the last twenty-five years has been one of decreasing ridership, increasing costs and inadequate service. If the car commuter is to be encouraged to switch back to public transit, it is evident that higher standards of convenience, reliability and comfort must be provided. However, in spite of all we can do to improve the situation, it is likely that a variant of Parkinson’s Law will pertain; namely, the automotive population will expand to fill the pavement area available to it” (p. 5)
		1Paradigms5: “The planners and designers of integrated systems face almost insurmountable economic and political problems. Prominent among these are the number of different jurisdictions involved and the number of different people and parties who are asked to pay different parts of the total bill” (p. 5)

		<p>1Paradigms6: “One of our most difficult problems is the lack of any consensus on the values to be placed on the many social benefits and disbenefits involved. We do not yet know how to allocate the costs of snow removal and policing to the various users of our city streets, let alone how to quantify the costs of noise, pollution, accidents, time lost in congestion, and aesthetic intrusion. We know how to estimate the cost of building new arterials (or do we?), but we do not know how to evaluate the social costs involved in carving up the communities they traverse ... One begins to wonder how we shall ever be able to apply the ... ‘systems approach’ to our urban problems on any significant scale” (p. 5)</p>
		<p>1Paradigms7: “The major urban problems to which the private car makes a substantial contribution are traffic congestion, air pollution, noise, and the high total cost of urban transportation. The ... automobile may be an excellent vehicle for highway cruising, but it would be difficult to conceive of a more ridiculous vehicle for urban use” (p.5)</p>
		<p>1Paradigms8: “A well-integrated and comprehensive system [involving flexible, express, and conventional transit services] could greatly enhance urban mobility and reduce the need for private vehicles to operate in core districts. It should be readily responsive to changes in land use and improvements in technology, unlike conventional rapid transit which tends to leave the public investment ‘locked in’ to a static technology and to exert a dominant influence on land use patterns throughout its useful life” (p. 7)</p>
		<p>1Paradigms9: “Review of the process of building new urban transit systems in North America over the last decade or so shows that the major problems encountered were jurisdictional and institutional, that these problems dominated the basic technical task of system planning, and entailed extraordinary delays before detailed design and construction could be undertaken ... There is a mutual attraction between real estate investment capital and mass transit, partly because of the permanent or ‘inflexible’ nature of rapid transit routing. This in turn inhibits the flexibility of long-term urban development planning” (p. 9)</p>
		<p>1Paradigms10: “In the last decade or so there has been a growing awareness of the magnitude of the problems facing us in the development of urban transportation, and of the technological opportunities offered to us. We have yet to establish effective machinery whereby a concerted and cohesive attack on these problems on a nationwide scale can be made through the research and development process” (p. 17)</p>

<p>Gertler, L. O. (1973). The research program of the Ministry of State for Urban Affairs. In <i>Annual Meeting of the Canadian Council of Urban and Regional Research</i>. Montreal, QC: Ministry of State for Urban Affairs.</p>	<p>1Paradigms11: “The pressing urban problems of poverty and housing shortages and escalating land costs, transportation and environmental vulnerability and urban servicing are interrelated ... and cannot be dealt with effectively in isolation from each other. The policy maker must be informed by a synoptic view of urban problems. At all levels of government we need to coordinate the urban-related sectors, and to develop broad urban policies that provide a perspective and context for sectoral policies” (p. 3)</p>
	<p>1Paradigms12: “Urban problems reflect deep societal forces, such as rural-urban migration, income structures, the economics of transportation, the biases of private banking and investment, the mechanism of the land market, and so on. As a consequence, urban problems cannot be treated by each city in isolation without reference to the relationship between and interdependence of cities and towns, town and country, and multi-governmental networks of policies and programs that have an urban impact. To cope with urban problems, we need to sustain consultation between all levels of government on the character of the problems, the policy options and the ways and means of bringing to bear on the solution or alleviation of problems the full weight of the urban government system” (p. 3)</p>
	<p>1Paradigms13: “To understand the role and potential of the Ministry's research program, we have to appreciate that the essence of the approach, as represented by the Ministry, is to initiate a process which is directed both inwards to the federal system, and outwards to other governments and non-government urban interests” (p. 5)</p>
	<p>1Paradigms14: “Movement within urban areas should not depend to the extent that it does on the private automobile, which results in congestion, environmental pollution, and denial of adequate transportation to those without cars such as the poor, the handicapped, the elderly and young people. Substantial government assistance is required if public transit facilities are to compete effectively with the private automobile in convenience, comfort, speed and cost. Broadly speaking, the form of the city and the type of transport available are closely related: the spread of sprawling low-density suburbs tends to make dependence on the private automobile inevitable; conversely a more closely-knit urban area may require a commitment to adequate and well-planned transport facilities at an early stage” (p. 8)</p>
<p>Ministry of State for Urban Affairs. (1974). Annual Report, 1973-1974. Ottawa, ON.</p>	<p>1Paradigms15: “Fixed guideway modes encourage high-density, linear development while those which share roads with other vehicles generally encourage low-density spread out growth. It depends upon the goals of the community as to which type of development is the more desirable in a given situation” (p. IV-8)</p>
<p>Ministry of State for Urban Affairs. (1974). Comparison of public transit systems. Ottawa, ON.</p>	<p>1Paradigms16: “We seem to accept the fact that our roads and highways which concern us so much are part of the general revenues. We don't seem to do cost-benefit analyses on these; in this country at least we accept them as part of our taxes or our budgets. But as soon as we talk about public</p>
<p>Danson, B. (1975a). Text of an address delivered by the Honourable Barney Danson,</p>	

<p>PC, MP, Minister of State of Urban Affairs to the National Joint Conference of the American Society of Planning Officials and the Community Planning Association of Canada. Vancouver, BC: Ministry of State for Urban Affairs.</p>	<p>transportation, we immediately start counting the cost. And so far, I've been unable to find a proper economic analysis which will compare those two, compare the losses along those roads, the amount it costs us to drive our cars and amortize those cars and the gasoline to use them, not to mention the wear and tear on our nerves and the additional health cost, which is probably hard to quantify" (p. 5)</p>
<p>Duc, G. (1975). Description of selected urban-relevant programs. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Paradigms17: "Although it is natural that sectoral program objectives predominate, few if any programs can by themselves fully take into account the interrelated and wider ranging concerns of urban Canada. At the present time, however, there is emerging within federal departments and agencies an increasing consciousness of the urban consequences of their actions. In due course, this can be expected to yield a federal program/activity structure that in addition to satisfying sectoral requirements, is sensitive to the needs, concerns and priorities of urban Canadians" (p. 4)</p> <p>1Paradigms18: "At the present time, the Ministry [of Transport]'s major role is: (a) to ensure that national transportation policy influences and responds to the objectives and programs of the private and public sectors. (b) to provide, for any mode of transportation, such as way, terminal and vehicular services, supportable where appropriate by recoverable financing from the users or other beneficiaries, that cannot or should not be offered by the private or other public sectors. (c) To balance economic, technical and social consequences resulting from changes in capability or use of transportation services and ensure that socially and economically viable standards of vehicle, way, terminal and operator performance are established and adequately maintained. (d) Development – to encourage and promote continuous improvement, innovation, growth or phase-out of modal and intermodal transportation" (p. 346)</p>
<p>Sunga, P. and Duc, G. (1975). MSUA and the federal government. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Paradigms19: "As the sixties drew to a close the already apparent 'urban crisis' and the problems foreseen in further unconstrained urban growth generated a new federal initiative in urban affairs leading to the creation of the Ministry of State for Urban Affairs. Several other factors motivated the creation of the Ministry, including: (a) the realization that the federal government is itself a major actor in urban Canada, affecting developments in urban areas to a far greater extent than previously supposed; (b) the recognition that the urban implications of current federal activities needed to be understood more precisely and that new policies and programs needed to be assessed in terms of both the urban objectives and priorities of the Government of Canada, and of provincial and municipal aspirations for urban Canada; (c) the fact that the national urban system is highly integrated and</p>

		<p>responsive to policies at the national level; (d) the realization that interdependent urban problems (housing, transportation, land use, environmental deterioration, fiscal pressures and financial demands, among others) required comprehensive solutions which would favourably influence the future pattern of urbanization and the form and quality of urban regions; and (e) the recognition that policies and programs of all levels of government require coordination to guide the development and enhance the quality of life in existing and new urban centres” (p. 3)</p>
		<p>1Paradigms20: “Notwithstanding the primacy of provincial and municipal governments in urban affairs, actions of the Government of Canada and the activities of its agencies ... have significant impact on urbanization and urban development. Federal responsibility in the area of urban affairs stems from a number of sources. The growing pace of urbanization, the evolution of an integrated urban system and the massive infrastructure required to assure its viability, led to major de facto federal involvement in urban Canada that undoubtedly surpasses the Canadian government’s explicit constitutional responsibilities in urban matters. Secondly, a large number of agreements have been negotiated between the federal and provincial governments in the past, extending to the Government of Canada responsibilities that have important direct and indirect urban consequences. Lastly, the growing physical presence of federal departments and agencies and the operation of their programs in urban centres has further accentuated the historical federal involvement in urban Canada” (p. 3)</p>
	<p>Ministry of State for Urban Affairs. (1975). Annual Report, 1974-1975. Ottawa, ON.</p>	<p>1Paradigms21: “Canada has become one of the world’s most urbanized countries. The challenge of this rapid shift of population, of the increased demand for public utilities, housing and transportation, social services, education and cultural facilities calls for complex and far-reaching responses from planners, developers, and public administrators. The strain on facilities, the drain on the public purse, the private distress of crowding, and the rising cost of accommodation are some of the major concerns today for Canadian citizens and their government” (p. 2)</p>
	<p>Ministry of State for Urban Affairs. (1975). Capital assistance program for urban transportation announced. Office of the Honourable Barney Danson, Minister of State for Urban Affairs. Ottawa, ON.</p>	<p>1Paradigms22: “The capital assistance program reflects the importance the government attaches to solving urban problems. Many of these problems are related to automobile use — including urban sprawl, traffic congestion, automobile accidents, wasteful use of energy, and pollution” (p. 2)</p> <p>1Paradigms23: “Studies have shown that energy consumption per capita for transportation stabilizes or declines as the use of public transportation increases. For every dollar Canadians spend in urban areas on private cars, they spend less than five cents on public transportation. The measures now announced are intended to encourage planned management of urban growth and greater use of the alternative to the automobile, namely, public transportation services. Both these matters are key aspects of the government’s urban priority” (p. 2)</p> <p>1Paradigms24: “The assistance program is expected to have the greatest impact on major metropolitan areas where the degree of urgency about urban problems is highest” (p. 3)</p>

<p>Danson, B. (1975). Note for an address: "An Urban Strategy for Canada" to the Conference Board of Canada. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Paradigms25: "A moment ago, I suggested that there seemed to be an emerging consensus that the trend toward concentration of our population in three or four provinces and two or three large urban regions is unacceptable and that governments at all levels ought to pursue policies that will result in a more regionally-balanced pattern of provincial and urban growth. In order to do this effectively, it is obvious that we will need to look at ways and means to shift a larger part of the immigration flow to our smaller and less rapidly growing centres. At the same time, we need to look at ways and means to encourage more people to stay in these same centres instead of migrating to larger urban areas" (p. 11)</p>
<p>Ministry of State for Urban Affairs. (1976). <i>Annual Report, 1975-1976</i>. Ottawa, ON.</p>	<p>1Paradigms26: "In my view ... the management of our urban regions and their future shape and form is most appropriately dealt with at the provincial and local level. There are obvious constitutional reasons for this. There are other reasons as well. If we want to preserve and enhance the diversity of our communities and the life-styles that they offer, this choice should reflect the differences in the social fabric and cultural attitudes of a Montreal as compared with a Vancouver, or a St. John's as compared with a Regina" (p. 14)</p>
<p>Kirkland, J. (1976). Intra-urban mobility in Montreal, Toronto and Vancouver. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Paradigms27: "For some time ... municipalities, both individually and through the Canadian Federation of Municipalities, have argued that their revenues are inadequate to meet their expanding financial responsibilities. The property tax, their prime source of revenue, is judged by critics to be inadequate. Further, the increasing role of intergovernmental transfers is cited as symptomatic of a basic imbalance of revenues and expenditures among the three levels of government" (p. 3)</p>
<p>Kirkland, J. (1976). Intra-urban mobility in Montreal, Toronto and Vancouver. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Paradigms28: "It is easy to single out suburban residential development as representing urban growth and population mobility because of the distinct differences from core and / or older sections of urban centres. Street patterns and architectural styling are very visible reminders on the physical landscape that one as left an inner city district and is now in suburbia. By definition, suburban development and population mobility are one and the same" (p. 1)</p>
<p>Kirkland, J. (1976). Intra-urban mobility in Montreal, Toronto and Vancouver. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Paradigms29: "By widening and extending present expressways the carrying capacity is increased. This does not necessarily reduce the travel time from a given suburban point to downtown. This is prevented from happening since more traffic is induced to the system from even greater distances. The efficiency of the system is high and its own success is self-defeating. More distant suburban areas can be developed at low density as expressways are built further from downtown areas. Thus higher than average in-migration rates can be expected in suburban areas developing in response to the construction of multi-lane expressways. Massive traffic flows, characteristics of all three centres mainly consist of journey-to-work type trips" (p. 24)</p>
<p>Kirkland, J. (1976). Intra-urban mobility in Montreal, Toronto and Vancouver. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Paradigms30: "The spatial direction in which cities grow can be directly influenced by transportation networks. Certainly the Yonge Street streetcar line in Toronto in the early 1900s is a case in point. Here the strong impetus to the north was strengthened to offset the distinct east-west historic development"</p>

		(p. 25)
		1Paradigms31: “Subway developments in Montreal and Toronto have in a different fashion influenced mobility if not in-migration rates. Terminal stations at any point in time could favour high density residential and/or commercial activities. Travel between these points and the core is relatively cheap and fast while land costs may be significantly lower than in the central business district. Depending on site characteristics, subway terminal locations can foster large scale developments because of the conveniences offered ... the benefits accruing to suburban commuters in the form of expressway development are to a lesser degree there also in subways. Although their extent is not as great as expressways, their carrying capacities are markedly higher. Thus through some mixed mode pattern of transport, commuters in more outlying areas in metropolitan centres can take advantage of this type of transportation. Core areas themselves reap many of the disadvantages of such patterns in certain environmental aspects but on the other hand, several economic benefits accrue to them as well” (p. 25-26)
	Ministry of State for Urban Affairs. (1977). Annual Report, 1976-1977. Ottawa, ON.	1Paradigms32: “Urban transport facilities occupy up to 40 percent of urban land, and more than 15 percent of Canada’s oil consumption is used for urban travel. Given the pervasive role of transportation in urban development, this directorate investigated urban transportation and the urban impact of inter-city transportation infrastructure” (p. 7) 1Paradigms33: “Because of the limited federal role in urban transportation, these efforts were directed at assessing existing federal programs in terms of their consistency with local urban transportation objectives, without detracting from the achievement of the relevant program objectives” (p. 7)
	Ministry of State for Urban Affairs. (1978). Annual Report, 1977-1978. Ottawa, ON.	1Paradigms34: “Each parcel of land needs access, needs links to other parcels, if it is to function in its intended way. The pattern of transport demand is thus directly tied to the pattern of settlement, both nationally and within cities or regions. Some patterns are more efficient than others, in terms of the monetary and other resources consumed and in terms of the benefits yielded” (p. 35) 1Paradigms35: “Urban transit financing is becoming more difficult at a time when transit is expected to help solve urban and energy problems. However, federal housing and highway programs can conflict with local transit planning. Furthermore, national transportation infrastructure investments frequently result in urban impacts which are not fully taken into account, such as conflicts with local development plans or the economic viability of small communities” (p. 36) 1Paradigms36: “It is apparent that continued heavy reliance on the automobile, brought about by the more dispersed forms of urban growth and the lack of transit investment relative to roadworks, will overshadow minor improvements in transport-system efficiency. Indeed, studies of typical neighbourhood designs have indicated that unplanned ‘sprawl’ development may require up to twice the investment in road-related construction and operation as a higher density development” (p. 36-37)

	<p>N.D. Lea and Associates, Ltd. (1979). Transportation/Housing Interrelationships: Pilot Study. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Paradigms37: “In some cases the lower land costs of more peripherally located [housing] projects (and hence the lower rents) are offset by the increased costs of transportation to the user and the transport subsidies provided by the municipalities” (p. 1)</p>
	<p>Frankena, M (1979). The economics of urban transportation. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Paradigms38: “[A] factor which appeared to have an important impact on household transportation and municipal transport costs was the location of each project in the city. Perhaps the most interesting finding in this part of the analysis was that municipal transport costs appeared to be much lower in the core than in the frame and in the fringe. Consequently, the transport costs incurred by municipalities for households that moved into the core from the frame and fringe decreased; however, the cost to the municipalities for households that moved into the frame and fringe from the core increased” (p. 8)</p> <p>1Paradigms39: “The greater proportion of trips made by public transit, other things equal, by lower-income people reflects their lower rate of automobile ownership and the lower dollar value they place on savings in travel time and on comfort, and the fact that public transit typically has a lower out-of-pocket money cost but requires more travel time and less comfortable than the automobile” (p. 17)</p> <p>1Paradigms40: “Existing public transit systems generally provide services which are inferior goods. As incomes have increased, people have been willing to pay higher out-of-pocket costs to reduce travel time and increase comfort and convenience, and automobile ownership per capita has increased substantially. Consequently, people have switched from public transit to private automobiles” (p. 18)</p> <p>1Paradigms41: “Transit fares in Canada increased substantially relative to the cost of living and relative to the price of gasoline between 1945 and 1970 ... This naturally deterred people from using public transit (p. 18)</p> <p>1Paradigms42: “The decline in public transit trips in absolute terms and compared to automobile trips is further explained by the decentralization of urban areas. In large part because the private automobile is the lowest-cost mode of transportation between dispersed origins and destinations, the transit service provided in suburbs is generally inferior to that in the higher density central parts of urban area” (p. 18)</p> <p>1Paradigms43: “As real incomes and leisure have increased, the number of non-work trips per capita has increased. Consequently, the share of all trips which are to work has declined. Since the share of trips made by transit is higher for work than non-work trips, the decreasing share of all trips which are to work has entailed a decrease in the share of all trips which are by transit” (p. 20)</p> <p>1Paradigms44: “With all of these factors encouraging a decline in transit ridership, it is natural to ask why there was not a further decline in ridership after 1960 and why ridership has increased since 1971. The major explanation is undoubtedly that there was a 60 per cent increase in the number of vehicle miles of public transit service supplied between 1960 and 1975, between 1971 and 1975, primarily as a result of increasing government ownership and subsidization of public transit. Consequently, transit service improved in many areas, and the population served by transit increased considerably as service</p>

		<p>was introduced for the first time in suburban areas. It should be noted that ridership per vehicle mile of service continued to fall during this period” (p. 20)</p>
		<p>1Paradigms45: “The fact that a case can be made for some form of government subsidies for urban public transit on both efficiency and ... distributional grounds does not imply that existing subsidy programs necessarily contribute to efficiency of resource allocation or a more equal distribution of well-being” (p. 60)</p>
		<p>1Paradigms46: “In the [case of the proposed Spadina Expressway] ... after two miles of expressway had been completed, the Ontario provincial government decided in 1971 not to continue the project. This decision was made as part of a shift in urban transportation policy from emphasis on expansion of facilities for private automobiles to improvement of public transportation” (p. 94)</p>
		<p>1Paradigms47: “The studies of the 1960s have been criticized because they assumed that a proper objective for transportation investment was expansion of facilities to accommodate estimated future peak-hour travel, usually while achieving some increase in travel speeds. In short, investment projects to limit or reduce congestion were recommended regardless of cost. There was rarely any attempt to base recommendations on serious cost-benefit analyses of projects and their alternatives, or to determine whether people benefiting from the proposed facilities would be willing to pay the costs. This approach to investment decisions was in part a reflection of the fact that these transportation studies were carried out by people trained in engineering and planning rather than economics” (p. 110)</p>
		<p>1Paradigms48: “Studies [in the 1960s] were biased toward reliance on investment in rights-of-way as a solution to urban transportation problems. Little concern was given to other areas of policy such as pricing of road use and parking, regulation of taxis, or regulation of roads to improve the functioning of bus systems. More recently, however, as political opposition to highway construction has increased, greater attention has been given to traffic regulations which would improve the performance of buses compared to private automobiles” (p. 112)</p>
	<p>Urban Transportation Research Branch. (1979). <i>A review of the experience and activities of the Urban Transportation Research Branch 1974-1979</i>. Ottawa, ON.</p>	<p>1Paradigms49: “Increasing traffic congestion, inefficient utilization of energy and other vital resources, deterioration of the urban environment, dwindling land supply and mounting transit deficits are all seen as symptoms of basic problems affecting the transportation of people and goods in our modern cities. Without quality communications and transport, life in cities as we know them today would not be possible. It has been recognized that significant effort is required to ensure that communications will be adequate to meet the sophisticated needs of future cities. Hand in hand with these efforts toward more effective communication is a need for effective, urban transportation research to identify problem areas and to seek out solutions which may improve the efficiency and effectiveness of urban transportation” (p. 2)</p>
		<p>1Paradigms50: “Perhaps the greatest social disbenefit of all is urban sprawl encouraged by the</p>

		<p>automobile system in addition to the cost of automobile accidents and air and noise pollution. The automobile has made possible the dispersal of activities and the expansion of the whole urban area, so that lacking adequate public transport, the entrenched means for access to traditional urban facilities has become the automobile. Since 15% of Canadian families do not own an automobile and 5 to 10% of the population does not and cannot have access to a car because of physical disability , economic disadvantages or social isolation, existing transit modes must shoulder the burden of daily travel for these people” (p. 3)</p>
		<p>1Paradigms51: “In the United States and in many European countries, the federal government is visibly committed to urban transportation RandD (e.g. the Urban Mass Transit Administration in U.S.). In Canada, this has not been the case. The support of speculative, high risk RandD is a traditional role of central governments. The research sponsored by the Branch was often conducted in response to the needs of user groups or clients” (p. 14)</p>
		<p>1Paradigms52: “The transit field, unlike traffic engineering, has never been clearly defined as a professional or academic discipline. This fact has contributed significantly to the slow rate of progress in developing new transit management and engineering techniques and the lack of interest in transit among young professionals leaving university” (p. 17)</p>
		<p>1Paradigms53: “A research group working as part of the federal government and housed within a line department necessarily has mixed allegiance. On the one hand, the allegiance is to the broad Canadian community. The acknowledgement of that responsibility leads to the conduct of projects which may or may not have any interest or relevance to the parent department. In fact, in some instances the research results produced may be critical of line policies or programs and may be directly embarrassing to the line department” (p. 21)</p>
		<p>1Paradigms54: “Coordination and support of urban transportation RandD on a national scale leaves much to be desired and no inter-governmental machinery exists which is suitable for this purpose. Existing organizations that already play a minor role in this cannot hope to fill the void, largely because their interests are either much wider than urban transportation research per se (e.g., RTAC) or cover only a small part of the urban transportation problem (e.g., CUTA)” (p. 23)</p>
		<p>1Paradigms55: “The problems of urban transportation are not unique to any one country. There is real value in international cooperation in this field to avoid repeating mistakes and to reap the benefits of successes in other countries. Unlike Canada, however, most other countries have a centralized responsibility for urban transportation RandD and it is difficult for Canada to participate in these studies” (p. 25)</p>

		<p>1Paradigms56: “Transit is now heavily subsidized and many service deficits are a growing burden for provincial and municipal finances. Operating deficits have grown rapidly in recent years, from virtually nothing in 1970 to over \$200 million in 1977. This has prompted studies into their causes, into methods of financing them, and into ways of improving transit without increasing costs. The operating deficit has risen due to expansion of services, inflation, low fares and increasing trip lengths. Fare changes have been found to have little impact on ridership and so have little effect on cost; subsidies used to depress fare levels can thus be seen as a transfer of income to transit riders from the rest of society, with little economic impact” (p. 37)</p>
<p>1st Era Programs</p>	<p>Lewis, C. B. (1972). Research directions in urban transportation. In <i>Canadian Federation of Mayors and Municipalities/Ministry of Transport Seminar on Urban Transportation</i>. Montebello, QC: Ministry of Transport.</p>	<p>1Programs1: “In practical terms, [restraining the automobile] might mean using subway systems, bus systems, private cars, and taxis for those tasks for which each is best suited; providing efficient interchange between these sub-systems, and employing modern technologies to extend, improve and generally lubricate the operation of the overall system” (p. 5)</p> <p>1Programs2: “In a major city, a ... comprehensive bus system might comprise; (a) Express or ‘limited access’ main line bus routes connecting the core of the city to the outlying suburbs and exurbs, and using equipment similar to the present intercity bus. These buses would usually operate on established routes and fixed schedules, using existing highways and arterials. They might provide an alternative ... where population densities or future uncertainties do not warrant the building of conventional rapid transit. (b) Conventional urban bus routes serving cross-town traffic and providing interchanges with the express or limited access main line buses. The equipment and passenger facilities could be greatly improved, and some degree of flexible routing and demand-responsive scheduling might be introduced. (c) Mini-buses or ‘jitneys’ providing shuttle service between points where the traffic volume warrants; e.g., to and from airports, railway stations, etc., or in downtown shopping districts. (d) Demand-responsive, flexibly routed collecting and distributing services provided by small buses or limousines ... These would be competing with conventional taxis, U-drive taxis and private cars” (p. 7)</p> <p>1Programs3: “Since the bus is likely to remain the work-horse of Canadian transit services for some time to come, it is essential that all possible ways of improving labour efficiency and equipment should be investigated. However, rising unit labour rates will tend to make automated ‘bus-substitute’ systems more economically viable. An intensive development effort in this direction is therefore warranted” (p. 7)</p>

		<p>1Programs4: “In general, it would seem that the characteristics of most Canadian cities are not well-suited to conventional rail rapid transit systems. If, however, a small gauge or mono-rail system employing small ‘passenger capsules’ could be devised that would permit fully-automatic control, and insertion and removal of passengers without disrupting the high speed (50 mph?) flow of ‘through’ traffic, a system would result in which the ratio of investment in rolling stock (plus control equipment, etc.) to investment in fixed track and structures would be much higher than for conventional rail transit. The flexibility of the system would thus be considerably improved in both routing and response to demand” (p. 8)</p>
		<p>1Programs5: “The potential usefulness of public transit for moving goods as well as passengers should not be ignored. [Modules] compatible with our larger freight containers and might be a convenient size for physical distribution within our cities, using future intermediate capacity ‘mini-transit’ systems for main haul, with specially designed conveyors and trucks for final distribution” (p. 11)</p>
		<p>1Programs6: “In the foreseeable future there will be no shortage of research opportunities; there is, however, likely to be a very real shortage of research resources. Thus, if improvements in the field of urban transportation are not to be hopelessly protracted because of the limited funds and effort available at the municipal, provincial and national levels, the development and demonstration phases, in many instances, will have to be undertaken jointly under bilateral or multilateral agreements between the various levels of governments. This will require the closest co-operation at the planning, research and development stages if we are to make wise choices and avoid expensive duplication of effort” (p. 17)</p>
	<p>Ministry of State for Urban Affairs. (1973). <i>Annual Report, 1972-1973</i>. Ottawa, ON.</p>	<p>1Programs7: “The main activities of [MSUA’s] Policy Directorate include the elaboration of federal theses on various items on the agenda of the tripartite conference of 1972 and the establishment of proposals in the following policy matters: (a) Urban objectives, setting national goals and determining general criteria used to judge policies and programs affecting urban-federal relations; (b) Urban Futures: projections of the effects of current trends in our cities until 2000 and various policy choices; (c) Urban transport: In collaboration with the Ministry of Transport and the Ministry of Environment, conduct research related to the federal role in urban transport policy” (p. 1-2)</p>
		<p>1Programs8: “Under its mandate, the Department must not only develop policy and conduct research but must also coordinate policies. This role is multidimensional as it is exercised at all levels. The Department coordinates the activities of urban-relevant federal departments, including the harmonization of federal policies and programs with those of provincial and metropolitan-regional governments” (p. 3)</p>
	<p>Gertler, L. O. (1973). The research program of the Ministry of</p>	<p>1Programs9: “The research program must represent the elements that are salient in the urban life of Canada. To emphasize a few, for example, housing, transportation or welfare to the exclusion of others,</p>

<p>State for Urban Affairs. In Annual Meeting of the Canadian Council of Urban and Regional Research. Montreal, QC: Ministry of State for Urban Affairs.</p>	<p>would impair the capacity for a synoptic view of urban problems and lead to distortions in policy advice. There is an obligation to move on a broad front” (p. 4)</p> <p>1Programs10: “Urban government is concerned with the system – involving several levels of government, acting separately and in coordination – within which policies and decisions about urban affairs are rendered. The evolving approach is to organize the theme by means of a multi-dimensional matrix consisting of both a number of policy questions and general social research problems. The policy questions are taken from such urban sectors as transportation, housing and community; the research problems will encompass such areas of concern as public participation, intergovernmental relations, urban policy formulation, urban planning, urban political culture, and so on. At each point where policy questions and research problems intersect, a number of research projects can be defined. One such intersection, which will have priority in the program, is between citizen participation and transportation. Such a project ought to contribute to the resolution of an important policy issue for the federal government” (p. 24)</p>
<p>Ministry of State for Urban Affairs. (1974). Annual Report, 1973-1974. Ottawa, ON.</p>	<p>1Programs11: “Any significant shift in these trends towards a more balanced pattern of urban growth will require the concerted support of all levels of government. The theme of the second National Tri-Level Conference on urban affairs at Edmonton in October 1973 was ‘The Management of Growth.’ During the conference all levels of government endorsed three preliminary urban objectives: the need for a more balanced national pattern of urban growth; the need to divert growth towards small, medium-sized or new communities – especially by improving the amenities and attractiveness of such smaller centres; and the need to maintain and improve the quality of the environment in the heart of the largest urban centres. The conference also endorsed the concerted deployment of public policies to these ends” (p. 2)</p> <p>1Programs12: “The Senior Interdepartmental Committee on Urban Affairs (SIDCUA) was established in July 1973. It is a forum for considering federal policies and programs as they affect urban problems and issues and for providing advice to the Minister of State for Urban Affairs on their development and evaluation. The committee consists of the deputy head of 15 federal departments and agencies, and it is chaired by the Secretary of the Ministry. During 1973-74 it addressed itself to broad issues, and specifically to the main agenda items considered at the Second National Tri-Level Conference, i.e., the management of urban growth, urban transportation, housing and public finance” (p. 3)</p> <p>1Programs13: “Working with and through the Halifax-Dartmouth tri-level committee, the Ministry has also initiated or ported work on a number of specific issues such as the redevelopment of the Halifax waterfront, solid waste management, transit improvement projects, and container port location” (p. 4)</p> <p>1Programs14: “During 1973-74, the Ministry of State for Urban Affairs worked closely with other federal departments and agencies, principally the Ministry of Transport, in a comprehensive review of the</p>

		<p>federal role in urban transportation. One result of the review was a federal proposal at the Edmonton National Tri-Level Conference to establish a National Urban Transportation Development Corporation as a joint venture of the federal and provincial governments. The proposal has been further elaborated and refined in subsequent consultation with officials of all provincial governments, involving MSUA, the Ministry of Transport and the Department of Industry, Trade and Commerce. Other results of this urban transportation policy review were emerging at the end of 1973-74 as new policy program options” (p. 7)</p>
	<p>Ministry of State for Urban Affairs. (1974). Public transit and the needs of disadvantaged groups. Ottawa, ON.</p>	<p>1Programs15: “Disabled and elderly persons with walking problems probably need a separate transit system. While some representatives of the groups concerned argue for modifications to be made to present transit systems to accommodate their needs, the cost and time involved to make these changes would appear to be prohibitive. A separate system would require careful planning and could also probably provide service to the blind. The importance of removing architectural barriers at origins and destinations of wheelchair and other persons should also be emphasized” (p. 6)</p> <p>1Programs16: “Some features of present transit systems should be modified to facilitate access by certain groups. Some of those persons with walking problems, some of the blind and mentally retarded, require only minor modifications to the system in order to serve their needs better. Improvements could include greater use of dial-a-bus, re-design of bus entrances, more shelters with benches and better information dissemination including special information for the blind. Also increased mobility training services for the blind and mentally [challenged] would be desirable” (p. 6)</p> <p>1Programs17: “While it would be necessary to study the overall feasibility of [a separate transit system for disadvantaged groups] first, a separate door-to-door service could be instituted on a demonstration basis. The city or cities should be carefully chosen, and the service should probably be instituted city-wide rather than only in one or two areas, so that the full logistics of a service to any destination in a city can be tested. The city or cities chosen should be sufficiently large to have a large enough population of such groups to support a separate vehicle system, and with sufficiently dispersed destinations to create mobility problems for the groups. It would obviously also be advisable to select a city sympathetic to the needs of these groups; one, for example, which has had a LIP or large volunteer service. Of the cities we have studied, possible candidates for such a trial service might be Hamilton, Regina, Quebec City, Halifax or Victoria. We also know of interest in this problem in several other medium-sized cities, including Kitchener-Waterloo” (p. 9-10)</p> <p>1Programs18: “Many cities have introduced fare reductions for the elderly, the blind, children, and in a few instances the poor and the mentally [challenged]. However, in no cases have there been any attempts to monitor the change in the numbers of trips taken by the groups affected. As a result no information is available on how price sensitive these groups are. There are even some quite significant experiments with approaches to pre-paying fares which warrant close attention” (p. 10)</p>

		<p>1Programs19: “Direct funding to individuals for transportation, or in other words, as an alternative to providing demonstration of a separate service, providing individuals with funds to purchase their own service from those available privately,, and monitoring the changes in behaviour which result ... could be applied to those without transportation, such as persons in wheelchairs who do not own cars, or to groups likely to be sensitive to cost” (p. 11)</p>
		<p>1Programs20: “Urban Affairs can: actively disseminate the results of research on the subject to federal, provincial and municipal agencies involved. In particular, our report should be distributed as quickly as possible to all persons interviewed during the course of the work ... sensitize public transit and agencies and urban planners to the needs of these groups, through the development of educational materials and management seminars ... liaise directly with provincial departments of transportation to draw them into considering a problem area usually considered only by welfare-related agencies and departments ... encourage greater funding of agencies for the blind and mentally [challenged], for providing increased mobility training for these groups” (p. 12)</p>
	<p>Ministry of State for Urban Affairs. (1974). Comparison of public transit systems. Ottawa, ON.</p>	<p>1Programs21: “For cities of between 250,000 and 1,000,000 population, the conventional bus is still the lowest cost system but bus rapid transit, light rapid transit, and commuter rail can provide low cost solutions with higher service levels. In the larger cities of over 1,000,000 populations the transit expressway concept of light rapid transit with small vehicles provides the highest level of service. The rapid transit modes including light rapid transit, bus rapid transit, and full rapid transit also provide high levels of service at low cost, and commuter rail provides the lowest unit cost if existing rail rights-of-way can be utilized (p. I-1)”</p>
		<p>1Programs22: “The results of this analysis indicate several trends. For example, in all cities of over 100,000, bus rapid transit becomes very attractive. There are currently no examples of this type of transit system in Canada and this would appear to be a prime area for research and development. For cities of over 250,000 population, light rapid transit also appears to be very attractive. Several proposals for this type of system have been made recently, notably in Vancouver, Ottawa, and Kitchener, and a research effort in this field seems to be required, particularly in the development of a modern vehicle of this type. Only in the largest cities of over 1 million population do full rapid transit and the other rapid transit technologies become attractive. This is in line with world experience. The heavy capital costs of full rapid transit make it unattractive except at the various heavy, maximum expected volumes Even at present transit usage in our typical city of over 2 million population, the full rapid transit option does not turn out to be the least” (p. V-2)</p>
	<p>Danson, B. (1975a). Text of an address delivered by the Honourable Barney Danson,</p>	<p>1Programs23: “There are many instruments or levers as they are sometimes called which governments have at their disposal ... [including] the tri-level conferences. These are excellent mechanisms to make these levers work and while the process is far from perfect; it is making great progress. Once other levels</p>

<p>PC, MP, Minister of State of Urban Affairs to the National Joint Conference of the American Society of Planning Officials and the Community Planning Association of Canada. Vancouver, BC: Ministry of State for Urban Affairs.</p>	<p>of government understand that the federal government is not trying to move in, and trying to do a job which is perhaps none of its business, but certainly included in its jurisdiction, I find that they are prepared to listen and to cooperate” (p. 12)</p>
<p>Danson, B. (1975b). Notes for an address: "An Urban Strategy for Canada" to the Conference Board of Canada. Winnipeg, MB: Ministry of State for Urban Affairs.</p>	<p>1Programs24: “The federal government has many relevant and powerful instruments at its disposal and it is prepared to deploy these in support of new goals reflecting new values. Immigration policy, economic and tax policies, transportation and industrial policies, as well as regional development policies, can be used to influence regional location and urban settlement patterns. Control over railways and airports, federal lands and buildings and housing policies can be used deliberately to support provincial and metropolitan growth strategies and to improve the quality of the urban environment” (p. 6)</p> <p>1Programs25: “Frankly, I don't think that we have begun to exhaust the types of incentives that are available, not only to the federal government, but also to the provincial and municipal governments, to influence the location of economic activity and population. It is important that we look at other types of incentives, because the achievement of so many of our national goals depend upon a more balanced distribution of population and wealth across this country” (p. 12)</p>
<p>Duc, G. (1975). Description of selected urban-relevant programs. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Programs26: “In respect of research, MSUA may: (a) initiate studies relating to urbanization; (b) coordinate with other agencies of the federal government, research relating to urbanization that has been undertaken or financed by those agencies; and (c) recommend priorities for research in urbanization. In respect of its coordinative functions, MSUA may: (a) coordinate, promote and recommend urban policies among agencies of the Government of Canada; (b) coordinate the activities of the federal government in establishing cooperative relationships with the provinces and their municipalities; and (c) coordinate the involvement of the federal government with other governments and non-government” (p. 371)</p> <p>1Programs27: “Interaction with federal urban-oriented agencies, the provinces and municipal governments, are an integral part of MSUA's mandate. At the federal level MSUA-agency consultation is broadly based extending to a greater or less extent to all agencies dealt with in this paper. The most formal mechanism for federal interagency consultation is the Senior Interdepartmental Committee on Urban Affairs (SIDCUA) whose membership in total includes 15 departments and agencies. For more</p>

		<p>specialized tasks requiring interagency involvement, smaller departmental mechanisms may be formed as required. Examples of these kinds of interagency involvement include: MSUA's association with TBS, DPW and CMHC in connection with federal land management and with MOT and CTC in conjunction with railway relocation. The principal mechanism for intergovernmental consultation is the Tri-Level process instituted by the Ministry shortly after its establishment. Tri-Level is discussed at length in a companion paper entitled "MSUA and the federal government" (p. 375)</p>
		<p>1Programs28: "The MSUA Program as it is presently constituted permits the Ministry to exercise primarily an indirect impact on urban Canada. Notwithstanding this constraint, the program has the potential to significantly affect the course of urban development in this country. In particular, the articulation of a viable set of urban objectives; the development of knowledge-based policies designed to further accepted urban goals; the coordination of urban-oriented initiatives of all levels of government; and extending present knowledge concerning complex urban processes can be expected to measurably enhance the quality of urban living in Canada over time" (p. 376)</p>
	<p>Sunga, P. and Duc, G. (1975). MSUA and the federal government. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Programs29: "In the area of urban affairs, the scope of federal actions and their implications were judged to be too comprehensive, too pervasive and probably too important to be dealt with in this manner. Traditional mechanisms for consultation and coordination were considered inadequate to ensure that urban policy and program initiatives, originating from various quarters in the federal system, proceeded toward rationally conceived and commonly held objectives for urban Canada. This prompted the establishment of a separate Ministry to assess the effects of ongoing and proposed federal programs and policies, to initiate urban policy, to coordinate federal urban activity within federal jurisdiction, and to harmonize federal urban activity with provincial and municipal initiatives" (p. 4)</p>
		<p>1Programs30: "The Urban Institutions and Services Directorate operates in two interrelated areas. The Urban Institutions Group assesses existing mechanisms and seeks to develop improved delivery systems for federal and intergovernmental programs. The Urban Service Systems Group is concerned with achieving more desirable urban configurations through the provision or support of more effective and efficient transportation, communications, energy, and other services systems" (p. 7)</p>
		<p>1Programs31: "Many federal/provincial agreements and related intergovernmental initiatives with urban implications ... have been instituted in the past ... MSUA's legitimate concerns extend over a large segment of federal activity and moreover, include major areas of interest to all levels of government. This requires that the Ministry be concerned with elements of the overall urban environment that affect the material well-being of urban Canadians, e.g., housing, land use, transportation, environmental quality and the urban economy. It also requires a concern for those less tangible but equally important factors that bear directly on cities' social and cultural development and more generally on the quality of life in urban Canada. This endeavour requires MSUA to be concerned with all urban elements in which</p>

		<p>the federal government has the authority, responsibility and means to effect change for the better. It also requires the Ministry to continually explore and develop initiatives which support the urban thrusts of provincial and municipal governments” (p. 7)</p> <p>1Programs32: “The formulation of a national urban perception, the development of a suitable conceptual framework and the articulation of urban objectives for Cabinet consideration, bearing in mind the government’s overall objectives and priorities is a lengthy and exploratory process requiring extensive research and development. Moreover, obtaining a consensus about perceptions of urban objectives within the federal government and with other levels of government requires coordinating machinery at the bureaucratic level as well as on national, regional and metropolitan scales at the political level” (p. 8)</p> <p>1Programs33: “There exists an urgent need for the Ministry to establish and maintain contact with planning authorities at the local and provincial levels in order to identify new initiatives that may have an important bearing on existing and proposed federal activities in the urban domain and to determine how new federal urban initiatives can best be tailored to local circumstances and priorities. These contacts at the planning and operational levels are essential for identifying locally-generated urban development at a sufficiently early stage so that federal involvement can be most beneficial. Close working relationships between the Ministry and local planning authorities are expected to be accomplished gradually. Over time this kind of collaboration will result in the development and implementation of federal urban initiatives that are in harmony with regional priorities and aspirations” (p. 8)</p>
	<p>Ministry of State for Urban Affairs. (1975). Annual Report, 1974-1975. Ottawa, ON.</p>	<p>1Programs34: “During 1974-1975, the Ministry was involved with broad policy planning at the federal level as well as with specific urban transportation problems. The Ministry carried out a variety of studies related to urban transport policies and problems, ranging from an investigation of the special transit needs of the handicapped and elderly in 10 major cities to studies for a new public transit network for downtown Quebec City ... At the federal level, the Ministry and the Ministry of Transport conjointly began a national transportation policy review. Extensive consultations took place between the provinces and federal government (represented by the Ministry, the Department of Industry, Trade, and Commerce and the Ministry of Transport) toward establishing the National Urban Transportation Development Corporation. At the provincial-municipal level, the Ministry indirectly assisted municipalities through schemes like Vancouver’s Livable Region Program, and Toronto-Scarborough’s Light Rapid Transit System ” (p. 5)</p>
	<p>Ministry of State for Urban Affairs. (1975). Capital Assistance Program for Urban</p>	<p>1Programs35: “The Federal Government will provide \$100 million for an urban transportation capital assistance program to help the provinces and municipalities manage urban growth and combat traffic and related problems. Urban Affairs Minister Barney Danson and Transport Minister Jean Marchand</p>

