

Political Challenges and Active Transportation: A Comparison of Helsinki, Finland and Ottawa,  
Canada

Karl Saidla

University of Ottawa

Thesis submitted to the Faculty of Graduate and Postdoctoral Studies in partial  
fulfillment of the requirements for the PhD in Human Kinetics

University of Ottawa, August 2017

**Table of Contents**

List of Tables.....	viii
List of Figures.....	viii
List of Acronyms.....	ix
Definitions of key terms.....	x
Abstract.....	xi
Acknowledgements.....	xii
Chapter 1: Introduction.....	1
The benefits of active transportation.....	5
Active transportation and public policy.....	8
Differing levels of AT success in Europe and North America.....	10
Political challenges in healthy public policy.....	11
Political factors and active transportation.....	13
Summary.....	18
Chapter 2: Theoretical Framework: The Advocacy Coalition Framework.....	19
Theories of the policy process.....	19
The Advocacy Coalition Framework.....	22
Selection of the Advocacy Coalition Framework for this research.....	27
Summary.....	29
Chapter 3: Methodology.....	30

Selection of the Case Methodology .....	30
Selection of Helsinki, Finland, and Ottawa, Canada .....	31
Criteria .....	32
Criterion 1: AT modal splits.....	32
Criterion 2: Policy-level commitment to AT promotion.....	33
Criterion 3: Potential AT correlates.....	35
<i>a. total population</i> .....	35
<i>b. population density</i> .....	36
<i>c. climate</i> .....	36
<i>d. topography</i> .....	38
<i>e. car ownership</i> .....	39
Criterion 4: Socioeconomic and cultural context.....	40
<i>a. wealth</i> .....	41
<i>b. levels of physical activity</i> .....	41
<i>c. age and sex distributions</i> .....	41
Methods.....	44
Primary method: The semi-structured interview.....	48
Secondary method: documentary review and analysis.....	53
Identification of most significant results.....	55

Chapter 4: Health Promotion by Stealth: Active transportation success in Helsinki, Finland .....	57
Abstract .....	57
Introduction.....	58
Theoretical Framework: The Advocacy Coalition Framework .....	61
Methods.....	63
Major Findings: The Dominance of the Easy, Beautiful and Green (Pro-AT) Advocacy Coalition.....	64
Relatively Stable Parameters. ....	65
Major policy changes and external events. ....	66
Discussion: From a Health Promotion Perspective .....	70
Advocacy Coalition Membership. ....	71
Objectives and motivations of AT advocates. ....	72
Evidence.....	73
Arguments.....	74
Conclusion: Implications for Health Promotion.....	74
References.....	77
Chapter 5: Active Transportation in Ottawa, Canada. The Challenge of Enduring Political Obstacles.....	83
Abstract.....	83

Introduction.....	84
Theoretical Framework: the Advocacy Coalition Framework (ACF) .....	86
Methodology.....	88
Case selection.....	88
Methods.....	89
Overview: Long term efforts to promote AT in Ottawa.....	91
Major findings and discussion: Relatively stable parameters as obstacles to AT promotion in Ottawa .....	94
Challenges related to Ottawa’s North American sociocultural context. ....	94
Obstacles related to Ottawa’s political system.....	103
Conclusion .....	107
References.....	110
Chapter 6: Active Transportation Promotion: Easier in a European City, but Why? .....	119
Abstract.....	119
Introduction.....	119
Methods.....	122
Theoretical framework: The Advocacy Coalition Framework (ACF).....	122
Case selection.....	125
Data collection and analysis.....	129
Results.....	131

Overview: AT advocacy in Helsinki and Ottawa, 1970-2015.....	131
Main findings: Differences in relatively stable parameters help to explain varying AT success.....	137
Conclusions and Discussion .....	151
Implications for Policy.....	152
Limitations .....	154
References.....	156
Chapter 7: Conclusion.....	167
Main conclusions and implications.....	171
Theoretical implications.....	175
Effectiveness of the methodology.....	176
Case selection.....	176
Methods.....	177
Limitations.....	179
Possibilities for future research.....	182
References.....	185
Appendix A: Interview Guide.....	202
Appendix B: Interview Guide (Abbreviated) .....	210
Appendix C: Interview Analysis Template .....	218
Appendix D: Interview Participant List.....	221

Appendix E: Ethics Approval Notices ..... 230

Appendix F: Interview Consent Form ..... 237

### List of Tables

Chapter 1:

Table 1: Helsinki and Ottawa: Summary of AT characteristics .....	43
---	----

Chapter 6:

Table 1: Helsinki and Ottawa: AT-related characteristics, governmental commitment, and performance .....	127
--	-----

Table 2: Pro-AT organizations/actors (prominently identifiable) .....	134
---	-----

Table 3: Obstacles to AT: organizations/actors (prominently identifiable).....	134
--	-----

### List of Figures

Chapter 1:

Figure 1: Basic version of the advocacy coalition framework (1988).....	24
---	----

Chapter 3:

Figure 1: Interview analysis procedure.....	52
---	----

Figure 2: Document analysis procedure .....	55
---	----

Chapter 6:

Figure 1: Basic version of the advocacy coalition framework (1988).....	123
---	-----

**List of Acronyms**

AT	active transportation
ACF	Advocacy Coalition Framework
EPOMM	European Platform on Mobility Management
UCL	University College London
HiAP	Health in All Policies
HEAT	Health Economic Assessment Tool
WHO	World Health Organization
RMOC	Regional Municipality of Ottawa-Carleton
OMB	Ontario Municipal Board
NCC	National Capital Commission
CFSC	Citizens for Safe Cycling
OECD	Organization for Economic Cooperation and Development

**Definitions of key terms**

Active transportation (AT): Walking and cycling for practical transportation, as well as public transit use

AT modal split: The total percentage of people who use active transportation (i.e. walking, cycling and public transit use combined) for daily transportation in a given jurisdiction

AT mode share: Synonym for *AT modal split*

AT rate: Synonym for *AT modal split*

### **Abstract**

This qualitative comparative case study examined factors related to politics that might explain the notably different *active transportation* (AT - walking, cycling, and public transit use) rates achieved in Helsinki, Finland (a leading European city in AT, where 77 per cent of people use primarily AT for daily transportation) and Ottawa, Canada (a leading North American city in AT, but where the AT rate is 28.5 per cent).

Applying the Advocacy Coalition Framework (ACF) - a policy process theory - individual focused interviews were conducted with 47 active transportation experts from the two cities. Document review was employed as a secondary method. The results are discussed in three articles written for peer reviewed journals – the first two concentrating on the findings from Helsinki and Ottawa respectively, and the third article comparing the findings from both cities.

Overall, differences stemming from the ACF category of *relatively stable parameters* (i.e., stable background-level factors) including land use, transportation planning traditions, and political systems were identified as likely important in explaining the discrepancy in AT rates.

### **Acknowledgements**

I would like to sincerely thank the people and organizations that provided very important assistance in the completion of this research project. I am tremendously grateful for their support.

With respect to funding, this work strongly benefitted from the Ontario Graduate Scholarship Program of the Ontario Ministry of Advanced Education and Skills Development and a Doctoral Fellowship of the Centre for International Mobility (Finland).

My research supervisor, Dr. Jean Harvey, was extremely knowledgeable, open-minded and patient in assisting in the development and conduct of this work. His creativity, sound advice and generosity with his time were invaluable. My thesis advisory committee members – Dr. Patrick Fafard and Dr. Alexandre Dumas – provided numerous insightful suggestions and ideas which served to substantially improve many components of this thesis. In addition, they helped to create very useful and timely opportunities to meet and interact with scholars engaged in research involving themes and approaches similar to my own.

While conducting three months of fieldwork in Helsinki I was very fortunate to be a guest of the Finland Futures Research Centre (FFRC) of the School of Economics, University of Turku. At a practical level, the FFRC provided a very functional and convenient office space for my personal use. More importantly, members of the FFRC generously shared their relevant knowledge and made very useful recommendations concerning my research, particularly in suggesting potential interview participants. In particular, I would like to thank Dr. Petri Tapio and Dr. Sirkka Heinonen for their assistance as representatives of the FFRC.

Two people - Megan McTavish and Tony Saidla - contributed very large amounts of voluntary time and shared their particular expertise with respect to proof-reading, organizing reference lists, and formatting. Furthermore, they listened with patience to my frequent verbal

deliberations related to the research. Their efforts undoubtedly led to a much more polished presentation of the results and much less anguish for me than would otherwise have been the case.

Evidently, the completion of this project depended on the willingness of the research participants in Helsinki and Ottawa to take the time answer my often evolving questions and to provide their insightful commentary. I am particularly appreciative of their generosity given their busy lives and many pressing obligations.

Finally, I would like to thank the many friends and family members who, by their example and advice, encouraged me to take a risk in pursuing what has proven to be an undoubtedly worthwhile intellectual challenge.

## Chapter 1: Introduction

This research project consisted of a qualitative comparative case study examining the role of factors related to politics in the promotion of active transportation (AT - walking, cycling and public transit use)<sup>1</sup> in Helsinki, Finland and Ottawa, Canada between the late 1960s and today.

The promotion of AT is supported by numerous health organizations (Dora, Hosking, Mudu, & Fletcher, 2011; Edwards & Tsouros, 2006; International Society for Physical Activity and Health, 2011). This reflects its potential with respect to increasing physical activity as well as reducing air pollution and improving safety for vulnerable road users. AT is also favoured for its beneficial effects in terms of the environment (e.g., reduced greenhouse gas emissions), social concerns (e.g., improved equity in transportation) and the economy (e.g., reduced health and environmental costs, increased mobility and productivity). So far, very little research has attempted to explore the effects of political context on AT promotion.

While numerous top-performing international cities have achieved AT *modal splits* (i.e. the percentage of people who use AT for daily transportation)<sup>2</sup> of more than 75 per cent (European Platform on Mobility Management, n.d.a), Canadian and North American cities rarely

---

<sup>1</sup> The term *active transportation* (AT) is most frequently considered to include walking, cycling as well as (in some cases) less common forms of non-motorized transportation such as skateboarding and in-line skating. For the purposes of this research, AT is defined as including walking, cycling, and public transit use. The inclusion of public transit use is mainly in response to an emerging body evidence (Besser and Dannenberg, 2005 and Lachapelle, Frank and Saelens, 2011) indicating that public transit users typically accumulate significant amounts of physical activity (as a result of walking to and from transit stops, for example). Further discussion of the logic for this choice is provided later in the Introduction on p. 18 (Active transportation: definition).

<sup>2</sup> According to its definition by Transportation-Dictionary.org ([http://www.transportation-dictionary.org/Modal\\_Split](http://www.transportation-dictionary.org/Modal_Split)) and employed by the European Platform on Mobility Management (EPOMM) (European Platform on Mobility Management, n.d.b). As modal split data are typically collected via surveys, there is no way to ensure direct comparability from city to city, given differences in survey methods. Research by EPOMM indicates that despite differences in survey methods, modal split data are “relatively well comparable” (European Platform on Mobility Management, n.d.b) between cities in different countries.

have modal splits of more than 30 per cent (Statistics Canada, 2015; U.S. Department of Transportation, 2015). This suggests that factors related to the North American context may be responsible for some of the large discrepancy in AT performance. As will be discussed, while it may be reasonably assumed that these overall differences in AT performance are strongly related to the degree of governmental commitment to public policies deliberately designed to support AT, it is not clear why North American jurisdictions have been less successful overall in making favourable policy decisions.

Accordingly, the selection of Ottawa and Helsinki as cases was made with the objective of examining the role of political factors in explaining varying levels of commitment to AT favourable policies and related AT success (measured by modal split) in noteworthy different contexts. Briefly, while Ottawa is among the top-performing North American cities for AT, with approximately 28 per cent of people using AT for daily trips at the city level (City of Ottawa, 2013a, p. 17), its success is weak relative to the 77 per cent achieved in Helsinki (European Platform on Mobility Management, n.d.a). This sizable difference is striking given that the cities share several potentially important AT-related challenges including low population densities, high driving rates in their respective countries, and cold winter climates. At the same time, Helsinki displays evidence of a much stronger long-term policy-level commitment to the promotion of AT than Ottawa when considered, for example, in terms of investment in AT infrastructure such as public transit, bicycle and walking facilities.

The research question was: What factors related to politics might help to explain why Helsinki was able to prioritize the promotion of AT to a much higher degree than Ottawa over the long term? The theoretical framework was selected from political science. Specifically, this research applied Sabatier and Jenkins-Smith's Advocacy Coalition Framework (ACF) (Jenkins-

Smith & Sabatier, 1994; Sabatier, 1988; Weible & Sabatier, 2007) - a theory of the policy process that provides a model of the major categories of factors affecting politics that result in ultimate policy choices. As will be discussed, this framework was chosen mainly on the basis of its relevance for social-determinants-focused health policy (to which AT promotion belongs) and its demonstrated useful application to a number of health-related policy areas. Furthermore, certain features of the ACF (briefly, relating to its salience for policy areas displaying values-based conflicts and a wide variety of actors) made it appear particularly applicable to municipal transportation policy.

The primary research method was the focused interview. In total, 47 interviews were conducted with identified AT experts in Helsinki and Ottawa. In order to gather background information, fill identified research gaps, and verify the information provided via the interviews, the review of a large volume of documents (e.g., newspaper articles, policy papers, academic research, advocacy material, websites, and city planning documents) was employed as a secondary method.

Following a discussion of relevant background information (in the remainder of the Introduction) and chapters discussing the theoretical framework and the methodology, the results are presented in three articles. The first (Saidla, 2017a), written for a health promotion-focused audience, is a case study of long-term AT promotion efforts in Helsinki. Mainly, it discusses identified political factors that appear to have facilitated Helsinki's high level of success in AT. The second article (Saidla, 2017b) is a case study of long-term AT promotion in Ottawa, written for a sociology- and political science-based interdisciplinary audience. It identifies and describes a number of identified context-specific political challenges that appear to have significantly hindered Ottawa's progress in achieving higher AT rates. The third article is a comparative case

study of AT promotion in Helsinki and Ottawa. This article focusses on the most noteworthy areas of contextual difference that may seem to explain a significant portion of the varying levels of commitment to AT observed in the two cities. It was written for a readership interested in health and policy at an international level, particularly in relation to topics identified as priorities by the World Health Organization (including, for example, physical activity). Finally, the concluding chapter presents a summary of findings overall, discusses practical implications for the promotion of AT and health, suggests possibilities for future research, and discusses the study's limitations.

### **Active transportation: definition**

The decision to include public transit use within the definition of AT (which is more frequently considered to include the practical use of walking and cycling) was made based on two major considerations. The first was that an emerging body of evidence (Besser and Dannenberg, 2005; Lachapelle, Frank, Saelens et al. 2011) indicates that public transit users frequently accumulate significant amounts of physical activity. Research carried out by Besser and Dannenberg (2005) suggests that Americans who use public transit spend a median of 19 minutes per day walking to and from public transit stops. The same study suggests that 29 per cent of American public transit users accumulate at least 30 minutes of walking to and from transit per day, an amount that would allow the achievement of US physical activity targets. (Active Living Research, 2009; U.S. Department of Health and Human Services, 2014). Furthermore, the results of research carried out in the Seattle and Baltimore regions (Lachapelle, Frank, Saelens, & et al., 2011) included the finding that frequent transit users accumulated eight more minutes of objectively measured moderate physical activity per day than those who did not commute by transit. Assuming this occurred on five days per week, a typical transit user would

thus accumulate 40 of the 150 weekly minutes of moderate to vigorous physical activity recommended in the U.S. (U.S. Department of Health and Human Services, 2014). Bearing this in mind, including public transit use within the definition of AT was considered a straightforward way to ensure that this analysis included a transportation mode that is likely associated with important amounts of physical activity and related health benefits.