<p>Transportation Announced. Office of Barney Danson, Ministry of State for Urban Affairs. Ottawa, ON.</p>	<p>announced today that the funds will be available over five years beginning April 1, 1977 for the acquisition of commuter rail vehicles, stations and platforms, and required traffic control facilities. The program does not apply to vehicles currently on order or to facilities already in place” (p. 1)</p> <p>1Programs36: “To qualify for assistance, the province and the municipality concerned and the federal government must agree upon an overall strategy for metropolitan growth management within the urban region. Agreement must be reached on the role commuter services will play, the efficient utilization of their special characteristics and their integration with the surrounding transportation system. The province or municipality must also agree to cover any past or future operating deficits of the system” (p. 2)</p> <p>1Programs37: “The federal contribution will be up to 75 percent as a grant and 25 per cent as a loan toward the capital cost of systems at an early stage of development. For other systems, federal assistance will be between 25 per cent and 75 per cent on a grant basis, depending on the maturity of the system and up to 25 per cent on a loan basis. Loans will be made to provincial governments or to the municipalities or transit authorities if guaranteed by the provincial governments concerned. Federal grants will be available for up to half the cost of directly associated commuter rail platforms, stations and feeder systems, or traffic control facilities” (p. 3)</p> <p>1Programs38: “The Ministers also noted that capital assistance for municipal urban transit services, as distinct from commuter services, remains under consideration and will be the subject of further examination by the federal ministries of Urban Affairs, Transport, Finance and Industry, Trade and Commerce” (p. 3)</p>
<p>Ministry of State for Urban Affairs. (1975). What it is, what it does. Ottawa, ON.</p>	<p>1Programs39: “[MSUA influences] urban transportation ... by developing and recommending urban transportation policies, including the National Urban Transportation Development Corporation; and by developing the railway relocation program and participating in its implementation” (p. 2)</p> <p>1Programs40: “[MSUA influences] urban planning and intervention ... by supporting the preparation of regional plans and strategies by the provinces to further and guide the development of Canadian urban regions. For example, federal contributions are supporting regional planning for Vancouver, Halifax-Dartmouth, Quebec City, and other centres. [It influences] urban institutions ... by providing federal leadership for the development of the tri-level process; and by joining with other levels of government in establishing provincial and metropolitan tri-level bodies” (p. 3)</p> <p>1Programs41: “The [railway relocation] program applies particularly to cities where railway facilities — tracks, yards, terminals — are obstacles to planned redevelopment of the community. Part I of the Act permits the federal government to fund and support the planning and implementation of railway relocation and rail traffic rerouting proposed by provinces and municipalities so that expanded rapid transit facilities, housing, recreation facilities, among other projects, can go forward” (p. 4-5)</p>

Ministry of State for Urban Affairs. (1976). Annual Report, 1975-1976. Ottawa, ON.	1Programs42: “Because all levels of government have policies and programs that impinge on financing urban development, it appeared that the most appropriate method for defining the extent of the problem, if indeed a problem existed, would be a study jointly sponsored by all levels of government. As a result, an independent Tri-level Task Force on Public Finance was set up to examine the matter in detail. Officials from the Ministry and the Department of Finance represented the Federal Government” (p. 3-4)
	1Programs43: “During the year under review, the Ministry concentrated on a major evaluation of the federal role in urban transportation assistance programs. In co-operation with the Ministry of Transport, MSUA representatives met with officials from all provinces, major cities and associations to discuss urban transportation needs. Research was conducted on the implications of improved public transportation for energy consumption, the mobility of disadvantaged groups, urban land use, and the demand for transit services. The results are being used to develop guidelines for current federal expenditure programs in urban transport” (p. 5)
	1Programs44: “Studies were undertaken in the following areas: the financial implications of alternative transportation service levels, energy implications of alternative urban transportation systems and travel demand levels, urban form and neighbourhood design criteria which would encourage public transit, urban development and land value potential of public transport investments, and, the cost of expanding urban transport capacity using various combinations of transit/highway infrastructure” (p. 7)
Ministry of State for Urban Affairs. (1977). Annual Report, 1976-1977. Ottawa, ON.	1Programs45: “[MSUA’s] Urban Networks group approaches transportation from the standpoint of urban development, with a geographical perspective both within and between urban areas, and with an emphasis on passenger transport, although not to the exclusion of goods” (p. 35)
Ministry of State for Urban Affairs. (1978). Annual Report, 1977-1978. Ottawa, ON.	1Programs46: “In the short-run, it appears possible to bring about significant improvements in energy-consumption levels and overall transport-system efficiency through proper management techniques and increased attention to provide viable transit services. Improvements and efficiency in the medium-to long-term, however, require increased coordination of land use and transportation planning to support the development of a more efficient overall transport system” (p. 37)
	1Programs47: “ <i>The Costs of Highway versus Transit Expansion Programs to Accommodate Future Travel Demand</i> was initiated for the purpose of developing and testing a technique for rapidly assessing the marginal and total costs of alternative highway and transit investments. The technique, which is to be tested in detail in a selected urban area, will be suitable for use by municipal, regional and provincial agencies at the transportation corridor, sub-system and system levels” (p. 38)
	1Programs48: “ <i>A Survey of Urban Transportation Level of Service Guidelines and Standards</i> was undertaken in cooperation with the Roads and Transportation Association of Canada. The survey was initiated to develop an information base and obtain a better understanding of the road and transit level

		<p>of service guidelines and standards currently being used or developed in Canadian urban areas. Further, the survey was designed to identify the presence of standards or performance guidelines for core areas” (p. 38)</p> <p>1Programs49: “<i>Urban Public Transportation in Canada: Subsidy Levels, Trends and Effects</i> was undertaken, jointly with Transport Canada, in order to assemble information on operating deficits of transit agencies, along with an analysis of the contributing factors in cities of various sizes. In addition, the study reviewed policy options governments could pursue for financing urban transit and determined the relationship between these options and transit demand, levels of service, fares and operating costs and revenues. Further, it assessed the sensitivity of these relationships to changes in socio-economic conditions, urban form, roadway investment and automobile ownership” (p. 39)</p> <p>1Programs50: “<i>The Travel to Work Survey</i>, a supplement to <i>the Labour Force Questionnaire</i> administered monthly by Statistics Canada, has been performed at least once a year since 1973. For the years 1975, 1976 and 1977 the survey was jointly sponsored by Transport Canada, the Departments of Energy, Mines and Resources, Regional Economic Expansion and MSUA. The survey represents the only source of nationally-available annual statistics of travel behaviour and attitudes in Canada ... The principle focus of the questionnaire is an overview of the entire work trip by mode (e.g., access to transit/car/other, travel time/ distance, location of parking/transit relative to place of work, parking availability/ cost, reasons for using particular modes, automobile occupancy)” (p. 40)</p> <p>1Programs51: “<i>A Study of the Relationship Between Subdivision/Neighbourhood Design and Urban Transportation</i> was undertaken jointly with Transport Canada and CMHC. The objectives of the study included the performance of a literature review and synthesis of current subdivision design and planning practices, along with related work in the area of transit planning. Seven case studies were performed in selected communities across Canada to review and report on conventional and innovative plans and projects relating to neighbourhood design and transit services. The study focuses on the development of recommended guidelines for subdivision design and transit services and overall evaluation of the economic feasibility of alternative designs and guidelines” (p. 41)</p> <p>1Programs52: “The [Urban Networks] directorate, along with Transport Canada, is responsible for assessing applications under the Urban Transportation Assistance Program (UTAP) and evaluating the program as a whole. This five-year, \$230-million program, announced in October 1977 by the federal government, was designed to assist the provinces to improve their urban public transportation systems. UTAP funding includes that of both the Commuter Services Program and the Railway Relocation and Crossing Act. Under UTAP funding, participating provinces and municipalities can develop coordinated long-range urban land-use and transportation development strategies involving both railway relocation and transit improvement. The above-noted descriptions are of the activities undertaken by the six Urban</p>
--	--	---

		<p>Analysis directorates, which work specifically on improving the quality of urban life by addressing topics within the federal government's urban concerns" (p. 43)</p>
	<p>Frankena, M (1979). The economics of urban transportation. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Programs53: "While public transit service may have improved in the central parts of urban areas, the service ... in the expanding suburban areas is clearly inferior to that in central areas. Consequently, as the share of urban population and employment which is located in suburban areas increases, on average accessibility by public transit has probably declined" (p. 13-14)</p>
		<p>1Programs54: "It has often been proposed that reduction of transit fares, increases in road user and parking charges, reservation of lanes for exclusive use cases, or investments in mass transit be used to induce travelers to switch from automobiles to public transit and thus reduce road congestion pollution. There would, for example, be a substantial reduction in congestion if the modal split could be returned to the level prevailing two or three decades ago" (p. 23)</p>
		<p>1Programs55: "Large investments in rail rapid transit systems have ... been proposed as a method of reducing automobile congestion. In most cases economists have predicted that only a modest share of automobile trips would be diverted to the new transit systems, basically because the private cost per trip (in terms of time and money) by automobile would be lower than that by the new systems for most travelers who were previously going by automobile, except those whose origins and destinations are close to transit terminals or whose trips are very long. While 54 per cent of the initial riders on Toronto's GO Transit commuter railway previously travelled by automobile, the volume diverted to the railway was small compared to the volume of traffic on the parallel expressway. When the Yonge Street subway opened in Toronto in 1954, a large majority of the riders were people previously used other public transit modes. A study of riders on the Yonge Street subway found that 85 per cent previously used other public transit and only 13 per cent previously used automobiles" (p. 25)</p>
		<p>1Programs56: "There are three limitations to 'second best' pricing of public transit at less than its marginal social cost as an alternative to using tolls to price automobile use at its marginal social cost ... First, if both automobile use and public transit use are priced below marginal social cost, people will be induced to do more than the efficient amount of travelling in urban areas. Second, even complete elimination of transit fares might not offset the effect on modal choice of failing to collect congestion tolls for automobile use in the downtown area and at rush hour, e.g. if efficient public transit fares were less than efficient road use and parking charges per person trip. Third, available empirical studies suggest that the cross-elasticity of demand for automobile use with respect to public transit fares is very low" (p. 58)</p>
		<p>1Programs57: "Subsidization of public transit by municipal and provincial governments is a standard practice in Canada. In 1974 bus and integrated bus-subway systems in most urban areas received subsidies of 15 to 50 per cent of their costs, and special services such as suburban commuter railways</p>

		<p>and dial-a-bus typically received subsidies of over 50 per cent of their costs. The most extensive program of subsidies has been operated by the Ontario provincial government, which paid 75 per cent of the costs of all new transit rights-of-way and vehicles plus 50 per cent of the costs of the operating deficit of each urban transit system in the province during 1972-1976. In terms of dollars, the largest subsidies have been in Toronto and Montreal, where municipal and provincial governments have paid over \$600 million since 1949 for construction of subways. In addition to such subsidies for capital costs, during 1976 the Toronto and Montreal transit systems received over \$100 million in municipal and provincial subsidies to cover their operating deficits” (p. 60)</p>
		<p>1Programs58: “The fact that a transit company is receiving a subsidy does not necessarily imply that the subsidy is being used to reduce the fare to the efficient level. It is possible that the transit system would choose to use the subsidy to introduce a new route in a low density suburb where the demand did not justify the cost of providing service. In this case, the subsidy might bring about a less efficient allocation of resources” (p. 61)</p>
		<p>1Programs59: “While [increasing the speed of buses during rush hour] improve[s] ... service ... benefits may not always have exceeded ... costs in terms of increased travel time for other road traffic and bus operating expenses. Consequently, a number of such experiments have been abandoned. One problem with these experiments is that they have not been accompanied by road user charges for automobiles” (p. 71-72)</p>
		<p>1Programs60: “[A] problem faced by rail rapid transit is that the benefits of a transport project are mainly reductions in travel costs for people who use the new facility and for people who use existing facilities which become less congested ... Thus, the benefits of a project depend heavily on the number of people who actually use the new facility rather than on the capacity of the new facility ... One possible exception to this evaluation ... would be in situations where rail rights-of-way and usable tracks already exist because of interurban railways ” (p. 101)</p>
		<p>1Programs61: “Bus rapid transit has several advantages compared to rail rapid transit. First, at the residential and downtown ends of the trip buses can provide their own local collection and distribution of passengers while most users of rail rapid transit would have to walk, drive, or take local buses to stations and then transfer. Second, buses are small enough to pick up a full load in one residential area and then drive non-stop to one destination area. By contrast, because rail vehicles must make stops along the route to pick up and discharge passengers, no one is able to travel express. Third, while buses can pass each other, rail vehicles cannot. As a result of these three advantages, bus rapid transit may be able to achieve faster door-to-door travel times than rail rapid transit. Moreover, the costs of bus rapid transit to the transportation authority are lower than those of rail” (p. 102)</p>

		<p>1Programs62: “It appears likely that a more efficient method of providing intermediate capacity transit service in most situations would be to use buses or modern streetcars (typically called ‘light rail transit’ to disassociate them from conventional streetcars), operating on exclusive rights-of-way or with priority over other traffic at crossings. Within Canada, the principal organization involved in developing both advanced technology intermediate capacity transit systems and modern streetcars is the Urban Transportation Development Corporation, which is funded by the Ontario provincial government” (p. 106)</p>
	<p>Urban Transportation Research Branch. (1979). <i>A review of the experience and activities of the Urban Transportation Research Branch 1974-1979</i>. Ottawa, ON.</p>	<p>1Programs63: “A number of urban areas in Canada have been experimenting with demand-responsive residential collection and distribution as a way of reducing the cost and improving the service of public transit available in low-density residential areas. The major experiments have been with dial-a-bus services as feeders for fixed-route line-haul mass transit systems” (p. 107)</p>
		<p>1Programs64: “The Urban Transportation Research Branch (UTRB) and the Surface Policy and Urban Transportation Assistance Branch of Transport Canada (TC) together with the Urban Networks Directorate of the Ministry of State for Urban Affairs (MSUA) have provided the impetus and the focus for federal government involvement in urban transportation issues during the past five years. As a result of recent changes in policy regarding the federal government’s role in urban development, the UTRB and the Urban Networks Directorate of MSUA have been disbanded, although the Surface Policy and Urban Transportation Assistance Branch continues to represent Transport Canada’s interests in this area” (p. 1)</p>
		<p>1Programs65: “Emphasis was placed on improving the competitive position of public transit relative to the private automobile and optimizing the movement of people, not vehicles. A secondary emphasis was the reduction of delay, congestion, and cost to all road users through improvements benefiting both modes equally” (p. 6)</p>
		<p>1Programs66: “Many urban transportation problems are due to economic and institutional factors rather than to a lack of technology. Better urban transport systems may result either from modifications to the socioeconomic framework or through the use of new technology, but the latter will only occur if it can be accommodated within this framework. The determining factors are often under the irradiate control of the federal, provincial or municipal governments, and this research and the data generated will frequently be valuable for policy development purposes “ (p. 6)</p>
		<p>1Programs67: “The challenge of the next decade will be to find ways to make the best possible use of transportation infrastructure and capital facilities with emphasis on operational-intensive rather than capital-intensive improvements. Thus the division developed new systems and sub-systems to improve overall efficiency and to concentrate on projects that have the best potential for visible results in the relatively short term. A smaller effort was devoted to monitoring developments of new technologies and systems with a view to their potential for implementation in Canada ... Overall, there has been a</p>

		<p>conscious decision to concentrate on public transport and special system research with a corresponding reduction of emphasis on highway or auto-oriented research” (p. 7)</p> <p>1Programs68: “Certain projects were conducted intramurally, others were contracted out to the private sector or universities, and a number arose from requests received from the public sector (e.g., municipalities and transit commissions) for technical and/or financial assistance for specific projects. In general, assistance was only given to projects in the latter category when: a) they were likely to result in demonstrably significant urban transportation improvements; b) the results were likely to be applicable to similar problems in other Canadian cities; c) Transport Canada was free to disseminate all results and information arising from the project; d) endorsement had been obtained from the appropriate provincial authorities; e) the appropriate municipality and/or provincial government was committed to a significant technical and/or financial involvement in the project” (p. 8)</p> <p>1Programs69: “In 1974 an international joint committee involving Canada, France, the United States and the United Kingdom undertook a study of bus priority systems. Canada's contribution consisted of researching and writing part of the final report which examined ‘with-flow’ bus priority systems and miscellaneous treatments for bus priority” (p. 12)</p> <p>1Programs70: “At the provincial level, an example of our coordination work is the New Brunswick Six City Transit Study. In 1975, the Province of New Brunswick requested the Branch's assistance in analyzing transit needs in its six largest urban communities ... The Branch provided one member to the New Brunswick Six City transit study team to supply technical information available within the Branch and to advise on federal government programs available to assist transit. Included in the study program was a nationwide survey of provincial policies concerning transit” (p. 13)</p> <p>1Programs71: “In 1974, the Urban Transportation Research Branch undertook a nationwide survey to determine the needs and priorities in ... urban transportation planning and modeling ... This national survey revealed that research and development were required to develop a model which integrated both the traffic and transit systems, and models which accounted for congestion effects” (p. 17)</p> <p>1Programs72: “In an attempt to overcome [a lack of academic interest in public transit], the Branch developed a ... transit engineering textbook which could serve in the universities as the basis of a transit course. It was hoped that this effort would lead to the eventual improvement of transit engineering education in the universities, act as a valuable tool for transit operators, and, hopefully, increase interest in this field. The textbook was written jointly by a number of leading academics and consultants in transportation. It will be used by several universities in the fall of 1979 and is anticipated to enjoy wide distribution both in Canada and in the United States” (p. 19)</p> <p>1Programs73: “In 1975, the City of Winnipeg approached the Branch with a request to participate in a joint study of a transitway to be located along an abandoned rail right-of-way corridor from the central</p>
--	--	---

		<p>business district of Winnipeg towards the southwest in the direction of the University of Manitoba campus. The Branch agreed to co-sponsor this research together with the Province of Manitoba and the City of Winnipeg because it afforded an opportunity to evaluate bus transitways and alternative technologies in the Canadian urban environment and the use of rail rights-of-way for urban transportation applications. This activity ... related directly to two Transport Canada programs: the Rail Relocation and Crossing Act and the Urban Transportation Assistance Program, and afforded the opportunity to examine ... implementations of these two programs” (p. 20)</p> <p>1Programs74: “A notable example of the way in which the Branch has promoted and underwritten the cost of high risk innovative projects is the development of the Automated Bus Passenger Information (ADPI) System ... Provid[ing] information to the prospective bus passenger on the actual time of arrival of the next bus at his nearest bus stop ... the passenger could obtain this information by using a normal telephone from the comfort of his home or workplace, etc. and thus minimize the time spent waiting in the all-too-often hostile environment at the bus stop” (p. 21)</p> <p>1Programs75: “In 1970, [the Transportation Development Agency] was among the first to recognize the benefits of paratransit and promoted the introduction of dial-a-bus services in Canada. In 1971, TDA entered into a tri-level demonstration project with the City of Regina and the province of Saskatchewan entitled the ‘Regina Telebus Demonstration’. Basically, the telebus is a high quality, personalized transit system service designed to serve areas with low population density. It provides a doorstep pick-up and drop-off service in response to telephone requests” (p. 22)</p> <p>1Programs76: “The commitment, vision, enthusiasm and drive necessary for research group staff are difficult to achieve in a line department especially when: the department has no real mandate or responsibility for the improvement of urban transportation in Canada; senior management is preoccupied by other matters it considers much more relevant to its mandate and about which it is more knowledgeable; a disproportionate share of the professional time of a small group such as UTRB had to be devoted to administrative chores” (p. 24)</p> <p>1Programs77: “Many innovations and experiments are going on across the country, yet many unsuccessful experiments are repeated and successes go unreported because there is no central clearing house for urban transportation information. The agencies that conduct these experiments rarely have the time or resources to document them full y and while they would like to see these experimental results made widely known, they have no responsibility to do so. Planners, transit and manufacturing industry all need to be made much more aware of the needs and opportunities” (p. 27)</p> <p>1Programs78: “In order to overcome the criticism of ‘hobbying’ and ‘meddling’ with provincial or local priorities, an Advisory Board on Urban Transportation could be formed to represent national interest across the country. This Board could be responsible for establishing research priorities on a reasonably</p>
--	--	--

		<p>long term basis (e.g. 3 to 5 years), for reviewing these annually and approving the organization's program proposals" (p. 28)</p> <p>1Programs79: "The participants of the Branch submit that the operation of UTRB, if viewed as an experiment, has been successful and has demonstrated that the federal government does have a role in urban transportation research, particularly in the areas of information dissemination and high risk RandD. Trying to perform such roles as part of the line administrations, however, was found impractical. Should the federal government re-enter this field in the future. It is recommended that responsibility for urban transportation research be placed with an independent body where the resources of the federal and provincial governments and industry can be pooled and an ideal research environment can be fostered" (p. 30)</p> <p>1Programs80: "As long as transit vehicles must compete for roadway space with low-occupancy private vehicles, transit will be a slower transport mode no matter how slow travel by private vehicle becomes. The Branch involvement in this area Included research and development projects giving priority treatment to public transit thereby improving its position relative to the private automobile. Examples included reserved bus lanes, exclusive transit rights-of-way, and priority treatment for transit at traffic signals" (p. 35)</p> <p>1Programs81: "Bus priority systems have some scope to improve transit service significantly, although this is limited in Canada because traffic congestion is not severe enough in Canadian cities to delay buses. Imposition of bus priority schemes may in some cases create congestion where it formerly did not exist and hence result in an overall disbenefit. There are locations where bus priority would be of benefit in Canada but these must be carefully studied and monitored since the improvements are generally marginal" (p. 35)</p> <p>1Programs82: "Where automobile usage is especially costly, and in particular, where there are heavy external costs not covered by automobile users, there are grounds for raising driving costs to cover social costs, or for discouraging automobile travel through various restrictions. The various measures adopted in Ottawa in recent years (bus priorities, variable work hours, parking charges, and expanded transit) led, through the proposal of the Branch and the Ministry of State for Urban Affairs, to Ottawa being one of several case studies reviewed by the OECO Group of Experts on Traffic Policies to Improve the Urban Environment. A general finding of this exercise was the need to introduce measures as a coherent package, not as piecemeal gimmicks. In particular auto restraints can only be effective if adequate transit is provided as a complementary system" (p. 36)</p>
1st Era Frames	Lewis, C. B. (1972). Research directions in urban transportation. In Canadian	1Frames1: "In the past ten years almost every city in Canada has had its transportation study. We have had one learned paper after another analyzing our urban transport problems ad nauseam. Yet the average citizen has seen nothing approaching a solution to his problem as he waits for thirty or more

	<p>Federation of Mayors and Municipalities/Ministry of Transport Seminar on Urban Transportation. Montebello, QC: Ministry of Transport.</p>	<p>freezing minutes, for a bus that is supposed to run every ten minutes, on a morning when his car has failed to start or he has refused to face the hopeless task of digging out his driveway” (p. 1)</p> <p>1Frames2: “Transportation is so much a part of Canadian life that in the absence of explicit national goals it is indeed most difficult to formulate detailed policies for the development of our transportation systems or for research oriented towards that end” (p.3)</p> <p>1Frames3: “I believe that there is no way in North America that we will be able to banish the private car from our cities, and, indeed, most of us would hate to see it abolished unless completely satisfactory alternatives were available. Thus, we must attempt to achieve an optimal mix of private and public transportation and make the car a better ‘citizen’ of the urban environment. In doing this, we may well have to develop some new forms of ‘semi-private’ transportation” (p. 5)</p> <p>1Frames4: “There is a growing realization that the basic qualities and inherent advantages of bus systems have not been fully appreciated and exploited and that, with the judicious application of modern technology, they could be transformed to offer an immeasurably better service than they do at present” (p. 7)</p> <p>1Frames5: “The easier we make it for people to drive in cities, the more people will drive in them. When we have finished redesigning our cities and cars and other transport systems, we shall soon be as congested as ever unless we apply some form of economic restraint” (p. 15)</p> <p>1Frames6: “The concept of providing so-called ‘free’ public transport for everyone is not a solution, it will merely compound the physical problems and create new economic injustices. Surely a saner, if perhaps more difficult, approach is to try to ensure that everyone pays a fair share of the total private and public costs of the transport services he uses” (p. 15)</p> <p>1Frames7: “It may well be that the traditional roles of the Federal Government in transportation development need to be reviewed in the light of rapidly changing circumstances. Our national wealth will continue to depend on the economic transportation of our resource materials and our manufactured goods to their markets. On the other hand, our national well-being will increasingly require the application of other than purely economic criteria to transportation planning. For example, in the foreseeable future, we may well have to modify our urban use of the automobile, or accept even less convenient access to our airports, if we wish to breathe acceptable air or continue to have ‘quiet enjoyment’ of our homes” (p. 17)</p> <p>1Frames8: “Perhaps the most important contributions the federal government could make in the research field would be in the provision of well-digested information and in the assessment of development opportunities against Canadian needs and resources. No doubt there are other kinds of contributions that many of the provinces and municipalities would like to see the federal government undertake in urban transport research” (p. 17)</p>
--	--	--

<p>Gertler, L. (1973). The research program of the Ministry of State for Urban Affairs. In Annual Meeting of the Canadian Council of Urban and Regional Research. Montreal, QC: Ministry of State for Urban Affairs.</p>	<p>1Frames9: “Other notable landmarks [in urban research] were ... the increasing preoccupation of the Federation of Mayors and Municipalities with the ‘fiscal squeeze’ and the need for coordinated action by provincial and federal governments; the holding in the mid-sixties of broadly-based national conferences on two of the most hard-pressed urban sectors, housing and transportation; the rise of environmental consciousness; the linking of economic development and urban growth in the Fourth Annual Review of the Economic Council of Canada, published in our centennial year” (p. 1-2)</p>
<p>Ministry of State for Urban Affairs. (1974). <i>Annual Report, 1973-1974</i>. Ottawa, ON.</p>	<p>1Frames10: “The federal government has maintained that the solution of the urban problems facing Canada requires the active cooperation of all levels of government – federal, provincial and municipal. From this stems the concept of tri-level consultation and cooperation. Second, the federal government as also maintained that the modalities of municipal cooperation and participation are a matter for provincial government to determine” (p. 3)</p>
<p>Sunga, P. and Duc, G. (1975). MSUA and the federal government. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Frames11: “The effectiveness with which MSUA can carry out its mandate depends on a number of key factors. These include: the viability of intergovernmental interaction; the strength of interagency working relationships at the federal level; and the capacity of MSUA to favourably influence decision making that affects urban Canada. The viability of intergovernmental working relationships is particularly crucial for the Ministry since all levels of government have mandated responsibilities or conduct activities that have important implications for urban Canada. In matters of urban concern, governments do not deal with static problems. Issues are continually changing in content and relative importance. In large measure, these changes reflect the evolving priorities and the policy and program thrusts of the three levels of government” (p. 8)</p> <p>1Frames12: “In many ways the character of federal decision making is an evolving one. Continuously, new processes are being designed or existing processes refined to promote the clarity, comprehensiveness, economy and foresight which are prerequisites to informed decisions in the public domain. Improving the effectiveness and efficiency of public endeavors are naturally matters of concern to the government and are among the factors that underlie continuous efforts to improve the basis for, and quality of, decision making in the public sector” (p. 9)</p>
<p>Ministry of State for Urban Affairs. (1975). <i>Annual Report, 1974-1975</i>. Ottawa, ON.</p>	<p>1Frames13: “In many cities ... movement depends heavily on the private automobile, with the resulting traffic-clogged streets and fume-laden air. At the same time, non-drivers –the poor, the handicapped, the very old and the young – are denied cheap and efficient transportation. Governments recognize that they will have to lend substantial assistance to make public transportation systems as convenient, comfortable, and efficient as the private car” (p. 5)</p>
<p>Danson, B. (1975b). Note for an</p>	<p>1Frames14: “If allowed to unfold, [population concentration in Canada’s three largest regions] would</p>

<p>address; “An Urban Strategy for Canada” to the Conference Board of Canada. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>have an immense impact not only on these provinces and cities but also on all of the others. Our largest, most rapidly growing cities would become unmanageable; the others, continuing to lose population, would wither. Regional economic disparities would be accentuated and political power would shift, perhaps to quasi city-states, but most certainly to the dominant provinces, to an even greater extent than today” (p. 5)</p>
<p>Ministry of State for Urban Affairs. (1976). <i>Annual Report, 1975-1976</i>. Ottawa, ON.</p>	<p>1Frames15: “The ... choice before Canadians has to do with management of our urban regions — with the size and shape and form and quality of our cities. What kind of cities do we want? Do we want cities with a strong downtown core, full of light during the day and full of life and activity at night? Or do we want to see our commerce and our population scattered around the periphery of our cities while the downtown core withers. Do we want access to our waterfronts, now often cut off by railways — as here in Winnipeg — or by a wall of old harbour buildings, as in Toronto. What kind of communities do we want? High, medium or low density? Should we continue to support high rise dwellings or should we look to other forms of high and medium density, more in keeping with the results of social research and more in keeping with the Canadian climate?” (p. 13)</p>
<p>Ministry of State for Urban Affairs. (1978). <i>Annual Report, 1977-1978</i>. Ottawa, ON.</p>	<p>1Frames16: “Transportation is a vital part of everyday urban life. We depend on cheap and efficient public transit within our cities and towns, and on the large-scale transportation systems that link cities and regions to each other and to the rest of the world. In Canada, the federal government exerts a major influence on national transportation through its jurisdiction over airport location, railway relocation, port expansion and the use of waterfronts” (p. 5)</p> <p>1Frames17: “In past years, cities such as Ottawa and Saskatoon have derived major benefits from relocating their railway operations away from the downtown core to the fringe of the city. With relocation, prime downtown land has been freed for other uses, and the noise and traffic problems caused by railway crossings have been removed. Other cities wished to follow their example, and as a result the Railway Relocation and Crossing Act was passed in June 1974. The Act provides the federal legislative authority for financial assistance to cities considering railway relocation” (p. 5)</p> <p>1Frames18: “By 1971 approximately 76 percent of Canada’s population was classified as ‘urban’. These trends represented a serious cause for alarm; in the early 1970s, projections indicated a continuing urbanization, particularly in the three largest centres of Toronto, Montreal and Vancouver” (p. 6)</p> <p>1Frames19: “It must be clearly stated ... that by identifying these policy areas as those of urban concern, the federal government is not claiming responsibility for controlling these aspects of urban life. Instead, it is merely stating that these are the areas in which the federal government can have the greatest supporting effect or interest” (p. 9)</p>

		<p>1Frames20: “The rapidly escalating costs to provide adequate transportation services and the need for governments to rationally and equitably allocate available funds have made it increasingly apparent that there is a need to develop a framework for coordinating land-use and transportation planning. In doing so, the potential exists to better cope with traffic congestion, to reduce energy-consumption levels and adverse environmental impacts, and to reduce the amount of land required for urban areas” (p. 36)</p>
	<p>N.D. Lea and Associates, Ltd. (1979). Transportation/Housing Interrelationships: Pilot Study. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Frames21: “The criteria and guidelines for social housing may result in the selection of remote or unusual sites. These locational decisions in turn can result in additional travel costs being imposed on the client group. Such costs take the form of increased travel distances, increased dependency on ownership of an automobile, or increased transit subsidies for the municipality” (p. iii)</p>
	<p>Frankena, M (1979). The economics of urban transportation. Ottawa, ON: Ministry of State for Urban Affairs.</p>	<p>1Frames22: “For people who live and work in Canadian urban areas, the major concerns with urban transportation are rush-hour congestion, pollution, and availability of public transit. Most of the important issues in urban transportation economics involve the use of government pricing, regulatory, and investment policies to deal with congestion, pollution, and public transit” (p. 1)</p> <p>1Frames23: “One serious criticism of radial expressways and rail rapid transit lines which would connect outlying suburbs with the CBD is that benefits would accrue largely to high income commuters, suburban landowners, and downtown businessmen. Yet, low income people might bear a significant share of the costs in terms of higher taxes, neighbourhood disruption, and higher rents if part of the low-income housing stock was demolished to make way for the transportation right-of-way. Because of such distributional effects, in carrying out cost-benefit analyses it is desirable to break down benefits and costs by income group to determine which income groups receive positive net benefits” (p. 94)</p> <p>1Frames24: “Some people believe that urban areas should invest in rail rapid transit rather than expand their facilities for automobiles. They argue for rail rapid transit on the basis of its advantages (or alleged advantage compared to the automobile: (a) provided the volume of travel is large enough, the explicit cost per trip for land, capital, fuel, and wages is lower for rail transit; (b) rail transit involves less loss of public open space and trees and less displacement of households and firms because less land is required; (c) rail transit causes less pollution and congestion; (d) rail transit does not promote as much decentralization of economic activity in the urban area; and (e) rail transit provides greater benefits to low income people who do not own cars.(p. 98)</p> <p>1Frames25: “Economists generally argue that, in spite of [the advantages of rail rapid transit], in Canada additional rail rapid transit investments are rarely likely to be justified when compared to additional facilities for automobiles. First, investments in rail rapid transit are much less divisible than investments in roads. While investments in roads can be scaled more or less to meet demand, investments in rail</p>

		<p>rapid transit are inevitably large. The capital cost per mile of rail systems is extremely high. While this presents no problem if the volume of travel by public transit is very high, it makes rail rapid transit service much more expensive than the automobile for the volumes of travel which occur in all but the densest corridors in the largest urban areas ... Second, the preceding list of advantages of rail transit ignores two important disadvantages: (a) except for trips which both originate and end close to transit terminals, rail transit has a higher cost in terms of door-to-door travel time than does the automobile; and (b) travel is less comfortable by rail transit than by automobile when allowance is made for walking, waiting, transferring, and standing in crowded cars as well as for the loss of privacy” (p. 98-99)</p>
		<p>1Frames26: “Economists generally infer ... that additional investment in rail rapid transit would be more efficient than investment in additional facilities for automobiles only if origins and destinations are dense enough to produce a very high demand for trips in a given corridor. Sufficient densities occur only along the major radial suburban-CBD routes and within the CBDs of urban areas with populations exceeding 2 million, i.e., Montreal and Toronto, and in most of these cases rail transit already exists. Because of the trend toward decentralization of employment and population, it is unlikely that in the future travel densities will increase sufficiently to make rail rapid transit more efficient than automobiles in other Canadian urban areas” (p. 99-101)</p>
		<p>1Frames27: “There is a widespread belief that the solution to many of the urban transportation problems addressed in this monograph – congestion, pollution, availability of public transit – will come from new developments in mass transit technology which will make it possible to provide at reasonable cost transit service which is competitive in travel time and comfort with the automobile for a large share of urban travel. Unfortunately, it is unrealistic to expect any such major breakthrough in technology. Generally speaking, apart from improvements in more-or-less conventional bus and streetcar service, proposals for new systems which would improve the speed and comfort of mass transit involve very high capital and operating costs. It appears that such systems would probably be efficient for only a very small share of urban travel, even if all the technological problems could be solved ... Nevertheless, a considerable amount of research is being done to develop new mass transit systems which would have a lower social cost per trip than buses, streetcars, or subways in ‘intermediate capacity’ travel corridors, i.e. where the number of transit trips in the peak direction during rush periods is between 5,000 and 20,000 per hour. The supporters of such systems in Canada argue that once the technological problems are solved, construction of such systems would be justified by cost-benefit analysis in two situations: in major radial corridors in cities with populations around 500,000, and in corridors where travel volumes are insufficient to justify a subway in Montreal and Toronto” (p. 104-105)</p>
	<p>Urban Transportation Research</p>	<p>1Frames28: “The benefits from research are potentially large because the costs of present day urban transportation are enormous. Without doubt, the largest element of cost in urban transport is private</p>

	<p>Branch. (1979). <i>A review of the experience and activities of the Urban Transportation Research Branch 1974-1979</i>. Ottawa, ON.</p>	<p>car operation” (p. 2)</p> <p>1Frames29: “During those early years [of the Urban Transportation Research Branch] there was a growing feeling within the federal government of some responsibility for urban development. This was most clearly demonstrated with the formation of the Ministry of State for Urban Affairs and the election promises made in 1974 regarding federal assistance to urban commuter and transit services” (p. 4)</p> <p>1Frames30: “The initial cost of research and the dispersed federal structure of Canada mean that adequate research is unlikely to take place in the urban transport field because no one city or province can normally expect to recapture the benefits of the costs it incurs. Thus a case can be made for broadly based agencies to coordinate funding and implementation, disseminate research findings and assist in long-term planning coordination. Given the need for central government involvement, one of the impediments to urban research has been the need to combine three levels of government in contractual or supervisory capacities The negotiation necessary to set up such tripartite committees is at best time-consuming and at worst impossible. In the final analysis, a three-level agreement can only be obtained through personal trust and understanding amongst the individuals involved and is clearly helped by staff continuity and stability in the agencies concerned” (p.5)</p> <p>1Frames31: “Most provinces and all municipalities are faced with strained budgets in the urban transportation area due to spiraling transit deficits and the increasing costs of road construction. As a result, it is difficult for the provinces or cities to make funds available for the more high risk type of urban transportation R&D. Benefits to the initial developer are minimal unless the results can be exploited on a national, or even International scale. For this reason federal commitment and funding are essential. Costs are then absorbed by the entire nation instead of coming out of provincial and municipal transit operating budgets. Speculative, high risk R&D should continue to be a traditional role of central governments” (p. 23-24)</p> <p>1Frames32: “Private automobile traffic can be socially harmful in terms of congestion, energy wastage, pollution, accidents and degradation of the urban environment, although it is often the most efficient way of transporting people within urban areas. We are now well aware of the futility of attempting to increase the supply of infrastructure and energy to match an unrestrained demand, and will be forced to adopt measures to control the profligate and at times antisocial urban uses of the automobile” (p. 34)</p> <p>1Frames33: “The future of conventional systems such as bus, streetcar, subway and commuter rail is increasingly likely to depend on finding new financial mechanisms, such as incentive subsidy programs or municipal taxes on gasoline, parking or employment. A hard look must be taken at the economic and institutional viability of conventional transit systems over the long term in the face of escalating deficits and labour demands, vis-à-vis the development of alternative systems” (p. 36)</p>
1 st Era	Lewis, C. B. (1972). Research	1PublicSentiments1: “Civil disobedience and insurrection in North American cities in recent years have

Public Sentiments	directions in urban transportation. In <i>Canadian Federation of Mayors and Municipalities/Ministry of Transport Seminar on Urban Transportation</i> . Montebello, QC: Ministry of Transport.	been responsible for focusing both public and political attention on the urbanization process. Many people are wondering if the pressures of living in North America today are proving to be too much for us and whether the city is in any way to blame. We cannot help wondering whether our North American style of urban living is somehow failing to satisfy the most profound needs of man” (p. 1)
		1PublicSentiments2: “[Canadian populations] are also demanding more ‘quality’ and convenience in their personal transport. In the past twenty years the number of automobiles per capita has trebled; in the same period, the number of public transit rides per capita has dwindled to one-third” (p. 4)
		1PublicSentiments3: “The restrained automobile-orientated policy that appears to have evolved as the result of public pressure in Metropolitan Toronto will probably influence policy makers in other Canadian cities. Rejection of the concept of free traffic flow on urban roads and holding peak-hour congestion levels even close to present conditions will necessitate accelerated development of the public transit systems of Canada’s larger urban areas and more effective planning for the sane use of private transport in most of our cities” (p. 5)
		1PublicSentiments4: “If public transport is to attract a significantly larger share of the market the quality of service offered must be substantially upgraded in terms of convenience, speed, comfort and cost, and new marketing approaches taken to ensure public acceptance of the new product” (p.14)
	Sunga, P. and Duc, G. (1975). MSUA and the federal government. Ottawa, ON: Ministry of State for Urban Affairs.	1PublicSentiments5: “The priorities, in broad terms, are established by Cabinet which in turn is responsive to the political environment. Public demands are expressed through opinion polls, through members of Parliament, the press and other communication media and through the various community and interest groups. Political choices concerning which demands will be honoured are made by ministers. They must guide the principal direction of policies and must evaluate alternative programs and program mixes as instruments for achieving the more specific objectives of government. The ordering of many of these priorities takes place in the Cabinet committees and in particular, in the Cabinet Committee on Priorities and Planning, where the broad policy directions and priorities of government are determined” (p. 30)
	Danson, B. (1975). Note for an address; “An Urban Strategy for Canada” to the Conference Board of Canada. Ottawa, ON: Ministry of State for Urban Affairs.	1PublicSentiments6: “There appears to be fairly general agreement that the trends [towards sprawl and population concentration in three major cities] are unacceptable ... The residents of two of our three largest centres, Vancouver and my own City of Toronto, are showing signs of resisting rapid, uncontrolled growth. So are the residents of other communities. These people are telling us that they would be happy to see more of the future growth spread around to other regions” (p. 7)
	Kirkland, J. (1976). Intra-urban mobility in Montreal, Toronto and Vancouver. Ottawa, ON:	1PublicSentiments7: “Surface transportation networks, in and around metropolitan areas provide the means whereby suburban dormitories are linked to central city employment opportunities. Suburban households have opted for space over accessibility and are willing to spend more time in transit than

	Ministry of State for Urban Affairs.	<p>would be the case if they lived at higher densities near or in core areas” (p. 24)</p> <p>1PublicSentiments8: “Increasing energy costs may force a shift in some of these patterns [suburban and automobile congestion] but commuters generally find it difficult to give up the private automobile in favour of mass transit” (p. 24-25)</p>
	Frankena, M (1979). The economics of urban transportation. Ottawa, ON: Ministry of State for Urban Affairs.	<p>1PublicSentiments9: “Because of increasing public opposition to construction of urban highways, during the present decade automobile congestion may increase in many urban areas. Whether this will occur depends on many aspects of urban transportation policy and on the extent of decentralization of employment in urban areas” (p. 14)</p> <p>1PublicSentiments10: “Studies of travel behavior in Metropolitan Toronto and Region and in Winnipeg support this type of model of modal choice behavior [economic rationality]. They report that the proportion of trips made by public transit was higher when the relative out-of-pocket cost, travel time, and comfort and convenience of service were more favourable for transit and when the income of the tripmaker was lower” (p.16)</p> <p>1PublicSentiments11: “People sometimes support a policy of charging a lower toll for a car with more occupants on the grounds that this would encourage car pooling and hence reduce congestion, but such a policy would be inefficient “ (p. 40)</p> <p>1PublicSentiments12: “Since the late 1950s most Canadian urban areas have sponsored at least one major transportation study, including recommendations for investment in highway and public transit systems during the next 20 to 25 years. These studies and related plans and decisions concerning investment in urban transportation have been criticized both by social scientists and by citizen groups” (p. 110)</p> <p>1PublicSentiments13: “A ... criticism [of 1960s transportation studies] is that when costs were calculated, many social and environmental costs were ignored. As a result, there may have been a bias toward overinvestment in transportation facilities and, in particular, a bias toward the private automobile as opposed to public transit. For example, estimated costs of expressway construction and operation typically included only actual government outlays and not the uncompensated costs involved in displacement of families and businesses, traffic congestion and neighbourhood disruption during construction, use of park land, air and noise pollution, and unsightly views. Recently, however, there has been increased consideration of such costs because of pressure from citizen groups” (p. 110-111)</p> <p>1PublicSentiments14: “It is argued that there was inadequate citizen participation in planning and decision-making in urban transportation. Land-use and transportation plans were used without being publicized and officially adopted, and decisions were made without public discussion and then presented as <i>faits accomplis</i> by planners and city politicians. More recently, however, many urban transportation studies have had elaborate provisions for public participation” (p. 112)</p>

	Urban Transportation Research Branch. (1979). <i>A review of the experience and activities of the Urban Transportation Research Branch 1974-1979</i> . Ottawa, ON.	1PublicSentiments15: "Since mid-1978 ... events have taken a [turn away from political support for federal involvement in urban development]. As a result of mounting public pressure to cut federal government spending, coupled with a general feeling that the federal government should get out of areas not directly within its jurisdiction, a Cost Reduction Task Force was set up in Transport Canada to achieve these goals. As a direct result of the Task Force's recommendations. Transport Canada decided to phase cut UTRB by March 31, 1979, and return the responsibility for such activities to the realm of provincial and municipal agencies" (p. 4)
		1PublicSentiments16: "Present enthusiasm for public transit stems mainly from a reaction against the private auto (and major road construction related to it) and the need to conserve petroleum fuels" (p. 5)

Table 15: Second-era (documents from 1980-2001) codes applied during the thematic coding process.

2nd Era Paradigms	Gray, H. (1981). Notes for a speech by the Honourable Herb Gray, PC, MP, Ministry of Trade, Industry, and Commerce, to the 76 th Annual Meeting of the Canadian Urban Transit Association, Hotel Loews le Concorde, Quebec City, QC. Monday, 22 nd of June.	2Paradigms1: "The current high levels of service and industry achievement have come about through the combined efforts of the public and private sectors. These private and public sector efforts keep public transit more healthy in Canada than in the USA. This is one reason why Canada today is a world leader in the manufacture of public transit equipment, and the development and operation of public transit systems" (p. 1)
		2Paradigms2: "The role of public transit is becoming increasingly important in urban areas, especially in city cores. Obviously, it can reduce congestion, expense and journey time. In spite of the fact that this is a large country, with a relatively small population, almost 75% of Canadians live and work in urban areas. With higher energy costs, public transit will play an even bigger role in the future. Public transit increasingly serves as primary transportation for many people. It can provide many of the routine daily commuting needs of urban dwellers" (p. 4)
		2Paradigms3: "What do we have to do to meet our own needs, and obtain a growing share of world markets for urban transit equipment and systems? We must continue to market aggressively; we must capitalize on our proven capability in project management; we must develop financial resources to meet foreign competition; we need continuing efforts by CUTA, in such areas as coordination of research and development; and we need the cooperative efforts of all manufacturers, operators, and municipal, provincial, and federal governments" (p. 5)
	Department of External Affairs. (1981). <i>Urban transportation: The Canadian experience</i> . External Information Program	2Paradigms4: "Canadian cities have been quick to recognize light rail transit's potential for service and cost-saving. In Edmonton and Calgary, fast-growing areas in Canada's oil-rich province of Alberta, rising oil prices boosted dramatically economic activity and populations during the past decade. To meet current and future public transportation requirements, both have embraced the idea of light rail transit to keep pace with urban growth" (p. 3)

<p>Division. Ottawa, ON.</p>	<p>2Paradigms5: “Despite the dominance of the automobile during the years of rapid urban growth, Canada's largest cities maintained and expanded their public transportation systems to provide an alternative means of travelling within their boundaries. In small and medium-sized cities such as Ottawa and Vancouver, the alternative is a highly reliable bus system. Larger centres such as Toronto and Montreal constructed integrated, multimodal transit systems which provide passengers with inexpensive, dependable and comfortable transportation. These systems were planned, built and commissioned by the municipalities, and most of the equipment required for them was designed, developed and manufactured in Canada” (p. 8)</p>
	<p>2Paradigms6: “Most national governments today are increasingly concerned with the cost and supply of imported oil. Since urban transportation by private automobile accounts for a significant proportion of the oil consumed by many nations, there is growing interest in reducing auto use. Public transportation addresses the energy problem directly. In peak travel times, urban diesel buses are approximately 11 times more efficient than automobiles, achieving approximately 100 passenger-km per L of fuel compared with approximately nine passenger-km per L with standard automobiles. The fuel efficiency of electrical mass transit systems is similar to that of buses on a passenger-km-per-L basis” (p. 8)</p>
	<p>2Paradigms7: “Over the past 80 years, Canada has developed a solid foundation of transit specialists. The urban transportation systems they have built offer affordable and reliable service to millions of people daily. The broad base of research and development personnel and the evident public support ensure a continuing evolution of the technology and equipment. The Canadian transit-manufacturing industry meets both domestic needs and the requirements of the highly competitive international marketplace. The export of millions of dollars in new equipment every year illustrates that Canada's transit manufacturing sector is well able to compete in tough international bidding” (p. 21)</p>
<p>Department of Industry, Trade and Commerce. (1981). First Choice: Urban transit solutions. External Information Porgram Division. Ottawa, ON.</p>	<p>2Paradigms8: “As well as responding to the challenges of urban growth. Canada’s transit industry has always had to face another challenge, that of climatic extremes. Not only is transit equipment required to operate in the extreme cold our country is justly famous for but it must operate in summer temperatures that in parts of the country can rise over 40°C (104°F) at times. Given the severe operating conditions transit equipment and components are subjected to, one can say that, if they work in Canada, they will work anywhere” (p. 18)</p>
	<p>2Paradigms9: “Canada’s transit industry is meeting the requirements of the highly competitive international marketplace, with the export of millions of dollars in new equipment yearly illustrating the ability to hold its own in tough bidding ... [there are] many examples of Canadian expertise in the transit field that have been or are being applied throughout the world” (p. 33)</p>
<p>Transport Development Centre.</p>	<p>2Paradigms10: “The R&D activities in the urban transit sector are concentrated in three main areas, namely vehicle/system technology development, computer applications and development, and</p>

<p>(1985). Urban Transit Research and Development: Inventory of projects and value analysis. Transport Canada. Ottawa, ON.</p>	<p>transportation planning and management. Other areas of research with the exception of service and methods demonstration are relatively inactive. The largest number of projects in a single research area involves R&D on alternative energy vehicles and/or alternative fuels. This R&D is largely at the federal level reflecting the federal governments mandate to promote energy efficiency in the transportation sector as a whole. Although not a serious problem, there is some duplication of effort on national basis” (p. i)</p>
	<p>2Paradigms11: “Lack of R&D funds, lack of time and staff, lack of up-to-date information, and the lack of clear R&D policies were most frequently identified as obstacles to more effective R&D. Increased funding and a proper coordination mechanism for selecting, funding and implementing ... projects were most frequently mentioned as solutions to the above obstacles” (p. ii)</p>
	<p>2Paradigms12: “Many projects are clearly local in nature and have been conducted without consideration for regional or national Interests. Government agencies were generally more optimistic when evaluating R&D projects in comparison to transit operators. Government agency evaluations are generally 12-15% higher. Projects in the General Transportation Research, Training and Labour Relations and Computer Applications and Development subject categories ranked highest in value. Projects in the Policy and Program Development and Transportation Planning and Management category ranked lowest” (p. iii)</p>
	<p>2Paradigms13: “There is strong consensus that the level of urban transit R&D is unsatisfactory, that urban transit R&D funding should be Increased to meet current Industry needs and that current funding policies for the conduct of R&D are not generous enough. There is moderate consensus that the current R&D efforts of transit operators and manufacturers are valuable. However, the R&D efforts of provincial governments, the federal government and universities/private research organizations is in considerable doubt according to the respondents. There is a high degree of consensus that 1f transit operators and CUTA were more involved in project identification and selection, urban transit R & D would be more valuable. Provincial government Involvement is also seen to be desirable, however, less Federal Involvement in project identification and selection is seen to be desirable” (p. iii)</p>
<p>National Transportation Agency. (1985). Freedom to move: A framework for transportation reform. Ottawa, ON.</p>	<p>2Paradigms14: “I, as Minister of Transport, have been guided in particular by the following principles: (a) Less regulation, leading to less government interference, will encourage innovation and enterprise; (b) Greater reliance on competition and market forces will result in lower unit costs, more competitive prices, and a wider range of services to shippers and the public; (c) Canadians require a regulatory process that is open, accessible, and not excessively costly or time consuming. A policy and legislative framework based on these principles will allow Canada’s transportation system to contribute efficiently and effectively to our future growth and prosperity” (p. i)</p>
	<p>2Paradigms15: “We must do everything we can to promote an efficient, responsive and productive</p>

		<p>transportation system. The Government must facilitate and encourage, rather than obstruct and intervene. We must allow the system to operate under market conditions and allow business to play its proper role in fostering economic growth ... The Government recognizes that the changes proposed to economic regulation of transportation may, in rare circumstances, such as for essential air services in remote areas, result in transitional difficulties for certain users. In such circumstances, a policy of selective government action, using the services of the market as much as possible, will ensure assistance for cases of greatest need ” (p. ii)</p>
		<p>2Paradigms16: “The [transportation] industry has matured. Trucking has flourished while railways have become more specialized carriers with much of their traffic in bulk commodities. Air traffic has tripled, and a much wider diversity of air services is now offered. Transportation services utilizing more than one mode (multimodal) have grown in importance, while shippers' needs have become more varied. Proportionally fewer Canadians are travelling by train and bus, and the automobile continues its dominance. A movement to deregulation has occurred in the United States, Canada's major trading partner. Greatly increased domestic and international competition has become a fact of life for Canadian producers and manufacturers” (p. 1)</p>
		<p>2Paradigms17: “The performance of the [surface] public passenger modes, rail and bus, has been significantly weaker than that of air since 1967. Both rail and bus have declined in market share. Rail traffic has fluctuated between 5 million and 7.8 million passengers annually. Bus traffic has approximated 32 million passengers annually during most of the period, except for 1984, which saw a decline to an estimated 28.5 million” (p. 13)</p>
		<p>2Paradigms18: “Since the mid-1970s, the overall performance of the transportation sector has been characterized by lower productivity gains, reduced new investment and higher energy prices. Latterly, improvements in productivity have been more evident in transportation than in the economy as a whole but inflation and high interest rates have inhibited new investment in the sector. Canada now faces a period of economic renewal with economic growth expected to be solid. Our producers, confronted with increased competition in world markets, need efficient transportation. Our transportation system, subject to increased competition from a deregulated U.S. system, requires more freedom and flexibility to respond successfully to market pressures“ (p. 14)</p>
	<p>National Transportation Agency. (1989). Freedom to move in Canada’s new transportation environment. Ottawa, ON.</p>	<p>2Paradigms19: “Air traffic has tripled, with a much wider diversity of air services becoming available. Trucking has flourished. Railways offer more specialized freight services. Services involving several different modes of transportation are more common. The needs of shippers have become more complex and more varied. In short, much has changed during the last 25 years; the transportation industry has changed; the needs of shippers and travelers have changed and the economy has changed. Although Canada has a small population, it is the second-largest country in the world. Transportation</p>

		<p>ties it all together. Canadians have conquered the sheer size of their land with a sophisticated network of transportation — thousands of km of roads, railways, waterways and airline routes. Today we take this network for granted, but we depend on it to keep the country moving” (p. 2)</p>
		<p>2Paradigms20: “Regulations have been removed or modified to stimulate competition within the industry, allowing a high degree of innovation as transportation firms take the opportunity to provide new, improved services to their customers. Under the old regime, innovation entailed long and costly procedures to amend license conditions. Antiquated public hearing procedures forced disclosure of original marketing proposals to potential competitors” (p. 5)</p>
	<p>Christopher, J. (1992). Transportation in Canada: Current Issues. Library of Parliament. Ottawa, ON.</p>	<p>2Paradigms21: “As urban transportation is the responsibility of provincial governments, the federal government has always been reluctant to get involved, especially in the recent years of fiscal restraint. There is, however, no constitutional barrier to the federal government’s using its spending power to become directly involved in urban transit projects. We must ask whether it should be involved and whether it can afford to be. Certainly, it is acknowledged on all sides, that there must be substantial investment in urban transit from some source over the next few years in Canada” (p. 13)</p>
		<p>2Paradigms22: “Cost recovery has been a part of federal government transportation policy for some time. Two years ago, Transport Canada published a proposal for cost recovery in all modes. One of the key issues is distinguishing the user costs for services from costs incurred by the government in the public interest. Another issue is how much involvement the users of these services ... should have in developing costing methodologies and setting cost levels. In addition, in order to ensure fairness and equity in any cost-recovery regime, it is necessary to identify the amount of ‘hidden’ subsidization” (p. 15)</p>
	<p>IBI Group. (1993). Urban travel and sustainable development: The Canadian experience. Canada Mortgage and Housing Corporation. Ottawa, ON.</p>	<p>2Paradigms23: “Across Canada, and across the industrialized world, there is a growing awareness that our systems for moving people and goods in urban areas are in conflict with the principles of sustainable development- The Canadian urban transportation system, which with few exceptions is based on the private automobile as the primary means of transport, is not considered sustainable for many reasons, including its consumption of non-renewable energy resources, its propensity to encourage a sprawling, low-intensity and inefficient form of urban development, its emission of air and water pollutants, its susceptibility to congestion (with attendant increases in emissions and energy consumption, inhibition of economic competitiveness and degradation of urban quality of life), and its direct impact on human life and suffering due to accidents” (p. i)</p>

		<p>2Paradigms24: “While the precise division of urban transportation responsibilities varies across Canada, in any given city the multiplicity of jurisdictions is complex. This often hampers environmentally-motivated transport innovation, as it is difficult for a single agency to take action alone” (p. 4)</p>
		<p>2Paradigms25: “From its rock-bottom low in 1973, transit ridership across the country increased between 1974 and 1985. In Canada, the 1970s are often referred to as the ‘Golden Age of Transit’, as most provincial governments provided generous capital and operating funds. However, as construction of the new lines was completed, many cities found themselves facing a type of ‘planning paralysis’ at the highest levels. Road-oriented infrastructure projects continued to be widely unpopular, and some proposed transit projects were also attacked on the grounds that they disrupted local communities. Throughout the period, transportation budgets steadily decreased in real terms, as governments at all levels reoriented their priorities towards social, education and health spending. These factors led to a virtual freeze on major capital-intensive network expansion, which continues to this day with some exceptions” (p. 20-21)</p>
		<p>2Paradigms26: “The period from 1986 to the present can be characterized as the time when the urban transportation trends which tended to decrease the sustainability/livability of urban areas (e.g. sprawl, increased auto dependency) began in earnest to negate the contributions of positive trends (e.g. increased transit ridership, cleaner automobiles) ... Almost everywhere, transit operating costs increased and revenues declined. In response there were service cuts and fare increases, followed by further declines in ridership. While some transit systems maintained or increased the total number of riders, transit did not keep pace with population growth, resulting in declining per capita ridership figures” (p. 22)</p>
		<p>2Paradigms27: “In the context of severe recession, which began to be felt in 1989 ... provincial governments not only became unwilling to increase operating subsidies but, in Saskatchewan and Quebec ... withdrew them entirely. Toronto, Montreal and Vancouver became once again the prime growth centres of Canada, having earlier been supplanted ... by smaller cities during the late 1970s. Cheaper land prices at the rural-urban fringe and government programs continued to encourage development of tracts of low density, single family detached homes in the surrounding regions, leading to increased servicing costs, longer commuter trips to downtown and the massive growth of suburb-to-suburb commuting” (p. 24)</p>
		<p>2Paradigms28: “At the present time, within each of Canada’s major urban centres, there exist three different types of urban form. At the heart of each area is the old, pre-war city which is pedestrian and transit-supportive. Surrounding this are the older suburbs, which feature lower densities, separation of uses, tracts of single-family detached homes, buildings oriented away from the street – often behind large parking lots, winding internal roads and cul-de-sacs – and a poor pedestrian environment. In the</p>

		<p>periphery, or in regions beyond, are areas of new growth where development is not only auto dependent in style, but often widely scattered and lacking a coherent urban structure. There is a predominance of single-family detached housing and an imbalance of housing over employment, which fosters commuter travel to the inner suburbs and downtown” (p. 38-39)</p>
		<p>2Paradigms29: “While most high-level, strategic transportation planning and land use planning studies in Canada recognize the strong interactions between land use/urban design and transportation, the mind-set in many instances until recently has been to assume a continuation of auto-dependent development and infrastructure; the delivery of new suburban subdivisions, and the incremental expansion of road infrastructure often includes little or no consideration of transit opportunities and requirements. However, there are some examples of joint actions in delivering urban development and related transit services in a more integrated manner. For example, in Edmonton, an innovative cost-sharing agreement between Edmonton Transit and a major developer resulted in the introduction of transit services to a new subdivision two years in advance of when it would normally have been introduced” (p. 49)</p>
		<p>2Paradigms30: “Other government priorities and fiscal restraint have effectively curtailed the expansion of rapid transit infrastructure in Canadian cities in recent years. However, virtually all of the seven major cities have stated their intention to expand and improve their rapid transit networks. In contrast, there are relatively few plans to significantly expand the urban freeway network” (p. 50)</p>
		<p>2Paradigms31: “At the institutional level, there is a need for re-examination of policies, procedures and regulations in order to remove biases in favour of the automobile and make room for innovation. With regard to taxation, for example, federal law allows companies to provide parking for employees as a tax-free benefit. Free or subsidized transit passes, however, are taxable benefits” (p. 58)</p>
		<p>2Paradigms32: “Transit service standards and funding ratios, while providing fair and impartial criteria for all routes and operating agencies, can sometimes impede policy and program innovation in special situations. When applied to the feasibility of a new route or service, such standards are usually predicated on expected ridership levels, which in turn are based on past experience. An innovative route/service proposal may be underrated in such a framework” (p. 58)</p>
		<p>2Paradigms33: “Transit planners and operating agencies lack formal power in the development approval process. Since the 1950s, there has generally been poor coordination between land-use and transportation planning/delivery at the local level, with public transit being provided after-the-fact and being required to adapt to difficult and inefficient situations. While initiatives have been begun in curtailing sprawl, the momentum of piecemeal urban sprawl continues around all major Canadian cities. The status-quo is perpetuated by market forces and government policies and programs which directly or indirectly promote development on ‘cheaper’ land at the rural-urban fringe, ‘NIMBY’ ... resistance and</p>

		<p>the general lack of understanding by local politicians, civil servants and general public about the need for change and required actions to achieve it. Given the political will, however, municipal and provincial governments possess very significant powers to bring about change, through the development planning and approvals processes and the funding of infrastructure” (p. 59-60)</p>
		<p>2Paradigms34: “In older core areas, because most of the original transit-supportive infrastructure is still intact in most Canadian cities, current levels of service and ridership are still relatively high, and there is excellent potential for improvement. The most significant changes since 1946 are declines in population density, increases in auto use and traffic congestion and resulting declines in transit ridership, service levels, and profitability ... In peripheral and regional growth areas, because of the scattered, density, car-oriented urban form, transit service and ridership are low. If available, local transit service tends to be designed to feed commuter rail lines, rapid transit, or highway express bus service in the central city, internal and suburb-to-suburb service is generally lacking or available only as paratransit, making it extremely difficult or impossible to live without a car” (p. 65)</p>
		<p>2Paradigms35: “While long-term strategies are needed for curbing urban sprawl and creating a more focused urban structure, in the meantime it is difficult to improve the general level of transit service in these peripheral communities. Some planners have questioned whether significant investment in transit is worthwhile in such areas, when the same Investment could bring proportionally much better results in other places. However, the number of auto trips associated with the current level of car dependence is causing increasing congestion on regional highways and inner city roads and perpetuating an expanding cycle of traffic congestion and road construction” (p. 66)</p>
	<p>IBI Group. (1994).Transportation Material for the Urban Chapter. Environment Canada. Ottawa, ON.</p>	<p>2Paradigms36: “One may think of transportation and land use as having direct impacts on each other. Transportation affects land use by making different parcels of land more or less accessible by different modes. In turn, the mix and density of land use will affect travel in terms of the number and length of trips made, and the modes used. In one sense, this direct view of the relationship is correct but misleading as it fails to explicitly regard the human element. All decisions on land use and transportation are made by humans, individually or collectively, and it is this three-way relationship which ultimately determines the environmental effects and sustainability of an urban area” (p. 2)</p>
		<p>2Paradigms37: “The expanding municipal boundaries and decreasing densities meant that transit systems were carrying fewer passengers per revenue km , with increasing emphasis on more long-distance commuter trips from distant suburban and exurban areas to the downtown core. Where businesses migrated to the suburbs they were often located in scattered, segregated, single-use office developments, rather than focused in compact, mixed use nodes or sub-centres which would favour internal walking trips and could be served efficiently and effectively by transit” (p. 7)</p>
		<p>2Paradigms38: “[Beginning in 1986,] transit systems began to be caught in a downward spiral of</p>

		<p>declining revenues and ridership, leading to deterioration of service, an echo of the massive downward spiral experienced following World War II. In the context of the severe recession, which began to be felt in 1989 and still grips Canada's economy, provincial governments not only became unwilling to increase operating subsidies but, in some cases actually withdrew them entirely" (p. 7-8)</p>
	<p>National Round Table on the Environment and Economy. (1996). Sustainable transportation in Canada (Backgrounder). Ottawa, ON.</p>	<p>2Paradigms39: "There is increasing evidence that the negative consequences of transportation may be overwhelming the benefits we derive from it, and that there are serious risks to society if we continue our current patterns of transportation development and use ... Social polarization is occurring between those who have access to good transportation alternatives and those who do not. There are major threats to human health and the global climate as well as other environmental concerns from unrelenting growth in the use of fossil fuels for transportation, both in Canada and around the world. An international consensus is emerging, based on an expanding body of research, that present trends in transportation, coupled with human settlement and communication patterns, are not sustainable in the long term. Effective measures for mitigating the harmful effects of transportation have been widely researched and reported in the literature. Many federal agencies, as well as those at the provincial and municipal levels, have begun to include elements pertaining to sustainable transportation in their strategies on sustainable development" (p. vii)</p>
		<p>2Paradigms40: "Not only are there more cars and trucks on the road, but consumer trends to larger vehicles are pushing up the average fuel consumption per vehicle. Despite continued public investments in public transportation, transit ridership has been declining in some of Canada's largest cities both in absolute volumes and in modal share over the last 10 years" (p. ix)</p>
		<p>2Paradigms41: "Governments face declining financial resources for maintaining and expanding transportation infrastructure ... [they] are divesting themselves of responsibility for funding the massive additions to infrastructure that will be necessary if current demand trends continue. Even if the financial challenge of meeting demand for transportation infrastructure could be met ... there is a boomerang effect in expanding transportation systems. If we build a freeway system or an extended airport system to meet some prediction of future demand, then we should not be surprised to discover that these investments hasten our progress in that direction" (p. 2)</p>
		<p>2Paradigms42: "The high costs of infrastructure serving suburban areas are frequently paid for out of general tax revenues, not by the people responsible for the demand. Access to such publicly funded infrastructure is seen as a right, while user fees are criticized as tax grabs. Under current market conditions, users do not pay for the full social costs of transportation. Therefore, transportation is 'over-used' from an efficiency perspective" (p. 4)</p>
		<p>2Paradigms43: "In Canada, the primary focus of attention in sustainable transportation is on the impacts of ground level air pollution and greenhouse gases. Of particular concern are the impacts of</p>

		<p>increasing concentrations of ground level ozone, airborne particulates and carbon dioxide. At the same time, much attention is being paid to the economic and social implications of the continuing low density of human settlement patterns, particularly in the major urban areas of Canada. The financial constraints on all levels of government are forcing municipal and regional decision makers to reconsider land-use practices and to look for more cost-effective ways to develop urban infrastructure. There is widespread, though by no means universal, consideration of more compact, mixed-use development as one way to address this issue. There has been less emphasis, until relatively recently, on the connections between the unsustainability of transportation and patterns of land use” (p. 5)</p> <p>2Paradigms44: “Much of the debate about sustainable transportation centres on the problem of automobile dependence, which includes loss of community, reduced air quality; climate change; consumption of large amounts of space for roads and parking; intrusion of automobiles into neighbourhoods; boredom in the suburbs; and, in some countries, guarded communities. On a global scale, the imminent peaking in the next century of global oil production is also cause for concern” (p. 10)</p> <p>2Paradigms45: “Urban transit is several times more energy efficient per passenger-km than the automobile. Transit is also much less land-use intensive, and is more inclusive in that it provides access for those who do not drive cars. It follows that much more progress could be made toward sustainable transportation if the modal share of transit could be substantially increased in urban areas. Current trends are in fact in the opposite direction, despite continued calls for increased funding priority by public transit advocates” (p. 14)</p> <p>2Paradigms46: “Growth in automobile use is highly correlated to historical patterns of low density, single-use development in major urban areas, increasing disposable income of consumers and advances in vehicle technologies. Urban form and transportation systems have evolved under policies that do not require market players, including consumers, to pay the full environmental, social, health and safety and economic costs of their transportation or land-use decisions. Change will be required over the next 25 years or longer, even if steps are taken immediately to induce the massive changes in behaviour, technology and infrastructure required for truly sustainable transportation. It is uncertain whether there is any set of policies that could gain political acceptance at this time and that would result in truly sustainable transportation” (p. 22)</p> <p>2Paradigms47: “No long-term vision of sustainable transportation has yet been embraced by the Government of Canada or any provincial government” (p. 25)</p> <p>2Paradigms48: “Policy development for sustainable transportation in Canada is not being carried out in an atmosphere of crisis. Canada continues to work to harmonize its national ground level air quality standards and emissions regulations with those of the international community. Canada embraces the air quality guidelines of the World Health Organization, and the transportation vehicle emissions</p>
--	--	--

		<p>standards of the United States ... However, the situation could change substantially in the relatively near future. Municipal and provincial thinking about urban transportation in Canada today is driven almost exclusively by the new reality of shrinking budgets. This may be serendipitous, because some proposals for new revenue sources, such as roadway congestion pricing and user fees and tolls, can have positive environmental impacts by shifting auto demand to other times and other modes. We seem to be at a unique point in history when economic and environmental goals in urban transportation may converge, with major implications for sustainability” (p. 31-32)</p> <p>2Paradigms49: “Policy responses by governments, at least in North America, continue to focus on combinations of regulation and technology policy options in the technology sector. Few steps have been taken to implement stronger packages of policies that can affect a broad range of consumer and business decisions. Governments are financially constrained and can no longer base infrastructure investment decisions primarily on demand growth by individual mode ... There are, however, many signs of change in the way decisions are being made. Regional metropolitan governments in all parts of Canada are beginning to rethink the way urban transportation systems will be developed in future to support new land-use planning approaches. The Federation of Canadian Municipalities and some individual municipalities have adopted the generic vision and principles for urban transportation articulated by the Transportation Association of Canada. While the TAC acknowledges that the approaches it advocates will not lead to true sustainability, they are steps in the right direction” (p. 44)</p> <p>2Paradigms50: “There is a general lack of integrated decision making about transportation issues among all levels of governments. Economics still drives most transportation decisions of the federal government. There is limited consideration of policies and programs designed to produce combined economic, environmental and social benefits, and so far little sense of urgency about sustainable development (including transportation) evident in the government’s policies and programs” (p. 47)</p> <p>2Paradigms51: “Cultural values in Canada favour single-family exurban homes on large lots and wide use of the private motor vehicle. Fuel prices are at historically low levels in North America. The relatively fixed percentage of disposable income used by consumers for transportation has allowed consumers to purchase new vehicles and to drive them longer distances. There is a well-established relationship between gasoline price and vehicle use. Fuel prices in European countries are typically two to three times higher than in North America, while per capita fuel consumption in the EC is in the range of one third of that in North America. It is argued that urban population densities are much higher and that public transportation systems are more highly developed in Europe than in North America. The counterargument is that it has been the availability of ‘cheaper’ fuels and land in North America over many decades that has enabled wide use of the automobile and low density urban development. In order to meet sustainability objectives, we in North America may be forced to look seriously at patterns</p>
--	--	---

		<p>of urban development in other parts of the world, including Europe, for models of how we can have vibrant, liveable cities with less dependence on the automobile” (p. 51)</p> <p>2Paradigms52: “The availability of inexpensive land, the economic policies of governments over past decades and advances in road transport technologies have encouraged massive investments in single-use urban development, road infrastructure and personal and commercial vehicle fleets that have overwhelmed public transit in urban areas and intercity transport of goods by rail. Historically, government policies at all levels, combined with market forces, have encouraged developments in road and air transport at the expense of modal share for rail, domestic shipping and public urban transport. Governments have subsidized low density urban and suburban development with land-use policies that preclude financially viable transit systems and foster automobile dependence. The fact that governments are now fiscally constrained may offer an opportunity to move to more compact, mixed-use urban form” (p. 51)</p> <p>2Paradigms53: “One of the major limitations of policy development for sustainable development has been that efforts to date have largely taken the form of doing those things ‘that are worth doing anyway’ – for economic or other reasons in addition to environmental protection. As yet federal and provincial governments in Canada have not been able to agree on quantitative greenhouse gas emission reduction targets that would ensure real progress toward sustainable transportation” (p. 51)</p> <p>2Paradigms54: “Substantial investments have been made in urban transit infrastructure and services in Canada, but these investments have been overwhelmed by investments in road transport by all sectors of society” (p. 52)</p> <p>2Paradigms55: “It is unlikely that governments will be able to achieve sustainable transportation through policy measures alone, even if coordinated approaches are taken by all levels pursuing integrated strategies. It will also take informed action by the majority of citizens (in their choices as consumers) and by businesses (seeing it to be in their best interests to offer goods and services that contribute to sustainable transportation). Hence governments have a responsibility to educate the public about how they can change their behaviours to enable real change to occur. Many observers have suggested that efforts to date have been very much at the margin and unlikely to result in real progress toward sustainable transportation” (p. 52)</p>
--	--	--

	<p>National Round Table on the Environment and Economy. (1997). State of the debate: The road to sustainable transportation in Canada. Ottawa, ON.</p>	<p>2Paradigms56: “The division of powers among levels of government fragments decision-making with respect to transportation, and militates against investment decisions which maximize economic efficiency and minimize environmental and social costs. Moreover, responsibilities for land use and transportation planning are divided among provincial governments and municipalities in ways that often hinder the sustainable development of urban areas. Users do not pay the full societal costs, including the environmental costs, of transportation. For example, the high costs of the transportation infrastructure needed to serve suburban areas are mostly paid for out of general tax revenues and not by the individuals directly served ... These and many other elements of Canadian values and institutional structures create barriers to sustainable change in transportation use and energy consumption” (p. 16)</p> <p>2Paradigms57: “Urban sprawl forces most commuters to rely on personal automobiles. Walking and cycling are impractical due to the length of commutes and the lack of infrastructure to make these alternatives safe, pleasant and convenient. Low-density populations also reduce the efficiency, effectiveness and financial viability of public transit” (p. 20)</p> <p>2Paradigms58: “The federal government is participating in international negotiations on new commitments to reduce greenhouse gas emissions, yet authority to implement many of the policy instruments needed to achieve such reductions rests with the provincial and municipal governments” (p. 23)</p>
	<p>Transportation Association of Canada. (1997). Financing urban transportation. Ottawa, ON.</p>	<p>2Paradigms59: “Historically, finance and delivery of urban transportation infrastructure and services have been based on three underlying premises. a) Urban areas would be allowed to sprawl outward, to accommodate population growth and social desires through low density development on less expensive land on the urban fringe. b) Roads and parking would be provided to accommodate ever increasing vehicular demands resulting from that pattern of growth, and public transit would serve whatever markets it could. c) Transportation funding would be provided, through departmental and agency budgets, primarily from consolidated general revenue accounts and general tax revenues. For senior governments that includes transportation taxes (fuel taxes, licence fees, etc.) as well as personal and corporate income taxes, sales taxes, excise taxes, etc. For local governments, the principal source is property tax” (p. 2)</p> <p>2Paradigms60: “Belief in ... past practices is rapidly declining for two reasons. 1. The new reality of shrinking provincial and local budgets means that the old approaches to land use, transportation planning and funding are no longer affordable. 2. There is growing recognition that continuation of the status quo will result in 21st century urban areas which are neither environmentally nor socially nor economically sustainable” (p. 2)</p> <p>2Paradigms61: “Urban transportation is caught up in this budget crunch. Local governments have less money available for transportation and (in some cases) more road and transit responsibilities assigned</p>

		<p>by the provinces. In various locations, roadway maintenance is being deferred, capital funds are being used for maintenance, new construction is being delayed or cancelled, and transit budgets are being reduced. Meanwhile, automobile demand continues to grow. Urban populations, the number of automobiles and the average annual kilometers driven per automobile are all increasing, while the average number of occupants per automobile is decreasing. It is becoming obvious that governments will not be able to finance transportation systems to serve increasing vehicle demands the same way they did in the past” (p. 2-3)</p>
		<p>2Paradigms62: “Past practices are leading to urban transportation systems which are not sustainable in the long run. Warning signs are all around. In the environment: increased consumption of fossil fuels and other non-renewable resources; air pollution leading to more asthma and emphysema; greenhouse gas emissions (notably carbon dioxide) contributing to global warming and climate change; consumption of valuable land. In society: communities in which auto use is more a necessity than a luxury; lack of “sense of place” in neighborhoods without lively and pedestrian friendly streetscapes; empty, alien landscapes with unsafe areas for many citizens, especially at night; family disruptions when one or both parents must spend long times in stressful commutes” (p. 3)</p>
		<p>2Paradigms63: “The transportation industry nationally and internationally is undergoing revolutionary changes. With deregulation has come increased competition, reduction and elimination of subsidies, and private delivery of formerly public transportation services. The principle of user pay, or direct charge for consumption, has become firmly entrenched in competitive national and international transportation marketplaces. These developments have not yet been reflected in urban transportation but they may, as urban areas struggle to maintain services and competitive advantage in relation to other urban areas. The results may be intense pressure to reduce or eliminate subsidies, to institute the principle of user pay, and to create roles for the private sector where none have traditionally existed” (p. 6)</p>
	<p>Transportation Association of Canada. (1998). A New Vision for Urban Transportation. Ottawa, ON.</p>	<p>2Paradigms64: “Urban transportation systems will have to be very productive, efficient, cost effective and accessible to allow cities to generate the wealth needed for quality of life improvements, social services, infrastructure, environmental protection and transportation itself. To achieve that goal will require new approaches to land use, urban design, transportation planning and financing. Continuation of current trends will not work” (p. 1)</p>
		<p>2Paradigms65: “Municipal and provincial budgets have been the traditional sources of financing urban road construction and maintenance as well as transit subsidies. Federal transfer payments to the provinces and provincial grants to municipalities are decreasing relative to needs as a result of recession, a weak economy, government debt service charges and other factors. Municipalities are faced with increasing costs for social and other services, decreasing revenue and citizen resistance to higher taxes.</p>

		Something has to give, and it is often the municipal transportation budget” (p. 1)
	Office of the Auditor General of Canada. (1999). Canada Infrastructure Works Program: Phase II Follow-Up and Phase I Audit.	<p>2Paradigms66: “There are incentives for provincial governments to transfer their budgetary resources away from their own programs to the federal infrastructure initiative. However, this program substitution is not inevitable; in two provinces, for example, safeguards were put in place in Phase I to limit the "substitution effect". Any substitution that does occur reduces the Program's infrastructure development and job creation benefits. The Treasury Board Secretariat has not set out the limitations of estimates of employment generated by the Program in reporting them to Parliament” (p. 17-5)</p> <p>2Paradigms67: “The Treasury Board Secretariat indicated that although improvements can and should be made in any future such programs, the chapter presents an inappropriately negative view of what was a highly successful program in terms of results and one that made a positive contribution to federal-provincial-municipal relations in Canada” (p. 17-6)</p>
	Transportation Association of Canada. (2000). Measuring progress: Toward the new vision for urban transportation. Ottawa, ON.	<p>2Paradigms68: “Urban transit services, one of the ten key areas addressed in the survey, reported a sharp increase (more than 80% of the municipalities surveyed) in the identification of and implementation of transit safety/security programs. Annual transit ridership per capita remains an important overall indicator since it measures the extent to which transit’s share of the market is increasing (or not) on a per capita basis. However, while survey results revealed a decline in per capita ridership, a review of key transit related indicators suggest capturing a larger transit market is related to the ongoing level of investment in transit services” (p. 2-3)</p>
	IBI Group and Soberman, R. (2001). National Vision for Urban Transit to 2020. Transport Canada. Ottawa, ON.	<p>2Paradigms69: “Most Canadian municipalities today are unable to find the funding (particularly capital) required to maintain existing transit services, let alone expand transit systems and levels of service, solely from property taxes. As a result, in almost every municipality, there is a growing lobby for financial assistance from senior levels of government to assist in meeting the transit needs of the future” (p. 6)</p>
<p>2Paradigms70: “There are, of course, issues related to the division of powers and responsibilities between the federal and provincial governments that underlie the present lack of federal government participation in urban transit. Nevertheless, the federal government has recently been showing more interest in urban transit, motivated, in part, by Canada’s international obligations with respect to the Kyoto Protocol, in part, by the just completed mandatory review of the Canada Transportation Act (CTA), and in part by the increasing frequency of requests for financial aid” (p. 15)</p>		
<p>2Paradigms71: “There are a range of institutional constraints on what municipalities can do that are imposed by provincial governments. In Ontario, for example, municipalities are not empowered to raise revenue from other than property taxes whereas in British Columbia, Alberta, and Quebec, municipalities have access to other fees and charges. There are also examples of highway policies applied in urban areas that are in conflict with municipal transit policies. In addition, within individual</p>		

		<p>municipalities themselves, there are frequently institutional constraints that derive from lack of adequate coordination and integration of programs and policies between planning departments, transit operating agencies, and those responsible for traffic engineering and road construction. Planners, for example, often wish to invest in transit as a precondition for new growth and development whereas the service provider may be more interested in catering to existing demands. Road departments, parking authorities, and transit operators also often have different agendas within the same community” (p. 26)</p>
		<p>2Paradigms72: “The net operating costs of transit services are funded by municipalities from property tax revenues obtained from their constituents. Travel demand, however, is rarely dictated by municipal boundaries. As a result, in many cases, the ability to effectively match the supply and demand for urban transit is constrained by jurisdictional responsibilities that preclude one community spending money to serve the residents of adjacent or nearby communities. Even where regional or interregional authorities have been established, achieving agreement on equitable funding and levels of service often means that, in the end, with such fragmented decision making, agreement on improvements lags far behind the increase in needs. Within Canada, the relative importance of these institutional issues varies considerably. They pose more difficulty in the Greater Toronto Area, comprised of 28 separate municipal governments that operate 12 transit systems, than in cities such as Calgary and Winnipeg which have single municipal administrations and unified transit systems” (p. 26-27)</p>
		<p>2Paradigms73: “Fiscal priorities of both the provincial and federal governments may, in fact, represent the key impediment to achieving new visions for urban transit. In both cases, debt and tax reductions are increasingly seen as more important policy objectives than the expansion of public services. For the provinces, the funding of health care is the number one concern, a sector which has experienced rising costs, rising expectations, and rising public concern that in aggregate, may well exceed public concern about urban transit. In fact, the same can be said for municipalities that, depending upon the province, are now required to find funding for expanded demands in education, social services, social housing, and policing, as well as transit, primarily or entirely from property tax revenues” (p. 27)</p>
	<p>Flemming, B., Patenaude, J. Findlay, G., Rae, R., and Waters II, W. (2001). Vision and Balance: Report of the Canadian Transportation Act Review Panel. Canadian Transportation Act Review</p>	<p>2Paradigms74: “Urban transit, including buses and rail transit, is still supplied mainly by government rather than the private sector. Rail transit is generally government-owned and heavily subsidized. The latter reflects both a social policy of providing transportation for those not able to drive and recognition that reducing traffic congestion benefits motorists and reduces the need for new road investment. Commercial motivation has almost no role in the provision of urban transportation. There is a wide gap between the cost of providing urban transportation — whether by car or by transit — and the price paid by users. In addition, the signals conveyed to road users are distorted because of their failure to convey the high social costs of increasing automobile use in urban regions” (p. 16)</p> <p>2Paradigms75: “In principle, in an economically efficient transportation system, both users and suppliers</p>

	Panel. Ottawa, ON.	<p>recognize the true costs. Just as public provision of facilities without adequate charging distorts users' choice of modes, failing to recognize environmental costs results in a less efficient transportation system and lower standard of living. This is particularly true for urban transportation, where it is clear that automobile use, especially during peak periods, imposes costs beyond those recognized by users and where transit prices are deliberately subsidized, partly in an attempt to counter the distortion of under-priced urban car use" (p. 25)</p>
		<p>2Paradigms76: "Transit has become an anomaly in transport policy. Governments at all levels have generally sought to liberalize entry to transport markets, reduce price regulation, and inject a measure of enterprise in publicly owned carriers and infrastructure, yet urban transit is still delivered almost exclusively by municipal agencies. Further, while governments have tried in other transport modes, and in other fields, to make users responsible for the cost of services, urban transit is still funded mainly through direct subsidies" (p. 216)</p>
		<p>2Paradigms77: "From 1989 to 1999, service (vehicle-km) remained roughly constant, but trips per capita declined by about 15%. Transit companies have been heartened by the slight growth since 1996, but this was a period of rapid employment growth, and transit has been shown to be very sensitive to employment cycles in the past. The growth also appears to have been mostly in the fast-growing western cities, particularly Calgary and Vancouver, while ridership in Toronto, Montreal and Ottawa remains ominously below the levels of a decade ago" (p. 218-219)</p>
		<p>2Paradigms78: "Long-term trends in transit costs and productivity raise some serious concerns, however. While unit costs of most transport carriers have declined over time with productivity improvement and increased load factors, transit operating costs (excluding capital purchases) per vehicle-km have doubled (in constant dollars) since 1975, as shown in Figure 12.3. The attempt to retain and expand ridership through improved service involved more expensive buses, trains and track with higher operating costs (including dedicated light rail and busways). Figure 12.4 shows the trend in costs per passenger, which increased even faster, nearly quadrupling over the period (again in constant dollars) as the number of riders per vehicle fell with expanded service frequency and coverage — such as lower-density suburbs. Labour cost increases also played a role throughout the period" (219-220)</p>
		<p>2Paradigms79: "The situation began to change substantially in the most recent years. Fiscal stringency in provincial and municipal governments included reductions in transit subsidies — and notably the Ontario government's transfer of funding responsibility to regional and local governments" (p. 220)</p>
		<p>2Paradigms80: "Analysis undertaken for the Panel suggests that the current extent of annual transit use brings benefits in social costs avoided of about \$5 to \$6 billion. This suggests that current subsidies — in the range of \$2.2 billion nationally — are producing a substantial net benefit. The analysis also compared this to evidence of the returns provided by urban highway investment projects, concluding</p>

		<p>that the transit subsidies produced greater benefits ... still greater benefits would be realized simply by charging all road users for the full social costs they impose, including both external costs and the cost of resources consumed. In fact, for greatest efficiency, this would be the only remedy needed. Transit subsidies become a solution only because direct road charges are not imposed.” (p. 223)</p> <p>2Paradigms81: “The availability of federal capital subsidies there, and the attempt to induce shifts away from cars with high-quality transit services, is judged to have encouraged capital-intensive projects. Further, ridership projections have often proved overly optimistic, so that the cost per new rider has been high. That experience cannot be transferred directly to Canadian conditions, where transit is a much more accepted means of travel, and major investments have been made more to respond to increasing demand than to stimulate new demand. But the experience of recent decades — where rapid increases in transit delivery costs failed to arrest the long-term decline in trips per capita — raises questions about relying on service improvements alone to induce people to switch from cars to transit. Observers suggest that here too, the availability of capital subsidies has allowed transit agencies to adopt capital-intensive solutions, without supporting them with more cost-effective operational solutions — such as unpalatable restrictions on car use” (p. 223-224)</p> <p>2Paradigms82: “The Panel examined concerns about the cost of access for commuter authorities and concluded that although the railways appear to have some real bargaining advantages, commuter authorities are not without bargaining power. Final offer arbitration became available to commuter rail operators in 1996. Over the years, agreements for new services have been negotiated, and existing services have been expanded. The Panel is further encouraged by CN’s willingness to see contracts between railways and commuter agencies deemed public” (p. 235)</p>
	<p>Transport Canada. (2001). Sustainable transportation: The Canadian context. Submission to the 9th Session of the United Nations Commission on Sustainable Development, April 16-27.</p>	<p>2Paradigms83: “Reducing congestion in urban centres would be a good example of a win-win-win scenario because economic losses resulting from delays, time spent on the road, and air emissions that contribute to both local air pollution and climate change would all be reduced. A shift from single-occupancy vehicles to public transit can significantly reduce congestion, but large capital investments are required to ensure that systems can effectively handle increased use. While building more roads may decrease congestion in the short term, it is likely to cause an increase in traffic over time” (p. 7)</p> <p>2Paradigms84: “At the federal level, Transport Canada has evolved significantly to meet the changing needs of Canadians since it was formed as a federal department in 1936. Generally, the department is moving away from its role as operator of the transportation system toward that of regulator and policy maker” (p. 8)</p>
<p>2nd Era Programs</p>	<p>Gray, H. (1981). Notes for a speech by the Honourable Herb Gray,</p>	<p>2Programs1: “The federal government has committed \$60 million to the Vancouver ALRT project for three reasons: To bring about the selection of Canadian urban transit technology; To help provide a system to demonstrate to Canadian technology to the world, in connection with the Transpo ’86 World’s</p>

<p>PC, MP, Ministry of Trade, Industry, and Commerce, to the 76th Annual Meeting of the Canadian Urban Transit Association, Hotel Loews le Concorde, Quebec City, QC. Monday, 22nd of June.</p>	<p>Fair in Vancouver (this will be the first time this technology will be demonstrated, as an operating, revenue-producing system, to potential buyers from around the world); and to establish an industrial development project, encouraging production of its components by firms in BC and throughout Canada, both for its construction, and the construction of these systems. We want to sell them to buyers who see it in operation in Vancouver” (p. 2)</p>
	<p>2Programs2: “Our urban transportation problems and the solutions we have found for them are very relevant to meeting the needs of people living in cities around the world. The world market for urban transit is accelerating; the potential in the next 15 years is expected to exceed \$100 billion. Some of the best current prospects for Canadian firms are in Latin America ... and in Africa” (p. 3)</p>
	<p>2Programs3: “In the United States, many communities are committed to move more people, more efficiently, more safely, more reliably, more economically, and some of the more innovative concepts, which meet American needs, have been developed in Canada. Examples are the LRT system in Portland, Oregon; and the ALRT system in Detroit. I’m told the final contract signing is close ... The federal government’s trade commissioner in Detroit has been playing a major role in this sales effort. In fact, it’s an excellent example of the cooperation of industry and provincial and federal governments” (p. 4)</p>
	<p>2Programs4: “We have committed \$500,000 to provide full support to the Canadian exhibitors at the International Public Transit Expo ’81 in Chicago in October. As many of you are aware, more than 16,000 square feet has been leased by the federal government, and will be used by 22 companies to display Canadian technology. We are producing, jointly with the manufacturers, a new film depicting the Canadian experience in urban transit. We are publishing the first catalogue of the industry. And we have a brand-new selling tool – ‘Telidon’ ... this is the first application of this high-technology system, developed by the federal government ... This is one of the largest marketing assistance projects we have ever undertaken for any industry” (p. 8)</p>
	<p>2Programs5: “We are working at creating an international framework to reduce trade barriers; to facilitate joint ventures; and to exchange information and technology. I am pleased to ... announce here today the formation of a Canada-EEC working group on urban transportation. It will have its first formal meeting in September in Brussels. This follows an invitation from the EEC for a visiting Canadian mission. We are taking steps to try to reduce the effects of the ‘Buy America’ and the ‘Buy National’ state laws. I have raised our concerns about these matters US Cabinet officers, in both the previous Carter Administration and the new Reagan Administration” (p. 9)</p>
<p>Department of External Affairs. (1981). Urban transportation: The Canadian experience.</p>	<p>2Programs6: “Over the past seven years, Ontario has also spent large sums on research and development through its agency, the Urban Transportation Development Corporation (UTDC), which was created in the early 1970s as an element of Ontario’s new urban transit policy. Traffic congestion, air pollution and public resistance to freeways culminated in a broad provincial policy to improve</p>