The second consideration was that walking, cycling and public transit together are frequently and logically considered to constitute a unified alternative to automobile transportation. In connection, many policy-level suggestions for shifting the balance of transportation to healthier modes are aimed at simultaneously improving conditions walking, cycling, and public transit use while also discouraging automobile driving (Banister, 2005; Newman & Kenworthy, 1999). Examples of such policy-level suggestions would include, for example, the implementation of land use policies focused on the provision of a mix of housing, services and employment in close proximity, the creation of safer, more walkable business and housing districts, as well as policies designed to discourage automobile use such reducing the availability of parking and implementing road pricing policies.

### **The benefits of active transportation**

The promotion of AT is strongly supported by health organizations for its potential benefits in areas including physical activity, air quality and traffic safety (Dora et al., 2011; Edwards & Tsouros, 2006; International Society for Physical Activity and Health, 2011). Physical inactivity contributes to conditions including cardiovascular disease, obesity, and diabetes (Cavill, Kahlmeier, & Racioppi, 2006) and is the world's fourth leading risk factor for mortality (World Health Organization, n.d.). In Canada, roughly 85 per cent of adults and 93 per cent of children fail to meet currently recommended health-related physical activity targets

(Colley et al., 2011; Colley et al., 2014). Air pollution, meanwhile, contributes to cardiovascular disease as well as cancer and respiratory conditions (World Health Organization, 2016).

According to the Canadian Medical Association, air pollution is responsible for 21 000 premature deaths each year in Canada (Canadian Medical Association, 2008). Finally, the development of secure environments for AT can create substantial safety improvements for non-motorized users (Pucher & Dijkstra, 2003).

In terms of evidence specifically linking AT and health, scientific literature reviews indicate that AT promotion has considerable potential and few associated risks. According to the results of one extensive literature review (Larouche, 2012) examining the environmental and health benefits of AT:

...the reviewed studies suggest that increasing the mode share of AT [in this case, walking and cycling] may lead to multiple health benefits (i.e. declines in the risk of obesity, cardiovascular diseases, diabetes, hypertension, cancer, etc.). The benefits vary across studies, but importantly, all available health impact assessment studies have concluded that the benefits of increasing the mode share of AT largely outweighed the risks. (p. 429)

Meanwhile, Badland and Schofield (2005), in a review of evidence concerning the links between urban design and physical activity, found that “fostering suitable urban environments is critical to sustaining physical activity behaviours” (p. 177), noting that the greatest potential within urban design for sustaining physical activity appeared to be in transportation-related activities (p. 193). Finally, according to a research review by Active Living Research (2009) “A substantial body of research shows that certain aspects of the transportation infrastructure – public transit, greenways and trails, sidewalks and safe street crossings near schools, bicycle

paths, traffic-calming devices, and sidewalks that connect schools and homes to destinations – are associated with more walking and bicycling, greater physical activity, and lower obesity rates” (p. 6).

AT is also supported basis of its potential environmental, social, and economic benefits. Briefly, with respect to environmental protection, increased rates of AT should contribute to reduced levels of environmentally damaging air pollution and greenhouse gas emissions resulting in climate change (Bergeron & Cragg, 2009b; Transport Canada, 2011). From a health perspective it is noteworthy that climate change itself was referred to by a Lancet University College London (UCL) commission in 2009 as “potentially the biggest global health threat in the 21<sup>st</sup> century” (Costello, Abbas, Allen & et al., 2009, p. 1728) as a result of its effects in areas such as disease, water and food insecurity, shelter, and extreme climatic events.

From a social perspective, AT has the potential to provide increased *social capital* from more human interaction, more equitable distribution of public space and resources, and increased public access to healthy food, recreational opportunities, and other community resources (Bergeron & Cragg, 2009a; Transport Canada, 2010). This applies particularly to socially disadvantaged groups because AT provides mobility that one does not have to travel or pay for. Finally, it has been convincingly demonstrated that AT offers considerable benefits from an economic perspective, for example: less traffic gridlock, greater workplace productivity, reduced health costs, and lower environmental costs (Campbell & Wittgens, 2004; Litman, 2017).

The overall advantages of raising AT rates are increasingly clear, particularly with respect to related potential economic savings. A recent report by the Medical Officers of Health for the Greater Toronto-Hamilton Area (Mowat, Gardner, Mckeown, & et al., 2014), notably, documents a variety of benefits that could be achieved via increases in AT in that region. The authors

conducted calculations based on a theoretical scenario in which by 2031 (relative to the current situation) the region was able to increase public transit use by 9.8 percentage points, increase walking and cycling for commuting to work and school by five percentage points each, and substitute five per cent of current short car trips with walking or cycling. According to the report, achieving the above would prevent 184 premature deaths and 1000 cases of diabetes per year as a result of increases in physical activity; 154 premature deaths and more than 90 hospitalizations per year would be prevented via reductions in traffic-related air pollution; upfront municipal infrastructure costs would decrease by 38 per cent, while annual operating costs would decrease by 14 per cent; Greenhouse gas emissions would be 29 per cent less. Finally, the resulting reduction in congestion would shorten average commute times by 22 minutes. Overall, the economic savings associated with deaths prevented were calculated to be \$2.2 billion per year, while the net economic benefit (not including benefits related to health) was calculated to be \$ 15 billion.

### **Active transportation and public policy**

Policy-oriented research (R. Buehler, Pucher, & Kunert, 2009; European Conference of Ministers of Transport, 2004; Pucher & Buehler, 2012; Pucher, 2012; United Nations Economic Commission for Europe, 2009) suggests that AT performance may be considered strongly the result of public policy decisions. Pucher and Buehler, for example, conducted a thorough investigation (Pucher & Buehler, 2008) into what might explain the relative success of the promotion of cycling in the Netherlands, Denmark, and Germany. Mainly, they attributed it to the well-coordinated implementation of multi-faceted, mutually-reinforcing policies such as the generous provision of cycling infrastructure and traffic calming, public education and

promotional events, and the implementation of a variety of policies to discourage automobile use.

Even more pointedly, Pucher (1988) compared 12 Western European and North American jurisdictions by both modal split data and relevant transportation policies. According to the referenced modal split data, automobile travel accounted for 82 per cent and 74 per cent of trips in the United States and Canada respectively, but less than 50 per cent in Western European countries. With respect to transportation policies, Pucher notes a variety of ways in which these are more favourable to AT overall in Western Europe. These include higher levels of service for public transit, higher levels of subsidization for the construction of bicycle infrastructure, the establishment of more pedestrian-friendly zones and the provision of better safety overall for pedestrians and cyclists. Furthermore, Pucher highlights the particular importance of policies making automobile ownership and use expensive, such as high gas prices, high taxes on auto ownership, and high prices for parking. Finally, Pucher also notes the lower average subsidization of roadway building, and greater governmental involvement in land use and housing policies as likely connected with lower rates of automobile use. Overall, Pucher maintains that “current urban transportation systems and travel behaviour are – for better or for worse – primarily the results of public policy” (p. 517).

Overall, literature discussing recommended public policies to encourage AT (Banister, 2005; Newman & Kenworthy, 1999; Schiller, Bruun, & Kenworthy, 2010) generally points to investment in infrastructure and services such as public transit, traffic calming, and dedicated facilities for walking and cycling. Also frequently discussed are policies designed to discourage automobile use (e.g., increased fuel charges and decreased parking availability). Furthermore, AT

proponents typically favour the development of more compact communities featuring mixed land uses that result in shorter distances between amenities.

Given the established links between deliberate public policy decisions and AT rates, this research focused on questions related to what political factors may facilitate or hinder governmental commitment to AT-favourable public policies.

### **Differing levels of AT success in Europe and North America**

As noted earlier, some jurisdictions display remarkable success when measured according to AT rates, with a considerable number of European cities having AT modal splits of over 50 per cent (European Platform on Mobility Management, n.d.a), and some (such as London, Paris, and Helsinki) exceeding 75 per cent (European Platform on Mobility Management, n.d.a).