<p>External Information Program Division. Ottawa, ON.</p>	<p>existing roads and transit service. The corporation has since produced a steady flow of new technology. Although not a manufacturer, UTDC has forged strong links with industry, government, transit operators, consultants and financial institutions. Its major programs have yielded new light rail vehicles, intermediate capacity transit systems and a range of advanced technology subsystems, including suspension and propulsion equipment” (p. 2)</p> <p>2Programs7: “A major benefit of efficient urban transportation facilities is realized in capital investment. Stated simply, transit is less capital-intensive than the automobile. Studies conducted in the cities of Vancouver and Halifax in the 1970s indicated that the cost of providing transit facilities to meet travel demands through the 1980s was roughly half the cost of providing facilities for automobiles. Transit means fewer expressways and .access-roads; less parking space; savings on traffic-signaling equipment; and savings on police, fire-fighting and ambulance services” (p. 8)</p> <p>2Programs8: “In addition to the urban and transportation planning expertise which has evolved over the years, Canada also possesses a pool of experienced consulting and technical personnel. Canadian specialists, in both the public and private sectors, build, operate and maintain subways, light rail transit services, commuter rail and bus networks and urban bus services. This experience is available to municipalities anywhere in the world on a commercial basis” (p.</p>
<p>Department of Industry, Trade and Commerce. (1981). First Choice: Urban transit solutions. External Information Program Division. Ottawa, ON.</p>	<p>2Programs9: “In addition to improving the quality of urban life in general, well-designed transit systems a) alleviate downtown congestion, Toronto’s and Montreal’s central business districts are served by high quality, integrated transportation systems; strengthen land-use policy, Metro Toronto’s official plan features a decentralization policy away from the high density downtown, a new light rail transit line is attracting investment in a regional sub-centre. Edmonton, Calgary, Montreal, Hamilton and Vancouver are using transit to reinforce centralization policies; help to achieve the goals of modern urban planning: cooperation between urban planners and municipal transit authority planning staff ensures an integrated approach to urban transit” (p. 20)</p> <p>2Programs10: “The Urban Transportation Development Corporation Ltd. (UTDC) was established by the Ontario government in 1973 as a publicly-owned company with a mandate to design, develop am market new urban transit equipment and systems, not only within the framework of the Canadian transit industry, but on an international level a well. As such, it markets both its own technical developments and capability plus Canadian transit operating expertise” (p. 36)</p> <p>2Programs11: “UTDC’s most ambitious program has been its development of a light, rapid and economical intermediate capacity transit system (ICTS), designed primarily for city corridors where passenger demand is intermediate between subway and bus system capacities ... [and] to reduce capital costs and permit urban planners high-quality transit in a wide range of sensitive urban conditions” (p. 37)</p>

		<p>2Programs12: “Over the past sixty years, Canadian transit operators have skillfully incorporated new transit technology into conventional equipment in an unending effort to upgrade reliability and service. Today, conventional bus systems in Canadian cities are being improved through new communications and information equipment: from simple two-way radios linking bus operators and a central controller to complex on-board micro-processors and data collection devices” (p. 40)</p>
	<p>Transport Development Centre. (1985). Urban Transit Research and Development: Inventory of projects and value analysis. Transport Canada. Ottawa, ON.</p>	<p>2Programs13: “Total urban transit R&D expenditures totaled \$17.3 million 1n 1983, representing \$77.6 million in R&D expenditures over the life of all projects. It is felt that these figures are underestimated by approximately 30%. In 1983, almost 50% ... were spent on Computer Applications and Development followed by Vehicle/System Technology Development (38.8%), Service and Methods demonstration (6.6%), and Transportation Planning and Management (4.7%). All other areas of research in 1983 account for less than 4% of total R&D expenditures. Provincial agencies provided over 53% of the R&D funds expended in 1983. Federal agencies accounted for 21.4%, municipal agencies (Including transit operators) 17.1%, private companies 7.0%, and other organizations 1.1%” (p. i)</p> <p>2Programs14: “The largest single agency Investment of R&D funds was by the Ontario Ministry of Transportation and Communications (\$5.6 million in 1983) followed by Transport Canada (\$1.2 million) and the Quebec Ministry of Transport (\$1.1 million). Collectively, urban transit operators spent \$2.8 on research and development 1n 1983 (48 projects), mainly in the areas of Transportation Planning and Management and Service and Methods Demonstration” (p. ii)</p>
	<p>National Transportation Agency. (1985). Freedom to move: A framework for transportation reform. Ottawa, ON.</p>	<p>2Programs15: “Government should provide direct support to those transportation services that, though not economically viable, are deemed to be in the public interest. In this regard, users should also bear their fair share of costs” (p. 4)</p> <p>2Programs16: “The revised [National Transportation] Act will provide for compensation for imposed public duties in order to overcome the disadvantages of the current legislation. Departmental operations will be streamlined to reduce the administrative burden, to provide best value for the taxpayers' dollar and to promote competition in the marketplace, subject to the essential requirement that transportation safety not be compromised. The need for new capital expenditures will be carefully examined. Crown Corporations in transportation will be expected to be effective and efficient while operating as good corporate citizens” (p. 6)</p> <p>2Programs17: “The National Transportation Act of 1967, the chief legislation that established present policy and regulatory practices, contains an explicit statement of transportation policy. The NTA and related acts governing each mode have emphasized intermodal competition. Today, it is becoming imperative that more competition be generated not only between modes but also within each mode. There is no compelling reason to discard the heart of the NTA statement of objectives, which calls for ‘an economic, efficient and adequate transportation system.’ It is in the subsequent parts addressing the</p>

		means whereby these objectives are to be achieved that the policy statement needs to be changed in order to meet current realities” (p. 17)
		2Programs18: “The new statement ... will espouse minimal government intervention and permit more flexibility. It will recognize the needs of those in small or remote communities, where low traffic volumes or long distances make it difficult to have a competitive environment. The new statement of transportation policy objectives will recognize that transportation is a service industry to assist Canadian shippers in meeting the competitive demands of the future” (p. 18)
National Transportation Agency. (1989). Freedom to move in Canada’s new transportation environment. Ottawa, ON.		2Programs19: “The new legislation provides maximum flexibility for transportation firms and users to adapt to changing needs and circumstances while protecting the public interest where necessary. To ensure the intended results occur, the new National Transportation Agency will review the operations of the legislation annually and the government will conduct a comprehensive review of the legislation within four years. In addition, Parliament will be informed each year on developments in the key area of motor vehicle safety” (p. ii)
		2Programs20: “The new National Transportation Act and Motor Vehicle Transport Act establish a new direction for transportation in Canada. This direction was seen as important enough to warrant a ‘declaration of national transportation policy’ in the Act itself. Here are its principles and objectives: A safe transportation system is the top priority; The purpose of Canada’s transportation system is to serve the needs of shippers and travelers; Competition and market forces are the best means for providing Canadians with efficient transportation at the lowest possible cost; Regulations should be simple and kept to a minimum to encourage competition within the transportation industry; Transportation is recognized as a key to regional economic development; Carriers should bear a fair and reasonable share of the costs of facilities provided at public expense and be compensated for publicly-imposed duties; Access to transportation is a basic necessity for Canadians, including travelers with disabilities. Carriers should ensure that no undue obstacles are created that prevent access to transportation” (p. 4)
		2Programs21: “The federal government will monitor the effects of the new legislation to ensure that it is operating in the way intended. The National Transportation Agency will conduct an annual review of the legislation for each year from 1988 to 1991 and report to the Minister of Transport. In 1992, the government will prepare a comprehensive report on how the legislation is affecting shippers, travelers, transportation firms, trade and regional development. This report, as well as the annual reports, will be tabled in Parliament” (p. 13)
		2Programs22: “Recent discoveries in ‘superconductors’ – new materials that can transmit energy with 100-per-cent efficiency – have created visions of entirely new modes of cheap, rapid transportation. Today, these are just visions; but in our day and age, visions can become reality very quickly” (p. 15)
John, C. (1992). Transportation in		2Programs23: “The Standing Committee on Transport ... recognized that the government will have to be

	<p>Canada: Current Issues. Library of Parliament. Ottawa, ON.</p>	<p>involved in any high-speed rail project; there is not a sufficient return for the private sector to undertake it alone. The Committee's major recommendation was that the federal government should not consider making a financial commitment to the development of ... the Quebec City-Windsor corridor until it has been clearly demonstrated that substantial and tangible socioeconomic benefits will accrue to the public interest from such a project. Such benefits would include reduction of air pollution if enough people shifted from their automobiles and airplanes to HSR, less energy consumption, less airport and highway congestion and deferral of significant public investment in highway and airport infrastructure. The Committee concluded, however, that a 'leap of faith' would be required for any such project and recognized that the government might want to proceed with high-speed rail for other reasons, such as the need to stimulate the economy ... The November 1992 Report of the Royal Commission on National Passenger Transportation recommended that governments invest in high speed rail infrastructure only if the benefits to the passenger transportation system exceed the costs, and if taxpayers do not have to pay any operating subsidies" (p. 11)</p>
	<p>IBI Group. (1993). Urban travel and sustainable development: The Canadian experience. Canada Mortgage and Housing Corporation. Ottawa, ON.</p>	<p>2Programs24: "The Federal Government has no direct responsibility in urban transportation matters. However, it administers many programs, policies and research activities which directly or indirectly affect urban transportation such as immigration, housing, finance, interprovincial and international transportation, and energy and environmental policies" (p. 4)</p> <p>2Programs25: "As effort focused away from major transportation infrastructure projects, more attention was paid to alternative methods of reducing congestion and petroleum consumption, and making more efficient use of existing infrastructure. All levels of government sponsored efforts in the fields of alternative transportation fuels, demand management techniques (e.g. ridesharing and alternative work hours) and traffic system management techniques such as improved arterial and traffic signal control systems and freeway traffic management systems. Since the major driving force behind such efforts was concerns about petroleum dependency, political and general support for these measures tended to ebb and flow with the energy crises. However, the measures provided enough potential and actual benefits in terms of infrastructure efficiency and reduced congestion and emissions to maintain a steady level of support from all government levels" (p. 20)</p> <p>2Programs26: "Following in the path of Metropolitan Toronto and Montreal, the transit systems of Vancouver, Ottawa, Halifax and Quebec City regionalized, under new regional authorities and/or governments. Regionalization provided for efficient co-ordination and delivery of service, particularly for 'trunk' or 'backbone' routes, and also made available resources for operating specialized services such as paratransit for persons with disabilities. However, it also tended in some cases to separate the local</p>

		<p>land-use planning functions from the planning and provision of transit service. With the exception of Saskatchewan, none of the provincial governments currently give transit authorities formal power in the land-development approval process. Throughout the period, urban population growth continued, and there was a disproportionately higher increase in employment associated with increasing participation of women in the out-of-home work force. These trends, coupled with an aging, generally more affluent population with fewer children and more double income households, led to continued growth in auto-ownership and increased vehicular trip-making, with a decreasing tendency to use transit” (p. 21-22)</p> <p>2Programs27: “Rapid transit expansion came to a halt with a virtual freeze on capital intensive work [as a result of shrinking municipal transportation budgets]. This was especially problematic in Edmonton, where the LRT system was still too short to function effectively, and in Winnipeg, where the planned busway was never built. In Toronto, suburban congestion grew, while plans for completing a rapid transit grid stayed on the drawing board. Lacking an extensive commuter rail system, Montreal was increasingly affected by traffic from regional commuters” (p. 22)</p> <p>2Programs28: “Transit priority/high occupancy vehicle (HOV) facilities are rare in Canada. No urban freeway contains them and their presence on urban roads is confined to limited, discontinuous locations in a few cities (although dedicated bus lanes are a little more common). However, interest in their use is growing. A recently completed strategy would see some 600km of HOV lanes forming a true network within Metropolitan Toronto. High-occupancy vehicle lanes are planned as part of the current expansion of the main east-west commuter corridor in Vancouver” (p. 51)</p> <p>2Programs29: “In addition to specific infrastructure projects, the transportation planning process itself has undergone a transformation in Canada. The federal government, and most provinces, have enacted Environmental Impact Assessment (EIA) legislation to formally introduce environmental concerns into the planning and design of transportation infrastructure projects. While EIA processes vary across the country, and application is sometimes inconsistent, the best of the Canadian processes are noted for their broad definition of the environment, and their consideration of environmental values alongside, rather than after traditional project criteria” (p. 52)</p> <p>2Programs30: “Ecosystem-based planning, a logical extension of EIA principles, has also been employed recently in urban transportation planning. The ecological planning approach articulated by the Royal Commission on the Future of the Toronto Waterfront has aided it in assessing the benefits and costs of replacing part of a major elevated freeway in Toronto’s central waterfront area with a combination of urban streets plus greatly improved commuter rail and transit services and related land use/urban</p>
--	--	---

		<p>design changes including more downtown housing to help moderate the growth in long commuting trips from suburban are many of which are still by auto” (p. 52)</p>
		<p>2Programs31: “Canada’s era of extensive urban road building is over, and few expect a resurgence in urban expressway construction. Nevertheless, appreciable road system expansion continues today, particularly on the fringes of all major cities. With very few exceptions, the roads being built are almost exclusively automobile-oriented. In Canada today, very little thought is given to constructing multi-modal roads, or refitting older roads to cater equally to pedestrians, cyclists or transit; the latter represents a significant opportunity, since most arterial roads outside city centres have generous rights-of-way and could be converted relatively easily” (p. 60)</p>
		<p>2Programs32: “Road pricing may be a mixed blessing: it may lead to a more efficient use of road infrastructure by harnessing the market mechanism, but may also be used only to provide funds for additional roadway capacity which, in itself, is increasingly viewed as a self-defeating mechanism in terms of sustainability. If it is introduced, sustainability considerations suggest strongly that the funds generated should be used for public transit as well as, or perhaps in place of, road improvements” (p. 64)</p>
		<p>2Programs33: “[In older core areas], at current subsidy and fare levels, it is generally still possible to provide frequent, multi-directional service, during both peak and off-peak hours. Except for people with special needs or occupations or out-of-town destinations, there is a low level of car dependence. The challenge in the central areas is to reduce traffic congestion, improve transit service where appropriate, and encourage a modal shift in trips to the central area through a variety of measures. In older suburbs, because of the low density, car-oriented infrastructure of the suburbs, service and ridership are lower than in central areas. While peak-hour service and ridership may be good on main routes downtown, off-peak, cross-town and suburb-to-suburb service and ridership are characteristically poor. Thus, a different strategy will needed in the suburbs, that will set in motion long-term changes to urban structure while, in the immediate future, making service improvements tailored to the suburban setting” (p. 65)</p>

		<p>2Programs34: “Reducing the ‘burden’ of public transit on government spending will have a detrimental impact on sustainability. A structural long-term increase in ridership will come only with the land use changes discussed previously. In the short-term, an increase in operating funds is required. To obtain additional funding for transit operations, from other than general revenue, requires innovations such as a parking tax, a gasoline tax, road pricing or, perhaps, transferring funds from capital budgets (such as road building projects) to transit operating budgets. The social and environmental imperatives for maintaining and improving transit service would seem to provide ample justification for using general revenues as well. However, these initiatives are generally not being pursued in Canada today, and all transit systems face operating budgets which tend to be static or declining” (p. 66)</p>
	<p>IBI Group. (1994).Transportation Material for the Urban Chapter. Environment Canada. Ottawa, ON.</p>	<p>2Programs35: “The availability of funds [for rapid transit] does not guarantee sustainability. Because of the often high capital costs involved and the permanence of the facility, great care has to be taken in selecting the appropriate technology and alignment, and developing an effective schedule for phasing improvements. These attributes greatly affect the relative cost-effectiveness of rapid transit and its contribution to sustainable development” (p. 79)</p> <p>2Programs36: “Urban structure and urban design practices seek to reduce the need for movement, particularly by mechanized modes, by rearranging our use of urban land to create patterns which are at a more human-scale. Initiatives include promoting and implementing compact, mixed land use patterns, pedestrian-friendly street design, the carrying out of transportation and land use planning as a single integrated process, encouraging an overall urban structure which features nodes of concentrated development joined by moderate-density, mixed-use” (p. 4)</p> <p>2Programs37: “Transportation infrastructure initiatives seek to foster the use of more sustainable modes by providing higher-quality facilities. Initiatives include building or expanding rapid transit, commuter rail and surface transit networks, high occupancy vehicle (HOV) facilities (dedicated lanes and preferred parking), and cycle and pedestrian ways” (p. 17)</p> <p>2Programs38: “What can be expected from implementing the above measures in Canadian cities? It is not possible to provide a definitive answer to this question, as there is no single measure of transportation sustainability which covers all environmental impacts attributable to transportation, and the applicability and effectiveness of each measure will vary from city to city. However, one indication of their potential comes from a recent study by Natural Resources Canada. The study examined the potential effects of a subset of the above measures in reducing transportation-related energy use and emissions in the seven largest Canadian cities, and three representative smaller ones. .As the study was focused on achieving results by the year 2000, longer-term measures such as urban structure and design initiatives were not assessed; neither were the effects of on-going improvements in vehicle emissions-control and fuel-efficiency technologies. Nevertheless, the study estimated that full application of the</p>

		<p>remaining initiatives result in an average energy usage reduction of 29-36% relative to 1990 levels” (p. 18)</p>
		<p>2Programs39: “While many of the initiatives noted above are being led by government, many activities, particularly in demand management, are occurring largely independently of government initiatives. For example there appears to be a significant trend towards great use of information technology for telecommuting (e.g. working at home one or more days per week) due to private sector and individual initiatives” (p. 20)</p>
<p>National Round Table on the Environment and Economy. (1996). Sustainable transportation in Canada (Backgrounder). Ottawa, ON.</p>		<p>2Programs40: “The NRTEE, wishing to make a concrete contribution ... has undertaken a Program on Sustainable Transportation. The purpose of this program is to assist the Government of Canada in developing a strategy for sustainable transportation that can be coordinated with the strategies and actions emerging from other levels of government in Canada and internationally” (p. vii)</p>
		<p>2Programs41: “Urban transit and automobile modes each receive total public subsidies from provinces and municipalities in the range of 12 cents per passenger-km. However, external costs for urban auto, at 10 cents per passenger-km, are much higher than those of public transit. External costs for the latter are approximately 1.4 cents per passenger-km” (p. 5)</p>
		<p>2Programs42: “In economic terms a sustainable transportation system will have to optimize infrastructure, labour, capital operating costs, and logistics costs and benefits. In social terms it will have to reduce noise, decrease accidents, including the environmental impacts of transportation accidents, and to reduce travel time and the associated stress and frustration arising from, for example, congestion. In environmental terms it will have to reduce and/or eliminate air, land and water pollution; and it will have to apply reduce, reuse and recycle strategies to decrease waste. In the area of urban transportation, mixed use and higher density urban land-use and zoning policies will enable the development of transportation systems which will provide an optimal balance between people’s and freight shippers’ needs for access to transportation services and mobility, healthy communities, and more sustainable transportation services. “ (p. 26)</p>
		<p>2Programs43: “Transport Canada ... suggests performance measures of progress toward achieving four ‘strategic objectives: To meet Canadians’ needs for access to safe, efficient and affordable transportation services; To achieve continuous improvements in the sustainable use of resources through measures to increase transportation efficiency, improve stewardship and enhance waste management; To respect ecosystem integrity; To promote more sustainable transportation in Canada and abroad. Other sources of performance measures focus on the environmental impacts of transportation ... Environment Canada has developed environmental indicators for Canadian passenger transportation based on the following series of interrelated factors: Human activity – how Canadians travel (passenger-km by mode); Stress – fossil fuel use by automobiles (L consumed); Environmental</p>

		<p>conditions: climate change, urban air quality, stratospheric ozone depletion, etc; Societal response: urban transit and automobile use (passenger-km)” (p. 29)</p> <p>2Programs44: “The Canadian government’s key responsibilities in the achievement of sustainable transportation include: Canada’s contribution to the development, negotiation of and commitment to international protocols related to sustainable development and sustainable transportation; Programs of public education and awareness; Monitoring and evaluating performance against national air quality standards, including health effects and impacts on ecosystems; National energy policy including measures promoting the use of lower carbon content fuels than gasoline and diesel, and standards for cleaner fuels; Developing technologies contributing to reduced fuel use and reduced need for transportation; Regulating vehicle emissions standards, with particular attention to harmonization with the United States and dealing with transboundary air and water pollution; Regulating vehicle safety standards; Regulating vehicle fuel efficiency standards, including harmonization with U.S. standards; Harmonizing sustainable transportation strategies and actions with other governments, particularly the United States, to ensure Canada remains economically competitive with other jurisdictions; Using its taxation powers to apply economic instruments in ways that internalize external costs of transportation or to meet specific environmental, economic and social objectives, by changing consumer and business behaviour. In particular, fuel tax and income tax levers could be adapted to meet sustainability objectives” (p. 34)</p> <p>2Programs45: “In Canada, jurisdiction over environmental issues, including air pollution, is shared among the federal government and the provinces (see Chapter 2). It is likely that the international community will attempt to establish more aggressive targets for environmental issues such as climate change. It is therefore important that, in advance of negotiating future international agreements related to issues such as targets for greenhouse gas emission reduction, the federal government work out a national negotiating position with the provinces. This anticipatory approach would ensure that the national position includes consideration of provincial interests in relation to provincial powers. The National Air Issues Coordinating Committee is one mechanism through which a coordinated national position on climate change might be developed” (p. 52)</p> <p>2Programs46: “The current division of powers among federal, provincial, and municipal governments makes land use and transportation planning and funding very fragmented in Canada. Actions in one jurisdiction can create conflicts with the policies or programs of other jurisdictions. For example: Federal income tax policies allowing business tax deductions for employer-supplied parking but not for employer-subsidized transit passes work against provincial and municipal efforts to encourage higher transit use. It is understood that this issue is now under study in the federal Department of Finance; Effective use of fuel taxation as an economic instrument for influencing long-term behavioural changes</p>
--	--	---

		<p>in the market would require coordination between federal and provincial levels since both have fuel taxation powers; Municipal efforts to reduce transportation fuel consumption can either be reinforced or negated by federal or provincial tax policies; The split of responsibility for road and rail transport between the provincial and federal governments makes it extremely difficult to develop integrated policy approaches for encouraging higher use of rail for both freight and passenger movement” (p. 55)</p>
		<p>2Programs47: “Planning legislation, as well as regulation of zoning and building codes, can influence urban settlement patterns by encouraging more compact, mixed land use to reduce transportation demand, increased use of non-motorized modes such as walking and cycling, and shifts to public transportation systems. Some of the specific aspects requiring attention include: Integration of transportation and land-use planning; Modification of transportation decision making to ensure selection of least societal cost modal alternatives and inter-jurisdictional integration of public transportation systems; Long-term commitment to providing transportation alternatives to ensure improved access for all citizens, as policies constraining high energy intensive modes take effect. Some progress is starting to be made in sustainable transportation planning and implementation at the municipal level in Canada. Change is happening on at least two levels. At the regional level, the planning of transportation networks is concerned with changing origin/destination patterns to minimize passenger-km travelled using high fuel-consuming modes. An example of the above is integration of transit services within a region to ensure optimized services across municipal boundaries and among modes” (p. 56-57)</p>
		<p>2Programs48: “In at least two ways, encouraging sustainable transportation is an ideal application of economic instruments. First, each individual has a contribution to make to achieving sustainable transportation. On a daily basis, the sustainability of the transportation system is affected by millions of decisions, such as walking to the store rather than driving, buying local rather than imported produce, spending a vacation locally rather than abroad, or driving a car instead of a sport utility vehicle. Behavioural change on such a “micro level” is not well suited to command-and-control approaches, but is the raison d’etre of economic instruments. Second, the current lack of urgency surrounding the sustainable transportation issue suggests that voluntary approaches are unlikely to lead to changes on the scale required. When economic instruments are visible to consumers, they act as reminders of the consequences of purchasing decisions. In this way, some economic instruments increase consumer awareness much as public education programs do. Education programs can also improve the effectiveness of economic instruments by raising public awareness of the intent of economic instruments” (p. 59)</p>
		<p>2Programs49: “All levels of government and other stakeholders will likely be involved in developing and implementing packages of policy instruments. A coordinated approach to the assessment, selection,</p>

		<p>design and implementation of the packages is essential for several reasons. First, coordination is required to create effective packages consistent with jurisdictional responsibilities. Each level of government has different policy instruments available to it and is constrained in different ways in how it applies the instruments. Second, coordination can avoid duplication of policy instruments. Avoiding duplication will be particularly important if a full costing approach is adopted. Under full costing, the total costs paid by transportation users through vehicle registration fees, user fees, fuel taxes and other payments should equal the full public, private and external costs. Third, coordinated packages will allow exploitation of synergies among policy instruments. For example, an increase in fuel prices may cause some people to use public transit instead of private vehicles. However, coupling a fuel tax increase with investments in more attractive public transit may have a much greater effect. Finally, coordinated packages will counter some of the undesirable effects of individual policy instruments” (p. 62)</p>
	<p>National Round Table on the Environment and Economy. (1997). State of the debate: The road to sustainable transportation in Canada. Ottawa, ON.</p>	<p>2Programs50: “Decision making related to transportation is highly fragmented in Canada, both institutionally and among consumers. The necessary changes are the responsibility of all sectors of society. They cannot be achieved by governments acting alone” (p. 4)</p> <p>2Programs51: “[NRTEE recommends the] creat[ion of] a national strategy to: reduce greenhouse gas emissions from transportation; and integrate transportation Action Program on Climate Change. Lead: Federal Minister of Transport. Encourage: municipal targets for reduction of greenhouse gas emissions from transport; municipalities to adopt sustainable transportation plans; and large cities to report progress on the Transportation Association of Canada’s (TAC) New Vision for Urban Transportation. Lead: Federation of Canadian Municipalities” (p. 5)</p> <p>2Programs52: “Transportation has not been fully integrated into the National Action Program on Climate Change. Sustainable transportation will require coordination of land use and transportation planning, often across many different jurisdictions” (p. 23)</p> <p>2Programs53: “Full-cost accounting and user-pay approaches can create the right price signals to start changing people’s decisions about where to live and work, how and when to travel, and what to buy. In addition to managing travel demand and reducing environmental impacts, they can also provide sustainable financing mechanisms to maintain a quality transportation system in an era of smaller government. As population and economic wealth grow, the low cost of fuels for road transport only serves to encourage increased consumption ... Canada has the second-cheapest gasoline in the world” (p. 24)</p> <p>2Programs54: “In recent years, Transport Canada has been transformed from its previous focus on subsidizing, building and operating transportation infrastructure to ... regulation and transportation policy. According to the department’s 1996 Transport Business Plan, ‘the new policy framework emphasizes a national vision of safety, efficiency, industry viability and environmental responsibility” (p.</p>

		<p>27)</p> <p>2Programs55: “It is recommended that the federal Minister of Transport lead the development and implementation of a long-term national campaign to raise awareness of the risks of inaction and the changes which will be required throughout Canadian society to achieve sustainable transportation by reducing: the need for motorized travel; the consumption of energy per unit of transportation; and the emissions per unit of energy consumed. Lead: Federal Minister of Transport. Others: Many other public and private sector organizations across Canada” (p. 35)</p> <p>2Programs56: “Coordinated action is a prerequisite to achieving sustainable transportation. However, the current division of responsibilities for transportation, including its environmental, social and economic implications, is highly fragmented. Moreover, existing policy coordination mechanisms are failing to move Canada towards sustainable transportation. Policy coordination is required both within and between governments ... A common language for planning and action is needed if consensus is to emerge on an integrated national strategy and coordinated approaches. Drawing on earlier work, the NRTEE will develop a package for presentation to the federal government, proposing a definition of sustainable transportation, a national vision and a set of principles to guide decision making. It is recommended that the federal Ministers of Transport and the Environment use the package of Definition, National Vision and Principles of Sustainable Transportation, to be presented by NRTEE, as the basis for building a consensus on these elements of a national strategy” (p. 36)</p> <p>2Programs57: “Municipalities should be encouraged to set their own targets for greenhouse gas emissions in support of national targets. Some cities have already taken this step, including those which are members of the 20% Club sponsored by the Federation of Canadian Municipalities. The main efforts of municipalities should be directed towards the implementation of: transit-supportive, compact, mixed land use; sustainable transportation plans; and green fleets programs (public and corporate)” (p. 37)</p> <p>2Programs58: “It is recommended that the federal Minister of Finance take initial steps towards an economy in which decision making supports sustainable transportation. This means developing a clearer understanding of how economic instruments, as critical elements of an integrated package of policy tools, can help to achieve specific targets for sustainable transportation, as well as a better appreciation of their social and economic impacts. Analysis and debate are needed on the potential use of economic instruments, with priority consideration given to an integrated package of policy instruments which includes: increased fuel taxes to influence travel demand; vehicle purchase decisions and shifts to less energy-intensive modes; new fuel economy standards for transportation vehicles: other economic instruments, including tax rebates for fuel-efficient road vehicles, registration and parking fees; tax and development fee policies which encourage land use compatible with sustainable transportation in urban areas; major subsidies and incentives for increased use of public transit; and road pricing” (p. 37)</p>
--	--	---

	<p>Transportation Association of Canada. (1997). Financing urban transportation. Ottawa, ON.</p>	<p>2Programs59: “The goal of the new model is to provide adequate and secure funds to deliver urban transportation systems that support new visions and move toward a sustainable future. The new model should meet the following criteria. 1. Stable and Predictable: Capital, operating and maintenance funding should be stable over time, predictable in magnitude, and provide long term financial commitment to the new vision. 2. Transparent: The sources and allocation of funds should be open, clearly presented, and easily understood by decision makers and the public to ensure accountability and fairness. 3. Least Cost: The model should foster an urban transportation system operating at the least possible total cost to the environment, society and economy. 4. Simple: The process should carry a low administrative overhead burden. 5. Access to Funds: When senior governments assign additional transportation responsibilities to local governments, access to sufficient additional revenues should be provided at the same time. 6. User Pay: Funds should be increasingly derived from users, with transportation treated as a government controlled utility where the user is charged based on consumption. 7. Dedicated: Revenues derived from user pay methods should be dedicated, by law, to urban transportation system improvements that support new visions. 8. Public Involvement. Public support for the model, resulting from information and consultation programs, should be an integral part of the process. 9. Measurable Results: Performance indicators should be used to measure progress and report to decision makers and the public” (p. 3)</p> <p>2Programs60: “There is no single, simple solution to the urban transportation financing challenge. While the goal and criteria in the previous section should be met, any new financing model must draw heavily on traditional budgetary sources in the early years, and be supplemented over time with a blend of new efficiencies and revenue sources, which may differ between provinces and even between urban areas within a province” (p. 4)</p> <p>2Programs61: “Before contemplating any new fees, first maximize government effectiveness and efficiency, in all departments and service delivery areas: Increase value for expenditure through the application of performance indicators, best practices, benchmarking and performance management; Consider alternative and potentially more cost effective delivery mechanisms such as interdepartmental cooperation in purchase and delivery, contracting out and public-private partnerships; Restructure or merge organizations to reduce overheads and duplication, and improve public accountability; Streamline processes of purchasing, financial controls and decision making; Encourage transportation operations and service delivery that are businesslike and cost effective; Explore alternate means of delivering transportation programs, including : public-private partnerships, rationalized equipment and facilities to reduce duplication, and revised design standards to lower costs” (p. 4)</p> <p>2Programs62: “Public-private partnerships are cooperative ventures between governments and the private sector to develop or improve public infrastructure or services, while retaining public control.</p>
--	--	---

		<p>Benefits to governments can include: Investments in new, improved, or repaired facilities that government could not otherwise afford; More rapid or efficient development or operation of a facility; Reduced risks for the public sector; New revenues for the facility (e.g. from ancillary development) and for government (through taxes or franchise fees). A wide range of partnership types is possible, from fully public to fully private” (p. 4)</p> <p>2Programs63: “Urban transportation funding should move toward a system in which the user is charged based on consumption. This concept is reflected in many existing utilities, such as municipal water and wastewater services, electricity and natural gas supply, and long distance telephone. Transit riders also pay based on consumption, and the trend is to increase transit revenue/cost ratios. The advantages of such an approach, with dedicated fees, are that it will: increase transparency and accountability; maintain and protect the transportation network as a key economic asset; and start to send the correct market signals to consumers. These benefits can be achieved if revenues are applied to multimodal systems in support of local visions. The principal sources of federal and provincial government revenues derived from roadway transportation are: Federal excise tax on fuel; Provincial fuel taxes. Provincial vehicle registration fees. About half the pump price of gasoline in Canada (26 cents/litre in 1993) is in federal and provincial taxes. This element proposes that the majority of money collected from fuel taxes and license fees be identified as taxes and retained as general revenues, and an appropriate portion be identified as a transportation fee and dedicated to urban transportation in support of local visions. Any future increases to either the general revenue tax or the dedicated urban transportation fee would be identified as such at the time” (p. 5)</p>
--	--	---

		<p>2Programs64: “To achieve a new model will require coordination and cooperation between federal and provincial governments, between provinces and their municipalities, between municipalities in each region, and between governments and citizens. Five major steps are required. 1. Adopt a Local Vision for Urban Transportation: Each urban area should first adopt its own local vision ... using the TAC vision as a model. Some municipalities have already done this. The vision will result in less expensive systems, provide a framework for future action and involve citizens. 2. Determine Financial Requirements to Achieve the Local Vision: Comparison of transportation budgets from traditional sources versus requirements to achieve local visions will help prioritize projects and identify any financing shortfalls. 3. Select a Package of New Revenue Sources to Fill the Gaps: A key feature of any new vision, which is fundamental to the success of a new financing model, is that it offers choices in land use and travel options. User fees should be designed to provide and encourage choices that minimize future urban transportation costs to the community. Care must be taken to avoid economic imbalances or competitive disadvantages between municipalities, regions, and provinces. New revenue sources must be acceptable to citizens and all levels of government. Consultation and consensus building will be required throughout. In some cases, legislative change, empowering municipalities, may be needed prior to implementation. 4. Create Mechanisms to Dedicate New Revenues: Dedication will be critical for public acceptance. Details on how new revenues will be collected, and who will control them and how, must be decided in consultations between provinces and their municipalities. Clarification of provincial, regional and city mandates regarding urban transportation infrastructure and services may be required, to ensure that jurisdictional disputes do not compromise good planning and operations. Legislative change may again be required to empower municipalities, who in turn may require new bylaws to administer the funds. 5. Allocate Funds to Support the Local Vision: Performance indicators, based on policies and priorities in local visions should be established, monitored over time, and reported to the public. This will help track progress in achieving the vision, justify revenue allocations, and demonstrate benefits” (p. 8)</p>
	<p>Transportation Association of Canada. (1998). A New Vision for Urban Transportation. Ottawa, ON.</p>	<p>2Programs65: “Better transit can reduce reliance on the single occupant automobile. Current demographics, existing urban designs and funding requirements make this a challenging goal, but many things can be done – especially if improvements are aimed at specific market segments ...The key method lies in new urban structure and land use planning approaches ... Other methods include: Develop a hierarchy of transit services (primary on controlled access ways, secondary on exclusive bus lanes or HOV lanes, a feeder network and auxiliary facilities such as park-and-ride). Give transit funding and operating priority (e.g. transit or HOV lanes); Improve comfort, security, frequency, on time reliability, geographic coverage, access for the physically challenged, and public information services; Encourage park-and-ride, kiss-and-ride and bike-and-ride by providing appropriate facilities; Integrate transit stations, schedules and fares in areas with more than one transit system; Introduce preferential</p>

		<p>income tax treatment for transit use (e.g. make employer provided transit passes a non-taxable benefit)” (p. 2-3)</p> <p>2Programs66: “The private automobile is the dominant mode of urban transportation and will remain so for the foreseeable future. Current urban structures and land use practices, coupled with the comfort, security and convenience of the auto make this inevitable. However, inefficient auto uses (eg: single occupant vehicles to destinations served by transit) should be reduced, and a more balanced transportation system could be achieved through a combination of methods: Reduce travel demand by bringing origins and destinations close together through higher densities and mixed land use; Design new suburbs, major developments and redevelopments to be more walking, cycling and transit friendly; Employ traffic management techniques (including HOV lanes) to achieve more efficient use of roads; Encourage flexible working hours and ride sharing programs” (p. 3)</p> <p>2Programs67: “Each mode ... should be conveniently integrated with the rest of the urban transportation system. Special planning efforts are required to achieve this. Benefits include more attractive transit services and more efficient goods movement. Methods include: In the urban development plan, design the location of transit connections to be quick, easy and weather protected; In community/neighbourhood plans and site developments, minimize walking distances to transit; Promote gateway/mobility centres; Integrate fares and services between transit systems” (p. 4)</p> <p>2Programs68: “Improving urban mobility requires a determined effort to make the most of the expensive transportation infrastructure already in place. Minor modifications (lane widening, turning bays, etc.) may be appropriate, but very expensive items (new freeways, bridges tunnels, mass rapid transit, etc.) will have to wait in favour of cheaper options with better payoffs. Methods include: Treat the road system as a multi use public facility which recognizes the needs of pedestrians, cyclists, transit, high occupancy vehicles, autos and trucks; Make operational improvements through transportation management; Promote ways to flatten traffic peaks and shift modes through demand management; Enhance transit services; Implement supportive parking policies” (p. 5)</p> <p>2Programs69: “Realistic means must be found to provide adequate and sustaining sources of funds for new, expanded and properly maintained urban transportation infrastructure and services. Current funding/financing mechanisms do not meet this need. Funding should be: Stable over time; Predictable in magnitude; ‘Transparent’ (open and easily understood by decision makers and the public); Increasingly derived from users in proportion to benefits received; Dedicated by law to urban transportation system enhancements; Designed to foster an urban transportation system operating at the lowest possible total cost” (p. 5)</p> <p>2Programs70: “Differing perceptions surround each [method of financing], and no consensus has yet emerged. Some suggested methods include: Redistribution of existing taxes – Some believe that taxes</p>
--	--	---

		<p>currently levied on the transportation sector could substantially help meet funding needs if they were allocated or dedicated to transportation rather than being treated as general revenues. The federal excise tax on motor vehicle fuel is often cited in this context. Others suggest that it is unrealistic to propose such a fundamental change in government tax policy; New taxes – Dedicated fuel taxes, license fee surcharges and frontage levies are proposed by some as ways to raise money for urban transportation. Others argue that these are blunt instruments that do little to encourage more efficient travel behaviour, and that existing tax revenues should be more equitably distributed before new taxes are imposed; Roadway pricing – Proponents say that this can raise money, flatten demand peaks, encourage modal shifts and lead to more efficient use of roadways. Opponents say that roadway pricing is a punitive measure against private motorists who believe they already pay their fair share” (p. 5)</p>
		<p>2Programs71: “Several changes to current institutional arrangements and practices may be required to develop and implement the new vision: Most municipal departments are structured on vertical lines (planning, transportation, transit, sewer, water, etc.). New methods for horizontal communications may be needed. Where more than one municipality or more than one level of government has jurisdiction in an urban area, a mechanism will be needed to coordinate and integrate their efforts across the region, at least for planning purposes. Public education will be a major key to success. Without it political leaders will not have the mandate to move in the right direction. This can be a very time consuming and expensive exercise, but it is necessary. Checks must be built into the decision making process, to ensure that day-to-day decisions are compatible with the vision and its principles” (p. 6)</p>
	<p>Office of the Auditor General of Canada. (1999). Canada Infrastructure Works Program: Phase II Follow-Up and Phase I Audit.</p>	<p>2Programs72: “From an overall federal perspective, the Program is essentially ‘running on trust’ with little accountability. Criteria for project selection were not clearly defined, and many of the files we reviewed lacked persuasive evidence to justify applicants' claims relating to selection criteria. In most cases, federal officials recommended projects for approval without ensuring that applicants' claims were adequately supported. We found that federal officials relied on municipal and provincial certifications with respect to costs claimed. The implementation of compliance audits, which, among other things, represent a means of obtaining assurance on the adequacy of financial controls, has been slow” (p. 17-5)</p> <p>2Programs73: “The Program is a collaborative arrangement. The federal government is one of several program partners. The others include provincial and local governments, and, in some cases, the private sector. For the purposes of this program, the federal government entered into a separate agreement with each province and territory. Under these agreements, the federal government contributes up to one third of eligible project costs, and the provincial and local governments and other partners contribute the remainder. In the majority of cases, municipalities identified their priorities for infrastructure program funding based on local requirements, and submitted projects for provincial review. Provinces then forwarded projects selected to the federal government for review and approval”</p>

		<p>(p. 17-7)</p> <p>2Programs74: “Officials believe that the [CIWP]’s approach – combining the specific expertise of the two levels of government within an established framework of federal-provincial agreements – has been largely responsible for [its success]. The provincial governments are responsible for the day-to-day running of the Program, while the federal government has a less operational role. Consequently, the federal government has not become involved in project nomination or in second-guessing the decisions made at other levels on the screening and selection of initial project proposals” (p. 17-11)</p> <p>2Programs75: “Most of the federal and provincial project files we examined lacked persuasive evidence to support the claims of project applicants relating to selection criteria. Although some files for large and complex projects contained more detailed analyses, most applications were prepared in qualitative and often vague terms, with no information, other than certifications by project applicants, to back up claims that criteria were being met. In most cases, federal officials endorsed provincial assessments without ensuring that provincial officials had received and analyzed the appropriate information or requiring direct supporting information themselves” (p. 17-12)</p> <p>2Programs76: “When projects are funded under the Canada Infrastructure Works Program, provincial government expenditures average only about one third of the total investment. Because of the different provisions of federal and provincial programs, we believe there are financial incentives for provincial governments to transfer their budgetary resources away from their own regular programs to the national infrastructure program” (p. 17-17)</p>
	<p>Kohn, H. (2000). Factors affecting urban transit ridership. Statistics Canada. Ottawa, ON.</p>	<p>2Programs77: “The cost of providing comprehensive services, especially for communities that are characterized by urban sprawl, has meant a requirement for subsidization. In 1998, governments in Canada paid approximately \$2.4 billion in capital and operating subsidies to urban transit companies. Nevertheless, transit companies have sought ... new sources of revenue such as fees from parking lots and advertising. Revenues from these sources grew from \$82.4 million in 1995 to \$110.4 million in 1998” (p. 2)</p> <p>2Programs78: “Both service declines and fare increases will generally have a negative impact on ridership but a positive impact on revenues. Thus, it appears that urban transit ridership is, indeed, inelastic. It may be that revenue or ridership declines prompted transit companies to raise fares and/or decrease service levels on marginal routes. Despite the fact that most bus companies raised fares, reduced levels of service and suffered declines in ridership, they did realize greater revenues. This indicates that if the objective of the bus companies was to increase revenues, they were successful in achieving this goal, even though ridership may have declined” (p. 8)</p> <p>2Programs79: “In the 1990s, most Canadian urban transit operators implemented both service and fare changes. Generally, service hours have decreased whereas fares have increased. The general impact has</p>

		been a decrease in ridership coupled with an increase in revenues” (p. 8)
	House of Commons of Canada. (2001). Commons Debates, December 10, 2001 (Financial Statement of Minister of Finance, Hon. Paul Martin). Ottawa, ON.	2Programs80: “In Budget 2000, we announced a number of initiatives aimed both at sustaining our environment and at developing innovative technologies. Two of those initiatives, the \$25 million green municipal enabling fund and the \$100 million green municipal investment fund, have already spawned more than 100 projects. These projects chart new ground in areas as diverse as energy and water savings, urban transit, waste diversion and renewable energy. These funds are improving the quality of our life and securing our position as a leader in environmental technology. We would like to congratulate the Federation of Canadian Municipalities both for its initiative and for its management of these Funds. Today, as a result, we are announcing that we will double our contribution to both funds” (p. 8082)
	IBI Group and Soberman, R. (2001). National Vision for Urban Transit to 2020. Transport Canada. Ottawa, ON.	2Programs81: “A capable system [involves]: 1. Door-to-door, “seamless” travel by public transit and related modes within the entire urban area, unimpeded by jurisdictional boundaries or intermodal barriers, through integration of transit services, pricing, and passenger information systems, as well as intermodal coordination and parking policies. 2. Increased transit speed, capacity, frequency, coverage and connectivity to compete more effectively with the automobile and reduce automobile dependency in serving a wider variety of trip purposes, through general improvements in the network of transit services and increased integration of public and private transportation activities. 3. Improved accessibility to transit service for the disabled and seniors through modifications to new vehicle and infrastructure designs, retrofitting of existing infrastructure, and special services for these individuals in communities with modest or no conventional transit services. 4. Increased comfort, convenience and safety for transit users in both vehicles and waiting areas, through general improvements in the amenities of transit vehicles and waiting areas. 5. Improved transit service in currently transit-deprived areas, including use of appropriate service structures and technologies to provide transit services in an efficient and cost-effective manner” (p. 11-12)
		2Programs82: “A compatible system [involves]: 6. Fewer and shorter motorized trips per person and more trips by transit, walking and cycling, largely through management of urban development, regardless of city size, in ways that lead to compact urban form and greater mixed land use plus more pedestrian-, transit- and cycling-friendly streetscapes. 7. More transit-friendly and walkable/cyclable streets and streetscapes through integrated planning, design and delivery of those services and facilities. 8. Greater opportunities for accommodating bicycles in connection with transit services through special features of transit stations and vehicles” (p. 12)
		2Programs83: “A conserving and clean system [involves]: 9. Reduced transit/transportation energy consumption and resource depletion through an increase in the proportion of vehicle-km involving more energy-efficient vehicles and the use of alternative propulsion systems. 10. Reduced emissions of