Canadian and US cities, however, rarely achieve modal splits of even 30 per cent (Statistics Canada, 2015; U.S. Department of Transportation, 2015). In the United States, only four of 383 metropolitan statistical areas have AT mode shares of more than 25 per cent (U.S. Department of Transportation, 2015). According to Statistics Canada, the census metropolitan areas of Ottawa (Ontario-side) (30.1 per cent) Montreal (29.7 per cent), Toronto (29.1 per cent), and Vancouver (27.8 per cent) have the highest percentages of AT from among major Canadian metropolitan areas (Statistics Canada, 2015). More broadly, Bassett et al., (2008) examined overall AT modal splits in 17 countries including the United States and Canada. While the United States and Canada had AT rates of roughly 11 per cent and 20 per cent respectively, eight European countries (e.g., Switzerland, the Netherlands, and Spain), had AT rates above 40 per cent (Bassett et al., 2008, p. 799). Furthermore, as discussed earlier with reference to AT and public policy, Pucher's research (1988) compared 12 Western European and North American jurisdictions by modal split data and found that automobile travel accounted for 82 per cent and

74 per cent of trips in the United States and Canada respectively, but less than 50 per cent in Western European countries.

Overall, these numbers suggest the possibility that factors related to the North American context may at least partly explain the failure of North American cities to achieve higher AT mode shares and that research concerning more specific factors that might contribute to these differences is warranted.

### **Political challenges in healthy public policy**

From a health-based perspective, the promotion of AT clearly fits within the category of *healthy public policy*, or alternatively, *health in all policies*. The National Collaborating Centre for Healthy Public Policy described this concept as “public policy that potentially enhances populations’ health by having a positive impact on the social, economic, and environmental determinants of health” (National Collaborating Centre for Healthy Public Policy, 2013). Nancy Milio, one of those widely credited with the original development of the healthy public policies approach, defined healthy public policies as “ones that improve the conditions under which people live: secure, safe, adequate, and sustainable livelihoods, lifestyles, and environments, including housing, education, nutrition, information exchange, child care, transportation, and necessary community and personal social and health services” (Milio, 2001).

From a practical perspective, healthy public policy requires a shift in the focus of analysis from health care services to a very large number of social, economic and political factors which affect the determinants of health. Healthy public policy emphasizes the role of a wide range of determinants of health including, for example, wealth, occupation, diet, physical activity, and the built environment. Notably, it includes the explicit consideration of the health effects of policies that are outside the traditional health sector (Fafard, 2008). This is in contrast to the more

traditional view of health outcomes being primarily determined by care (often acute) received in doctors' offices and at hospitals. Credit for the increase in the popularity of the healthy public policy approach has been given (Breton & De Leeuw, 2010) to Milio (1981), as mentioned earlier, as well as to Hancock (1985), and, following them, to the Ottawa Charter for Health Promotion (World Health Organization, 1986).

In recent years, the term *health in all policies* (HiAP) is increasingly used in place of healthy public policy, particularly at the international level. In substance, however, the concept remains essentially the same. Health in all policies was defined by the WHO in 2013 as “an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies, and avoids harmful health impacts, in order to improve population health and health equity” (World Health Organization, 2013).

A number of specific challenges for healthy public policy implementation have been identified. Exworthy (2008) outlined seven high-level policy challenges related to addressing the social determinants of health. Briefly, Exworthy's challenges include: the fact that social determinants of health are multi-faceted and have multiple causes; the fact that the time frames associated with the “life course” approach (which emphasizes how factors at all stages of life influence long-term health outcomes) employed by advocates of healthy public policy are long relative to political cycles; the requirement for inter-sectoral cooperation; the relatively low level of priority assigned to health in other policy areas; the difficulty in clarifying cause-effect relationships because of the complexities involved in addressing social determinants; lack of supporting epidemiological data; and globalization.

In addition to locating the promotion of AT within the category of healthy public policy (and health in all policies) and revealing some of the significant potential challenges relevant for

AT policy implementation, related literature also makes it clear that advocates of healthy public policy have generally struggled when it comes to transferring the evidence that supports the logic of healthy public policy into actual policy implementation (Breton & De Leeuw, 2010; O'Neill, LeMieux, Groleau, Fortin, & LaMarche, 1997). To a significant degree, this is attributable to the fact that the healthy public policy movement has generally been led by researchers from the health field who do not have formal expertise in public policy. Authors including Bernier and Clavier (2011) and Fafard (2008), for example, have suggested that health promotion advocates have often assumed that the process of policy making is essentially linear, progressing through stages such as problem identification, research, the transfer of research to policy, and finally, to policy implementation. In contrast, the reality is much more complex and involves many factors external to the immediate policy environment including, for example public opinion, social movements, economic interests, and values (Bernier & Clavier, 2011; Fafard, 2008; Fafard, 2015; Hawkins & Parkhurst, 2015).

Correspondingly, a number of authors (Breton & De Leeuw, 2010; Gagnon, Turgeon, & Dallaire, 2007) have argued that more research that applies formal theoretical frameworks from fields such as political science (where a wide variety of factors beyond evidence in itself are given thorough attention) is called for. This research project aimed, in part, to respond to the call for theoretically informed research about healthy public policies.

### **Political factors and active transportation**

Overall, little formal policy research that specifically deals with political factors and the promotion of AT could be identified at the outset of this research. Several studies (Litt et al., 2013; Richards, Murdoch, Reeder, & Rosenby, 2010; Richards, Murdoch, Reeder, & Amun,

2011) were identified that had made efforts to document the characteristics and strategies of advocates in favour of either AT or a subject area strongly related to AT.

Litt et al. (2013) for example, interviewed members of 59 active living collaboratives (including coalitions, networks, partnerships, and alliances that were in some way advocating changes to the built environment that would assist in the promotion of physically active lifestyles) in twenty-two U.S. states in order to determine both their characteristics and the extent to which they were successful in achieving environmental and policy changes. Their analysis focused mainly on describing the composition, characteristics, locations, activities and objectives of the collaboratives. Overall, the authors found that the collaboratives typically included diverse sets of partners and undertook very wide ranges of activity. The most common areas of work were *safe routes to school*, and *parks and recreation*, while the most success in changing policy was achieved in the areas of public plazas, street improvements, streetscaping, parks, open spaces, and recreation. The types of policies that were targeted most frequently included *complete streets* (i.e., policies that require streets to accommodate all users, including pedestrians, cyclists, and automobiles), and zoning ordinances. Finally, the most frequently employed strategies were “engaging in media activities and the policy-making process” (p. 1) as well as “engaging stakeholders” (p. 1). Overall, the authors concluded that while the most success was achieved in the area of parks and recreation, further opportunities existed in areas including transit and infill development.

While the results of this and other similar studies (Richards et al., 2010; Richards et al., 2011) have considerable value, these studies do not employ approaches driven by formal policy process theories that emphasize not only the advocates but also the associated political factors, nor do they specifically examine a Canadian case as part of their inquiry.

Bratzel (1999) and T. J. Buehler (2007) were the only authors originally identified who had considered underlying political factors related to success in the implementation of policies strongly related to AT. Bratzel (1999) conducted a comparative analysis using five case studies of cities in Switzerland, the Netherlands and Germany in order to consider underlying political factors related to *sustainable transportation* policy (sustainable transportation being the same as AT, including walking, cycling and public transit). Bratzel makes reference to several theoretical concepts from political science such as *policy learning*, *levels of policy change*, and *policy windows*, associated with the authors Sabatier and Jenkins-Smith (1999), Hall (1993), and Kingdon (1984). While Bratzel's research would not normally be described as making formal use of any of these theoretical concepts, the term *policy macro-windows* (or large-scale opportunities for policy shifts) is used to describe the development of sustainable transportation policy in his case studies. Bratzel explicitly borrows this idea from Kingdon's (1984) well-known multiple streams theory from political science as well as from an elaboration of this same concept by Keeler (1993).