		<p>greenhouse gases and other pollutants from transit/transportation through use of alternative fuels and propulsion systems plus greater reliance on transit, walking and cycling.</p> <p>2Programs84: “A cost-efficient system [involves]: 11. More efficient operation of transit vehicles and higher vehicle productivity, through road design and traffic engineering policies, urban development patterns that are more favourable to transit and consideration of alternative service delivery approaches. 12. Transit priority policies that improve average transit travel speed and net revenue per vehicle, thus increasing vehicle and driver productivity, as well as the attractiveness of transit relative to the private automobile leading to increased transit ridership and revenues and reduced net costs per rider. 13. Cost-effective planning and delivery of new and/or expanded levels of transit service as well as maintenance and rehabilitation of existing services and facilities based on appropriate governance which enables an integrated approach to urban development and provision of transit/transportation. 14. A level playing field from the standpoint of transit versus auto travel decisions based on consideration of real costs and affordability, including under-priced parking and rationalization of income tax regulations affecting allowable deductions and taxable benefits. 15. Generation of reliable, performance-based revenue streams to fund urban transit thereby making possible more cost-efficient capital investment programs, through public funding policies and drawing on road pricing and/or other user pricing mechanisms that account for the external costs imposed on society by road users and the co-benefits to society of achieving improved and more widely used transit” (p. 12-13)</p> <p>2Programs85: “The Government of Canada’s Action Plan 2000 on Climate Change, for example, includes an Urban Transportation Showcase Program intended to promote effective strategies for the reduction of greenhouse gas (GHG) emissions. However, although direct provincial involvement is not mandatory (as in the case of both Canada Infrastructure Works Programs), any objection by a provincial government to a municipal submission for funding is sufficient to render that application ineligible” (p. 15)</p>
	<p>Flemming, B., Patenaude, J. Findlay, G., Rae, R., and Waters II, W. (2001). Vision and Balance: Report of the Canadian Transportation Act Review Panel. Canadian Transportation Act Review Panel. Ottawa, ON.</p>	<p>2Programs86: “The most pronounced effects of congestion charges would probably be to encourage combining of car trips, or shifting them to off-peak times, while increased charges for emissions would induce shifts to more efficient vehicle technologies and alternative fuels. Urban transit would also gain some traffic, and there is potential for increased use of intercity buses as well. Importantly, charging for the full cost of road use should mean that transit would eventually no longer need general subsidies, as its relatively lower social costs would be evident to users when they compared public transit fares that included all its social costs with charges for road use that did the same” (p. 183)</p> <p>2Programs87: “[The Canadian Transportation Agency] could take on a multi-modal role, notably by considering alternatives to expanding the national highway system’s congested links through major cities — for example, commuter rail or other forms of public transit — and funding them when they</p>

		<p>offered superior benefit/cost ratios. In principle, this could also be extended to marine or rail freight infrastructure projects that provided alternatives to highways” (p. 192)</p> <p>2Programs88: “The [federal] government has provided no such funding in recent years, though Transport Canada managed a small-scale Urban Capital Assistance Program during part of the 1970s and ’80s and has provided some minor funding for transit vehicles using alternative fuels and larger amounts intermittently from special funds. Transit infrastructure could be eligible for funding under the present Canada Infrastructure Program, though its announced priorities are for water systems and energy efficiency (under which, curiously, transit does not qualify)” (p. 221)</p> <p>2Programs89: “Subsidy policy varies substantially among jurisdictions. Five provinces (Newfoundland and Labrador, Prince Edward Island, New Brunswick, Nova Scotia, Saskatchewan) and all three territories do not provide routine capital or operating subsidies directly for transit, so all subsidies are municipal. Further, the province of Ontario announced cessation of any new provincial funding of capital or operations in 1999, passing the full responsibility to regional and municipal governments. In that year, total regional or municipal subsidies in Ontario amounted to \$1.1 billion. In the other three provinces with major transit systems — Quebec, Alberta and British Columbia — although municipalities continue to provide half the subsidy or more, the provincial government has recently adopted innovative approaches to transit funding for cities” (p. 221)</p> <p>2Programs90: “The Panel came to the following interrelated conclusions: Urban sprawl reduces route density, making competitive transit service costly. Moreover, although joint planning of land use and transportation is still widely lauded, it is hardly implemented, because of inadequate co-ordination among local/regional governments; Increases in transit ridership are induced more by service speed, frequency and convenience than by price; Train services, both metro systems and commuter trains, with their reliable trip times, are particularly effective in inducing shifts of travelers from cars to transit; The speed and reliability of bus/streetcar/trolley services can be improved more cost-effectively by giving transit greater priority — bus priority lanes, parking and turning restrictions on other traffic — than through capital investments or fare reductions; Increased charges for car use (road tolls, congestion charges, or parking surcharges) would also be more effective than reductions in transit prices” (p. 224)</p> <p>2Programs91: “The Panel recommends that transit operating agencies and their funders seek the most cost-effective ways of improving their services. A key feature of transit is its continued delivery almost exclusively by government agencies, which means that costs have not been subjected to market tests to the same extent as those of recently privatized or commercialized infrastructure and services. This is a sensitive policy and political issue for transit agencies and the governments that fund them, particularly because of the nature of labour relations. But the obligation to spend public money wisely requires a hard look at these issues” (p. 226)</p>
--	--	--

		<p>2Programs92: “A practical national transportation strategy would also resolve the issue of federal fuel taxes. The Panel has proposed that federal fuel tax revenues be transferred to provinces and territories on condition that they deposit them in newly established roads and transport funds. The Panel also suggested that the agencies administering the funds should receive proposals for alternative projects in other modes” (p. 226-227)</p>
		<p>2Programs93: “The Panel recommends that urban transit be permitted to qualify for funding from road user charges. The intention is that initially transit projects should be permitted to compete with roads for fuel tax revenues. In the longer term, they should qualify for funding from the proposed provincial and territorial roads and transport funds — or urban regional transport funds on the Greater Vancouver and Montreal models, with wider responsibilities and greater user involvement in decisions. There is no reason in principle to limit funding to capital projects — especially in view of criticisms that past funding favouring capital projects has led to less cost-effective solutions” (p. 227)</p>
		<p>2Programs94: “The Panel does not believe it is necessary or appropriate for the federal government, or governments of the provinces and territories, to specify what measures should be adopted in order to qualify for funding. Instead the Panel suggests that agencies simply be given performance-based incentives ... The Panel recommends that payments to transit authorities be made on the basis of their actual performance in inducing shifts from private automobile use to transit. The Panel suggests a payment per trip, based on mode shift from car (with verification from ridership counts and periodic surveys of new riders to determine alternative modes)” (p. 227)</p>
		<p>2Programs95: “The Panel recommends that the purchase of railway lines for use as urban transit corridors (including spurs identified through the process set out in the previous recommendation) qualify for funding consideration from the provincial and territorial roads and transport funds the Panel proposes” (p. 241)</p>
	<p>Transport Canada. (2001). Sustainable transportation: The Canadian context. Submission to the 9th Session of the United Nations</p>	<p>2Programs96: “In Canada, three levels of government share responsibility for transportation. In general, the federal government is responsible for national, interprovincial, and international transportation; provincial governments are responsible for intraprovincial transportation; and municipalities are responsible for urban transit and local planning decisions. Federal and provincial ministers of transportation coordinate activities through the Council of Ministers Responsible for Transportation and Highway Safety” (p. 8)</p>

	Commission on Sustainable Development, April 16-27.	2Programs97: “In 2000, Transport Canada launched an internal Green Commute program to promote sustainable commuting behaviour among its employees in the National Capital Region. The Green Commute program is about removing barriers to enable employees to make more sustainable choices about the commute to and from work. Green commuting is broken down into three different transportation categories: active transportation, which encompasses walking, biking, and in-line skating; public transit and carpooling; and telecommuting. Transport Canada is committed to working in partnership to develop and initiate a Green Commute program for implementation at Transport Canada’s regional offices and other federal department offices across Canada” (p. 17)
2nd Era Frames	Department of External Affairs. (1981). Urban transportation: The Canadian experience. External Information Program Division. Ottawa, ON.	2Frames1: “The successful achievements of public transportation in Canadian cities are chiefly the result of provincial and municipal policies. To meet public mobility needs, these governments have committed funds for transit research and development, the creation of new networks and the strengthening of existing systems” (p. 2)
	Department of Industry, Trade and Commerce. (1981). First Choice: Urban transit solutions. External Information Program Division. Ottawa, ON.	2Frames2: “Over the years we have encountered numerous urban transportation problems in our country and we have been most fortunate in finding solutions to formidable challenges. Canadian cities, located as they are beside lakes, rivers, mountains, etc., have presented just about every geographical challenge imaginable. This, coupled with seasonal changes and a shifting population base, has made the Canadian solutions to public transit universally recognized” (p. 3)
		2Frames3: “At the show, some 23 Canadian transit-related companies will make up the main exhibitors group – with other Canadian companies and organizations exhibiting separately. All of them are equipped to offer North American solutions to mass transit problems. In addition, they are all able to offer innovative solutions to the special needs of particularly unique urban centres. So...come to the exhibit and see what the Canadians have to offer in buses...rail passenger equipment...maintenance...communications...special passenger needs...engineering...and planning. Many of these Canadian companies can offer American references to back-up what they sell! And all of them offer an excellent follow-up service!!!” (p. 4)
	National Transportation Agency. (1985). Freedom to move: A framework for transportation reform. Ottawa, ON.	2Frames4: “The current environmental and economic climates, more specifically the energy crisis, favour urban transit” (p. 19)
2Frames5: “I would like to indicate unequivocally that the Government will neither propose nor permit any economic regulatory reform that might be detrimental to safety standards” (p. ii)		
		2Frames6: “As the transportation sector matures, regulation should be relaxed and simplified to allow the system to respond to the changing needs of shippers and the travelling public. Restrictions reducing competition and inhibiting cost reductions should be eliminated: diversity and initiative should be

		<p>promoted. Regulations, and the agency that administers them, should become more flexible, more accessible to Canadians and less legalistic. Mediation and less-formal resolution of disputes should be encouraged” (p. 1)</p>
		<p>2Frames7: “The thrust of these proposals, reliance on competition and market forces rather than regulations, is clearly the wave of the future. The Government realizes, however that the proposed changes, while leading to a more efficient and effective transportation system that will serve Canadians at lower cost, may involve some transitional problems in isolated cases. With this in view, the Government proposes to review the effects of the legislative reform proposed in this paper within four years of the new legislation coming into effect” (p. 3)</p>
		<p>2Frames8: “Transportation Crown Corporations will be discouraged from engaging in non-business-like pricing and in loss-making commercial activities. The Government is sensitive to criticism that Crown Corporations may unfairly cross-subsidize their operations. Particular emphasis will be devoted to ensuring that the transportation Crown Corporations operate as good corporate citizens” (p. 23)</p>
	<p>National Transportation Agency. (1989). Freedom to move in Canada’s new transportation environment. Ottawa, ON.</p>	<p>2Frames9: “Many regulations appeared to have become obstacles to growth, innovation and competitiveness in Canadian transportation. Removing those obstacles, while protecting the public interest, became a priority in the government’s national agenda for economic renewal” (p. 4)</p>
		<p>2Frames10: “The powers of the new National Transportation Agency are tailored to the new regulatory approach. They have been designed to ensure responsiveness to public interest, industry needs and policy direction from the government. The legislation calls for the Agency to establish regional offices in Western Canada and the Atlantic Provinces” (p. 11)</p>
		<p>2Frames11: “Transportation firms now have the freedom they need to respond to new demands. Shippers have the freedom they need to seek out the most competitive transportation services available. Canadians have the freedom they need to move into the future” (p. 15)</p>
	<p>John, C. (1992). Transportation in Canada: Current Issues. Library of Parliament. Ottawa, ON.</p>	<p>2Frames12: “Clearly, the question is whether, in a large and diverse country with strong regional differences and interests, it is possible or indeed necessary to have a national transportation policy” (p. 16)</p>

	<p>IBI Group. (1993). Urban travel and sustainable development: The Canadian experience. Canada Mortgage and Housing Corporation. Ottawa, ON.</p>	<p>2Frames13: “Urban travel is, of course, only one element of human society which affects the sustainability of that society. It is an important element however, since the internal combustion engine powers more than half of the motorized transportation in most urban areas and well over 90% in the cities and towns of most Western countries. This form of propulsion is notorious for its consumption of fossil fuels ... and its production of noxious emissions into the atmosphere and products which contribute to ground water pollution. The automobile has also had an extremely profound impact on the form, density and livability of urban areas, contributing strongly to let density, spread urban development and continuing consumption of high quality farmland for urban purposes” (p. 27)</p> <p>2Frames14: “What is particularly of concern about the de-evolution of Canadian urban land use practices in terms of sustainability is that most of Canada's future population growth, according to current trends, is likely to be accommodated in automobile-oriented, low-density modern suburbs leading to an increasingly dispersed urban population. Further, Canada’s population will likely continue to concentrate in its three largest cities; currently, one-third of Canada s population resides in Toronto, Montreal and Vancouver, with almost half of that in Toronto. This combination of concentration at one scale and dispersion at another produces a powerful mix: an urban population which is automobile-dependent due to its low-density single-use living areas, and which must travel increasing distances to employment ... In the absence of fundamental policy changes, virtually all growth trends point to a future urban transportation scenario where the private automobile is used more frequently by more people to make longer trips at lower speeds, with serious impacts on the economic, social and environmental viability of Canadian cities.” (p. 39)</p> <p>2Frames15: “The implementation of any solutions will be hampered by serious lack of funding, due to the intense pressure on all governing levels to reduce deficits and curb expenditures. For example, virtually all of [Canada’s largest seven] cities have plans to expand their transit networks, but most of these plans have been delayed, scaled down or indefinitely shelved for financial reasons” (p. 39)</p> <p>2Frames16: “In assessing the current state of urban transportation in Canada’s one cannot help but conclude that the prognosis is grim. However, it is also apparent that the trends of the past 30 years will not continue unabated, since in the end these trends are fundamentally unsustainable. The only open question is whether Canadian cities take steps proactively to reverse the trends, or allow congestion, pollution and resource depletion to do the job” (p. 39)</p> <p>2Frames17: “In peripheral growth areas, the priority is to curtail further urban sprawl and create more balanced and diversified communities. Restriction is needed on greenfield development and, where that is impossible, requirements that new development be planned according to transit-supportive principles. Growth needs to be re-directed to already urbanized areas in order to improve the urban form and densities, in the same manner as the older suburb” (p. 49)</p>
--	---	---

		<p>2Frames18: “A city’s transportation infrastructure is an integral part of its urban form which, in turn, provides the basis (nodes, corridors, density, orientation of buildings) for the successful functioning of the transportation system. A crucial issue for sustainability is whether the automobile is assumed to be the main form of transportation or whether at least equal provision is made for walking, bicycling, and public transit” (p. 60)</p>
		<p>2Frames19: “In comparison to geographically smaller, older, more densely populated European countries, Canada has a particularly challenging task in achieving transportation sustainability. A vast country with a small population, its cities are relatively low density and often separated by great distances. Thus, there is a relatively high level of energy consumption by the transportation sector as a whole” (p. 74)</p>
		<p>2Frames20: “Within many of Canada’s major cities, however, there are good prospects for improvement. In comparison to U.S. cities, where central areas have been depopulated and original transit systems dismantled, core areas of Canadian cities have largely retained their vitality and a full range of functions, along with the transit systems that serve them. Canadians have also retained traditions of urban living, with more affinity for walking, bicycling, public transit and use of public space” (p. 74)</p>
	<p>National Round Table on the Environment and Economy. (1996). Sustainable transportation in Canada (Backgrounder). Ottawa, ON.</p>	<p>2Frames21: “There are many factors propelling Canadians along the path to unsustainability – including population growth, low density urban settlement patterns, the explosion of global communications and the competitive advantages of energy intensive modes of transport. But underlying these factors are deep roots in Canadian social values and lifestyles, as well as in the country’s economic system and political structure. Canadians are already experiencing the negative health impacts of unsustainable transportation. Medical research shows that ground-level air pollution in Canada is contributing to increased incidence of respiratory illness, higher physician/emergency room visits among people with heart or lung disease, and possibly increased mortality” (p. ix)</p>
		<p>2Frames22: “Achieving sustainable transportation requires that individuals and governments change the way they make decisions. Increased public education efforts are called for, as well as full integration of environmental objectives into transportation policies, and a shift in emphasis from mobility to accessibility – to minimize the need for motor transportation. An essential element in all of these changes is the use of quantifiable performance measures to track progress towards goals and targets. All levels of government – international, federal, provincial/territorial and municipal – have an important role to play in achieving sustainable development. While there are signs of positive change, particularly at the municipal level, Canadian efforts have not coalesced into a well-formed national strategy for tackling urban sustainability” (p. ix)</p>
		<p>2Frames23: “There is also growing evidence that the measures available for dealing with the climate</p>

		<p>change issue are central to dealing simultaneously with a range of other global and local issues. For example, measures that would result in major reductions in greenhouse gas emissions from transportation would also contribute to improvements in ground level air quality. The reverse is not necessarily true. Measures for dealing with greenhouse gas emissions from transportation have also been shown to provide economic and social benefits. For example moving to more compact urban form and improving the design of streetscapes for pedestrian and transit operations can result in lower cost urban infrastructure and reduced social isolation for those without access to automobiles. At the same time, single-occupancy vehicle use is reduced” (p. 8)</p>
		<p>2Frames24: “Measures promoting the use of compact urban form and mixed land use, as well as non-motorized forms of transport, have the potential to reduce the social isolation, barrier effects, public safety, health and environmental impacts of transportation and to increase the economic efficiency of society” (p. 53)</p>
		<p>2Frames25: “Achieving change on the scale required for sustainable transportation will only be possible if the public is well aware of the risks of the status quo and is ready to change its values, behaviours and beliefs. The literature suggests that the job cannot be done solely by interventions of governments. The public will have to be convinced that it is in society’s long-term interest to take action to modify the way we live. The message will be much more palatable if it can be shown that there can be long-term economic and social and lifestyle benefits from the changes needed to reduce transportation energy use. There are many examples from past battles for environmental change. Some of the strongest advocates for clean-up of industrial processes are leaders of companies and industry associations who initially resisted regulation but have realized improved profitability from ... efforts to reduce waste” (p. 57)</p>
	<p>National Round Table on the Environment and Economy. (1997). State of the debate: The road to sustainable transportation in Canada. Ottawa, ON.</p>	<p>2Frames26: “Canada’s highly developed transportation networks are vital to our international competitiveness. They also contribute in countless ways to the vibrancy of the economy and the quality of our lives. For many Canadians, distance no longer poses a barrier to social and commercial interaction. However, current patterns of transportation use are not sustainable. If existing trends are allowed to continue, Canada’s transportation networks will become more polluting, increasingly congested and, with urban sprawl, more costly to maintain. The economy, the environment and the quality of Canadians’ lives will suffer as a result” (p. 9)</p>

		<p>2Frames27: “Where and how we live, work and play are intimately tied to our access to transportation. Unlimited personal mobility, often in single-occupant road vehicles, is highly valued at every level of Canadian society. A single-family home on a large lot in the suburbs, a recreational property in the country and dependency on personal vehicles are key components of the Canadian dream. Where once they walked or cycled, children in urban areas are now driven to school and other activities, whether because of fear for their safety or the physical distances between home, school and recreational activities - in part a consequence of the low-density, single-use urban sprawl that now predominates in Canada’s urban regions” (p. 16)</p> <p>2Frames28: “Transportation and land use policies and planning must be integrated. Past practices of allowing urban areas to sprawl outward to accommodate population growth and social desires through low-density development on less expensive land’ are strongly linked to the growth of fossil fuel consumption. Major reform of urban land use policy is required” (p. 32)</p> <p>2Frames29: “The current trends away from sustainable transportation are deeply rooted in our culture, our economy and our massive built infrastructure. They have little hope of reversal unless there is widespread public demand for substantial change. Increased public awareness and understanding of the issues surrounding sustainable transportation are thus prerequisites to political action. All Canadians need to be much better informed about the risks they face. They must be willing to alter their transportation choices, and be open to changes in government policies and programs. The main messages to be delivered are that: there will be serious costs and risks to bear if the present unsustainable practices are allowed to continue; there are short- and long-term benefits to be derived from a shift to sustainable practices; and there are actions that individuals and institutions can take now to begin the necessary” (p. 34)</p>
	<p>Transportation Association of Canada. (1997). Financing urban transportation. Ottawa, ON.</p>	<p>2Frames30: “A [hypothetical] long term urban development plan has been approved. It emphasizes multi use town centres and high density, mixed use along connecting corridors. Transit has funding and operating priority in those corridors. Short-medium term community/neighborhood plans have been approved. They emphasize compact, mixed use communities based on pedestrian, cycling and transit friendly design. Transit, highways, arterials, parking and truck routes are planned and coordinated across the urban area. The percentages of trips made by walking, cycling, transit and high occupancy automobiles are all increasing; the percentage of trips made by single occupant automobiles is decreasing. The average distance and time for peak hour commuter travel is decreasing. An area wide parking strategy is in place and enforced. There are very few places which still require on-street goods transfer. The physically challenged enjoy universal access to public transport facilities and services. Roads and bridges are in a good state of repair. Air pollution from motor vehicle sources is declining. Urban transportation infrastructure and services are adequately funded from stable and sustainable</p>

		<p>revenues. Political leaders have the support of a well informed public when making decisions on urban development and transportation systems to serve the area” (p. 1)</p> <p>2Frames31: “[Economic warning signs of unsustainable patterns include] traffic congestion; deteriorating infrastructure; systems which cannot operate at maximum efficiency; hidden subsidies and accounting systems that ignore environmental and social costs, thus sending the wrong market signals to public decision makers and travelers” (p. 3)</p> <p>2Frames32: “A new vision can replace the status quo practices of the past. It will help communities move toward sustainability and it will result in urban transportation systems which are less expensive to build and operate ... A new vision can achieve these dual goals because it will reshape urban development, reduce per capita travel requirements, lessen reliance on single occupant auto trips, shift demand to more efficient and environmentally friendly patterns and modes, encourage integrated approaches by all governments in the urban area, and make the best use of existing revenue” (p. 3)</p>
	<p>Transportation Association of Canada. (1998). A New Vision for Urban Transportation. Ottawa, ON.</p>	<p>2Frames33: “Someone must take the lead in this process and it is logical that municipal elected officials do so. They should be supported and encouraged by the appropriate provincial departments and their own urban planning and transportation professional staffs” (p. 6)</p>
	<p>Office of the Auditor General of Canada. (1999). Canada Infrastructure Works Program: Phase II Follow-Up and Phase I Audit.</p>	<p>2Frames34: “The Canada Infrastructure Works Program is a contributions program. This means that the federal government pays if performance conditions and program requirements are met, as specified in the agreements. These requirements have important implications for the Program's accountability regime – in terms of accountability among the partners to the agreements and also accountability to Parliament for expenditures undertaken and results achieved” (p. 17-7)</p> <p>2Frames35: “The design of the Program recognizes that, in general, the provinces and municipalities are responsible for investments in local infrastructure. At the provincial and municipal levels, there is extensive experience in planning, financing and implementing such investments” (p. 17-8)</p> <p>2Frames36: “In its Performance Report, the Treasury Board Secretariat should provide Parliament with information on the employment effects of the Canada Infrastructure Works Program that clearly sets out its sources and limitations” (p. 17-19)</p> <p>2Frames37: “In future programs of this type, the government should ensure that: environmental assessments are completed early enough to be taken into account in the project planning and approval process; necessary mitigation measures are clearly identified; and a system for obtaining assurance of the implementation of mitigation measures is in place” (p. 17-23)</p>
	<p>Transportation Association of Canada. (2000). Measuring</p>	<p>2Frames38: “Reducing our dependence on the automobile for urban travel is viewed by many as a key to realizing more livable cities in the future. Fostering more choice among non-auto modes of travel, particularly for peak travel periods, is fundamental in meeting the overall goals of reducing both vehicle-</p>

<p>progress: Toward the new vision for urban transportation. Ottawa, ON.</p>	<p>km traveled and the associated environmental impacts” (p. 4)</p> <p>2Frames39: “Achieving the New Urban Vision will require more stable and reliable funding sources than are currently available in most Canadian urban areas and an infusion of additional funding- particularly to improve public transportation - if the Vision is to be achieved” (p. 5)</p>
<p>House of Commons of Canada. (2001). Commons Debates, December 10, 2001 (Financial Statement of Minister of Finance, Hon. Paul Martin). Ottawa, ON.</p>	<p>2Frames40: “We also recognize that our great cities are too important to our economy, to our quality of life and to our signature as a nation, to leave them in straitened circumstances. We recognize as well that the same reasoning holds true for smaller, rural or remote municipalities, all of which are hard pressed to foster the economic development they need to offer their young people a future in their own communities” (p. 8081)</p>
<p>IBI Group and Soberman, R. (2001). National Vision for Urban Transit to 2020. Transport Canada. Ottawa, ON.</p>	<p>2Frames41: “The likelihood of meeting future urban transportation needs through road expansion alone appears to be increasingly impracticable from the standpoint of sustainable development, system capability, environmental impacts, liveable communities, and the accessibility to be provided to all groups of society (including the disabled and seniors, shippers, and those for whom travel by automobile is essential)” (p. 6)</p>
	<p>2Frames42: “Improvements in transit that attract individuals from the private automobile, as well as land use and transportation planning that leads to shorter trips, fewer motorized trips and increased use of cycling and walking are also seen as essential elements of meeting Canada’s commitments to reductions in greenhouse gas emissions, improvements in air quality, and related health impacts, while also helping to conserve energy and reduce dependence on fossil fuels” (p. 6)</p>
	<p>2Frames43: “A sustainable transportation system should be: capable of providing the necessary speed, capacity, frequency, coverage and connectivity to provide access to all activities in the urban areas with service that is safe, comfortable and convenient; Compatible with liveable communities that support a vibrant economy, walkable streets, people-friendly places, and a high quality-of-life; Conserving of energy and other natural resources and clean in terms of waste products; and cost-efficient in terms of efficient service delivery, appropriate and affordable transportation pricing, and adequate, predictable funding arrangements” (p. 10-11)</p> <p>2Frames44: “By 2020 Canada’s urban transit/transportation policies and initiatives will have achieved: a reduced level of motorized travel per person; less dependence on the private automobile; improved transit accessibility for those who by reason of age, income, or physical disability are unable to drive; more competitive transit service delivered in an effective and cost-efficient manner that attracts users from their cars for a wider variety of trip purposes; and, resulting from the above, more capable, compatible, clean, conserving and cost-effective urban transit and transportation systems” (p. 11)</p>

		<p>2Frames45: “In Canadian urban areas, there is a growing consensus that: The likelihood of meeting future urban transportation needs through road expansion alone appears to be increasingly impracticable from the standpoint of sustainable development, system capacity, economic viability, environmental impacts, liveable communities, and the accessibility to be provided to all groups of society (including the disabled and seniors, shippers, and those for whom travel by automobile is essential); Improving urban transit services in ways that increase the competitiveness of transit relative to the private automobile and which reduce the ever increasing growth in car dependence are desirable from social, economic and environmental standpoints; Improvements in transit that attract individuals from the private automobile, as well as integrated planning and delivery of transit/transportation and land use that leads to shorter and fewer trips and increased use of transit, walking and cycling are also seen as essential elements of meeting Canada’s commitments to reductions in greenhouse gas emissions, improvements in air quality, and related health impacts, while also helping to conserve energy and reduce dependence on fossil fuels; Stabilization and, if possible, reduction in levels of road congestion are necessary to maintain and improve the competitiveness of urban economies, and thus of the national economy; [and that] most Canadian cities are unable to find the funding (particularly capital) required to maintain existing transit services, let alone expand transit systems and levels of service, solely from property taxes” (p. 14-15)</p>
		<p>2Frames46: “The most recent Speech from the Throne, which states that the federal government will ‘cooperate with provincial and municipal partners to help improve public transit infrastructure’, singles out urban transit as a new area of federal government interest as do recent statements by the federal Minister of Transport” (p. 15)</p>
		<p>2Frames47: “Perhaps the single most important difficulty in attempting to reach consensus on a Canadian transit vision probably derives from the tremendous variation in size, demographic characteristics, and needs of urban communities across the nation. Converting automobile users to transit users is a very different challenge in Haliburton, Ontario than in Markham, Ontario, as it is between some residential areas of the same region such as White Rock and the community of Kitsilano in British Columbia. Location, independently of size, moreover, affects the practicality of using small, more fuel-efficient automobiles in built up urban areas, as opposed to large, four wheel drive vehicles that are more of a necessity in rugged, rural municipalities” (p. 67)</p>
	<p>Flemming, B., Patenaude, J. Findlay, G., Rae, R., and Waters II, W. (2001). Vision and Balance: Report of the Canadian</p>	<p>2Frames48: “The Panel ... conclude[s] that transit service improvement without deterrents to private vehicle use are unlikely to be successful. Policies should therefore encourage the governments involved to seek the most cost-effective solutions, which clearly means solutions that deal with both transit and urban car use” (p. 224)</p> <p>2Frames49: “In Canadian conditions, it seems possible that deregulation (permitting entrants to</p>

	<p>Transportation Act Review Panel. Canadian Transportation Act Review Panel. Ottawa, ON.</p>	<p>compete with what are currently monopoly transit agencies) and commercialization could encourage innovative and less costly services, such as small buses or shared taxis from less-dense suburbs to interconnections with transit trunk routes. But those possibilities are probably quite limited. More extensive commercialization is constrained by labour agreements, cultural factors (people’s attachment to their cars), and the fact that urban infrastructure tends to favour private automobile use over transit” (p. 225)</p>
	<p>Transport Canada. (2001). Sustainable transportation: The Canadian context. Submission to the 9th Session of the United Nations Commission on Sustainable Development, April 16-27.</p>	<p>2Frames50: “Continued urbanization will bring greater traffic congestion in the next 20 years, with continued growth at suburban and ex-urban nodes also contributing to commuter demand. Several Canadian cities anticipate that commuter rail will become an increasingly attractive option as population and traffic volume rise. In order for the option to be available, existing rail corridors might need to be preserved from abandonment and redevelopment” (p. 232)</p> <p>2Frames51: “Sophisticated intelligent transportation systems, including satellite communication and navigation, are not only getting us to different places accurately and faster, they are also making connections between various modes of transportation much easier. More and more, urban transit systems are linking downtown with rail stations, airports, and ports. Canadians will have more options from which to choose the best combination of commuter rail, intercity bus, subway connections, railways, or cars, benefiting the environment by increasing the use of more sustainable modes” (p. 16)</p> <p>2Frames52: “The challenges of sustainable transportation are immense and will not be solved overnight. Sustainable transportation is a long-term goal, requiring the cooperation of many partners, domestically and internationally, in the search for effective solutions. Progress toward sustainable transportation must be made incrementally. In Canada, the key will be to better integrate economic, social, and environmental considerations into decisions affecting transportation activity” (p. 21)</p>
<p>2nd Era Public Sentiments</p>	<p>Department of Industry, Trade and Commerce. (1981). First Choice: Urban transit solutions. External Information Program Division. Ottawa, ON.</p>	<p>2PublicSentiments1: “As was experienced elsewhere, rapid urban growth creating housing shortages within the city necessitated residential development on the outskirts. It was difficult and expensive for transit systems to keep pace with the resulting urban sprawl, which caused Canadians to buy automobiles to commute with — possible within a growing economy possessing plentiful low-cost gas and oil. Large-scale auto use, however, created several problems, such as traffic congestion on main arteries, air and noise pollution in city centres, loss of valuable space to roadways and parking lots, and increased capital expenditures for related services” (p. 17)</p> <p>2PublicSentiments2: “The number of public transit users is increasing steadily as service improves and oil prices rise. In the past decade, public use of transit systems has increased by almost five times” (p. 18)</p> <p>2PublicSentiments3: “In recent years, Canada’s cities have concentrated on modern rapid transit to move large volumes of riders quickly. While planning, constructing and operating two major systems,</p>

		<p>Canadians have developed a broad range of rapid transit experience which spans the steel-wheel/steel-rail in Toronto and the rubber-tire technology of Montreal” (p. 39)</p>
		<p>2PublicSentiments4: “New equipment has also been developed for commuter rail services as well. For example, GO Transit’s rail service had become so popular with Toronto area commuters by the mid-seventies that the agency was forced to alleviate overcrowding. As a result, GO began replacing its single-level coaches on the busiest route with new bi-level cars. These cars, with a full upper level, are unique in North America” (p. 40)</p>
<p>IBI Group. (1993). Urban travel and sustainable development: The Canadian experience. Canada Mortgage and Housing Corporation. Ottawa, ON.</p>		<p>2PublicSentiments5: “In comparison to geographically smaller, older, more densely populated ‘old world’ countries. Canada’s cities are relatively low density and often separated by great distances. Thus, there is a relatively high level of energy consumption by the transportation sector as a whole and a high level of auto dependence and auto use within urban areas. Culturally, Canadians expect a high degree of mobility, thinking nothing of travelling long distances for work, recreation, shopping and socializing. Within many of Canada’s major cities, however, there are good prospects for improvement. In comparison to many ‘new world’ cities where central areas have been depopulated and original transit systems dismantled, core areas of Canadian cities have largely retained their vitality and a full range of services along with the transit systems that serve them. Canadians have long and proud traditions of urban living, with more affinity for walking, bicycling, public transit, and the use of public spaces” (p. 2)</p>
		<p>2PublicSentiments6: “The unpopularity of freeway projects, the pressure to consider a full range of environmental and social goals in planning transportation systems, and concerns regarding petroleum dependency due to the two petroleum energy ‘crises’ in 1974 and 1979 caused a renewed interest in public transit” (p. 5)</p>
		<p>2PublicSentiments7: “Against this backdrop, a number of events crystallized popular environmental concern. For example, publication of the Brundtland Report popularized the concept of ‘sustainable development’ in all fields of development, including urban transportation, published articles in the scientific and popular literature on acid precipitation and the appearance of an ‘ozone hole’ in the Antarctic brought home the growing impacts of human activities on the environment. The emergence of global warming as an environmental issue refocused attention on the energy-intensive nature of urban transportation in Canada” (p. 25)</p>
		<p>2PublicSentiments8: “Transportation began to be recognized as an environmental issue in its own right by the major environmental organizations, transit supporters and transit operators. Various publications were produced and programs adopted encouraging a reduction in car use and car dependence. However, unlike the case of the Clean Air Act in the United States, such concerns were not translated into specific reduction targets and schedules enshrined in legislation” (p. 25)</p>

		<p>2PublicSentiments9: “There has been renewed interest in some Canadian cities in harnessing transportation/land use interactions, and the ability of compact, mixed land-use patterns, pedestrian-friendly streets, integrated transportation/land use planning and controls on parking supply to contribute to an urban area's sustainability” (p. 47)</p>
		<p>2PublicSentiments10: “A number of government and non-government organizations have recently been undertaking public awareness programs to stress the environmental benefits of non-automobile transportation modes. The Canadian Urban Transit Association’s Modal Shift project includes a substantial outreach program to reverse the trend toward declining transit ridership, as does Montreal’s ‘transit revival’ program. Winnipeg Transit recently undertook a ‘green bus campaign’, wherein ten buses were painted green and white as part of a major publicity effort in newspapers, transit shelters, bus boards and television advertisements stressing the environmental benefits of public transit” (p. 56)</p>
		<p>2PublicSentiments11: “The key flaw in ... direct demand management methods is that they require incentive, and that incentive is missing in Canadian cities. Canadians value the environment, their pocket-book and their urban amenities, but not highly enough to make the benefits of these practices outweigh the disbenefits in terms of less convenience and flexibility, longer travel times, etc. Unless the sensitivity of Canadians to congestion and pollution increases, the automobile mode becomes significantly more inconvenient in terms increased costs or congestion, or the ‘payability’ of alternative practices improves, such practices will continue to have only a marginal effect in terms of sustainability” (p. 62)</p>
		<p>2PublicSentiments12: “Currently, there is public pressure, on one hand, to continue expanding the road system, and on the other, for more stringent efforts at demand reduction. And, finally, another factor being largely overlooked in the debate is the social impact of the lack of transportation alternatives for people living in these communities” (p. 66)</p>
	<p>IBI Group. (1994).Transportation Material for the Urban Chapter. Environment Canada. Ottawa, ON.</p>	<p>2PublicSentiments13: “The growing citizen dissatisfaction with the lack of concern for environmental and social issues in major transportation projects and other public-sector undertakings led to the establishment of environmental assessment legislation and processes. To varying degrees across the country, transportation plans were required for the first time to consider explicitly environmental and social goals as well as the transportation and cost objectives. On a formal level, transportation planning agencies began to incorporate environmental factors into their planning processes” (p. 5)</p>
	<p>National Round Table on the Environment and Economy. (1996). Sustainable transportation in Canada</p>	<p>2PublicSentiments14: “What is propelling us on such an unsustainable path? At first glance, it appears that population growth, low density urban settlement patterns, the explosion of global communications and the competitive advantages of energy intensive modes of transport, including cars, trucks and aircraft, have combined to make transportation unsustainable. Underlying these factors, however, are the deep roots unsustainable transportation trends have in Canadian social values and lifestyles, as well</p>

	(Backgrounder). Ottawa, ON.	<p>as our economic system and political structure. For example: unlimited personal mobility, often in single-occupant vehicles, is viewed by many as a right. Calls to curtail travel are seen as draconian measures that impinge on basic freedoms; Cars continue to be one of the most important status symbols for many Canadians. People see sport utility vehicles, high performance sports cars, luxury cars or, in the case of many teenagers, any car at all as symbols of lifestyle and wealth. A home in the suburbs remains a key component of the Canadian dream. Fierce opposition to high density or infill development often arises from nearby homeowners. Ironically, these not-in-my-backyard (NIMBY) reactions often argue against such development in the name of environmental protection” (p. 3)</p>
		<p>2PublicSentiments15: “Such are the powers of the market and the aspirations of citizens for ‘mobility’ that they have, acting rationally and in their own interests, used the personal transportation freedom of the automobile, as well as increasing disposable income, to create expanding urban sprawl, and to increase the distances between activities. While the benefits of road transport are embedded in the public psyche and have driven much political action in past generations, the public is only now becoming aware of the disbenefits of continuously expanding transportation and low density land use” (p. 15)</p>
		<p>2PublicSentiments16: “The report of the GTA Task Force to the Premier of Ontario in January 1996 ... estimated that capital investment in new road, sewer and water infrastructure could be reduced from \$55 billion to \$42.8 billion over the next 25 years by adopting a more compact mixed-use development pattern for the region. When capital, operating and maintenance, as well as external costs are taken into account, the Task Force estimated that the annual cost savings of containing urban sprawl would be about \$1 billion. This, it is argued, would reduce the cost burden on governments as well as increasing the economic competitiveness of the city-region in the global market. The subsequent public debate on the recommendations of the Golden report generated little discussion of the collateral benefits that could be obtained through the reduced automobile use that could accompany the more compact mixed-use settlement pattern” (p. 53)</p>
		<p>2PublicSentiments17: “The use of economic instruments, including taxes and fees, to send strong, long-term signals to consumers for reduced automobile use and to manufacturers for sale of more fuel-efficient vehicles, has been the subject of much research and analysis internationally. However, there has been great resistance in North America to the use of fuel taxes for this purpose because of the entrenched cultural values and beliefs of North Americans ... In contrast, the use of such instruments appears to be gaining political support in various European countries, including the United Kingdom, despite the fact that fuel prices in Europe are already two to three times higher than in North America” (p. 56)</p>
		<p>2PublicSentiments18: “Public support for some of the tougher policy instruments that will be needed is weak. Public education regarding the benefits of tough measures can provide support for political</p>

		action” (p. 60)
	National Round Table on the Environment and Economy. (1997). State of the debate: The road to sustainable transportation in Canada. Ottawa, ON.	2PublicSentiments19: “Stakeholders agree that reversing current trends will be extremely difficult because of market forces and consumer behaviours which are entrenched in Canadians’ values and aspirations” (p. 4)
		2PublicSentiments20: “A home in the suburbs remains the choice of many Canadians. In all but one of Canada’s 25 Census Metropolitan Areas (CMAS), the core cities are growing at a much lower rate than their suburbs. The same trend is evident in smaller cities such as Regina, Trois-Rivieres and St. John’s. A first step toward changing this trend would be to increase awareness of the full environmental and financial costs of the decision to live in new, detached dwellings in low-density, single-use areas. At the same time, immediate action is needed by all three levels of government to change the way communities develop in the future” (p. 20)
		2PublicSentiments21: “The national debate on sustainable transportation is in its infancy. While there is a solid body of literature on the severity of the problems and analysis of potential solutions, there is no sense of urgency in the public, and no national consensus on what actions need to be taken. Despite its profound implications for the future, sustainable transportation is not widely debated among Canadians, and ranks lower than jobs, health care, education or national unity as an issue of national attention” (p. 32)
		2PublicSentiments22: “Entrenched societal values and commercial interests, backed up by massive transportation and urban infrastructure, pose formidable barriers to slowing or reversing the growing use of fossil fuels in transportation in order to reduce air pollution, including greenhouse gases. Achieving sustainable transportation will take decades, and possibly generations” (p. 32)
		2PublicSentiments23: “There is disagreement about the public acceptability of moving future urban development towards more compact, mixed use. Opponents of intensification within core urban areas believe that it results in increased crime, devaluation of property and a general loss in the quality of life. Other voices argue that governments can no longer afford the infrastructural costs associated with sprawl, and that more liveable, economically efficient, environmentally sustainable and socially inclusive communities can be developed, or redeveloped, over the long term, using well-designed, compact urban form. The use of fuel taxes to modify consumer behaviour is controversial. Advocates argue that fuel taxes are among the most efficient and effective means of modifying market behaviours, in that they affect the broadest range of decisions made by individuals and businesses. Opponents argue that fuel taxes could prove to be economically disruptive and regressive, that Canada’s fuel taxes are already far higher than those in the United States and, given the relative inelasticity of transportation demand with respect to fuel price, that large fuel tax increases would be required to produce substantial changes in market behaviour” (p. 33)

		<p>2PublicSentiments24: “Some argue that fiscal pressures on provinces and municipalities provide an opportunity for motivating decision makers to invest in ‘least societal cost’ transportation systems, by carefully evaluating the merits of alternative transportation solutions – for example, road versus public transit, or intermodal versus truck movement of goods. Others contend that established patterns of decision-making will not necessarily change in an era of tighter budgets” (p. 34)</p>
		<p>2PublicSentiments25: “Opinions differ about the potential economic impacts of policies favouring expanded use of lower energy modes - for example, public transit rather than increased automobile use or intermodal over trucking. Some argue that serious economic harm could result from measures aimed at constraining road-vehicle use. Others cite research suggesting that the economic impacts of shifts to lower energy-consuming modes and the more selective use of cars, trucks and aircraft could actually provide net economic benefits” (p. 34)</p>
	Transportation Association of Canada. (1997). Financing urban transportation. Ottawa, ON.	<p>2PublicSentiments26: “Federal and provincial deficit reduction programs, decreased transfer payments, the trend to downsizing government, declining tax bases in some areas, and citizen resistance to tax increases are combining to reduce public budgets. At the same time a growing, changing and aging population continues to exert strong demand for social and other services provided by government” (p. 2)</p>
	Transportation Association of Canada. (2000). Measuring progress: Toward the new vision for urban transportation. Ottawa, ON.	<p>2PublicSentiments27: “Financing transportation expenditures is a major challenge due primarily to reduced transfer payments from provinces and increasing pressure on municipal governments to focus on social and other services. Many urban areas reported continued interest in investigating new sources of revenue for transportation including user charges such as fuel taxes and vehicle registration taxes or parking surcharges dedicated to transportation” (p. 5)</p>
	Kohn, H. (2000). Factors affecting urban transit ridership. Statistics Canada. Ottawa, ON.	<p>2PublicSentiments28: “Many have postulated reasons for the decline in the early nineties: increased suburbanization leading to an increase in automobile usage; lower perceived operating costs of the automobile; a preference for the convenience of the automobile; increasing fares, decreasing subsidies, an aging population with a preference for the comfort and security of personal transportation; and varying levels of public support for urban transit across jurisdictions” (p. 2)</p>
	IBI Group and Soberman, R. (2001). National Vision for Urban Transit to 2020. Transport Canada. Ottawa, ON.	<p>2PublicSentiments29: “A variety of arguments can be raised in support of developing a national vision for urban transit, some of which, of course, are posed by constituencies such as national organizations that see a “national vision” as justification for federal financial aid. Others may simply argue that the majority of Canadians live in urbanized areas and that the federal government has an implicit obligation to look at urban transportation to ensure national goals are met” (p. 66)</p>
		<p>2PublicSentiments30: “Policy and decision-makers need to understand that there is no simple, one-stop solution to improving the transportation problems that face our urban areas. The report must clearly indicate that an overall strategy needs to be developed that reflects action on a number of fronts.</p>

		<p>Having said this, there is a great deal of information that should assist those new to transit/ transportation about some of the key issues facing transit, and the number of factors that interact to influence the demand for transit services” (p. 90)</p>
	<p>Flemming, B., Patenaude, J. Findlay, G., Rae, R., and Waters II, W. (2001). Vision and Balance: Report of the Canadian Transportation Act Review Panel. Canadian Transportation Act Review Panel. Ottawa, ON.</p>	<p>2PublicSentiments31: “Walking, biking and using public transit could replace some urban mobility, reducing congestion and environmental impacts. Buses, and potentially trains, could replace some intercity car (and aircraft) use, again with less environmental impact ... Some road use might be avoided relatively easily, without switching modes, by combining car trips ... The fact that Canadians are not adopting these alternatives to a greater extent – especially when they would often be cheaper in terms of out-of-pocket costs – shows how much users value the service qualities they get from cars and trucks: speed, convenience, flexibility, reliability and comfort. But it also reflects the fact that road users do not have to cover the whole cost of road use, because of the way governments fund road infrastructure, and because most users do not have to deal personally with some of the unwelcome social effects. If they had to do so – if road users were charged directly on each trip for the cost of maintaining the road network, as well as for the costs of congestion, environmental damage and accident risks that their road use imposes on others – it seems likely that their choices would change and more of the alternatives would be used. This possibility poses crucial policy issues for governments at all levels” (p. 180)</p> <p>2PublicSentiments32: “The current status of urban transit reflects a mutual agreement that transit is a necessary exception to general policies of user pay, that services are essential and worth their large subsidies, and that their delivery by government is appropriate. At issue for the Panel was how the principles of an integrated national transport policy could be extended to guide future transit decisions and what their implications might be” (p. 216)</p> <p>2PublicSentiments33: “Transit operators and advocates told the Panel they are confident that ridership can be increased through expanded service, particularly investment in light rail or dedicated busways. They argue for lower fares, through increased subsidies, specifically proposing a federal tax exemption for employer-provided transit passes, to match the treatment of employer-provided parking (which is technically a taxable benefit, but usually not enforced as such). They also advocate direct federal participation in transit funding” (p. 220-221)</p> <p>2PublicSentiments34: “Transit operators ... now argue for a much larger federal commitment, solely to transit. They suggest the government should share routinely in funding transit capital, by dedicating revenues from road fuel taxes. U.S. federal assistance provides a model, they suggest: US\$6-7 billion a year (20% of revenues from fuel taxes and vehicle fees dedicated to the Highway Trust Fund), is being allocated to transit capital investments. Canadian operators propose a range of 2 to 4 cents/L, which at current fuel consumption rates would raise revenues of about \$1-2 billion annually” (p. 221)</p>

		<p>2PublicSentiments35: “Commuter authorities’ main concern was their lack of a right of access to federal railway lines in urban areas. TransLink, supported by CUTA on behalf of its members, recommended amendments to the Canada Transportation Act to provide for shared use of active rail rights of way by light rail transit, with suitable safety requirements and oversight provisions similar to those for conventional commuter rail, provide for access to rail rights of way for urban transit infrastructure where this is possible without undue interference with railway operations, and to designate urban rail corridors as general transportation corridors” (p. 233)</p>
--	--	---

Table 16: Third-era (documents from 2002-2015) codes applied during the thematic coding process.

<p>3rd Era Paradigms</p>	<p>Prime Minister’s Caucus Task Force on Urban Issues. (2002). Canada’s Urban Strategy: A Blueprint for Action. Ottawa, ON.</p>	<p>3Paradigms1: “We agree with the assessment that if we do not act now, the opportunity for change will be lost. The options for action being debated range from restructuring the constitution to provide more autonomy for cities to developing new means and new fiscal tools to serve municipalities. At the core of the debate is the relationship between and among federal, provincial and municipal governments and how to develop opportunities to strengthen these partnerships. The significant presence of the Government of Canada in urban regions is a major factor in this equation and key to its success” (p. v)</p>
		<p>3Paradigms2: “To build world-class, competitive urban regions, all orders of government must invest in multi-modal transit systems. Canada is the only G7 country without a national transit investment program. Keeping pace with demand will require a commitment to transit infrastructure from all orders of government” (p. 15)</p>
	<p>Transport Canada. (2002). Urban transit in Canada: Taking stock. Ottawa, ON.</p>	<p>3Paradigms3: “Provincial government contributions to capital funding of transit are in decline. To account for this, higher fares have covered a larger portion of expenses, new funding sources such as regional gas taxes in British Columbia have been introduced” (p. 4)</p>
		<p>3Paradigms4: “A significant difference between [mid-sized cities] and the three large urban areas is that only about one third of the projects identified have already been planned and budgeted for, compared with more than half ... in the larger regions. While there are no absolute data available to explain this difference it is likely the result of two factors: 1) Two of the three large urban regions (Montreal and Vancouver) have access to alternative funding sources providing them with a significantly more stable funding environment. 2) Only three of the nine mid-to-large sized urban areas have extensive, high quality rapid transit facilities. The remaining six areas view some form of rapid transit in the future as the only way of achieving their local visions. However, they are not in a position to fund a major program. This compares with the large urban areas where the projects are largely additions to the existing system rather than completely new endeavours” (p. 7-8)</p>
		<p>3Paradigms5: “Fare revenue from transit users in the National Vision scenario is assumed to grow from an annual amount of \$1.8 billion today to \$2.7 billion in the future. The difference between this future</p>

		<p>revenue and the future total annual operating costs of \$4.1 billion is \$1.4 billion (compared with a gap of \$1.1 billion today). Thus, the potential gap in operating cost funding under the National Vision, would be approximately \$300 million annually. This operating funding gap essentially reflects the additional funds ... required to pay for the extra peak period service necessary to allow transit to compete effectively with the automobile” (p. 10)</p>
		<p>3Paradigms6: “The availability of long-term sustained and guaranteed funding support for transit agencies would provide the agencies with the ability to plan and commit to vehicle purchases in a stable and predictable environment. This would, in turn, allow equipment manufacturers to invest in their production capability to meet the needs of an expanded market” (p. 10)</p>
		<p>3Paradigms7: “Canada’s escalating urbanization and increasing international attention to global warming and sustainable living have raised the Federal Government’s interest in becoming involved with urban transit. This commitment comes at a time when provincial funding of the transit industry has decreased to levels that, in many provinces, are not considered sustainable. Recently, federal support for urban transit has been highlighted in the Speech From the Throne, recommendations by the Federation of Canadian Municipalities, the National Climate Change Program, as well as the Federal Budget, which has benchmarked significant funds towards programs for which urban transit qualifies” (p. 11)</p>
		<p>3Paradigms8: “Fluctuation in timing for bus purchases is a function of availability and the ability to provide funding. If anything, it has not been consistent over the past 10 years, which has the by-product of making it difficult for Canadian bus manufacturers to manage their businesses” (p. 32)</p>
		<p>3Paradigms9: “Operating expenses are paid for by operating revenues ... municipal funding, provincial funding and other sources, which might include a gas tax allocation, as is the case in British Columbia and Alberta. [From 1992-2000], operating revenues have increased slightly, while provincial funding decreased to almost non-existence by 1999 ... Municipal funding has stayed fairly constant, and other funding sources have increased ... Debt servicing [has fluctuated, reflecting] operating or capital expenses not fully covered in previous years” (p. 50-51)</p>
		<p>3Paradigms10: “Similar to operating funding, capital funding from the provincial governments has experienced a general downwards trend. Unlike operating funding, the difference has had to be made up entirely by municipal contributions, which have risen steadily in response to the declining provincial funding” (p. 52)</p>
		<p>3Paradigms11: “Through the analysis and discussion presented in this chapter, a number of issues, or pressure points, for the Canadian transit industry are evident: 1. There is a significant gap between current capital funding and future needs to accommodate significant growth in transit ridership, as set out in the National Vision of almost \$1.4 billion annually; 2. Significant positive progress must be made</p>

		by all governments, transit agencies and industries on the elements that influence transit ridership; 3. The best opportunities for reducing operating costs in real terms will require investment in a wide variety of information technologies that provide more information and better service at a lower per passenger cost; 4. The incentive for transit agencies to implement so-called “green” technologies on a large scale is limited because of the added cost and the fact that improved conventional technologies meet environmental standards. The most effective strategy in reducing green house gases is for all governments to pull together in programs which will see people shift from their private cars to public transit; 5. All transit agencies, regardless of size need financial assistance (new funding) for the rehabilitation and replacement of their fleets; 6. All transit agencies in Canada need new sources of funding to meet the requirements for new and expanded service as set out in the National Vision: 7. The twelve largest urban regions in Canada need financial assistance (new funding) in order to implement transit infrastructure to accommodate growth in ridership, improve reliability and maintain or improve running speed” (p. 90)
	Transportation Association of Canada. (2003). Urban transit: An essential factor. Paper prepared for presentation at the opening session of the 2003 Annual Conference of the Transportation Association of Canada. St. John’s, Newfoundland and Labrador.	<p>3Paradigms12: “Two major reasons for the lack of the required transportation investment integrated with land use development are identified: 1. Insufficient funding; and 2. Fragmented planning and implementation of transportation and related land use” (p. 2)</p> <p>3Paradigms13: “The importance of transportation improvements to reduce pollution and contribute to better health and to use resources efficiently (e.g., land, energy) is less in smaller CMAs than in larger metropolitan areas. However, the major benefit of providing safe, convenient service and a people-friendly ambience (e.g., low levels of noise, vibration and dust) is seen as equally important for both CMA size groups. Similarly, while for some smaller CMAs it may be less important to make transportation changes to shape and support smart growth and to move people and goods more efficiently, it is seen as essential for both size groups that transportation improvements be provided in order to attract and retain investments, jobs and income” (p. 4)</p>
	Transport Canada. (2003). Straight Ahead: A Vision for Transportation in Canada. Ottawa, ON.	3Paradigms14: “Both the road system and the urban transit system, arguably the backbone of Canadian transportation and the primary means of linking communities and activities throughout the country, have been left largely untouched by [reforms for more commercial decision-making and responsive governance structures]. The CTA Review Panel noted many challenges in the future provision of adequate road infrastructure and urban transit systems. In particular, the Panel identified several factors that undermine the health of current systems: the growth of traffic, high unit transit cost, the need for a practical approach to ensure sustained funding, the lack of an effective pricing regime, and uncertainties about the total cost of road transportation” (p. 52)
	Transport Canada. (2004). Review of international urban	3Paradigms15: “Beginning in the 1990s, issues global in scope, but local in scale began to confront Canada and its policy makers. Gridlock and congestion, municipal financial capacity, adequate affordable

<p>transportation policy frameworks, strategies and governance models. Metropolitan Knowledge International. Toronto, ON.</p>	<p>housing, and strategic infrastructure investment rose to the national stage. Other countries and cities around the world began to market themselves and compete for business using local 'quality of life' indicators, creating a new link between economic competitiveness and urban conditions. In Canada in 2004, the 'new deal for communities' discourse is part of the federal lexicon, and sustainable urban transportation in particular is a key area of national interest" (p. 4)</p>
	<p>3Paradigms16: "All countries have a number of urban transportation infrastructure programs that fund road and highway capital projects; by contrast public transit needs, as well as all urban transportation maintenance needs are not funded by all of the survey countries' governments" (p. 17)</p>
	<p>3Paradigms17: "A recognition of the need to co-ordinate land use and transportation principles has emerged in all survey countries, and receives at least minimal attention in urban transportation policy in all countries. The extent to which this objective is given policy teeth varies from country to country, but the tools to achieve land use goals are particularly strong in the UK and (somewhat surprisingly) in the United States, where TEA-21 incorporates a number of land use requirements. Conflicts have emerged where national-level transportation policy and local-level planning policy are not in tune, a situation that makes this connection a potentially problematic one in Canada" (p. 56)</p>
	<p>3Paradigms18: "A more extensive and influential policy linkage exists between environmental policy (usually referred to as 'sustainability') and transportation policy. All survey countries now include 'sustainability' as a key policy component and recognize a need for a national initiative to reduce the environmental impacts of transportation, by addressing specific issues such as vehicle emissions. Canada probably leads, or at least matches, the other survey countries in the extent to which this policy link is being executed through various programs" (p. 56)</p>
	<p>3Paradigms19: "In general, it is apparent that the success of national transportation policy often depends on its ability to adapt to local context and competing policy interests. Even in the UK, a relatively centralized state, it is clear that local-level interests often successfully challenge national interests in executing a transportation agenda. The experience of some of In states with highly decentralized (i.e. strong local) levels of government, this need is the survey countries suggests that the success of a national transportation strategy hinges, to some extent, on its ability to integrate successfully with other levels of government and respond to the unique requirements of the local context in which transportation projects occur. In states with highly decentralized (i.e. strong local) levels of government, this need is considerably stronger" (p. 56)</p>
<p>Transport Canada. (2005). Case Study 32: Urban transportation pricing options. Urban</p>	<p>3Paradigms20: "There has been much study and discussion of urban transportation pricing opportunities in Canada, but little movement to take advantage of them. Progress in pricing beyond the realms of transit and municipal parking has been limited by the presence of legislative, regulatory, technical and cultural barriers" (p. 1)</p>

	Transportation Showcase Program. Case Studies in Urban Transportation. Ottawa, ON.	
	Transport Canada. (2005). Case Study 34: Monitoring progress toward sustainable transportation. Urban Transportation Showcase Program, Case Studies in Urban Transportation. Ottawa, ON.	3Paradigms21: “Canadian urban areas are becoming more strategic in their approaches to planning for sustainability. Transportation plans are growing more sophisticated and far-reaching as they increasingly tackle the linkages between transportation and other key quality of life issues (e.g. land use, environmental and public health, economic growth, access to opportunity). However, the success of these long-range plans will depend in part, on efforts to monitor relevant conditions, actions and their impacts. Cities that remain aware of their progress toward key objectives can modify their plans, and add or delete priorities as needed. This will foster a continuous understanding of successes, failures, new opportunities and emerging challenges” (p. 1)
	Urban Transportation Task Force. (2005). Urban transportation in Canada: Needs and opportunities. Council of Ministers Responsible for Transportation and Highway Safety.	<p>3Paradigms22: “The federal government has committed to provide new funding through its ‘New Deal’ for cities and communities, funded in part by sharing federal gas taxes. It is an important principle from the federal perspective that provincial/territorial governments not reduce their funding to municipalities as a consequence of that federal investment. It is recognized that funding decisions for the “New Deal” will be the product of an intergovernmental negotiation that involves many ministries and departments at both the provincial and federal levels. The emphasis, regardless of mechanism, must be on securing reliable, long-term, net new revenue sources adequate to meet the growing needs in urban areas” (p. 2)</p> <p>3Paradigms23: “[Canada’s public transit] vehicle fleet ... averages 11 years old, compared to the ... recommended average fleet age of 6 to 9 years. At the extreme, in some cases buses are pressed into service at 25 years of age and subway cars in Montréal and Toronto have been in service since the 60s. The delivery of transit services in a reliable, efficient and effective manner, which is necessary to ensure they are a viable alternative to the automobile, is greatly challenged by the age of the system” (p. 5)</p> <p>3Paradigms24: “Lower density land use and the sprawl of residential zones and places of employment fosters increased automobile use, complicates management of public transit services, accentuates infrastructure needs and limits the potential of certain alternative modes, such as walking and cycling. Sustainable land-use planning and development approaches could limit sprawl and its effect on urban areas” (p. 5)</p> <p>3Paradigms25: “Large urban centres experience major congestion and gridlock, causing delay, increased energy consumption and air pollution. The economic and environmental consequences of congestion are high, estimated at several hundred million dollars to \$2 billion annually in some urban centres ... The modern economy relies on its workforce and on ‘just-in-time’ production. Urban congestion has a substantial negative impact on the competitiveness of Canadian urban centres and Canada as a whole”</p>

		<p>(p. 5)</p> <p>3Paradigms26: “In the jurisdictions with the largest cities, the investment required is much larger than in jurisdictions with smaller cities. For example, in Ontario, investment required in just the next four years to maintain, renew and expand transit infrastructure, rolling stock and technology will exceed \$10 billion. In New Brunswick, investment needed in transit is estimated to be nearly \$39 million over the next ten years. There, the primary investment needs are replacement of buses and maintenance of transit infrastructure such as garages and bus stop locations with some additional funding required for advanced technology traveler information systems. While there is an order of magnitude difference in dollar value, in proportion to the current resources of the jurisdictions, the needs are similarly significant. Furthermore, the impact of the investment is expected to be important from an economic support and development perspective, regardless of the size of the need or the jurisdiction” (p. 13)</p>
	<p>Transport Canada. (2006). An evaluation of Transport Canada’s Moving On Sustainable Transportation Program. Departmental Evaluation Services. Ottawa, ON.</p>	<p>3Paradigms27: “There is a legitimate and necessary role for government in the MOST Program. It is the only Canadian federal contribution program that is dedicated to providing contributions for sustainable transportation projects. Additionally, federal involvement in these types of projects is viewed by MOST funding recipients as a stable source of funding, which has been used as leverage to obtain additional funding from other partners” (p. ii)</p> <p>3Paradigms28: “It is difficult to determine the extent to which the MOST Program as a whole realizes quantifiable results for TC’s sustainable development priorities. An examination of the three case studies suggests that there are projects that have realized some quantitative environmental and sustainable development results. However, in other cases, the objectives of the projects do not intend to lead to quantitative results” (p. 13)</p>
	<p>Urban Transportation Task Force. (2009). Urban transit in Canada: Taking stock of recent progress. Council of Ministers Responsible for Transportation and Highway Safety.</p>	<p>3Paradigms29: “Greater interest in transit over the last few years has translated into increased funding, new and expanded transit systems, and growth in ridership. There is widespread agreement that investing in public transit produces measurable economic, social, and environmental benefits. New governance models and long range transit expansion plans are being put in place and all indications are that much more will be accomplished in the near future. Especially noteworthy are substantial new transit funding partnerships among Canada’s municipalities, provincial/territorial, and federal governments. The state of transit funding has changed dramatically in recent years” (p. 3)</p> <p>3Paradigms30: “The population of major urban centres continues to increase, usually in municipalities on the periphery of CMAs. Employment is growing faster in the peripheral areas than in the central municipalities of CMAs. These conditions exacerbate the pressures on urban transportation networks and make the delivery of effective and efficient transit systems more difficult. There is a growing need for transit to operate within suburban areas, from suburban areas to central areas, and between suburban areas. Smart planning is required to manage these patterns and pressures” (p. 4)</p>

		<p>3Paradigms31: “In 2005, aging transportation infrastructure and a lack of funding were widely recognized as key issues for federal, provincial/territorial, and municipal governments. With recent funding commitments made by all levels of government, progress is being made towards addressing the requirements for new and improved transportation facilities and services. However, it will take time to launch all the necessary projects and costs have continued to rise, leaving an infrastructure challenge to contend with for some time” (p. 5)</p>
		<p>3Paradigms32: “Traffic congestion has a substantial negative impact on Canada’s economic competitiveness. For example, in 2006, traffic congestion cost the Greater Toronto and Hamilton Area (GTHA) \$6 billion in travel delays and lost investment. By 2031, three million car trips (compared to the current two million) will be made during the weekday morning commute and the costs to the area are estimated to be \$15 billion in travel delays and lost investment.⁶ Easing gridlock and improving the movement of people and goods through Canada’s urban centres can be furthered by investing in transit” (p. 5)</p>
		<p>3Paradigms33: “Greenhouse gas (GHG) emissions from transportation are significant, accounting for almost 27% of Canada’s GHG emissions in 2006. The need to address these issues was noted in 2005 and has grown in importance since that time. Many jurisdictions have developed climate change action plans and sustainability objectives. Transit plays a key role in meeting such objectives” (p. 6)</p>
		<p>3Paradigms34: “Over several months in 2008, sharp increases in fuel costs captured the nation’s attention, raising concerns about fuel dependence and raising the awareness – and attractiveness – of alternatives to the automobile, such as public transit and active modes of transportation. Transit ridership increased as fuel prices rose” (p. 6)</p>
		<p>3Paradigms35: “The state of the economy in Canada, the United States, and around the world became one of the foremost issues for governments in 2008-09. Investments in transportation infrastructure and transit specifically are viewed as valuable contributions to economic activity in the long term and as effective forms of economic stimulus and job creation in the shorter term, while playing a key role in long-term sustainability objectives ... While most major urban centres in Canada are experiencing population growth, some smaller communities are suffering population losses. Transit can be critical to maintaining viable and liveable smaller communities, often providing a much needed transportation option for all residents, but particularly for the elderly and low income residents” (p. 6)</p>

		<p>3Paradigms36: “The 2009 federal budget also included several legislative and regulatory amendments that would ensure a more efficient approval of projects under the Building Canada plan and other funding initiatives. For projects requiring federal environmental assessment decisions, regulations could allow one environmental assessment process to meet both federal and provincial/territorial requirements, by agreement with the provinces and territories. With these changes, it is expected that the time needed to provide federal approvals for major projects could be shortened by up to 12 months” (p. 19)</p>
		<p>3Paradigms37: “That the need is even greater than originally projected in the 2005 report is a reflection of many factors, including: growing demand for transit services in both large urban centres and in smaller communities; with growing demand, some transit systems are reaching capacity and need to expand operations; [and] continuing need to maintain and renew transit infrastructure and fleets” (p. 21)</p>
		<p>3Paradigms38: “The transit investments made to date have produced direct and indirect impacts that have begun to pay off and will continue to do so into the future. But recent successes of increased investments have spawned even greater demand for transit services. Capacity is being reached in some systems, and they must improve and expand operations in order to accommodate growing populations and growing economies. Smaller communities that may not yet have transit systems see its benefits and are exploring the addition of new services. Municipal plans predicated on environmental sustainability are building on transit services to help meet such objectives” (p. 26)</p>
	<p>Urban Transit Task Force. (2010). Recent developments in transit in Canadian cities: Report of the Urban Transit Task Force to the Ministers of Transportation. Council of Ministers Responsible for Transportation and Highway Safety.</p>	<p>3Paradigms39: “The previous report noted exceptional levels of investment in transit by the provincial, municipal, and federal governments in the period 2005 to 2007. From 2007 to 2008, Canadian provinces and municipalities increased their contribution to both operating and capital funding. One way to measure operating contributions by governments is to look at ‘net operating revenues,’ which exclude passenger fares from total operating revenues. In 2008 Canadian municipalities contributed 62.7% of net operating revenues, or a 4.2% increase from 2007. Provincial governments contributed 29% of net operating revenues, a 20% increase over the previous year. In 2008 municipal capital contributions amounted to 18% of total capital costs, while provinces increased their capital contributions by 39.0%, representing 59% of total capital cost. Meanwhile, federal capital contributions as a percentage of total capital investment decreased from 25% to 20%” (p. 5)</p>
		<p>3Paradigms40: “Transit funding varies greatly from one province to another. For example, the Atlantic provinces rely on fare revenues and municipal funding as the sole sources for operating funding. All other provinces have established programs to contribute to operating costs. The federal government does not provide funding to support transit operations” (p. 6)</p>
		<p>3Paradigms41: “The thrust of developments since 2003-07 continued in 2008-09, with growth in</p>

		<p>ridership and service, upgrades of fleets, and greater investments in capital and operating costs by all levels of government. Current expansion projects for public transit systems will contribute to healthy ridership gains in the upcoming years, as suggested by preliminary ridership numbers for 2010 from Canada's 10 biggest transit systems. Transit agencies are using technology and pooling their buying power to improve service and reduce costs. But some signs of slower growth were also evident in the latest data. When full data becomes available for 2009 and 2010, we can expect to see slower growth in transit as fiscal restraint replaces fiscal stimulus as government policy across the country. The end of federal infrastructure and stimulus programs and of the transit trust funding of 2006 and 2008 may have a significant effect. The Urban Transit Task Force will continue to monitor and report on the status of transit as developments occur" (p. 13)</p>
	<p>Ruffilli, D. (2010). Federal support for bus rapid transit and light rail transit systems in Canada. Library of Parliament. Industry, Infrastructure, and Resources Division. Parliamentary Information and Research Service. Ottawa, ON.</p>	<p>3Paradigms42: "At the core of current discussions in several Canadian cities over the future direction of their public transit systems is a debate over the relative merits of BRT and LRT. This debate is fuelled by passionate proponents of both technologies and often clouded by inaccurate perceptions of the cost and nature of BRT and LRT systems. Indeed, BRT and LRT share many common advantages: they connect communities rapidly and reliably; they can reduce gridlock and improve mobility, particularly for lower-income residents; they can be designed to remove barriers for people with mobility impairments by ensuring that stations, platforms and vehicles are fully accessible; and they can reduce emissions, both through the displacement of car traffic as drivers shift to public transit and the use of lower-emissions transit technology (i.e., electricity for LRT, and hybrid, alternative fuel or electric trolley technology for BRT)" (p. 3)</p> <p>3Paradigms43: "Public transit in Canada is normally provided by municipal governments, although in some cases, such as Metrolinx in Ontario and BC Transit in British Columbia, certain public transit services are provided on a regional basis by the provincial government. To provide federal support to public transit systems across the country, in recent years the Government of Canada has established a range of funding programs, many of which are cost-shared with provincial/territorial and local governments. In fact, since the Infrastructure Canada Program of the late 1990s, most federal infrastructure funding programs have included public transit as an eligible category of investment" (p. 6)</p> <p>3Paradigms44: "The Government of Canada, in partnership with provincial/territorial and local governments, is supporting several rapid transit projects through the Building Canada Fund and the Infrastructure Stimulus Fund as well as the Gas Tax Fund. The federal government states that it invests in public transit through these programs to support its priorities of 'a growing economy, a clean environment and safe and prosperous communities.' As the cost of developing rapid transit systems is generally beyond the capacity of Canadian municipalities, implementing BRT and LRT projects currently in the planning stages will depend largely on continued federal and provincial infrastructure funding to</p>

	<p>Ministry of Finance. (2011). Evaluation of the Public Transit Tax Credit. Ottawa, ON.</p>	<p>local governments” (p. 9)</p> <p>3Paradigms45: “Public transit users are sensitive to a permanent change in price, and that the responsiveness increases with time. The longer a price adjustment is in effect, the greater will be the response of transit users. This finding is key to the assessment of the PTTC as it suggests that the effectiveness of the credit should increase over time as individuals take into account the price reduction due to the credit when making their long-term decisions (such as where to live or whether to buy an automobile)” (p. 16)</p> <p>3Paradigms46: “Data show that public transit fares grew at a steady pace in Canada [from 1995-2010], averaging about 3.8% per year. There were no marked price increases following the introduction of the PTTC: the average annual growth rate in public transit CPI from 2006 to 2010 was 4.0%, slightly higher than the long-term growth rate” (p. 16-17)</p> <p>3Paradigms47: “Economic conditions, in particular employment, are key determinants of the demand for public transit. A primary reason for using public transit on a regular basis is to commute to work. The deterioration in employment typically observed during depressed economic periods will therefore translate into reduced use of public transit” (p. 19)</p> <p>3Paradigms48: “[High] levels of spending would be expected to translate into significantly better transit networks and increased quality of service ... The second half of the past decade was marked by a significant renewal of bus fleets (the average bus age decreased by 32% from 2005 to 2010, compared to less than 9% from 2000 to 2005) and major increases in the per-capita total hours of operation of all vehicles (an increase of almost 16% from 2005 to 2010 compared to 1.2% from 2000 to 2005). The average speed of vehicles in service has not improved over the past decade. However, it is not clear what this indicates for the quality of service. For example, it could reflect an increase in the number of routes that are in urban centres relative to suburban or rural zones, rather than a lack of improvement in commuting time” (p. 22)</p> <p>3Paradigms49: “There is evidence that the key conditions for the credit to be effective are present: econometric studies indicate that public transit users are responsive to a permanent change in fares, and data on the price of public transit indicate that the benefits of the PTTC appear to be captured by the target population. It is expected that the effectiveness of the credit will increase as time passes and individuals continue to include it as a consideration in their long-term decisions regarding their transportation options. Recent trends in ridership could suggest that the PTTC has had an impact on public transit use. However, factors such as economic conditions, the cost of alternative modes of transportation, the quality of public transit service, population aging, urbanization and environmental awareness can also affect the demand for public transit. A multivariate analysis over a prolonged period of time could help separate the effect of the PTTC from these factors, but this would remain a complex</p>
--	---	---

		task. Such an analysis is not possible at this time given that the PTTC was introduced in July 2006, which provides for only a few years of observations” (p. 24)
	Infrastructure Canada (2012). Infrastructure spotlight: Improving public transit for the 21 st century. Ottawa, ON.	<p>3Paradigms50: “Effective public transit systems also help reduce urban traffic congestion and the cost of gridlock to our cities’ economic competitiveness. Traffic gridlock means increased fuel consumption and air pollution, more public health issues, higher costs from traffic accidents, increased greenhouse gas emissions, and productivity losses. In fact, a national study from Transport Canada¹ found that congestion in urban areas could cost Canadians as much as \$ 4.6 billion per year” (p. 2)</p> <p>3Paradigms51: “The current level of federal investments in transit infrastructure is unprecedented. Since 2006, the Government of Canada has committed close to \$5 billion to provinces and municipalities across the country for public transit projects that they have identified as priorities. At no other time has the Government of Canada made such substantial investments in transit systems. This has not only helped build better transit – it’s also built strong partnerships among all levels of government and key stakeholders, and created momentum for increased public transit investments. These coordinated efforts have meant tangible improvements to public transit all over Canada, such as new and expanded transit systems, larger fleet sizes with more accessible vehicles and the capacity to handle increasing ridership. Furthermore, CUTA reports that over the past decade, existing federal, provincial and municipal funding programs have increasingly been able to cover the expansion and renewal needs of the country’s transit systems. The result: more and more Canadians across the country can count on modern, efficient and attractive transit systems in their community” (p. 5)</p>
	Transportation Association of Canada. (2012). Sustainable funding for urban/regional transportation in Canada. TAC Briefing. Ottawa, ON.	<p>3Paradigms52: “Particularly during the past two or three decades, a number of factors have resulted in chronic underinvestment in urban and regional transportation. This has led to an increasing backlog of deferred maintenance, service cut-backs, deteriorating facilities, and growing congestion/crowding as transportation demands continue to outstrip supply in most Canadian cities” (p. 2)</p> <p>3Paradigms53: “The emphasis in some cases on capital funding that is unmatched with a comparable increase in funding of operations-related expenditures can lead to suboptimal infrastructure decisions (e.g. over-building of capital-intensive transit modes when not justified by ridership forecasts, because the capital funding is available and because they offer significantly lower annual operating costs). Opportunities to defer infrastructure expansion, through strategies such as peak spreading, are largely exhausted. Commuters – particularly in larger metropolitan areas – have been shifting their trip start and finish times where feasible and peak periods are spreading and intensifying. Average trip times have also approached or exceeded the levels of other major cities in the world, such that our cities’ ability to attract or accommodate growth is at risk” (p. 2)</p> <p>3Paradigms54: “Total transit infrastructure needs for the next five years are valued at \$53.5 billion, including \$12.8 billion (24%) to rehabilitate or renew infrastructure and \$40.7 billion (76%) to expand</p>

		service to meet the growing mobility needs of the Canadian population. Of total infrastructure needs, only \$35.9 billion (72%) can be met by existing funding programs – leaving a funding gap of almost \$18 billion (28%). Meeting this capital investment gap of \$3-4 billion per year over the next five years will require additional funding programs” (p. 4)
	Tweed, Mervin . (2012). Study on transit in Canada: report of the Standing Committee on Transport, Infrastructure and Communities. House of Commons of Canada Standing Committee on Transport, Infrastructure and Communities. Ottawa, ON.	<p>3Paradigms55: “No transit system in Canada, or virtually anywhere in the world, can exist without substantial government subsidies.²⁷ Despite the fact that Canada has one of the highest average revenue to cost ratio in the G8 (at around 60%), municipal and provincial governments must make up shortfalls in operating and maintenance costs and all levels of government are needed to make capital investments possible. Some provinces, such as British Columbia, Manitoba, Ontario, Nova Scotia and Quebec, provide operating as well as capital funding for transit services; in other provinces and territories, municipalities must cover net operating and maintenance costs. The willingness of all orders of government to subsidize transit reflects the generally held view that the combined transportation, economic, environmental and social benefits from the service are important and justify the subsidy” (p. 5)</p> <p>3Paradigms56: “Federal contributions to transit have amounted to nearly \$1 billion annually in recent years and have leveraged even greater annual investments from other governments because of the cost-sharing nature of the programs. In total, some \$13 billion has been invested in transit initiatives since 2006” (p. 6)</p> <p>3Paradigms57: “According to Infrastructure Canada, the Government of Canada has focused capital investments in transit projects that demonstrate positive outcomes in areas such as: mobility and congestion; access to transit; transit ridership; transit modal share; travel times; safety and security for passengers and other transportation users; operational efficiency; air emissions and greenhouse gases; and, implementation of transit-oriented development” (p. 6-7)</p>
	Transport Canada. (2012). Improving bus services: Modest investments to increase transit ridership. Gris Orange Consultant. Ottawa, ON.	3Paradigms58: “Many Canadian communities have taken actions to improve the sustainability of their urban systems and reshape their transportation systems to address congestion issues, respond to their community needs and provide travelers and commuters with convenient, reliable, clean, safe, and sustainable transportation options. In this attempt, Transportation Demand Management (TDM) strategies have gained momentum over the past decades. TDM is based on the idea that there is an increasing need to manage mobility and not just providing more mobility options” (p. 5)
3rd Era Programs	Paul Martin. (2002). Speech by the Honourable Paul Martin, Minister of Finance for Canada, to members of the Federation of Canadian	3Programs1: “It has been suggested ... that a specific tax source be dedicated to municipalities by the federal and provincial governments, or that the federal and provincial governments vacate existing tax room to create a revenue source for municipalities. Now, the federal government has always been wary of dedicated taxes – arguing that such ties make it very difficult, if not impossible, to respond to changing circumstances. So I’m a skeptic, but I also recognize that it is a plain fact that municipalities

	Municipalities. Hamilton, ON.	have inadequate revenue sources as things stand – and I’ve said we need to be open to considering all options” (p. 7)
		3Programs2: “While I have always met with municipal delegations before budgets, the step I am proposing today goes further. In the preparation of future budgets, I have agreed to institute a formal meeting with a group of mayors, assembled by the FCM, for the same kind of working session - and I’d like to have that meeting soon. We’ll roll up our sleeves, just as I do with provincial and territorial finance ministers” (p. 8-9)
	Prime Minister’s Caucus Task Force on Urban Issues. (2002). Canada’s Urban Strategy: A Blueprint for Action. Ottawa, ON.	3Programs3: “The Government of Canada responded to the debate on urban issues on several levels. Within the Privy Council Office, an internal Task Force on Urban Communities was established to develop a profile of the federal presence in urban centres, research into best practices and to explore ways of integrating federal programs. Every federal department is preparing a Sustainable Development Strategy and Environment Canada has created a ‘sustainable development lens’. As well, Industry Canada created a Sustainable Cities Initiative to advance this agenda in Johannesburg and beyond. A Sustainable Development Coordinating Committee was established comprising Deputy Ministers from departments that are responsible for programs related to sustainable development” (p. iv)
		3Programs4: “We congratulate the government for its announced intention to set up a 10-year Infrastructure Program that includes a component for a strategy for a transportation system: within this framework, it will introduce a new strategy for a safe, efficient and environmentally responsible transportation system that will help reduce congestion in our cities and bottlenecks in our trade corridors”. This is an important step towards the recognition of urban transit as an area of long-term national investment” (p. 14)
		3Programs5: “The Task Force recommends the Government of Canada commit to a National Transit/Transportation Program that will: Consolidate current federal transit/transportation programs into a National Transit/Transportation Program; Create further tax incentives to aid the construction and use of public transit; Amend the Income Tax Act to permit employers to provide transit benefits to employees on an income tax exempt status. A personal income tax exemption gives employers the incentive to offer transit benefits to their employees. This in turn, motivates drivers to use public transit; Encourage the expansion of the ‘Ecopass’ and ‘Passe Partout’ Programs, currently a federal pilot program in the National Capital Region, to other federal employees to allow payroll deductions for the purchase of transit passes; Treat employer-provided free parking in large urban centres as a taxable benefit where there is readily accessible public transit. Taxes collected under this method should be dedicated to transit programs; Consider tax incentives to Canadian companies that implement traffic reduction programs such as shuttle services from main transit intersections to places of work; and Invest in a high-speed inter-city rail network with upgraded railway infrastructure, including grade separations

		and traffic control systems. A National Transit/Transportation Program will have specific criteria, performance measures, rigorous evaluation and monitoring of all projects funded under this program” (p. 16)
	Transport Canada. (2002). Urban transit in Canada: Taking stock. Ottawa, ON.	3Programs6: “The National Vision calls for a 50% increase in transit over the next 20 years, with the demand for transit growing faster than the Canadian population ... This would represent a tremendous challenge for all concerned. To even make the attempt would require a systematic assessment of the factors that influence transit demand and a concerted effort to improve and adjust practices and policies related to these factors. For example: Policies that recognize and support transit’s integral role in creating a sustainable transportation system would be needed at all levels of government; Transit priority measures (tools to improve the ... performance of transit vehicles through congested urban streets) would need to be the standard rather than the exception; Policies that allow flexibility of zoning requirements with respect to parking and development intensity adjacent to transit facilities would need to be established by urban municipalities; Policies that facilitate increased urban density would need to be researched, developed and implemented; Policies to integrate transit efficiency and service considerations into land use decisions would be needed at the municipal level; Improvements would be needed to transit service availability and reliability to a level as yet not obtained in Canada; Rapid Transit infrastructure development would be needed to ensure that transit could be competitive, particularly in a congested traffic environment; [and Policies that provide for increased charges for car use such as road tolls, complementary congestion charges, license surcharges and parking surcharges would be needed” (p. 8-9)
		3Programs7: “Two basic types of programs to address the gap [in capital funding for transit] would be needed: 1) Large-scale infrastructure programs geared to the needs of the large transit agencies and residents of the urban areas they serve. Over 70% of capital funding would likely be for rapid transit projects in the three largest urban regions and the nine mid-to-large sized transit systems; [and] Programs to assist with vehicle purchase and small infrastructure projects for all transit agencies” (p. 9)
		3Programs8: “Some forms of service delivery beyond the conventional municipal public transit system could also possibly result in lower operating costs. However, this approach must be carefully studied so as not to disrupt the needed integration of all services in a given urban area. Transit service must be seamless to the user. Experience in other countries such as Australia has shown that quality of service and level of service can be adversely affected by such arrangements it care is not taken to address these issues in an ongoing manner. These Alternate Service Delivery ... options generally involve various degrees of contracting-out different elements of the transit system” (p. 82)
	Transportation Association of Canada. (2003). Urban transit:	3Programs9: “Demand-related, cost-based, reliable, multi-year funding sources are required which will overcome the [transit capital] shortfall and provide a firm basis for achieving improved transportation in

	<p>An essential factor. Paper prepared for presentation at the opening session of the 2003 Annual Conference of the Transportation Association of Canada. St. John's, Newfoundland and Labrador.</p>	<p>the area. Among the possible sources identified are the following: Increased municipal charges including property taxes and development charges; transfers from senior governments; Transportation user fees, based on full costs for fuel, road space, parking, vehicle registrations, etc., with the revenues dedicated to fund transportation improvements. It was concluded that a combination of funding sources will be required while recognizing that there is little or no scope for increased municipal charges and that transfers from senior governments require multi-year continuity and local coordination to be truly effective” (p. 8)</p>
	<p>Transport Canada. (2003). Straight Ahead: A Vision for Transportation in Canada. Ottawa, ON.</p>	<p>3Programs10: “Reliable, multi-year funding is required, at levels which will address existing funding shortfalls such as, for example, those that have been identified for the [GTHA] urban area; and an institutional/governance arrangement is required to achieve integrated planning, funding and delivery of transportation and related land use for the entire urban region. For urban regions involving more than one municipal government, this will require either municipal amalgamation to achieve a single municipal government or (more likely) development of a coordinating Transportation Agency with the necessary planning, funding and delivery powers, working with existing municipal and provincial agencies and transportation providers as well as the private sector” (p. 10)</p> <p>3Programs11: “Preserving surplus rail corridors for subsequent use by urban transit is a potential concern in large urban centres. A railway line that is no longer required for freight service must first be offered for continued railway operations, then to governments for a price no greater than net salvage value (NSV). The government proposes to retain this approach to corridor valuation. Urban transit authorities, which, in some urban areas, serve several municipalities, have no right to receive such offers. In the interests of protecting corridors that may be required for urban transit, the government agrees with the recommendation of the CTA Review Panel to amend the Act to require an offer of sale to urban transit authorities before municipal governments. The current discontinuance provisions do not technically include railway passenger stations, ‘spurs’ or ‘sidings’, some of which are of sufficient length to have potential use for commuter rail. The Government proposes that railways be required to offer these line segments and passenger stations to governments and urban transit authorities before removing them from service” (p. 35)</p> <p>3Programs12: “The government’s interest in investigating alternative governance models for road infrastructure and urban transit should not create an expectation of change in its policy with regard to excise taxation of fuels. Some stakeholders advocate federal spending on highways based on the fact that federal revenue from fuel used in transportation is not returned to the sector, contrasting this with the U.S. government’s dedication of revenues from fuel taxes and user fees to highways, transport infrastructure and urban transit. Federal fuel taxes are an instrument of fiscal, not transportation policy and are an important source of general revenue, used to finance many federal spending priorities,</p>

		<p>including health care, social security and national defence” (p. 53)</p> <p>3Programs13: “Ensuring adequate funding urban transportation is a major challenge for Canadian cities. Urban transportation projects are already eligible for funding under the Canada Strategic Infrastructure Fund, as well as the \$2 billion Infrastructure Canada program announced in 2000. In the Speech from the Throne, the government announced that it will put in place a 10-year program for infrastructure. This program, under the leadership of the Minister Responsible for Infrastructure, will contribute to reducing congestion in our cities” (p. 55)</p> <p>3Programs14: “To promote more sustainable urban transportation systems, transportation planners recommend a combination of options, such as demand management to optimize the use of existing transportation infrastructure, active promotion of alternatives to private vehicle use (such as expansion of infrastructure to permit walking and bicycling) and strategic investments in infrastructure to support urban transit systems. Other investment options include road and rail grade separations ... which can reduce traffic delays and lower ... greenhouse gas emissions, and urban bypasses, which can help diminish congestion in urban centres while contribution to trade and national competitiveness by permitting through traffic to avoid congested areas” (p. 55)</p>
	<p>Transport Canada. (2004). Review of international urban transportation policy frameworks, strategies and governance models. Metropolitan Knowledge International. Toronto, ON.</p>	<p>3Programs15: “The role of the federal government [internationally] in linking land use strategies with transportation planning and funding generally mirrors the degree to which the federal government is involved with local government. In the UK and France the government exercises a relatively high degree of control on broad land use/transportation policy. In the US the involvement is specific to federal objectives but also relates land use and transportation. The Swiss government sets out a land use strategy but only for guidance. In Australia there is little connection between national transportation objectives and state level and use policies” (p. 17)</p> <p>3Programs16: “Funding decisions are always made by multiple levels of government, either through intergovernmental partnerships or through lower levels submitting project proposals and/or transportation budgets. All surveyed countries use a measure of efficiency to evaluate and prioritize project proposals, though cost-recovery is seldom used as a funding criteria” (p. 43)</p> <p>3Programs17: “Urban transportation issues are approached from perspectives that can inform the Canadian context, but must be viewed from wider economic, geographic, and historical-political standpoints. France and Switzerland have constitutional structures and cultural or social differences that make comparison difficult. The United States has a well funded conditional grant structure that offers excellent experiences from which to learn. The UK demonstrates a system with a strong central government dealing directly with local authorities, a model for some discussion, but one that would require constitutional change in Canada. Australia, while most comparable from the perspective of government structure and geography, has not identified urban transportation as a federal issue. New</p>