Overall, Bratzel suggests that macro-windows favourable to sustainable transportation only open as a result of strong changes outside the immediate political environment (e.g., state-level political mandates and social crises). Furthermore, he adds that the opening of a macro-window, while necessary, is likely not a sufficient condition for policy change. He concludes that policy change in this area only appears possible when macro-windows are open and other factors (the level of organization of political actors, interest groups, etc.) lead to their exploitation.

T. J. Buehler (2007) analyzed fifty years of bicycle policy in Davis, California and attempted to determine what factors were responsible for the relatively high degree of success that was achieved in that city. He considered the influence of a very large number of bicycle

policy advocates and competing groups over different time periods. Throughout his research report, Buehler makes reference to aspects of three formal theories of the policy process that we will discuss later, including punctuated equilibrium theory, multiple streams theory, and the ACF. Buehler, like Bratzel, makes use of Kingdon's term, policy window, to describe periods during which it was possible to make considerable progress with the promotion of cycling. His application of these theories, however, is not systematic.

Buehler summarizes his account by dividing the development of bicycle policy in Davis into 6 time periods from the 1950s to 2005. Within each time period, he describes how the following five elements either affected or were affected by the promotion of bicycling: the natural environment, the built environment, the (social) community, advocacy, and self-selection (i.e., people choosing to live in Davis because they liked to cycle). Briefly, Buehler found that all of these elements contributed in differing ways and to varying degrees during each time period. Overall, he concluded that the factors that contributed the most to the high rates of cycling in Davis were the favourable climate and topography, residents who created a culture favourable to bicycling, and the strong efforts of individual leaders. With respect specifically to advocacy, the efforts of individual leaders were found to be particularly important during periods of significant opposition from the public, city officials, or municipal government.

While the research conducted by Bratzel (1999) and T. J. Buehler (2007) was considered relevant in that portions of their studies evaluate efforts to promote AT and relevant political circumstances, neither study formally applied a political theoretical framework to AT. Furthermore, neither study attempted to examine factors that might help to explain the glaring gaps in AT performance between Canadian and European contexts.

Interestingly, two research papers applying policy process theories to AT were identified more recently, having been published during the period that this research project took place. The first (Zwald, Eyler, & Moreland-Russell, 2016), guided by Kingdon's Multiple Streams framework (a theoretical framework from political science similar to the ACF that is discussed in more detail in the Theoretical Framework chapter), explored Metropolitan Planning Organizations' (MTOs – federally mandated agencies responsible for distributing federal transportation funds and planning transportation projects) prioritization of AT in six US metropolitan areas. The goal of the research was to “explore the policy change processes that influence MPO's increased prioritization of AT policies” (p. 294). The authors conducted their investigation using interviews with key informants, with interview questions and analysis being guided by concepts from the Multiple Streams Framework. Overall, the results indicated that the prioritization of AT by MTOs was the result of the convergence of Kingdon's *problem, politics and policy streams* and that highly committed *policy entrepreneurs* were vital in creating *windows of opportunity*<sup>3</sup>.

Weber (2016) also relied on the Multiple Streams Framework in his large-scale study investigating explanations for the varying levels of commitment to investment in bicycle infrastructure in US municipalities. Using a combination of surveys and interviews, he explored a number of hypotheses related to Kingdon's policy entrepreneur and windows of opportunity

---

<sup>3</sup> As described by the study's authors, the *problem stream* includes the problems that politicians and citizens would like addressed, the *politics stream* consists of the national mood, campaigns, or legislative and administrative changes, while the *policy stream* includes the policy options available at local, regional, state and federal levels. A *window of opportunity* is described by Kingdon (2002) as when two or more of the streams meet each other, which can happen as a result of a variety of events, including efforts by *policy entrepreneurs* who are advocates of particular policy positions that are also skilled at creating and taking advantage of favorable political circumstances.

concepts. Broadly, he concluded that while policy entrepreneurs do play an important role in local bicycling-favourable infrastructure and policy change, broader local support (e.g., from among academia, municipal personnel, political officials) is necessary to significantly change a municipality's infrastructure-related priorities in favour of bicycling (p.147) Furthermore, Weber found that windows of opportunity helped to "jumpstart" local attention to bicycling-related issues, but that over time enthusiasm tended to moderate and decisions largely reflected longstanding plans, programs, and policies (p. 148).

The more recent studies discussed above highlight the utility of applying formal political frameworks to the promotion of AT, with potentially useful findings being discovered in each case. As with all of the relevant literature discussed however, neither explores what might explain the very large differences in AT performance between North American and leading European or other international jurisdictions. Furthermore, neither includes the Canadian context. Altogether, the literature discussed above points to the potential utility of this dissertation.

### **Summary**

Overall, the motivation and logic for this research result from four main considerations: 1) the potential health and additional benefits to be derived from increasing AT rates, particularly in Canadian and North American cities; 2) the striking differences in AT rates between Canadian/North American and European jurisdictions; 3) the social-determinants focused scholarly literature calling for the application of formal political frameworks to healthy public policy, and 4) the fact that only a small body of research applying political theory to the promotion of AT exists, and that none was identified including the Canadian context.

## Chapter 2: Theoretical Framework: The Advocacy Coalition Framework

### Theories of the policy process

The Advocacy Coalition Framework (ACF) (Jenkins-Smith & Sabatier, 1994; Jenkins-Smith, Nohrstedt, Weible, & Sabatier, 2014; Sabatier, 1988; Weible & Sabatier, 2007) is one of several theories of the policy process from political science (e.g., *the stages model*, *multiple-streams theory*, and *punctuated equilibrium theory*). These theories provide conceptual models of how major categories of political factors (e.g., the power of the executive, institutions, interests, and values) interact to determine ultimate policy choices. The models can be used in a wide variety of ways. Apart from contributing to theoretical understanding of the policy process for its own sake, they provide structure for guiding inquiry into more detailed aspects of particular policy process areas and factors (e.g., agenda setting, interest groups, and collective action, among others) (Jann & Wegrich, 2007).

In a practical context, these theoretical models can be used to help organize and guide research concerning particular real-world policy areas (such as federal tax policy, provincial transportation policy, municipal environmental policy, and so forth). If one wanted to determine, for example, what factors resulted in the decision to create a given national park, a theory of the policy process would provide a useful starting point for identifying the most relevant political factors and understanding how they may have interacted to produce the end decision. Knowledge of this type can be useful not only in terms of understanding past public policy developments, but also in terms of how, for example, those with particular interests might be able to influence a given continuing policy process in their favour.

Historically, the most frequently employed model of the policy process is the *stages* or *policy cycle* model (Jann & Wegrich, 2007; Jenkins-Smith & Sabatier, 1994). Briefly, this model

breaks the policy process into the stages of problem identification/agenda setting, policy formulation and adoption, policy implementation, and policy evaluation and reformulation (Jann & Wegrich, 2007; Jenkins-Smith & Sabatier, 1994). Harold Lasswell (1956) is given credit for the original idea of modeling the policy process according to stages (Jann & Wegrich, 2007). Authors including Brewer and DeLeon (1983), Anderson (1975), and Jenkins (1978) subsequently advanced similar theoretical models based on roughly the same principles (Jann & Wegrich, 2007). Ultimately, the stages model became the most conventional way of describing the policy process (Jann & Wegrich, 2007).

The stages model has been the subject of a number of important criticisms. Jenkins-Smith and Sabatier (1994) notably, argued that it suffered from a legalistic, top-down focus that emphasized the role of legislators without leaving room for other important players such as lower-level bureaucrats. They also contended that the stages model generally considered *policy* to refer to specific pieces of legislation, and that it might be inapplicable when policy originated from a wide range of sources. Finally, they noted that the stages model does not identify what causes the policy process to move through the various stages. Apart from these criticisms, it has come to be generally acknowledged that this model is a simplified framework that assumes a linear process of policy development, moving in chronological order between clearly defined stages. As Jann and Wegrich (2007) point out, real policy processes rarely exhibit clear stages with defined beginnings and endings.

Partly in response to these criticisms, political theorists developed a number of alternative theories of the policy process. Among those frequently cited (Birkland, 2001; John, 2012) are the multiple streams approach (Kingdon, 2002), punctuated equilibrium theory (Baumgartner & Jones, 2010), and the ACF. Each emphasizes different areas and actors in the policy arena. Thus,

Kingdon's multiple streams theory focusses on agenda setting and the influence of what he terms the three separate streams of the policy process: politics, problems, and policies. Within a given policy area, the streams operate more or less independently until a particular event causes two or more of the streams to meet each other (e.g., the political climate becomes more conducive to taking action vis-à-vis a previously identified policy problem). This situation is described as a "window of opportunity". Kingdon gives considerable attention to *policy entrepreneurs*, who may be described as advocates of particular positions that work to create and take advantage of windows of opportunity (Kingdon, 2002).

Punctuated equilibrium theory (Baumgartner & Jones, 2010), meanwhile, suggests that the balance of power between groups and individuals regarding a policy area tends to remain stable over long periods of time, but is occasionally upset by sudden changes in public perceptions of problems, which thereby alter the balance of power between competing interests. *Policy monopolies* (relatively closed groups of the most important players in the policy process) work to keep the system closed in order to be able to continue to promote their ideas. Nevertheless, the equilibrium can be disrupted by, for example, media attention to a publicly unacceptable policy response to a given problem. Broadly, punctuated equilibrium theory suggests that policy change, rather than being incremental and continually evolving, tends to happen suddenly and rapidly following long periods of relative stability (Birkland, 2001).

No universally accepted best overall choice among the numerous modern theoretical models of the policy process has emerged. As mentioned, each emphasizes different areas, factors, and actors in the policy arena. Those considering the use of one of these models for research, therefore, should consider which one will likely best assist with understanding the

particular problem in question. The specific rationale for the selection of the ACF for this research will be discussed following the provision of an overview of the basic ACF framework.

### **The Advocacy Coalition Framework**

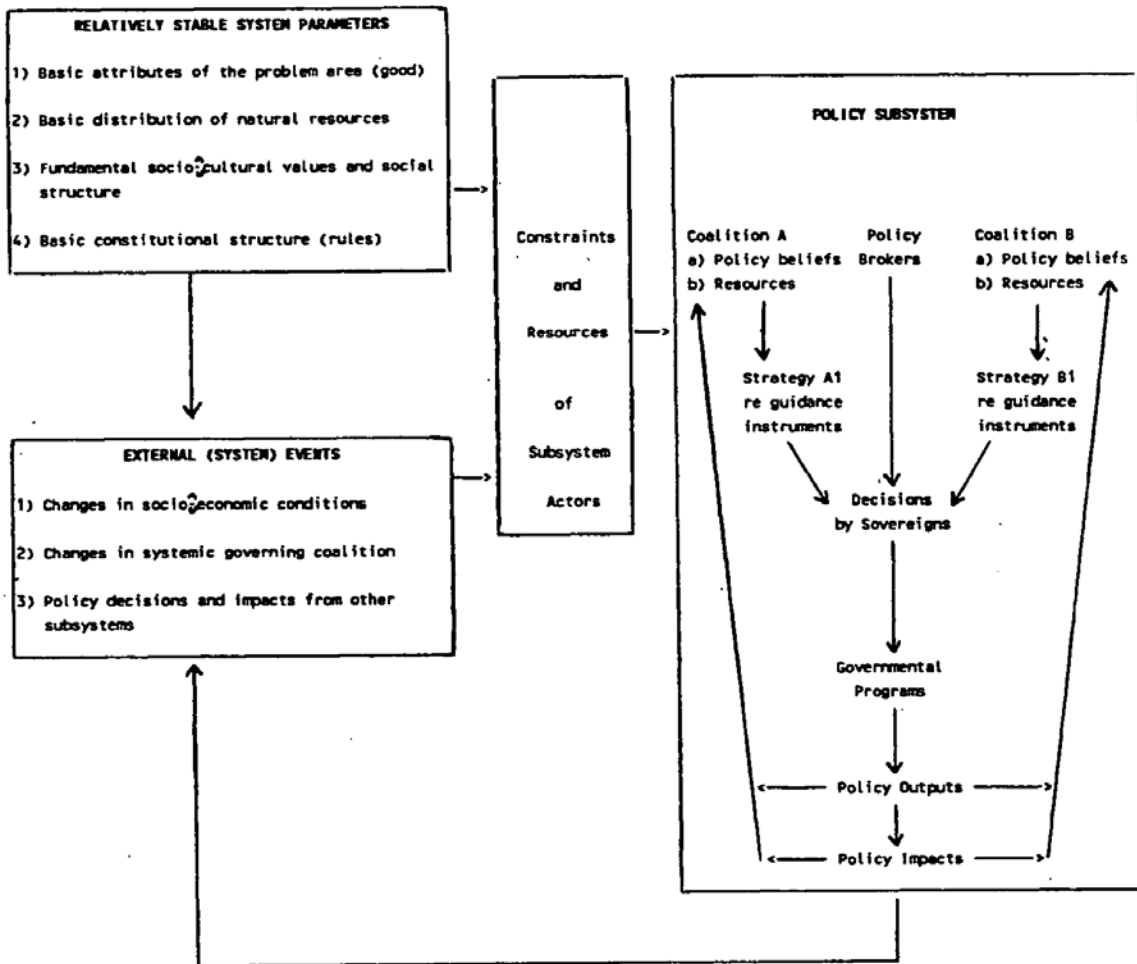
The advocacy coalition framework (ACF) (Jenkins-Smith & Sabatier, 1994; Sabatier, 1988; Weible & Sabatier, 2007) is a theory of the policy process that was developed especially to help explain situations involving substantial goal conflicts, important technical disputes, and multiple actors from a variety of fields and several levels of government (Weible & Sabatier, 2007). The framework is described as having four basic premises (Jenkins-Smith & Sabatier, 1994). The first is that understanding the process of policy change requires a time perspective of at least ten years. The second is that the most useful way to think about policy change is through a focus on what are referred to as policy *subsystems* that consist of the interactions between different actors from a variety of institutions that attempt to influence governmental decisions in a policy area. The third is that subsystems frequently involve all levels of government. The fourth is that public policies and programs can be thought of in the same way as belief systems: as sets of value priorities and causal assumptions about how to realize them.

According to the ACF, an individual's belief system may be divided into three tiers (Jenkins-Smith & Sabatier, 1994). The first consists of an individual's *deep core* values including basic normative beliefs such as, for example, the relative value ascribed to individual freedom vs. social equality. The second tier is referred to as *policy core* beliefs and is the level at which values and beliefs are translated into public policy. This category includes an individual's normative commitments and beliefs about causality in a given policy subsystem. Policy core beliefs also include value priorities such as the relative importance of considerations like economic development vs., for example, the health of the population, and also include

perceptions concerning the relative importance of the policy problem at hand and its causes.

Finally, this level includes beliefs about how to achieve policy goals. The third tier of the belief system is referred to as *secondary aspects* and can be defined as decisions that apply only to a specific part of the subsystem, such as administrative regulations, budgets, and individual performance evaluations. While changes at the deep core and policy core level are considered difficult and rare, changes at the level of secondary aspects may occur relatively easily and frequently.

Figure 1: Basic version of the advocacy coalition framework (1988)



*Note:* From “An advocacy coalition theory of policy change and the role of policy-oriented learning therein,” by P.A. Sabatier, *Policy Sciences*, 21, p. 132. Copyright by Kluwer Academic Publishers/Business. Reprinted with permission.

With respect to the framework itself (see Figure 1), policy subsystems are held to be influenced from the outside by two major categories of factors that ultimately determine the relative opportunities of the subsystem actors to influence and determine policy outcomes (Sabatier & Weible, 2007). The first is called *relatively stable parameters* and includes (but is not

necessarily limited to (Jenkins-Smith et al., 2014)) the basic attributes of the problem area, fundamental socio-cultural values and social structure, and the underlying constitutional structure. The second category is *external events* and includes changes in socioeconomic conditions, changes in the governing coalition, and policy decisions in other subsystems.