		<p>Zealand is of a scale that minimizes regional differences and allows for some unique structures for the delivery of urban transportation services” (p. 55)</p> <p>3Programs18: “Funding for capital expenditures on urban transportation is also provided by all national governments to local authorities – though local authorities vary in their powers from near-autonomy (Switzerland) to central government agencies (France). Yet in all survey countries, national governments have a role in determining funding priorities and in distributing capital funds for major infrastructure” (p. 56)</p>
	<p>Transport Canada. (2005). Case Study 32: Urban transportation pricing options. Urban Transportation Showcase Program. Case Studies in Urban Transportation. Ottawa, ON.</p>	<p>3Programs19: “The four major avenues for urban transportation pricing options are vehicle use pricing, road pricing, parking pricing and transit pricing. The many tools that could be applied in each of these areas have clear benefits for urban quality of life, but vary in their feasibility, acceptability, cost, effectiveness, equity and side-effects” (p. 1)</p>
	<p>Transport Canada. (2005). Case Study 34: Monitoring progress toward sustainable transportation. Urban Transportation Showcase Program, Case Studies in Urban Transportation. Ottawa, ON.</p>	<p>3Programs20: “To be useful, objectives should be measurable and reflect a desired change in baseline conditions over a specific timeframe. Even then, the dynamic cause-and-effect relationships among goals, objectives and indicators may not always be explicitly understood or defined, and judgment and intuitive understanding may be needed to interpret monitoring results. For example, one can only approximate the degree to which a drop in transportation energy use is due to transit ridership growth rather than improved auto fuel efficiency, or the degree to which an increase in transit ridership growth is due to improved service levels rather than rising fuel prices” (p. 3)</p>
	<p>Urban Transportation Task Force. (2005). Urban transportation in Canada: Needs and opportunities. Council of Ministers Responsible for Transportation and Highway Safety.</p>	<p>3Programs21: “[Federal transit] funding must be: Long-term, stable and sustainable. These characteristics are necessary to allow jurisdictions to undertake longer term planning and strategic investment in urban areas; Equitable, flexible and balanced. Funding should account for local needs and priorities and new funding should not be at the expense of investment in rural areas; Combined with good governance. Funding should be complemented by a governance structure that ensures coordinated planning with a responsible, accountable, transparent framework for all levels of government and independent transportation authorities” (p. 2)</p> <p>3Programs22: “Individually and collectively, Deputy Ministers of Transportation have elevated urban transportation as an important issue to discuss with a view to finding solutions to urban transportation problems while strengthening federal/provincial/territorial cooperation in this domain. The Council of Deputy Ministers Responsible for Transportation and Highway Safety directed the establishment of a</p>

		<p>Task Force to explore urban transportation issues and exchange information on urban transportation policy matters” (p. 4)</p> <p>3Programs23: “Infrastructure needs exceed the funding capacity of traditional partners – the users, the municipalities and provincial governments. New sources of funding and innovative funding arrangements must be found in order to address the substantial needs within urban areas. The federal government has committed to a ‘New Deal’ for cities and communities that would include new funding and a new partnership with provincial and territorial governments in collaboration with municipal governments. While the details of the deal have yet to be revealed, the Task Force has identified two key considerations that must be resolved in the establishment of a ‘New Deal’. These are funding arrangements and governance matters” (p. 14)</p> <p>3Programs24: “In some provinces, urban transit is the exclusive responsibility of municipalities and fare revenues and municipal funding are the sole sources of transit funding. In other provinces, government support directly targets capital expenditures and operation of services while in other cases the provinces do not systematically pay direct subsidies for capital or operating expenditures, favouring other modes of financing such as unconditional grant allocations. Some provinces also assume direct responsibilities for services. This is the case in Ontario where the provincial government recently took back responsibility for GO (Government of Ontario) Transit. Four provinces (British Columbia, Alberta, Ontario, Québec) have established financing formulae that involve the collection of motorists’ fees or fuel taxes that are then dedicated to public transit and transportation. In BC, a dedicated tax of 11.5 cents per L on fuel sold within the Greater Vancouver Regional District is directed toward transportation. In October 2004, Ontario began transferring one cent per litre of its provincial gas tax for transit capital projects across the province. This transfer will increase to one and a half cents per litre in October 2005 and two cents per litre in October 2006. This will impact the provincial funding share for public transit in Ontario” (p. 14-15)</p> <p>3Programs25: “The federal government has already committed to a rebate on the goods and services tax for municipalities and this represents another means to reduce the burden on municipal governments and allow room for new investment in urban infrastructure. Existing capital funding program partnerships should be continued and new ones should also be established. Even with tax rebates and revenue sharing, there will continue to be tremendous need for investment and there will always be strategic projects where additional federal investment will be essential” (p. 17)</p> <p>3Programs26: “Emerging from the needs, priorities and principles discussed above, the Task Force has identified a set of recommendations that should be considered by all governments. The recommendations received the endorsement of the Council of Ministers Responsible for Transportation and Highway Safety in September 2004. [These include:] 1. Recognizing the importance of urban areas,</p>
--	--	--

		<p>the federal government should provide sustainable, predictable, long-term funding to support urban transportation investment. 2. All orders of government must recognize that amongst competing urban infrastructure needs, the specific needs of transportation, including transit, are significant and merit a proportional share of new investment. 3. Governments must take action to improve transportation and travel time for freight and passengers in urban areas through increased investment, transportation demand management, improved planning processes and the use of advanced technology. 4. While respecting provincial and territorial jurisdiction and planning priorities, all orders of government must find ways to work together more effectively to improve transportation and mobility in urban areas. Opportunities for collaboration beyond funding partnerships should be explored. 5. All governments should pursue opportunities to promote awareness of the importance of sustainable urban transportation and transportation choices to the economy, the environment and social lives of Canadians” (p. 21-22)</p>
	<p>Transport Canada. (2006). An evaluation of Transport Canada’s Moving On Sustainable Transportation Program. Departmental Evaluation Services. Ottawa, ON.</p>	<p>3Programs27: “The MOST Program, originally named the Sustainable Transportation Fund (STF), was launched in 1999 as part of the department’s first Sustainable Development Strategy (SDS), a three-year strategy that outlines challenges and commitments through which TC can better integrate sustainable development into its activities. This program supports projects that produce education, awareness, and analytical tools needed to make sustainable transportation a viable option for Canadians. The program is currently in its second phase with \$2.5 million in funding to be allocated over the 2002 – 2007 period” (p. ii)</p> <p>3Programs28: “The MOST Program provided contributions to 46 projects that involved the development of studies/analyses, tools/practices, demonstration pilot projects, workshops/seminars, and education/outreach programs. These projects addressed a wide range of sustainable transportation issues such as public transit, urban planning and smart growth, and transportation demand management and employer programs” (p. iii)</p>
	<p>Urban Transportation Task Force. (2009). Urban transit in Canada: Taking stock of recent progress. Council of Ministers Responsible for Transportation and Highway Safety.</p>	<p>3Programs29: “Annual federal investments in public transit infrastructure have increased significantly in recent years and are projected to reach an estimated \$1 billion in fiscal year 2008/2009. Furthermore, there is significant potential for more funding to be invested in transit in the future, under the \$33-billion Building Canada Plan, if provinces and territories choose to give priority to transit over other infrastructure investments. Between 2001 and 2005, the federal government launched significant infrastructure funding programs that included public transit as an eligible category. The Infrastructure Canada Program, Canada Strategic Infrastructure Fund, and Municipal Rural Infrastructure Fund collectively represented a commitment of \$8.25 billion. Of that amount, approximately \$1.84 billion will be invested in public transit between 2002 and 2014” (p. 17)</p> <p>3Programs30: “The Gas Tax Fund (GTF), announced in 2005, committed \$5 billion to environmentally</p>

		<p>sustainable municipal infrastructure from 2005 to 2010. Budget 2007 committed another \$8 billion from 2010 to 2014. The GTF is a major source of predictable long-term federal funding. Municipalities select eligible projects within program parameters, and public transit is an eligible category. In fiscal years 2005/6 and 2006/7, approximately 25 per cent of committed spending, or \$217 million, was allocated to public transit. In fiscal year 2007/8, 29 per cent of the Gas Tax Fund, or a total of \$270 million, was allocated to public transit. Some major urban areas have allocated 100 per cent of their GTF allotments to public transit. For example, for the period 2005-2010, Toronto, Metro Vancouver, and Edmonton allotted \$407 million, \$307 million, and \$108 million respectively to transit. The \$400-million Public Transit Fund (PTF) supported investments in public transit infrastructure from the fiscal years 2005-2006” (p. 17)</p> <p>3Programs31: “The first Public Transit Capital Trust, which was announced in Budget 2006, provided \$900 million from 2006 to 2009 to support capital investments in public transit and infrastructure, as a means to reduce traffic congestion, as well as carbon dioxide and other emissions. In addition, Budget 2006 provided \$1.5 billion for the ecoTrust, which was designed to support provincial and territorial climate change agendas, including transit. Budget 2006 also created the Public Transit Tax Rebate for transit pass users, the scope of which was extended in Budget 2007” (p. 17)</p> <p>3Programs32: “Building Canada plan components include: The \$8.8-billion Building Canada Fund (BCF), under which public transit is particularly prioritized, along with clean water and sewage treatment infrastructure, the core National Highway System, and green energy. The Fund also has dedicated funding for projects in communities with populations of less than 100,000; The Gas Tax Fund, which will provide \$2 billion per year by 2010, and a total of \$11.8 billion by 2014; A full Goods and Services Tax (GST) rebate for municipalities, providing \$5.8 billion in additional flexible funding by 2014 will allow them to devote more money to priorities, such as transit; The \$2.275-billion Provincial/Territorial Base Funding Initiative, which provides each jurisdiction with \$25 million per year to support core infrastructure priorities; [and] the \$1.25-billion Public-Private Partnerships Fund (P3s) will be awarded to projects on a merit basis” (p. 18)</p> <p>3Programs33: “Budget 2008 announced the creation of the \$500-million Public Transit Capital Trust 2008, which provides supplementary funding to support capital investment projects in public transit infrastructure. Allocated on a provincial-territorial per capita basis, the Trust will finance projects such as such as rapid transit, rail, transit buses, and high occupancy vehicle and bicycle lanes. Furthermore, Budget 2008 confirmed the GTF as an annual \$2 billion permanent measure, taking effect as of 2014, providing municipalities with predictable, long term, sustainable funding that will help provinces plan and finance their infrastructure needs” (p. 18)</p> <p>3Programs34: “The new \$4-billion Infrastructure Stimulus Fund will provide support for</p>
--	--	--

		<p>provincial/territorial and municipal infrastructure rehabilitation projects, including transit. Funding will be available for two years for projects that will begin construction in 2009/10. The federal government will fund up to 50 per cent of eligible project costs” (p. 18)</p> <p>3Programs35: “To accelerate the construction of community projects, Budget 2009 provided up to \$500 million in new funding over two years under the Communities Component of the BCF. Also, payments under the Provincial/Territorial Base Funding initiative will be accelerated; for the next two years, up to \$1 billion of this federal funding will be brought forward and will be available for infrastructure projects, including urban transportation projects. Budget 2009 identified two public transit projects for potential acceleration of infrastructure spending, namely Union Station revitalization in Toronto and the Evergreen Line in Vancouver, and also announced that the P3 Fund will include an initial call for applications in 2009/10. Transit projects are considered an eligible category” (p. 19)</p> <p>3Programs36: “Some provinces are introducing new governance models within their metropolitan areas. These models encourage region-wide coordination of land use and transportation planning and decision-making. It is argued that such practices by regional authorities can resolve inefficiencies and inequities in the provision of government services and will ultimately be favourable to transit” (p. 29)</p> <p>3Programs37: “Urban Transportation Task Force members have shared information about TDM measures being used in their jurisdictions. The information compiled includes practices relating to: education, promotion and outreach; travel incentives and disincentives; sustainable travel options; and supportive land use practices, among others. It is evident from the extensive compilation that all jurisdictions in Canada have begun implementing transportation demand management in one form or another” (p. 30)</p>
	<p>Urban Transit Task Force. (2010). Recent developments in transit in Canadian cities: Report of the Urban Transit Task Force to the Ministers of Transportation. Council of Ministers Responsible for Transportation and Highway Safety.</p>	<p>3Programs38: “In 2009 the Urban Transit Task Force (UTTF) presented a report to Ministers of Transportation on the state of transit in Canada, based on data from 2006-07. That report updated an earlier study released in 2005. Last year’s report presented a picture of increased government investment in transit, increased demand for transit, innovative governance models, and the funding challenges facing transit systems. At their meeting in 2009, Ministers asked to be updated regularly on the status of transit in Canada” (p. 2)</p> <p>3Programs39: “Federal investments in public transit have greatly increased since the beginning of the decade, with over \$5 billion in federal funding invested in transit infrastructure since 2000-01. In fiscal 2008-09, total federal investments in transit amounted to \$1 billion. Federal funding is provided through various mechanisms, all of which emphasize respect for the primary provincial and municipal jurisdiction over public transit. In 2008-09, over 30 per cent of the transfer of federal gas tax funds to municipalities (\$285 million) was allocated to public transit. Cities such as Toronto and Vancouver have allocated all of their gas tax fund allotments to public transit projects” (p. 10)</p>

<p>Ruffilli, D. (2010). Federal support for bus rapid transit and light rail transit systems in Canada. Library of Parliament. Industry, Infrastructure, and Resources Division. Parliamentary Information and Research Service. Ottawa, ON.</p>	<p>3Programs40: “This support for public transit takes the form of transfers of federal and provincial gas tax revenue to municipalities as well as targeted, cost-shared infrastructure funding. This funding is not coordinated through any national transit strategy ... Canada is the only G8 country without a federal policy of long-term, predictable transit investment” (p. 1)</p> <p>3Programs41: “In February 2009, the governments of Canada, Ontario and Quebec announced that a contract had been awarded to EcoTrain Consortium to update the feasibility study for high-speed rail in the Québec–Windsor corridor. Although no decision has been made to date whether to develop an interurban high-speed rail network in Ontario and Quebec, several of the rapid transit projects being planned and constructed in the region include inter-modal nodes in their designs” (p. 6)</p> <p>3Programs42: “Part of the Government of Canada’s Building Canada Plan announced in the 2007 federal budget, the Provincial/Territorial Base Funding Initiative provides \$175 million to each province and territory for investment in its infrastructure.⁵¹ The initiative is cost-shared with provinces and territories. Federal funding is provided up front without a requirement to use the funding in the year in which it was provided, in order to maximize flexibility. Funding under this initiative may be used for construction or rehabilitation of infrastructure in almost all Building Canada Fund eligible categories, as well as for Highway System infrastructure” (p. 8)</p>
<p>Ministry of Finance. (2011). Evaluation of the Public Transit Tax Credit. Ottawa, ON.</p>	<p>3Programs43: “The Public Transit Tax Credit (PTTC) was introduced in Budget 2006 to encourage individuals to make a sustained commitment to public transit use and to reduce traffic congestion by providing a tax credit for the cost of public transit passes. The PTTC was part of a broader government strategy to promote a cleaner, healthier environment, which also included major investments in public transit infrastructure. The Government acknowledged at the time that the success of the credit would in part depend upon transit authorities’ willingness to continue to work to boost ridership through quality service and low fares—two of the factors that affect the demand for public transit” (p. 1)</p> <p>3Programs44: “The PTTC, which reduces the cost for individuals of using public transit by up to 15%, is delivered directly to transit users through the tax system. For the credit to be effective in providing an incentive to use public transit, the benefits from the credit must not be reduced or eliminated by coincidental increases in public transit fares. The fact that public transit fares have remained relatively stable following the introduction of the PTTC suggests that public transit users have been the main beneficiaries of the credit” (p. 2)</p> <p>3Programs45: “The PTTC applies to eligible transit passes purchased for travel in the current taxation year. An eligible transit pass is one that allows travel for an extended period of time. This includes annual and monthly passes, and, since 2007, weekly passes purchased for a period of at least four consecutive weeks, as well as electronic fare cards used for at least 32 one-way trips in a month. Individuals can claim trips taken by bus, ferry, subway, train or tram. There is no limit on the amount</p>

		<p>that may be claimed. The credit applies to individuals who purchase public transit passes for use within Canada. It may be claimed by taxfilers on behalf of themselves, their spouse or common-law partner, and their children who are under age 19 at the end of the taxation year” (p. 2-3)</p>
		<p>3Programs46: “Capital spending by transit operators grew substantially over the second part of the last decade due to major increases in funding from all levels of government. While public transit falls under the jurisdiction of the provinces, territories and municipalities, the federal government has made significant investments in this area through a number of infrastructure funding programs in partnership with other levels of government. Since 2006, close to \$5 billion in federal funding has been provided in support of public transit infrastructure projects across Canada, leveraging investments of \$7.9 billion from other funding partners. This includes funding for public transit through one-time initiatives such as the Public Transit Trusts in Budget 2006 and Budget 2008. In addition, \$1.1 billion in investments have been made in public transit infrastructure since 2006 through the Gas Tax Fund. According to CUTA data, capital spending by public transit operators from 2006 to 2010 averaged \$3.3 billion annually, compared to about \$1.2 billion annually from 2001 to 2005” (p. 21-22)</p>
	<p>Infrastructure Canada (2012). Infrastructure spotlight: Improving public transit for the 21st century. Ottawa, ON.</p>	<p>3Programs47: “For many years, the Government of Canada has worked with other orders of government to support key transit infrastructure projects throughout the GTA. This includes federal funding commitments of over \$1 billion through the Building Canada Fund for projects such as the Toronto-York Spadina Subway Extension, investments in the GO Transit rail and bus networks, as well as the revitalization of Toronto’s Union Station, Canada’s busiest passenger facility. Under the Infrastructure Stimulus Fund, part of Canada’s Economic Action Plan, the federal government provided over \$101 million in additional funding towards important transit projects in the GTA. These include enhancements to the City of Toronto’s transit system, a transit facility in Oakville, and a new intermodal ‘Mobility Hub’ in Brampton. In addition, since 2005, the municipalities of the GTA have used over \$550 million of their federal Gas Tax Fund allocations towards transit investments. These significant and strategic investments ensure that Canada’s largest metropolitan region can benefit, now and in the future, from a modern and more efficient public transit system that improves the region’s quality of life and competitiveness” (p. 3)</p>
	<p>Transportation Association of Canada. (2012). Sustainable funding for urban/regional transportation in Canada. TAC Briefing. Ottawa, ON.</p>	<p>3Programs48: “Effective incentives for both sustainable transportation and sustainable land use therefore depend on having reliable, long-term funding sources for urban and regional transportation and sources that also provide direct pricing signals encouraging more sustainable travel behaviour. Such pricing signals and related incentives to use the system more efficiently provide a powerful tool box for implementing transportation demand management (TDM), a major policy instrument for achieving sustainable transportation” (p. 3)</p> <p>3Programs49: “If scaled up from the GTHA to all Canadian CMAs, the estimated yield [for ‘Federal and</p>

		<p>Provincial Urban Infrastructure Funding'] is not necessarily more than current funding levels allocated in recent years by the federal and provincial governments for urban and regional transit/transportation. On this matter, for example, the federal government already provides significant funding through the \$2 billion per year Gas Tax Fund for municipal infrastructure, which includes urban transit and transportation infrastructure, and several provinces provide in excess of \$1 billion per year for urban and regional transit/transportation infrastructure" (p. 8)</p>
	<p>Tweed, Mervin . (2012). Study on transit in Canada: report of the Standing Committee on Transport, Infrastructure and Communities. House of Commons of Canada Standing Committee on Transport, Infrastructure and Communities. Ottawa, ON.</p>	<p>3Programs50: "The apparent transit infrastructure gap in Canada gave rise to a private member's bill in support of a National Transit Strategy for Canada in the first session of the 41st Parliament. According to the bill's sponsor, the bill asked "the federal government to take a leadership role to bring different levels of government and transit authorities together ... and say what a long-term plan would be." All members of the House of Commons Standing Committee on Transport, Infrastructure and Communities (hereafter "the Committee"), including the bill's sponsor, agreed to study the question of a National Transit Strategy in September 2011. The Committee convened 12 meetings and received oral and written comments from 20 stakeholders on the subject of a potential National Transit Strategy" (p. 2)</p> <p>3Programs51: "In recognition of the need to intensify investment in transit, the Government of Canada has made unprecedented contributions to transit systems in the past decade. The federal contributions to transit have largely been through infrastructure programs intended for 'incremental' projects, i.e., new projects that would not have otherwise happened without federal involvement. One major funding instrument was the Canada Strategic Infrastructure Fund, of which approximately \$1.5 billion was invested in transit infrastructure. Since 2006, the Government of Canada has directly committed approximately \$5 billion towards transit across Canada through other infrastructure programs, including the Building Canada Fund, the Infrastructure Stimulus Program, the ecoMobility Program, the Public-Private Partnership (P3) Canada Fund,³⁴ and the Green Municipal Fund" (p. 6)</p> <p>3Programs52: "Smaller federal program investments have been used by municipalities to purchase buses, construct rights-of-way and dedicated transit signals, and introduce Intelligent Transportation System technologies. The Building Canada Fund expires in 2014 and consultations on a new infrastructure program are forthcoming" (p. 6)</p> <p>3Programs53: "The other major component of federal funding for transit is transfers of federal gas tax revenues to provinces and municipalities. The Gas Tax Fund, which was established in 1996, amounts to \$2 billion per year Canada-wide and is distributed according to population to support environmentally sustainable infrastructure. The federal gas tax transfers give recipients more flexibility than the infrastructure programs because the federal government is not involved in project selection and does not require cost-sharing from other governments. Approximately \$1 billion of the gas tax transfers have been spent on transit projects since 2006. The Government of Canada recently made the gas tax</p>

		<p>transfers permanent in legislation” (p. 7)</p> <p>3Programs54: “The Committee recommends that the Government of Canada continue to recognize the need to form a strong partnership with the provinces, the territories, municipalities, as it has by launching a formal engagement process on the long-term infrastructure plan” (p. 15)</p> <p>3Programs55: “Infrastructure Canada officials commented on whether the Government of Canada should establish different criteria or triggers in the project approval process during their first appearance before the Committee. The Committee learned that the only thing the Government of Canada requires from its partners is that they commit to covering any operating losses in their totality. The effect of establishing financial criteria in the project approval process would be that funding would be awarded only to larger transit systems. Any projects outside of larger cities would likely automatically be excluded. Furthermore, Infrastructure Canada suggested that establishing a cost-recovery threshold could give municipalities incentives to defer maintenance or increase fares in order to improve its ratio” (p. 17)</p>
	<p>Transport Canada. (2012). Improving bus services: Modest investments to increase transit ridership. Gris Orange Consultant. Ottawa, ON.</p>	<p>3Programs56: “Planning for bus service is more effective when it relies on a comprehensive and strategic approach. The primary purpose is to form an integrated and efficient network of transit services, combining bus service with other modes of transportation (both public and private) and urban development policies” (p. 7)</p> <p>3Programs57: “Branding and marketing strategies have become a critical component of transit improvement projects. These strategies are intended to build a distinct brand identity for a bus service by emphasizing its distinctive features and benefits, and presenting it as a ‘premium’ transportation alternative. Branding, market research activities and social marketing are among the list of possibilities” (p. 8)</p> <p>3Programs58: “A bus service can significantly benefit from the introduction of right-of-way and other measures that reallocate road space by giving priority to transit vehicles and increase the competitiveness of buses. By allowing buses to bypass traffic congestion, the service gains in speed and reliability. There exists a variety of transit priority measures and right-of-ways along which the bus can operate, such as dedicated right-of-ways, bus lanes and transit priority systems” (p. 8)</p> <p>3Programs59: “Harmonizing provincial, regional and local governments’ transportation plans, strategies and budgets is crucial to create a supportive framework to improve the general functioning of transit systems. Land-use planning, road construction and regulation, major private and public events are intricately linked to transit use. Employers and various agencies can also mutually benefit from transit use by capitalizing on programs that seek to broaden transportation services from the workplace such as car-pooling, park-and-ride or bike-and-ride facilities, financial incentives, etc. For transit authorities in particular, this collaboration translates into intermodal coordination where transit vehicles from</p>

		different networks synchronize their scheduling or ticketing methods to provide complementary services” (p. 21)
	Standing Committee on Transport, Infrastructure and Communities. (2015). Updating infrastructure in Canada: An examination of needs and investments. Report of the House of Commons of Canada Standing Committee on Transport, Infrastructure and Communities (Larry, Miller, Chair). Ottawa, ON.	3Programs60: “Budget 2015 proposes new merit-based public transit funding in the amount of \$750 million over two years starting in 2017-2018, and \$1 billion annually thereafter. The new public transit funding would be administered by PPP Canada, the federal P3 agency, in support of projects that demonstrate more value for money for taxpayers as public-private partnerships. The terms and conditions of the proposed new public transit funds have not been announced. Major transit P3s in Edmonton, Winnipeg, Kitchener-Waterloo, York, Toronto and Ottawa are already underway. What the Committee heard from stakeholders about P3s is discussed in more detail in the following section” (p. 11)
3rd Era Frames	Paul Martin. (2002). Speech by the Honourable Paul Martin, Minister of Finance for Canada, to members of the Federation of Canadian Municipalities. Hamilton, ON.	3Frames1: “The challenges you face were intensified after the fiscal belt-tightening that has taken place in recent years by provincial and federal governments alike. Let’s just take two examples: housing and urban transit. Both present daunting challenges that simply must be tackled in order to secure the quality of life we all desire for the future. But the solutions – that is to say, the development of affordable rental accommodation and the required investment in new transit infrastructure – are simply beyond the capacities of local governments acting alone” (p. 3)
		3Frames2: “The simple fact is that the country’s infrastructure needs exceed the capacity of the three orders of government to fund them adequately in the short term. Therefore, the last suggestion I would raise today arises out of the fact that countries all over the world are showing that innovative partnerships with the private sector make it possible to use public money more effectively by leveraging billions in private investment” (p. 8)
		3Frames3: “What we need to do now is get to work. To move from concept to reality - to strike the New Deal. We’ve all seen good ideas, backed by the best of intentions, crash against the coral reefs of entrenched ways and attitudes. We can’t let that happen here. The stakes are simply too high. The

		<p>opportunities associated with success too great. More and more of our future together as Canadians will be built – brick by brick, idea by idea – at the local level. Our speed at innovating on the ground – in practices, in financing and in partnerships – will be one of the keys to Canada's success in a very competitive world” (p. 9-10)</p>
	<p>Prime Minister’s Caucus Task Force on Urban Issues. (2002). Canada’s Urban Strategy: A Blueprint for Action. Ottawa, ON.</p>	<p>3Frames4: “Canada has the capacity to be a world leader in new infrastructure design; that is, office buildings, transit systems, water and sewage treatment plants, that meet reduced targets of greenhouse gas emissions, and which are environmentally ‘clean’ in accordance with international agreements such as the Kyoto Protocol. We have the expertise and the resources to place Canada in the forefront of technology and innovation” (p. 2-3)</p> <p>3Frames5: “The broad objective for a National Transportation/Transit Program is to facilitate implementation of sustainable transportation defined by the Centre for Sustainable Transportation as a system that: Allows the basic needs of individuals to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations; Is affordable, operates efficiently, offers a choice of transport mode, and supports a vibrant economy; Limits emissions and waste within the planet’s ability to absorb them, minimizes consumption of nonrenewable resources, limits consumption of renewable resources to the sustainable level of yield, reuses and recycles its components, and minimizes the use of land and the production of noise” (p. 15)</p>
	<p>Transport Canada. (2002). Urban transit in Canada: Taking stock. Ottawa, ON.</p>	<p>3Frames6: “Where urban transit was once viewed as a local matter with limited impacts beyond the immediate municipality, there is a growing recognition in Canadian society that improving and expanding public transit is a key element in moving towards a more sustainable transportation system. Citizens and agencies across Canada are discovering that urban transportation without extensive transit is not a desirable future. Public transit is also recognized as an important component in reducing greenhouse gases and meeting Canada’s environmental commitments” (p. 11)</p> <p>3Frames7: “The wide variation in the physical, social and cultural geography of Canada's cities results in transit infrastructure projects that are unique to each city. Before deciding which projects to invest in, it is important that comprehensive economic analysis tools be used to assist with choosing the most effective projects” (p. 92)</p> <p>3Frames8: “Should efforts be made and funding provided in order that the future vision for transit can be achieved? To answer this question, it must be asked what the alternatives are? Is the future of transportation in urban Canada an extrapolation of today or will it include an enhanced transit component? Most researchers and observers agree that transit will need to play an expanded role in urban transportation if economic growth, congestion, sustainability and environmental issues are going to be tackled with a positive outcome. To do this will require work to begin on closing the resource gaps identified in this study. To accomplish this, governments at the municipal, provincial and federal level</p>

		<p>will need to work together to identify resources and programs that can be used to close the capital and operating funding gaps. All levels of government should work together because economic growth, sustainability, air quality, etc. are all regional and national issues in scope and affect individual Canadians. Municipal agencies are generally responsible for delivering the service, however to do so they need the committed and sustained support from other levels of government in order to meet the goals of the National Vision” (p. 98)</p>
	<p>Transportation Association of Canada. (2003). Urban transit: An essential factor. Paper prepared for presentation at the opening session of the 2003 Annual Conference of the Transportation Association of Canada. St. John’s, Newfoundland and Labrador.</p>	<p>3Frames9: “If the existing funding shortfalls for urban transportation and fragmented governance currently experienced in some CMAs are not addressed in the near future, Canadian urban areas face major environmental, economic and social risks affecting up to 80 percent of Canada’s population directly where they live and work” (p. 10)</p>
	<p>Transport Canada. (2003). Straight Ahead: A Vision for Transportation in Canada. Ottawa, ON.</p>	<p>3Frames10: “Urbanization, together with the ever-increasing amount of economic activity that originates in urban centres, is putting pressure on public transit and on road infrastructure. Transportation policy must address the challenges that growing congestion poses for the development of competitive cities and healthy communities” (p. 14)</p> <p>3Frames11: “The Panel offered bold, innovative concepts for new governance frameworks and new principles to guide investment, financing, costing and pricing decisions for roads and public transit. At the same time, the Panel acknowledged the debate about the role of the federal government and the complex jurisdictional and public financing issues. While federal responsibility for highways and urban transportation is minimal, the government recognizes their contribution to trade, competitiveness and mobility for all regions of Canada. Good connections to facilities under federal jurisdiction and the best use of all transport modes are also important contributors to the overall efficiency of the transportation system” (p. 52)</p> <p>3Frames12: “Recognizing the success of the models now in place for the air, freight rail and marine modes, the government believes that innovative options for managing the enormous funding pressures associated with road transportation and urban transit should be explored with other levels of government and the private sector. New governance models – such as the introduction of transportation authorities and the possibility of earning user revenue for infrastructure investment, including the tolls now charged for some highways and bridges – afford an opportunity to address the</p>

		<p>longstanding concern of provincial and territorial governments about a sustained funding regime for road infrastructure. While not minimizing the extent of public concerns in connection with these concepts, the successes achieved in other transportation modes call for at least a careful consideration of all possible options. The federal government is interested in pursuing consideration of these issues with provinces and territories” (p. 52-53)</p>
		<p>3Frames13: “The efficient and safe movement of people and goods is crucial for greenhouse gas reduction, ensuring a thriving economy and supporting the well-being of all Canadians. Traffic congestion is a major problem in larger urban areas. Concerted efforts are required to alleviate traffic congestion in urban areas and minimize its detrimental impact on the environment, economy and society” (p. 54)</p>
	<p>Transport Canada. (2004). Review of international urban transportation policy frameworks, strategies and governance models. Metropolitan Knowledge International. Toronto, ON.</p>	<p>3Frames14: “The ... Minister [of Transport] states that ‘transportation is fundamental to Canada’s economic prosperity and Canadians’ quality of life ... we need to ensure our transportation system is efficient and able to adapt to new challenges ... to ensure that our system is safe, secure and environmentally responsible’. These policy goals are virtually identical to those of the other six countries surveyed: competitiveness and innovation, supporting quality of life and sustainability, and recognizing the environmental impacts of transportation. While there is commonality in the basic goals of the six countries and Canada, it is clear from the information provided that the current issues in Canada regarding urban transportation funding are shared only to a limited degree by other countries and within the context that government revenue sharing is by its nature a contentious issue. It would appear that funding and responsibility arrangements are more a product of history, culture and constitutional arrangements than they are a reflection of common issues arising from land use and transportation problems in our cities. As in Canada, transportation is one of many competing priorities for funding and rarely is at the top of a national agenda” (p. 55)</p>
	<p>Urban Transportation Task Force. (2005). Urban transportation in Canada: Needs and opportunities. Council of Ministers Responsible for Transportation and Highway Safety.</p>	<p>3Frames15: “The challenges faced by urban areas will require not only new funding but also a new partnership amongst orders of governments. Principles that could underlie an effective partnership unanimously supported by provincial respondents to a Task Force survey include: Federal programs should respect provincial and territorial jurisdiction and planning priorities; Federal funding programs should not be contingent upon matching funding from provinces and territories; There should be flexibility in program designs to accommodate programs that meet the needs of the jurisdictions” (p. 3)</p> <p>3Frames16: “Recognizing the importance of urban areas, the federal government should provide sustainable, predictable, long-term funding to support urban transportation investment ... All orders of government must recognize that amongst competing urban infrastructure needs, the specific needs of transportation, including transit, are significant and merit a proportional share of new investment” (p. 3)</p> <p>3Frames17: “While respecting provincial and territorial jurisdiction and planning priorities, all orders of</p>

		<p>government must find ways to work together more effectively to improve transportation and mobility in urban areas. Opportunities for collaboration beyond funding partnerships should be explored ... All governments should pursue opportunities to promote awareness of the importance of sustainable urban transportation and transportation choices to the economy, the environment and social lives of Canadians” (p. 3)</p>
		<p>3Frames18: “[Investing in public transit] should increase the efficiency of goods movement in support of trade and the economy, reduce air pollution and environmental impacts and improve the quality of life and the social well being of Canadians living in urban areas. Public transit also serves a social mission: for people who do not have a car, it is often the only means of access to employment, health care, schools and other important activities” (p. 9)</p>
	<p>Transport Canada. (2006). An evaluation of Transport Canada’s Moving On Sustainable Transportation Program. Departmental Evaluation Services. Ottawa, ON.</p>	<p>3Frames19: “There was a high level of exposure about the Urban Transportation Project in local media, provincial websites and other environmental websites. Over 500,000 individuals were reached through consultations, surveys, and various other outreach activities. On average, BSD tracked over 1,400 unique visits per month to the project’s website. The BSD report anecdotally observed, ‘The words, Transit, Sustainable Development and Climate Change have been in our local media and in the conversations of our population more in the past year than in all of the 25 years I have lived in the city’” (p. 47)</p>
	<p>Urban Transportation Task Force. (2009). Urban transit in Canada: Taking stock of recent progress. Council of Ministers Responsible for Transportation and Highway Safety.</p>	<p>3Frames20: “Many positive impacts can be identified as a result of the unprecedented transit investments. Direct impacts include increasing ridership, new and expanded transit systems, and increasing fleet sizes with more accessible vehicles. Indirect impacts include improved accessibility, new urban developments that are often more transit-oriented, and many health, environmental, and economic benefits” (p. 1)</p> <p>3Frames21: “Emerging from the Urban Transportation Task Force’s review of the status of transit in Canada, recent investments and plans for the future, four recommendations are made. They are: 1. All levels of government need to work together to provide adequate funding to support transit, while respecting jurisdictional responsibilities. 2. Recent federal investments in public transit have supported national economic, social, and environmental priorities, and the federal government’s continued commitment to provide sustainable, predictable, long-term funding for transit is welcomed. 3. The movement of people and goods in urban areas must be improved through greater investment in transit, transportation demand management, improved planning processes, and the use of advanced technology. 4. All governments should promote transit use by raising public awareness of its economic, social, and environmental benefits” (p. 1-2)</p> <p>3Frames22: “While most major urban centres in Canada are experiencing population growth, some smaller communities are suffering population losses. Transit can be critical to maintaining viable and</p>

	<p>liveable smaller communities, often providing a much needed transportation option for all residents, but particularly for the elderly and low income residents” (p. 6)</p>
	<p>3Frames23: “Public transit is a provincial, territorial, and municipal area of responsibility. All federal engagement in public transit, including funding, is based on strict respect for jurisdiction” (p. 17)</p>
	<p>3Frames24: “The Building Canada plan is predicated on flexibility and respect for jurisdiction, meaning that the extent of funding dedicated to transit, or any other sector, is largely contingent on priorities established by the provincial/territorial and municipal sectors” (p. 18)</p>
	<p>3Frames25: “In response to the current economic climate, Budget 2009 provided approximately \$12 billion in new infrastructure stimulus over the next two fiscal years, and transit is an eligible recipient for much of this funding. In addition, approvals will be streamlined and funding accelerated under the Building Canada plan. The objective of these investments is to help Canada emerge from economic crisis with a more modern and greener infrastructure that is the foundation of sustainable, long-term economic growth” (p. 18)</p>
	<p>3Frames26: “Investments in transit can mean services are improved or expanded, which will improve access. Greater access may translate into increased ridership, increased mobility for transit-captive sectors of the population, and decreased use of, and reliance on, less efficient options such as the single-occupancy automobile” (p. 23)</p>
	<p>3Frames27: “Access to new or improved transit services may encourage and attract new transit-oriented development. With transit as a community focal point, those developments may also have more efficient land use patterns, with greater population density and services offered in a transit-friendly form. More efficient land use patterns would allow transit systems to become more cost efficient and cost effective to operate” (p. 24)</p>
	<p>3Frames28: “With improved transit services, transit mode share may increase relative to the automobile mode, which could result in reduced congestion and reduced GHG and air pollutant emissions” (p. 24)</p>
	<p>3Frames29: “There is a strong economic case for public transit. Improving and expanding public transit systems can result in economic benefits. The availability of transit services can reduce the number of automobile trips and reduce congestion within urban centres, saving auto and transit commuters time and money, and making the movement of goods and people more effective and efficient. Less congested areas and areas that are well-served by transit are more appealing to businesses. Reducing travel delays, driving costs, and collision rates by reducing congestion are also clearly beneficial from an economic perspective” (p. 24)</p>
	<p>3Frames30: “For its part, the federal government is currently providing more funding for transit than ever before, having increased funding from about zero at the beginning of the decade to approximately \$1 billion in fiscal year 2008/9; at the same time federal funding is based on strict respect for</p>

		jurisdiction” (p. 26)
	Ruffilli, D. (2010). Federal support for bus rapid transit and light rail transit systems in Canada. Library of Parliament. Industry, Infrastructure, and Resources Division. Parliamentary Information and Research Service. Ottawa, ON.	<p>3Frames31: “As the cost of operating and expanding public transit systems is beyond the capacity of most municipalities to undertake on the basis of property taxes and transit fare revenues alone, the federal and provincial governments both provide funding to support public transit. Although public transit is not in federal jurisdiction, the Government of Canada has stated that investing in public transit “contributes to economic, environmental and social objectives” (p. 1)</p> <p>3Frames32: “In Canada, the choice of whether to employ BRT or LRT technology is made by individual communities. Under the federal government’s infrastructure programs, the particular transit technology to be used in a given project is ultimately the choice of the project proponent. As a result, given the relative merits of BRT and LRT, communities must reflect upon their current and future transit needs and their fiscal capacity to undertake the necessary capital investments when determining whether to adopt BRT or LRT as their preferred rapid transit technology” (p. 4)</p> <p>3Frames33: “Announced in the 2007 federal budget as part of the Government of Canada’s Building Canada Plan, the Building Canada Fund is an \$8.8 billion infrastructure fund that the government describes as designed ‘to advance national priorities important to all Canadians – a stronger economy, a cleaner environment and better communities’ through the 2013–2014 fiscal year” (p. 7)</p>
	Infrastructure Canada (2012). Infrastructure spotlight: Improving public transit for the 21 st century. Ottawa, ON.	<p>3Frames34: “Efficient transit systems move commuters to and from centres of employment, commerce and other points of interest. They enhance our quality of life, and help our cities attract and retain business investment and talented people. Better public transit makes it easier for Canadians get to work, to school, to visit the doctor, or to see friends and family” (p. 1)</p> <p>3Frames35: “Ultimately, high-quality public transit systems mean more balanced, integrated urban transportation that improves the safety of daily travel and the quality of life in our cities. Whether they include buses, subways, light rail vehicles or commuter rail, transit systems increase transport options available to residents, workers and visitors. By improving mobility and accessibility to services and jobs, they make our cities more attractive and competitive” (p. 2)</p> <p>3Frames36: “Reliable public transit systems are important for communities large and small. They are the main transportation option for many Canadians, and provide easier access to jobs, education, recreation and social activities. In fact, Canadians are using public transit in record numbers. In 2010, transit ridership increased by 4.1%, representing an all-time record with 1.9 billion trips. These numbers continue to grow, with a nearly 5% ridership increase for the first half of 2011. Access to transit is particularly important to newcomers to Canada. As reported in a recent study by the Federation of Canadian Municipalities, new Canadians are twice as likely to commute by public transit.4 Efficient public transit helps people to connect with their community and provides access to jobs and much-needed services, such as language training, medical care, and others. As immigration is expected to play</p>

		<p>a significant role in Canada’s economic growth, public transit is an important piece in our nation’s future. In today’s economy, public transit also plays a key role in supporting young Canadians across Canada. Indeed, Canadian Urban Transportation Association (CUTA)’s ridership data and surveys show that the 15-24 age group uses public transit more frequently than other segments of the population. As increasing numbers of Canadians are relying on public transit, our cities must be able to meet that demand. This means renewing and expanding rapid bus, light rail and subway systems, and building new terminals, stations and facilities” (p. 4)</p>
		<p>3Frames37: “Modern transit infrastructure is vital for the long-term economic growth and prosperity of both our largest urban centers and our smaller communities. The Government of Canada recognizes that provinces and municipalities are best positioned to develop and implement transit strategies that meet their local needs. Federal investments in transit infrastructure have clearly respected jurisdictional responsibility for public transit, and provide significant flexibility for provinces, territories and municipalities to address their respective priorities” (p. 5)</p>
	<p>Transportation Association of Canada. (2012). Sustainable funding for urban/regional transportation in Canada. TAC Briefing. Ottawa, ON.</p>	<p>3Frames38: “Unless these negative trends are addressed, the resulting toll of congestion, accidents and unreliability will create increasingly significant economic, environmental, social and health problems. A stable mix of reliable, long-term funding sources that provide consistent revenue streams sufficient to meet ongoing capital and operating requirements, that send pricing signals to transportation users and beneficiaries to use the system more efficiently, and that encourage innovative approaches for transportation improvements will lead to more sustainable transportation and land use in Canadian cities” (p. 2)</p>
		<p>3Frames39: “The broadly estimated capital funding gap of \$8-10 billion per year in capital funding for urban and regional transit and urban roads and bridges is large, but recovering the accumulated shortfall over the next five years could be feasible if alternative funding sources are brought to bear ... If a ten year recovery period were implemented, some or all of the net transit operating cost could also potentially be funded from alternative revenue sources” (p. 5)</p>
		<p>3Frames40: “Long-term federal and provincial infrastructure funding plans could, however, provide a framework for cost-effective delivery and maintenance of urban and regional transit/ transportation systems and operations across Canada and enhanced achievement of [economic and environmental benefits]” (p. 8)</p>
		<p>3Frames41: “Sustainable funding from governments and derived user fees/levies are required to maintain, expand, operate and rehabilitate urban and regional transportation systems in Canada. The benefits are substantial and the negative consequences of continuing shortfalls – growing congestion/crowding, reduced economic prosperity, a continually degrading environment, and eroded social/ health wellbeing – will generate costs greatly exceeding the investment required to bring our</p>

		<p>urban and regional transportation systems up to acceptable levels of effectiveness and efficiency. The user/beneficiary levies required, while significant, will more than repay urban/ regional residents and travellers in terms of their economic prosperity, environmental well-being and overall quality-of-life. They could also promote innovation and gain new partners for joint public-private implementation of transportation improvements” (p. 10)</p>
	<p>Tweed, Mervin . (2012). Study on transit in Canada: report of the Standing Committee on Transport, Infrastructure and Communities. House of Commons of Canada Standing Committee on Transport, Infrastructure and Communities. Ottawa, ON.</p>	<p>3Frames42: “Transit provides an essential service for certain groups in Canadian society that depend on it for mobility, including people who are too young to drive, those individuals that have physical limitations that prevent them from driving, and lower-income residents. Many people who have access to an automobile also value transit services as they are a less expensive and less polluting alternative to driving. Businesses benefit from transit services because they take some drivers off the roads, allowing for more rapid movements of goods and services. In addition to the benefits of transit services to communities, the manufacture of transit vehicles and operation of transit systems are also significant industries in Canada” (p. 2-3)</p> <p>3Frames43: “Given the many benefits of transit services, the Committee recommends: As part of the new infrastructure plan that will replace the Building Canada Plan after its expiry in 2014, that the Government of Canada should continue to recognize the importance of transit to the economic health, quality of life and technological advancement of Canadian communities and the people who live in those communities” (p. 3)</p> <p>3Frames44: “We recommend the following parameters for assessing the effectiveness of every investment in transit by the Government of Canada: Growth in access to and use of transit; Improvement of productivity through reduction in commute times and congestion; Economic impact through the number of jobs created and other GDP benefits; Decrease in greenhouse gas emissions and improvement of air quality; Utilize federal funding in an incremental way, i.e. no displacement of provincial and municipal resources” (p. 7)</p> <p>3Frames45: “When questioned about their preference between a dedicated transit fund and a broad-based infrastructure fund, many stakeholders did not have a preference as long as there were set asides for transit projects under a broad-based program. Officials from Infrastructure Canada pointed out that there are some 15 investment categories to provide flexibility for all communities to fund their priorities, including transit, whereas a fund dedicated to transit would exclude communities without transit ... [As such,] the Committee recommends that the Government of Canada establish a new long-term infrastructure funding program, similar to the Building Canada Plan, for post-2014 that includes transit as an eligible investment category” (p. 10-11)</p> <p>3Frames46: “Officials from Infrastructure Canada presented the federal government’s view to the</p>

		<p>Committee, which is that equity among Canada’s diverse communities is best achieved through the combination of a distributed, flexible source of funding (gas tax transfers) and special infrastructure programs. Government officials told the Committee that the question of operating subsidies for a private intermunicipal bus operator would pose some difficulty for the government, whereas ... services operated by the municipalities involved would be eligible for funding under existing programs” (p. 11)</p>
		<p>3Frames47: “The Committee recommends that the Government of Canada continue to support the long-term usability of transit infrastructures” (p. 12)</p>
		<p>3Frames48: “The FCM proposed that the federal government and its agencies can take a leadership role in considering national principles and national level policy or national level resource allocation that will leverage resources from other orders of government and other actors. On this issue, officials from Infrastructure Canada indicated that the Government of Canada has shown leadership in funding and in financing, but it has not imposed any types of transit-specific measures that must be undertaken by provinces or municipalities” (p. 16)</p>
		<p>3Frames49: “The Committee recommends that all levels of government should pursue greater private sector involvement in the provision of mass transit [and] ... continue to recognize the importance of private partners in transit and consider carrying out infrastructure projects through public-private partnerships where the conditions are met” (p. 18)</p>
	<p>Standing Committee on Finance. (2014). Number 049, 2nd Session, 41st Parliament. Evidence: Monday, October 20, 2014. House of Commons of Canada Standing Committee on Finance. Ottawa, ON.</p>	<p>3Frames50: “Industry Canada [notes that] in car-oriented industrial countries, those who either cannot afford a car or are unable to operate one often have no access to jobs, schools, health centres, and other important destinations. Children, the handicapped, the poor and the elderly are not only made less mobile by an auto-based system, but they also bear the brunt of its costs: the physically weak suffer the most from pollution, and the poor are those most often displaced by roads. At the FCM conference in 2010, Prime Minister Stephen Harper stated that better transit means fewer cars; fewer cars mean cleaner air, and of course cleaner air means people breathing easier” (p. 2)</p>
		<p>3Frames51: “First, we should negotiate a special permanent exemption agreement for buy American procurement rules pertaining to public transit rolling stock. Second, we should partner with transit manufacturers, universities, and other private contributors to invest in research and development. On the second point, in budget 2014 we established the Canada first research excellence fund with \$1.5 billion in investments over 10 years. We committed to a long-term strategic vision for research and innovation in Canada, and, in fact, it’s been well received, especially by the universities in Canada. David Barnard, the president of the University of Manitoba, has said this is a pivotal moment for research excellence and innovation in Canada. That being said, is this enough? Is this going to be the spark that generates research and innovation in the transportation sector? We can always do more” (p. 10)</p>
	<p>Standing Committee on Transport,</p>	<p>3Frames52: “The Committee recommends that the federal government continue to work with</p>

	<p>Infrastructure and Communities. (2015). Updating infrastructure in Canada: An examination of needs and investments. Report of the House of Commons of Canada Standing Committee on Transport, Infrastructure and Communities (Larry, Miller, Chair). Ottawa, ON.</p>	<p>provinces, territories and municipalities to deliver record levels of funding for public transit through the New Building Canada Plan, the Gas Tax Fund and the new Public Transit Fund” (p. 12)</p>
<p>3rd Era Public Sentiments</p>	<p>Paul Martin. (2002). Speech by the Honourable Paul Martin, Minister of Finance for Canada, to members of the Federation of Canadian Municipalities. Hamilton, ON.</p>	<p>3PublicSentiments1: “I’ve heard a lot of support for is the creation of completely new, targeted Infrastructure funds. This type of new program could help to achieve better results, it is said, by focusing exclusively on a national priority like urban transit or safe water or housing. Again, this is another proposal worthwhile developing together” (p. 6-7)</p>
	<p>Transport Canada. (2005). Case Study 32: Urban transportation pricing options. Urban Transportation Showcase Program. Case Studies in Urban Transportation. Ottawa, ON.</p>	<p>3PublicSentiments2: “Transit pricing options are numerous and varied, reflecting the solid public acceptance of transit user fees (i.e. fares) and the readily available means of collecting them. The main limitation of transit pricing strategies is that, while they can help attract new transit users and retain existing ones, they have no effect on the great majority of passenger travel that is still served by automobiles” (p. 5)</p>
	<p>Urban Transportation Task Force. (2005). Urban transportation in Canada: Needs and opportunities. Council of Ministers Responsible for Transportation and Highway Safety.</p>	<p>3PublicSentiments3: “The increased motorization of households combined with changes in land use patterns and travel structure (increase in triangular trips such as home to daycare to work) mean that urban populations are increasingly reliant on the automobile. While automotive technology and fuel is becoming cleaner, technological advances are largely negated because of choices Canadians make about location and travel behaviour” (p. 5)</p> <p>3PublicSentiments4: “The provision of effective transit services is viewed as an important element of sustainable transportation within urban centres and transit is expected to be key to remedying the problems facing urban communities. Investing in transit systems to deliver higher quality (more</p>

		<p>efficient, effective, reliable) transit services will increase its attractiveness relative to the private automobile, thereby reducing automobile use and reducing gridlock and traffic congestion” (p. 8-9)</p> <p>3PublicSentiments5: “Federal programs should respect provincial and territorial jurisdiction and planning priorities: Unanimously agreed by provincial respondents. Transport Canada noted that the federal government has indicated a “New Deal” for communities would require provincial and territorial acceptance. Federal funding programs should not be contingent upon matching funding from provinces and territories: Unanimously agreed by provincial respondents. Transport Canada could not comment whether future federal funding programs would be contingent upon matching funding. There should be flexibility in program designs to allow for tri-partite (federal-provincial/territorial-municipal), bilateral (federal-provincial/territorial), and direct programs (federal-municipal) based on the needs of the individual provinces and territories: Unanimously agreed. One respondent remarked that in complex, larger urban environments direct federal-municipal agreements may not be appropriate. One respondent recommended that a formal committee be established to ensure coherent guidelines and framework” (p. 18-19)</p> <p>3PublicSentiments6: “The federal government should commit to long-term funding of urban transportation infrastructure in Canada: Generally agreed. One respondent suggested the statement should refer to all, not only urban, transportation. One respondent observed that the federal government should approach such a commitment with caution. While urban infrastructure is currently a pressing issue, other priorities will emerge” (p. 19)</p> <p>3PublicSentiments7: “All provinces and territories should negotiate a national urban transportation infrastructure program with the federal government, with jurisdiction-specific agreements negotiated bilaterally: Generally agreed. One respondent noted that it may be difficult to negotiate a federal/provincial/territorial framework agreement and that bilateral agreements may be more achievable” (p. 19)</p> <p>3PublicSentiments8: “Allocation of funding among provinces and territories should meet national objectives such as economic competitiveness, trade expansion, and environmental sustainability: Generally agreed. Provincial respondents remarked this statement could be supported as long as the national objectives are sufficiently broad in scope and are consistent with provincial objectives. Respondents recommend the words ‘and provincial’ or ‘and regional’ be added after the word ‘national’ in the statement” (p. 19)</p> <p>3PublicSentiments9: “Urban transportation funding should be directed to priorities identified in provincial and territorial infrastructure plans and strategies: Generally agreed by provincial respondents. In at least one jurisdiction, cities set their own priorities. One respondent added that intergovernmental negotiation and cooperation involving urban municipal representatives is possible although it may be</p>
--	--	---

		<p>necessary to sign agreements only between the federal and provincial/territorial governments. One respondent recommended the statement be changed to read ‘Urban transportation funding should be directed to priorities identified in a tri-partite or bilateral (provincial-municipal) process.’ Transport Canada remarked that federal funding for urban transportation should support national objectives and complement provincial/territorial, regional and municipal plans reflecting agreed sustainable parameters” (p. 19-20)</p>
		<p>3PublicSentiments10: “Provinces and territories should have the flexibility to reallocate urban transportation funding to areas not covered under any new transportation infrastructure program ... One respondent disagreed. One respondent added that provinces and territories should have the flexibility to identify urban transportation projects servicing inter-urban routes including provincial transportation infrastructure within or leading to urban centres. One respondent recommended that each provincial and territorial government should determine the detailed program design and mix best suited to its own needs and circumstances to meet agreed objectives. A provincial/territorial government, which does not require the total transfer to fulfill the agreed objectives, should be able to reinvest additional funds in the same or a related priority area. Transport Canada commented that projects would be expected to comply with established parameters of funding programs” (p. 20)</p>
		<p>3PublicSentiments11: “Allocation of funding among provinces and territories should be equitable and based on a per capita formula: Generally agreed although there was some disagreement with using a per capita funding formula. One respondent recommended that funding be allocated based on a relative portion of the gas tax collected from each province. One respondent noted that a per capita formula is a good start but it may be in the national interest to make additional strategic investments in regions that make a disproportionate contribution to Canada’s gross domestic product. One respondent remarked that the allocation must ensure that smaller urban centres receive their fair share of funding to invest in strategic transportation projects” (p. 20)</p>
		<p>3PublicSentiments12: “The federal government should financially support urban transportation infrastructure to meet economic, social, and environmental goals in large urban centres and the essentially social mission of transportation in smaller cities. General agreement although four respondents disagreed with the notion that transportation in smaller centres is essentially for social missions and recommended the statement be changed to read, ‘the federal government should financially support urban transportation infrastructure to meet economic, social, and environmental goals in all urban centres.’ One respondent recommended that the federal and provincial governments should influence the investment so that federal and provincial visions for economic growth, social programs, and environmental targets are considered and incorporated” (p. 21)</p>
		<p>3PublicSentiments13: “The largest portion of federal gas tax revenues should be reallocated specifically</p>

		to projects improving urban transportation. Five of eight provincial respondents disagreed with this statement. It was remarked that dollars should be allocated to areas of the greatest strategic importance or where there is a demonstrable need to remedy deficiencies. One respondent recommended a balance between large urban centres, small urban centres and the provincial transportation network, suggesting the largest portion of federal fuel tax should be directed towards highways. One respondent urged the federal government to vacate the federal fuel tax since it has no jurisdiction over municipal infrastructure. Transport Canada indicated that the means to provide federal funding remains to be determined; it is the purview of the Department of Finance” (p. 21)
	Transport Canada. (2006). An evaluation of Transport Canada’s Moving On Sustainable Transportation Program. Departmental Evaluation Services. Ottawa, ON.	<p>3PublicSentiments14: “There is an on-going demand for the MOST Program from stakeholders as well as a demand for longer-term funding for sustainable transportation projects” (p. ii)</p> <p>3PublicSentiments15: “Some key recommendations stemming from the evaluation seek to address stakeholder demand for longer-term funding, deal with issues with performance reporting and improve certain aspects of program delivery ... TC should examine the feasibility of modifying the MOST Program’s terms and conditions to provide project funding beyond the current two-year maximum” (p. iii-iv)</p>
	Urban Transportation Task Force. (2009). Urban transit in Canada: Taking stock of recent progress. Council of Ministers Responsible for Transportation and Highway Safety.	<p>3PublicSentiments16: “There continues to be a strong need for all levels of government to support urban transit. However, transit projects continue to compete with other infrastructure investment needs for funding across all levels of government. The provincial members of the Task Force strongly support greater federal investment in transit, including a long-term federal funding program dedicated to transit” (p. 26)</p> <p>3PublicSentiments17: “Transit expansion plans are welcomed by the public, but there is much debate on how these investments will be financed. A single jurisdiction cannot achieve transit expansion without a coordinated funding partnership and stakeholder consensus. It is essential to align transit visions, planning goals, project justification, construction time-frames, and budgets. In the absence of funding assurances, it is difficult for transit authorities to adequately prepare their organization, generate community support, align transportation and transit networks, and ensure that transit demand is coordinated with transit supply. Long term funding envelopes are critical to transit expansion” (p. 31)</p>
	Ruffilli, D. (2010). Federal support for bus rapid transit and light rail transit systems in Canada. Library of Parliament. Industry, Infrastructure, and Resources Division. Parliamentary Information	3PublicSentiments18: “Many Canadian municipalities are expanding, constructing or planning rapid transit systems to address traffic congestion, growth and environmental issues. BRT, by virtue of its lower capital costs and scalability, remains a popular choice for many Canadian cities. LRT’s greater carrying capacity makes it attractive for large cities such as Toronto, Vancouver and Calgary that need to move large numbers of riders in and out of employment centres at peak periods. LRT is also viewed by many policy-makers and the general public alike as being a cleaner, more reliable and more advanced “world-class” technology than BRT. This perception persists despite the fact that many BRT systems now

and Research Service. Ottawa, ON.	feature articulated and double-decker buses equipped with new hybrid or alternative fuel technology.
Ministry of Finance. (2011). Evaluation of the Public Transit Tax Credit. Ottawa, ON.	3PublicSentiments19: “Canadians are increasingly aware of the PTTC and benefit from it in large numbers: approximately 1.5 million taxfilers claim the credit annually for themselves and/or other family members” (p. 1)
	3PublicSentiments20: “The demand for public transit is affected by the age profile of the population it services. As one of the primary purposes for commuting is to travel to work, an increase in the proportion of retirees in the population will likely result in slower growth in the number of regular transit users. On the other hand, as individuals get older, they may be more attracted to larger urban centres where social, health and other services tend to be more accessible. A greater concentration of the population around large urban centres would be expected to have a positive effect on the use of public transit since larger urban centres tend to have more developed systems of public transit. Also, operating an automobile in large cities is generally more expensive and less attractive due to heavier traffic congestion and higher parking fees. In addition, individuals may also factor in environmental concerns in their transportation decisions. These considerations could, over time, be increasingly important as individuals become more aware of environmental issues” (p. 24)
Tweed, Mervin . (2012). Study on transit in Canada: report of the Standing Committee on Transport, Infrastructure and Communities. House of Commons of Canada Standing Committee on Transport, Infrastructure and Communities. Ottawa, ON.	3PublicSentiments21: “Various transit stakeholders, including transportation planners, transit operators, municipal representatives and others, submit that provinces and municipalities do not have sufficient resources to operate and keep Canada’s existing transit systems in a state of good repair — let alone to plan and provide new services” (p. 1)
	3PublicSentiments22: “A number of stakeholders who met with the Committee in Ottawa took the opportunity to express appreciation for the billions in federal contributions to Canada’s transit systems in recent years. These witnesses indicated that the additional federal funds precipitated the undertaking of many important transit projects. Conversely, a representative of the Canadian Taxpayers Federation (CTF) was of the view that federal funding programs had distorted decision-making for transit agencies and had actually delayed necessary projects. The CTF argued that projects such as the Evergreen Line in Vancouver would have been built sooner if the transit agency had not waited for an offer of federal funding” (p. 9)
	3PublicSentiments23: “The most consistent message from stakeholders concerning [the design of a] future infrastructure plan was the need for a predictable, longer term funding program for transit projects. A representative from CUTA suggested to the Committee that rapid transit, which takes many years to plan and build, is what Canadian cities need for the future. Furthermore, rapid light rail transit and bus transit use dedicated corridors and require major investments from all orders of government to achieve. In order to approve such projects, transit authorities need assurance that all orders of

		<p>government will be present and partners from the beginning until the end of a project. Given the long planning cycle for transit capital for systems of all sizes, the overall policy framework should provide assurance of funding for 25 years while a particular program could be reassessed every 5 years” (p. 10)</p> <p>3PublicSentiments24: “Some stakeholders also stated that accountability would be an important feature of the new funding program so that transit projects survived changes in government, whether municipal, provincial or federal, among other reasons. In their brief to the Committee, the Victoria Chamber of Commerce recommended new legislation to ensure year-over-year funding and provide a more predictable investment climate for transit” (p. 10)</p> <p>3PublicSentiments25: “Some stakeholders told the Committee that a new funding program for transit should consider the needs of different-sized communities, particularly those in rural Canada. A representative of Metrolinx, the commuter rail operator and manager of the air-rail link in Toronto, suggested that any funding program that succeeds the Building Canada Fund should have portions reserved for different-sized communities. This notion was supported by the Canadian Automobile Association (CAA) and the Federation of Canadian Municipalities (FCM). The AAMDC also recommended that funding should be earmarked for rural transit and that the federal share of rural transit project funding be raised to 50%. To further support rural transit, the AAMDC and a representative of Motor Coach Canada (MCC), which represents the private bus industry, both proposed a new federal subsidy for intermunicipal bus operations, where necessary, to ensure continued operations. MCC also suggested that private bus company fares should be exempt from sales tax where a private bus company is in competition with public bus services in order to level the playing field somewhat between the two operators” (p. 11)</p> <p>3PublicSentiments26: “Some stakeholders who met with the Committee felt that the ineligibility of existing transit system needs, such as fleet replacement, and operating and maintenance costs, was a problem with past infrastructure programs. The FCM noted that Canada’s infrastructure is extensive and much of it is either out of date or in disrepair and argued that federal funding should not be restricted to new infrastructure projects only” (p. 12)</p> <p>3PublicSentiments27: “A number of witnesses praised the predictability of the federal gas tax transfers and the municipalities’ freedom to direct the funds to their top infrastructure priorities. Several large municipalities, including Edmonton, Calgary, Toronto, Montreal, and Ottawa have dedicated the totality of their federal gas tax allocations to transit. The FCM told the Committee that the federal gas tax transfer is appropriate for the various and diverse needs of municipalities in the way it is administered and designed, but that it is not sufficient for the size of infrastructure investments required. The FCM is opposed to increases in the property tax to bridge the infrastructure gap because it submits that the property tax is already relied upon too heavily. Several recommendations were put forth that would</p>
--	--	--

		<p>effectively increase federal gas tax transfers” (p. 12-13)</p> <p>3PublicSentiments28: “The CTF had a different opinion of the federal gas tax transfers. The CTF recommended that the Government of Canada stop levying excise tax on gasoline so that the provinces can tax it at a higher rate to better fund the building and maintenance of roads and bridges. The CTF proposes that road users pay for roads through the gas tax and transit users pay for transit through fares” (p. 13)</p> <p>3PublicSentiments29: “Many stakeholders who met with the Committee presented the view that the Government of Canada has an interest in creating more federal policies and initiatives to foster growth of and demand for transit, despite its lack of constitutional jurisdiction. The CTF disagreed with this view, stating: If anyone thinks that city transit ought to be a federal responsibility, you could propose rewriting the Constitution. But it probably makes sense that city transportation, transit, ought to be a city responsibility, and they ought to have the means available to pay for it” (p. 13)</p> <p>3PublicSentiments30: “The FCM suggested that there is an extra-jurisdictional role for the Government of Canada in transit because the problems that arise from inadequate transit services, such as traffic congestion, air pollution and limited mobility, create national social, environmental and economic challenges. This assessment was reinforced by CUTA and CUPE, which observed that traffic congestion has economic and environmental impacts that transcend provincial borders. CUTA, and other witnesses, also commented that creating dynamic urban environments is a central part of Canada’s competitive advantage and thus a federal issue. On this point, the representative of the STM suggested that the Government of Canada has underestimated the impact of congestion on competitiveness and the importance of transit. Former Chief Planner for the City of Toronto Paul Bedford is convinced that Canada’s ‘cities and city regions are absolutely critical for the economic health of the country’” (p. 13-14)</p> <p>3PublicSentiments31: “Some stakeholders drew upon existing federal government roles and initiatives to justify a new role for the Government of Canada in transit. According to Transport Action Canada, the Government of Canada should have more of an interest in transit because it has well-established responsibility for transportation safety. CUTA suggested that a national transit strategy would be complementary to existing national gateway, greenhouse gas, and innovation policies. Some stakeholders, including AAMDC, SARM and Metrolinx, proposed that Canadians should have a right to expect mobility wherever they live, with the implication that a national standard is a federal responsibility” (p. 14)</p> <p>3PublicSentiments32: “During the Committee’s hearings, many stakeholders alternated freely between the terms ‘strategy’ and ‘policy framework.’ The CAA drew a distinction between the terms and was wary that a ‘strategy’ would be overly prescriptive. Similarly, CUTA rejected the notion of a strategy and</p>
--	--	---

		<p>suggested that ‘all orders of government should work together in developing a framework of national transit policies that are integrated and mutually supportive.’ On the other hand, the FCM recommended a strategy based on principles, long-term planning and funding. Whether as part of a policy framework or a strategy, stakeholders suggested a number of federal policies that could support transit to the Committee, which are described in the following sections” (p. 14)</p>
		<p>3PublicSentiments33: “There were multiple requests from stakeholders for the Government of Canada to assume new administrative and leadership functions with respect to transit in Canada. Several witnesses suggested that the federal government organize a venue or forum for all transit stakeholders to meet, discuss issues and share best practices. A representative of the Swiss Association of Public Transport strongly recommended that the general public be consulted about transit decisions, as did the former Chief Planner from the City of Toronto. A notable exception was the CTF whose representative commented that the federal government ‘has no useful place in the process’ (p. 14-15)</p>
		<p>3PublicSentiments34: “Some witnesses suggested that adding some conditions to the federal grant approval process would better ensure that value for money is achieved and only the best projects are selected. For example, financial criteria in the application process could help identify projects that meet a minimum cost-recovery standard if the government chose to set one. Metrolinx supported evidence-based project selection in order to demonstrate why certain projects are chosen over others, but recommended the inclusion of social and environmental benefits in the analysis [given that] ... although some transit projects do not seem efficient from a financial perspective, they might be the right answer to respond to a particular social need” (p. 17)</p>
		<p>3PublicSentiments35: “Some stakeholders recommended federal tax measures to foster the growth of and demand for transit. TAC suggested that more municipalities would be able to acquire unused rail lines and corridors for transit purposes more readily if the Government of Canada would issue a tax receipt to the railway for the charitable donation. TAC told the Committee that municipalities often do not have the resources to acquire railway lines when the freight railways wish to dispose of them” (p. 18-19)</p>
		<p>3PublicSentiments36: “The Government of Canada recently provided tax deductibility for transit users who buy a pass but a number of witnesses called for federal tax exemptions for employers who subsidize transit passes for employees[, giving] employers an incentive to provide transit benefits instead of parking benefits, and [increasing] transit ridership” (p. 19)</p>
	<p>Standing Committee on Finance. (2014). Number 049, 2nd Session, 41st Parliament. Evidence: Monday, October</p>	<p>3PublicSentiments37: “ATU Canada proposes permanent dedicated funding for public transit to maintain, renew, and expand transit services across Canada. ATU Canada recommends to government that at least one source of this permanent funding be a percentage of the current fuel and gas tax funds. Additional revenues sources should be considered, such as a small portion of the goods and services tax</p>

	<p>20, 2014. House of Commons of Canada Standing Committee on Finance. Ottawa, ON.</p>	<p>and/or an employer payroll tax. Canada is one of the few developed countries without a federal policy covering the long-term predictable transit investment that would permit our transit systems to achieve their full potential. A Canadian transit framework would provide economic and environmental benefits to all Canadians by ensuring that gridlock is reduced while allowing the public to reach their destinations in a safe and timely manner. Furthermore, tourism would be enhanced when our cities could boast world-class transit systems. Effective world-class transit systems will increase Canada's ability to compete globally in a world economy, help to protect our environment, and improve our quality of life. Expanding public transportation can help create thousands of new, green, well paid jobs and save billions of dollars in time, energy, and other efficiencies. Equally important, a world-class public transit system creates an all-inclusive community, a community that provides and even protects the most vulnerable in our society. A Canadian transit framework would also help to level the playing field for a large segment of that group, those who cannot afford a private vehicle, thereby aiding a segment of society that tends to get marginalized under the current system” (p. 2)</p> <p>3PublicSentiments38: “It is unusual for any industry's biggest stress to be their success, but even some of the more progressive transit systems in Canada struggle financially due to a steady growth in ridership owing to urban sprawl, an aging population, and more and more younger Canadians moving away from cars and onto public transit. It appears that these same Canadians are now ready to pay for better public transit also. A recent survey by CivicAction in Toronto shows that people are willing to pay more for public transit if the funds are dedicated to and assured to go towards public transportation. These same sentiments have been echoed across Canada. The main platform for the candidates in Toronto's current municipal election is public transportation. ATU Canada has seen these same sentiments unfold at the municipal level across the country for many years ... A recent CBC online poll showed that 88% of the 359 respondents said yes when asked if Canada should adopt a national transit strategy” (p. 2)</p> <p>3PublicSentiments39: “The industry is open to alternative funding sources such as P3s, but the current procurement model restricts the federal government to a maximum of 25% share of the cost in a P3. This often leaves municipalities and provinces with a more substantial share of the initial capital investment up front. As the federal government prepares its next budget, it should consider raising its maximum share of P3 projects from 25% to 33%, especially in cases where no private partners are providing initial capital investments” (p. 4)</p> <p>3PublicSentiments40: “By investing in transit infrastructure, we can maximize job creation in communities across the country. The Canadian transit industry employs 75,000 people and creates thousands more in spinoff jobs. In addition, many of the manufacturers, consultants, and suppliers at the core of the industry have developed their expertise here in Canada and export a substantial share of</p>
--	--	--

		<p>their production. Despite difficult economic times, they've continued to sustain a long legacy of public transit innovation, which has helped them increase their share of the North American transit market. In order to maintain our competitive advantage, the federal government can partner directly with the Canadian Urban Transit Research and Innovation Consortium, a new not-for-profit organization dedicated to bringing industry and academia together to increase technological development in Canadian transit. Before concluding, I'd like to be clear on one more point: buy America. Now more than ever, the threat of protectionist measures being debated in the United States regarding buy America procurement rules is real. That could raise U.S. transit content from 60% to 100%, putting hundreds, if not thousands, of Canadian jobs at risk if transit manufacturers are forced to shift their production to the U.S. We will continue to work with the Government of Canada to come up with solutions to help protect the high- value jobs in the Canadian transit industry and address these concerns with our U.S. counterparts” (p. 5)</p>
		<p>3PublicSentiments41: “A core element of a [national transit] strategy could be better alignment between infrastructure investments in new subway lines or light rail systems, for instance, and land use planning. That is the most important principle. Ensuring that investments are as effective as possible is key, so it's important to target the investment in the area that will deliver the best return and ridership. The right investment formula is also necessary to ensure adequate and ongoing funding in the context of a multi-level government partnership. Finally, a research and development program to help develop state-of-the-art technology would be important, in addition to ridership incentives. That could take the form of an excise tax exemption for employers who want to give their employees a choice between a parking spot and a monthly transit pass, for example” (p. 8-9)</p>
	<p>Standing Committee on Transport, Infrastructure and Communities. (2015). Updating infrastructure in Canada: An examination of needs and investments. Report of the House of Commons of Canada Standing Committee on Transport, Infrastructure and Communities (Larry, Miller, Chair). Ottawa, ON.</p>	<p>3PublicSentiments42: “The economic, social and environmental benefits of transit investment were thoroughly discussed during the course of this study. Some witnesses highlighted that transit investments reduce traffic congestion in major cities, whose impact on economic productivity was considered to be of national importance as it costs Canada billions in lost economic activity already. Transit projects are also expected to attract higher-paying jobs to communities, support the development of business clusters, and reduce urban sprawl, car dependence, greenhouse gases and the cost of living for some households. Witnesses proposed that transit projects generate a return on investment, in terms of incremental economic activity, of at least 20%” (p. 10-11)</p> <p>3PublicSentiments43: “CUTA told the Committee that its members strongly support the new federal transit funding proposal and hope that the terms for accessing the funds will be flexible. By proposing \$1 billion in dedicated transit funding per year starting in 2020 ‘the government is setting the wheels in motion to unlock funding for major infrastructure projects across the country.’ Although CUTA appreciates the predictability of the new funding, it told the Committee that there would still be a</p>

		<p>shortfall of \$18 billion for the \$56 billion in transit projects planned over the next five years ... 28% of transit needs over the next five years will be for rehabilitation or replacement” (p. 11)</p> <p>3PublicSentiments44: “FCM ... signaled its members’ approval of the new public transit funding announced in Budget 2015. As the terms and conditions of the funds are established, however, the FCM told the Committee that it would like to ensure “that local governments retain the flexibility to determine the appropriate degree of private sector involvement.” Since the proposed new public transit fund is set up to respond to big projects, which take time, the delay in disbursing those funds is not seen as a problem by the FCM as long as the approval process starts soon. Some representatives of individual municipalities expressed some concerns about the P3 requirements of the proposed new public transit funding. For example, the Mayor of Burnaby would like to have a choice not to engage in a P3 for a large transit project, and representatives from the City of Montréal suggested that the new public transit funds for P3 projects would only benefit the transit systems in the largest municipalities in Canada. The City of Montréal recommended that public transit funding be flexible, inclusive and long term. The representatives of the City of Vancouver also recommended having flexible rules around the new transit fund” (p. 12)</p> <p>3PublicSentiments45: “The FCM and CUTA both requested that the federal contribution for P3 transit projects be raised to one-third of eligible projects costs, like other federal funds. The FCM told the Committee that it is critical that the federal government invests as a true one-third partner in these projects as P3s do not reduce the need for government funding for the capital costs of public goods like major transit projects” (p. 12)</p>
--	--	--

Appendix D: Open Codes

Table 17: First-era (documents from 1968-1979) codes applied during the open coding process.

Idea category	Open codes	Thematic keys
1st Era Paradigms	Federal impacts on cities	1Paradigms18-20, 1Paradigms32-33, 1Paradigms45, 1Paradigms51, 1Paradigms53, 1Paradigms55
	Inadequacy of transit services	1Paradigms8, 1Paradigms39-41, 1Paradigms43-44, 1Paradigms46, 1Paradigms52, 1Paradigms56
	Interdependence of urban issues	1Paradigms11, 1Paradigms12, 1Paradigms17
	Jurisdictional tensions	1Paradigms5, 1Paradigms9-10, 1Paradigms13, 1Paradigms26-27, 1Paradigms54
	Postwar suburban sprawl	1Paradigms2, 1Paradigms28-29, 1Paradigms34, 1Paradigms36-38, 1Paradigms42, 1Paradigms50
	Recognition of automobile externalities	1Paradigms1, 1Paradigms4, 1Paradigms6, 1Paradigms7, 1Paradigms14, 1Paradigms16, 1Paradigms22, 1Paradigms47-48
	Transit investment rationales	1Paradigms15, 1Paradigms23-24, 1Paradigms30-31, 1Paradigms35, 1Paradigms49
	Urban decay	1Paradigms3, 1Paradigms21, 1Paradigms25
1st Era Programs	Capital funding initiatives	1Programs35-38, 1Paradigms41, 1Programs52
	Enhancing redistributive benefits	1Programs15-20, 1Programs60, 1Programs75
	Federal R&D involvement	1Programs6, 1Programs39, 1Programs44, 1Programs47-51, 1Programs68-69, 1Programs71-72, 1Programs74
	Improving multimodal efficiency	1Programs3, 1Programs4-5, 1Programs9-10, 1Programs30, 1Programs45-46, 1Programs54, 1Programs59, 1Programs65, 1Programs80, 1Programs82
	Intergovernmental coordination and influence	1Programs7-8, 1Programs11-12, 1Programs13-14, 1Programs23-29, 1Programs 31-34, 1Programs40, 1Programs42-43, 1Programs64, 1Programs66, 1Programs70, 1Programs73
	Modernizing transit	1Programs1-2, 1Programs21-22, 1Programs53, 1Programs55-58, 1Programs61-63, 1Programs67, 1Programs81
	Program effectiveness	1Programs76-79
	Synoptic approach	1Programs9-10
1st Era Frames	Automobile primacy	1Frames3, 1Frames5, 1Frames28, 1Frames32
	Benefits of federal-urban involvement	1Frames8, 1Frames10, 1Frames12, 1Frames16, 1Frames19, 1Frames29
	Benefits of improved intergovernmental coordination	1Frames11, 1Frames17, 1Frames20, 1Frames30-31
	Social justice as transit policy objective	1Frames13, 1Frames21, 1Frames23

	The need to improve ineffective transit services	1Frames1, 1Frames4, 1Frames6, 1Frames24-27, 1Frames33
	Transportation as a key component of Canadian identity	1Frames2, 1Frames7
	Worsening urban conditions	1Frames9, 1Frames14-15, 1Frames18, 1Frames22
1st Era Public Sentiments	Demand for suburban living and automobility	1PublicSentiments7-8, 1PublicSentiments10
	Demand for transit, planning, and pricing reform	1PublicSentiments2, 1PublicSentiments4, 1PublicSentiments14
	Opposition to sprawl and automobility	1PublicSentiments1, 1PublicSentiments3, 1PublicSentiments6, 1PublicSentiments9, 1PublicSentiments11-13, 1PublicSentiments16
	Public influence on federal decision-making	1PublicSentiments5, 1PublicSentiments15

Table 18: Second-era (documents from 1980-2001) codes applied during the open coding process.

Idea category	Open codes	Thematic keys
2nd Era Paradigms	Budget constraints	2Paradigms61-62, 2Paradigms65-66, 2Paradigms69, 2Paradigms72, 2Paradigms79
	Continuing suburban hegemony	2Paradigms26, 2Paradigms28-29, 2Paradigms34, 2Paradigms37, 2Paradigms42, 2Paradigms51-52, 2Paradigms57, 2Paradigms59
	Declining importance and quality of transit	2Paradigms16-17, 2Paradigms19, 2Paradigms25, 1Paradigms35, 2Paradigms38, 2Paradigms40, 2Paradigms54, 2Paradigms77-78
	Energy shortage and related effects	2Paradigms2, 2Paradigms6, 2Paradigms18, 2Paradigms27, 2Paradigms44
	Federal R&D trends	2Paradigms10-13
	Institutional inertia and barriers to transit improvement	2Paradigms21, 2Paradigms24, 2Paradigms30-33, 2Paradigms47-50, 2Paradigms53, 2Paradigms56, 2Paradigms58, 2Paradigms67-68, 2Paradigms70-71, 2Paradigms73, 2Paradigms81
	New Public Management imperatives	2Paradigms14-15, 2Paradigms20, 2Paradigms22, 2Paradigms41, 2Paradigms63, 1Paradigms75-76, 2Paradigms80, 2Paradigms84
	Public-private cooperation	2Paradigms1, 2Paradigms3, 2Paradigms7, 2Paradigms9, 2Paradigms74, 2Paradigms82
	Resilience of Canadian transit systems	2Paradigms4-5, 2Paradigms8
2nd Era Programs	Sustainable development imperatives	2Paradigms23, 2Paradigms36, 2Paradigms39, 2Paradigms43, 2Paradigms45-46, 2Paradigms55, 2Paradigms60, 2Paradigms64, 2Paradigms83
	Addressing funding shortfall	2Programs77-80
	Evaluations of federal support	2Programs72-75

	New Public Management programming	2Paradigms15-21, 2Programs28, 2Programs43, 2Programs53-54, 2Programs60-63, 2Programs84, 2Programs86
	R&D support programs	2Programs6, 2Programs10-11, 2Programs13-14, 2Programs22
	Recommendations for federal involvement	2Programs23, 2Programs40, 2Programs45, 2Programs50-51, 2Programs55-56, 2Programs58-59, 2Programs64, 2Programs69, 2Programs87, 2Programs92, 2Programs94-95
	Shifting focus away from capital investment	2Programs25, 2Programs27, 2Programs31, 2Programs68, 2Programs88-89
	Support for domestic transit manufacturers	2Programs1-5, 2Programs8, 2Programs12
	Sustainable development programming	2Programs34-38, 2Programs42, 2Programs44, 2Programs48, 2Programs82-83, 2Programs85, 2Programs97
	Transit governance and programming recommendations	2Programs7, 2Programs9, 2Programs24, 2Programs26, 2Programs29-30, 2Programs33, 2Programs39, 2Programs41, 2Programs46-47, 2Programs49, 2Programs52, 2Programs57, 2Programs65-67, 2Programs70-71, 2Programs76, 2Programs81, 2Programs90-91, 2Programs93, 2Programs96
2nd Era Frames	Canadian political culture and urban traditions	2Frames20-22, 2Frames26-27, 2Frames29, 2Frames40, 2Frames47
	Environmental, economic, and social benefits of transit	2Frames4, 2Frames18, 2Frames23-25, 2Frames30, 2Frames32, 2Frames42-44, 2Frames51
	Expertise of Canadian transit industry	2Frames2-3
	Externalities of sprawl and automobility as motivators of action	2Frames13-14, 2Frames16-17, 2Frames28, 2Frames31, 2Frames38, 2Frames41, 2Frames50
	Importance of New Public Management policy goals	2Frames5-10, 2Frames11, 2Frames15, 2Frames34, 2Frames36-37, 2Frames49
	Impropriety of national transit policy	2Frames12, 2Frames33, 2Frames35
	Transit problem definitions and remedies	2Frames1, 2Frames19, 2Frames39, 2Frames45-49, 2Frames52
2nd Era Public Sentiments	Automobile entrenchment and individualism	2PublicSentiments1, 2PublicSentiments5, 2PublicSentiments11, 2PublicSentiments14-15, 2PublicSentiments19-20, 2PublicSentiments22, 2PublicSentiments28, 2PublicSentiments31
	Big-city transit demand	2PublicSentiments3-4
	Energy costs and transit use	2PublicSentiments2, 2PublicSentiments6

	Resistance to user-pays transportation pricing	2PublicSentiments17-18, 2PublicSentiments26, 2PublicSentiments27, 2PublicSentiments32
	Support for federal involvement	2PublicSentiments29-30, 2PublicSentiments33-35
	Waning and waxing support for sustainable transportation policy	2PublicSentiments7-10, 2PublicSentiments12-13, 2PublicSentiments16, 2PublicSentiments21, 2PublicSentiments23-25

Table 19: Third-era (documents from 2002-2015) codes applied during the open coding process.

Idea category	Open codes	Thematic keys
3rd Era Paradigms	Climate change and sustainability imperatives	3Paradigms7, 3Paradigms18, 3Paradigms21, 3Paradigms24, 3Paradigms28, 3Paradigms33, 3Paradigms58
	Differing transit needs in large and mid-sized cities	3Paradigms4, 3Paradigms13, 3Paradigms26, 3Paradigms30, 3Paradigms42
	Federal involvement in transit funding (rationales and impacts)	3Paradigms27, 3Paradigms29, 3Paradigms36, 3Paradigms38, 3Paradigms40, 3Paradigms43-46, 3Paradigms48-49, 3Paradigms51, 3Paradigms56-57
	Globalization and competitiveness imperatives	3Paradigms2, 3Paradigms15, 3Paradigms25, 3Paradigms32, 3Paradigms37, 3Paradigms50
	Growing infrastructure and service deficits	3Paradigms3, 3Paradigms5, 3Paradigms8-12, 3Paradigms23, 3Paradigms31, 3Paradigms52-54
	Impacts of economic crises	3Paradigms34-35, 3Paradigms47
	Influence of peer nations	3Paradigms16-17, 3Paradigms19
	Requirement for new intergovernmental partnerships	3Paradigms1, 3Paradigms6, 3Paradigms14, 3Paradigms20, 3Paradigms22, 3Paradigms39, 3Paradigms41, 3Paradigms55
3rd Era Programs	Capital funding initiatives	3Programs4, 3Programs13, 3Programs27, 3Programs29-32, 3Programs35, 3Programs42, 3Programs46, 3Programs52, 3Programs60
	Funding conditions	3Programs24-25, 3Programs55
	Intergovernmental mechanisms	3Programs2, 3Programs15-18, 3Programs33-34, 3Programs39-40, 3Programs47, 3Programs53
	Proposed components of improved institutional framework for transit	3Programs1, 3Programs6-10, 3Programs14, 3Programs19-21, 3Programs23, 3Programs26, 3Programs49, 3Programs54, 3Programs56, 3Programs59
	Network expansion initiatives	3Programs11, 3Programs41, 3Programs58
	Responses to rising profile of urban and sustainability issues	3Programs3, 3Programs5, 3Programs12, 3Programs22, 3Programs28, 3Programs36, 3Programs38, 3Programs50-51
	Support for soft initiatives	3Programs37, 3Programs43-45, 3Programs48, 3Programs57
3rd Era Frames	Acknowledgement of fiscal imbalance and need for stability	3Frames1-2, 3Frames16, 3Frames47, 3Frames49, 3Frames51-52

	Climate change as a motivator of action	3Frames4, 3Frames6, 3Frames19, 3Frames28
	Constitutionality of intervention	3Frames12, 3Frames14-15, 3Frames17, 3Frames21, 3Frames23-24, 3Frames30-32, 3Frames37, 3Frames44-45, 3Frames48
	Linkages between transit investment and economic improvement	3Frames3, 3Frames8, 3Frames11, 3Frames25, 3Frames29, 3Frames33-35, 3Frames39-41, 3Frames43
	Health and equity benefits	3Frames5, 3Frames18, 3Frames20, 3Frames26-27, 3Frames42, 3Frames50
	Risks associated with the status quo	3Frames9-10, 3Frames13, 3Frames38
	Variation in urban needs	3Frames7, 3Frames22, 3Frames36, 3Frames46
3rd Era Public Sentiments	Attitudes toward user fees and taxation mechanisms	3PublicSentiments2, 3PublicSentiments19, 3PublicSentiments35-36
	Demand for coordinated governance	3PublicSentiments17, 3PublicSentiments23-24, 3PublicSentiments32, 3PublicSentiments41
	Demand for jurisdictional respect and flexibility	3PublicSentiments5, 3PublicSentiments7-11, 3PublicSentiments25, 3PublicSentiments27, 3PublicSentiments29, 3PublicSentiments44
	Demand for new federal leadership and programming	3PublicSentiments1, 3PublicSentiments6, 3PublicSentiments12-16, 3PublicSentiments26, 3PublicSentiments31, 3PublicSentiments33, 3PublicSentiments37, 3PublicSentiments39, 3PublicSentiments45
	Demand for reducing congestion and environmental impacts	3PublicSentiments4, 3PublicSentiments30, 3PublicSentiments42
	Dissatisfaction with fiscal gap and funding criteria	3PublicSentiments21, 3PublicSentiments34, 3PublicSentiments38, 3PublicSentiments43
	Technology and job creation	3PublicSentiments18, 3PublicSentiments40
	Preferences for suburban living	3PublicSentiments3, 3PublicSentiments20
	Opposition to transit investment	3PublicSentiments22, 3PublicSentiments28