Within the policy subsystem, actors are assumed to belong to a number of competing advocacy coalitions that include representatives from a variety of governmental and non-governmental organizations who share basic sets of normative and causal beliefs (i.e., deep core and policy core beliefs) and engage in a non-trivial degree of coordinated activity in order to achieve policy goals. The relative strengths of advocacy coalitions are affected by the influence of relatively stable parameters and external events, as well as a number of types of *resources* at their disposal, such as skillful leadership, financial resources, evidence, public opinion, and the availability of members of the public willing to engage in supporting political activities like demonstrations and electoral campaigns. In some cases, individuals referred to as *policy brokers* are said to mediate conflicts between competing coalitions. Policy brokers are described by Weible and Sabatier (2007) as actors who seek to find reasonable compromises between competing coalitions.

Finally, the ACF sets forth two categories of policy change. *Major policy change*, which occurs relatively infrequently, is considered to involve subsystem-wide alterations in policy at the level of policy core beliefs. It is noteworthy that the ACF includes the hypothesis that for major policy change to occur, strong change in conditions outside the policy system (i.e., connected with external events) is a necessary but not sufficient condition. Conversely, *minor policy change* happens more often and is less fundamental. It may concern, for example, more technical matters such as the specifics of budgets and performance evaluations.

The ACF may be applied in many different ways to assist in understanding policy-making challenges. Given the complexity of the policy process, political science research employing the ACF often entails rigorous analyses conducted in the interest of testing and exploring various aspects of the theory itself. For example, some scholars have specifically examined the factors that explain stability and change in coalition membership over time (Jenkins-Smith, St. Clair, & Woods, 1991; Zafonte & Sabatier, 2004).

In the current research, the ACF was employed more practically as a model of the overall policy process to assist in the development of broad, contextual understanding of the role of political factors in long-term efforts to promote AT in two different cities over a long period of time. The utility of employing the ACF in such a practical manner has been emphasized by ACF scholars Weible and Sabatier (2007) who outlined a basic version of the ACF which ultimately served as the basis for this research. Briefly, this version of the ACF includes all the major ACF elements described above, but does not include the ACF's list of *testable hypotheses* (i.e., a series of theoretical hypotheses about the policy process that may be empirically assessed through research – for more information, see Jenkins-Smith et al. (2014)), nor does it include a variety of more detailed considerations related to specific aspects of the theory (for example, the category of *coalition opportunity structures*, including the degree of consensus needed for policy change and the level of openness of the political system (Sabatier & Weible, 2007)).

As will be discussed with respect to methodology, ultimately, the ACF's main theoretical categories of political factors (e.g., *external events*, *relatively stable parameters*, *advocacy coalitions*, *resources*) served as the basis for the identification of noteworthy real-world political challenges and enablers for the promotion of AT in Helsinki and Ottawa.

**Selection of the Advocacy Coalition Framework for this research**

The selection of the Advocacy Coalition Framework for this research was made mainly in consideration of the fact that numerous scholars (Exworthy, 2008; Fafard, 2008; Gagnon et al., 2007) had previously suggested its particular relevance for social determinants-based policy. As discussed in the introduction, social determinants-based health promotion attempts to address health through measures in a wide variety of policy areas outside the traditional health sector. The identification of the utility of the ACF for health promotion research reflects its potential for the provision of a realistic portrayal of the health promotion policy environment in that it accounts for the involvement of a wide range of actors from a variety of fields. In fact, the ACF has already been usefully applied in areas including mental health (Swigger & Heinmiller, 2014), illicit drug policy (Kübler, 2001) , and tobacco control (Breton, Richard, Gagnon, Jacques, & Bergeron, 2008).

A secondary consideration was that the ACF appeared particularly well-suited to the analysis of municipal transportation policy, within which the promotion of AT logically fits. As outlined above, the ACF was designed to address policy areas displaying major goal conflicts related to values-based beliefs and also ones involving a wide range of stakeholders. Municipal transportation policy, meanwhile, is frequently the subject of significant values-based debate and controversy, and is also clearly contested by a very wide range of actors. First, changes in transportation policy undoubtedly have the potential to result in major alterations in the daily patterns of life for a large number of people and may also cause disruptions in other areas such as housing and employment (Fowler & Layton, 2002) .

Second, and more important, underlying the debate concerning the practical effects of municipal transportation policy is a values-based conflict about the degree to city transportation

systems should continue to accommodate automobiles relative to all forms of AT. (Schiller et al., 2010). Briefly, city planning in the post-industrial period has been dominated overall by a desire to increase economic productivity while separating designated areas for particular functions (notably, work and home) from each other (Marshall, 2002; Roseland, 1997). The result has been the development of cities which occupy large areas of land, connected by ever expanding road networks (Marshall, 2002; Roseland, 1997), and the assumption by transportation policymakers that the main aim should be to facilitate automobile use (Schiller et al., 2010). The opposing view is built on the premise that continued reliance on the automobile as the primary mode of transportation is destructive in terms of health, the environment, social life, and the economy. Ultimately, prioritizing AT (in most North American jurisdictions at least) would seem to entail a fundamental shift in values-based priorities from individual, automobile-centric *hypermobility* (Schiller et al., 2010), in which the emphasis is on providing individual freedom to travel long distances quickly and according to one's own schedule, to the promotion of modes of transportation that prioritize society-wide benefits including the promotion of long-term health, the protection of the environment, greater opportunities for social interaction, and social equality.

In addition to displaying an obvious fundamental conflict in goals resulting from values-based beliefs, municipal transportation is a policy area that is clearly contested by a very wide range of players from a variety of fields. The Heart and Stroke Foundation of Canada, for example, in a comprehensive guide (Heart and Stroke Foundation of Canada, 2009) that it prepared for local actors wishing to promote the design of communities that encourage AT, provides an overview of groups and organizations involved in this process. This list includes (among others), local planning departments, local elected officials, property developers, community groups, local residents, provincial governments (in roles related to, for example,

provincial highway and road systems, transit projects, and planning-related legislation), as well as the federal government, given its involvement in areas such as the development of national highways and the provision of a variety of types of infrastructure funding. In addition, one could potentially add actors from the health sector, particularly those who promote physical activity for health benefits, those concerned with the health effects of breathing polluted air, and those involved in efforts to improve pedestrian and cycling safety.

### **Summary**

Overall, the ACF appears particularly well-suited to the analysis of the policy environment related to the promotion of AT the municipal level. The framework is among the most well-established theories of the policy process. It has been highlighted as particularly relevant for the examination of social determinants-based health policy challenges. Finally, the ACF was specifically designed to address situations likely to be encountered in municipal transportation policy. These include the presence of important values-based conflicts and the involvement of a wide range of stakeholders.

### Chapter 3: Methodology

#### Selection of the Case Methodology

As noted in the introduction, this research project employed a qualitative case study methodology. This choice was made in consideration of literature concerning the appropriateness of particular approaches for different types of research. More specifically, Yin (2003) suggests that the case study (as opposed to experiments, surveys or histories) is likely the most appropriate methodology when the research concerns “how” or “why” questions, when the researcher does not have a high degree of control over events, and when the research is centred on contemporary phenomena in real life situations. Examining the long-term history of AT promotion in particular jurisdictions and seeking to explain how this process was affected by factors related to politics meets the “how” or “why” criterion. The research was also expected to be contemporary in nature, with the very earliest located North American example of AT policy implementation (T. J. Buehler, 2007) having begun in the 1950s and continuing until today. Finally, with reference to Yin’s assertion that case studies are ideal in situations where the researcher does not have a high degree of control over events, it was evident that this research would be investigating a long-term process in which the researcher would not have any degree of control over the relevant events.

Furthermore, Stake (2005) describes case studies as being ideal for situations where researchers want to learn as much as possible about particular cases. He notes that *instrumental* case studies can be used when researchers are examining particular cases with the goal of learning and making generalizations. When several cases are studied simultaneously, Stake (2005) refers to this as *multiple case study* or *collective case study*. He suggests that cases should be selected on the basis that learning about them will yield better understanding and possibly

better theorizing about an even larger set of cases. Given that this research involved the examination of two cases with an implicit goal of producing practical information related to the promotion of AT in other jurisdictions, it was evident that Stake's arguments would also support the case study as the appropriate methodology for this research.

As well, it is worth noting that a significant amount of research that has examined topics similar to this research has also employed case study methodology. As mentioned earlier, T. J. Buehler (2007) used the case study approach in his consideration of bicycle policy in Davis, while Bratzel (1999) used case study methodology for his comparative analysis of sustainable transportation in five cities in Switzerland, the Netherlands, and Germany. More recently, Zwald, Eysler and Moreland-Russell (2016) also chose the case study for their study employing Kingdon's multiple streams theory in investigating factors leading to greater commitment to walking and bicycling policies in six US jurisdictions.

### **Selection of Helsinki, Finland, and Ottawa, Canada**

Given the desire to systematically examine political factors related to AT promotion, the choices of Helsinki and Ottawa were made in consideration of comparative research design principles from the field of public policy. Specifically, the basic principles of the *most similar systems design* (Halperin & Heath, 2012, pp. 210-212; Przeworski & Teune, 1970) served as a guide for the selection of cases. Briefly, the logic of the most similar systems design is to compare cases with generally similar settings but with differences in terms of both the major outcome being considered and the phenomenon under investigation as a potential explanatory factor.

Accordingly, the overall goal was to select cities that were comparable with respect to both particular background-level factors considered to potentially affect AT rates and with

respect to more general socioeconomic and cultural circumstances, but which displayed notably different AT rates and supporting policy-level commitment. In order to accomplish these objectives, four specific criteria were developed. As is discussed in detail below, the first two were designed to assess AT rates and AT-related policy-level commitment respectively. The third assured comparability with respect to particular background-level factors (*potential AT correlates*) considered to potentially affect AT rates based on suggestions in existing literature, while the fourth considered more general socioeconomic and cultural circumstances that might also have affected AT rates.

Overall, the case selection was designed to lend strength to findings that might identify particular factors related to politics as important in explaining the different levels of policy-level commitment to the promotion of AT (and corresponding AT rates) in each city. Each of the criteria are discussed below with reference to Helsinki and Ottawa. Table 1 displays highlights of the findings of this exercise.

## **Criteria**

### **Criterion 1: AT modal splits.**

*The cities should differ significantly from each other in terms of AT modal splits, with one city constituting an international best case example and the other being an AT leader in a Canadian (and North American) context.*

The City of Helsinki has an AT modal split of 77 per cent<sup>1</sup>, making it one of only four cities with a population of more than 500 000 in the European Platform on Mobility

---

<sup>1</sup> If one includes Helsinki's major suburbs of Espoo and Vantaa, the AT modal split is roughly 65 per cent (calculated based on EPOMM data, (European Platform on Mobility management, n.d.a). While this lower figure is arguably more representative for the purposes of comparison with Ottawa (given that the City of Ottawa's official boundaries include its major suburbs while Helsinki's do not), it is still more than double Ottawa's, making Helsinki's overall superior AT performance clear.

Management's database (484 cities overall) (European Platform on Mobility Management, n.d.a) with AT modal splits of over 75 per cent. This leaves no doubt as to Helsinki's status as an international AT leader. Of trips in Helsinki, 34 per cent are by public transit, 32 per cent are by walking, and 11 per cent are by bike (European Platform on Mobility Management, n.d.a).

Ottawa, described as one of the least car-oriented cities in the English speaking world (Mees, 2010) (p. 113) has the highest AT modal split ((Statistics Canada, 2015) 31 per cent), among Canadian census metropolitan areas (CMAs) (Ontario side, Ottawa-Gatineau CMA.) The percentages of trips being made by public transit, walking and cycling are 21.8, 7.1 and 2.4 respectively. As measured at the city-level, Ottawa's AT modal split is 28.5 per cent (City of Ottawa, 2013, p. 17). In the United States, only four of 383 metropolitan statistical areas have AT modal splits of more than 25 per cent (U.S. Department of Transportation, 2015). Ottawa is thus a North American AT leader.

**Criterion 2: Policy-level commitment to AT promotion.**

*The cities should differ significantly from each other in terms of their demonstrated policy-level commitment to the promotion of AT as demonstrated by the provision of AT-related infrastructure and services.*

Helsinki displays a much higher level of commitment to policies and investment favourable to AT than Ottawa. Helsinki's internationally recognized public transit system, including a dense array of metro and commuter trains, trams and buses, has repeatedly performed very strongly in international surveys of customer satisfaction (Leite & Aftret - Sandal, 2016). In total, there are 97 km of track for trams, 21 km of metro track (with a further 14 km under construction) (Helsinki Urban Facts office, personal communication, April 26, 2017) and roughly 250 km of rail with commuter services connecting the airport, suburbs and outlying

municipalities to the city centre (HSL Helsinki Regional Transport Authority, personal communication, May 5, 2017). The traditional bus system has more than 100 routes (Jaakola, 2012, p. 120). Concerning both walking and cycling, the *cycle path network* (i.e., shared facilities for cycling and walking, also known as multi-use paths) stretches over 1, 200 km in the City of Helsinki (Helsinki City Planning Department, 2015) (p. 12) and approximately 3, 000 km in the greater metropolitan region (Helsinki Regional Transport Authority, n.d.). Finally, there is a total of 87.5 km of pedestrian only streets in Helsinki (City of Helsinki Public Works department, personal communication, April 26, 2017).

While Ottawa's public transit network is recognized as successful within a North American context (Cervero, 1998; Mees, 2010, p. 116), it is nowhere near as extensive as Helsinki's. Currently (acknowledging that a 12.5km light rail line is under construction), Ottawa's network consists of a bus rapid transit system with a unidirectional length of 37.6 km (OC Transpo, personal communication, May 2017), a traditional bus system with a total of 145 routes (including school routes) (OC Transpo, 2017) and a light rail line (8 km) (OC Transpo, personal communication, May 2017). Meanwhile, with respect to walking and cycling, Ottawa offers much less than Helsinki in terms of dedicated facilities. For example, the City of Ottawa's multi-use path network (435 km) (City of Ottawa., 2015) is a little more than one third the length of the City of Helsinki's while there are about 600 km of multi-use paths in the wider region (National Capital Commission, n.d.). The only pedestrianized street in Ottawa is the Sparks Street pedestrian mall (about 1km in length) (City of Ottawa, personal communication, May 18, 2017).

**Criterion 3: Potential AT correlates.**

*The selected cities should be comparable with respect to a set of previously-identified potential AT correlates (factors often considered to potentially affect AT rates).*

A review of existing literature (for example, see (Cervero & Duncan, 2003; Pucher & Buehler, 2006; Pucher & Buehler, 2012; Toronto Center for Active Transportation, 2010) concerning factors generally thought to have the potential to affect levels of AT led to the selection of the following specific *potential AT correlates*: a.) Total population; b.) Population density; c.) Climate; d.) Topography, and e.) Level of car ownership. Below, the logic for the selection of each of these potential AT correlates is discussed, along with a presentation of related information for both Helsinki and Ottawa.

***a. total population***

While there does not appear to be a consensus with respect to the overall effects of total city population on rates of AT, it is a factor that is considered to have potentially important influence (Toronto Center for Active Transportation, 2010). Briefly, it is reasonable to assume that jurisdictions below a certain population size (e.g., rural municipalities) are at a disadvantage for AT overall as a result of, for example, their lack of potential ridership for public transit. At the same time, larger cities tend to occupy relatively large areas of land, often resulting in increased trip distances between key destinations and making walking and cycling less feasible. In addition, if supportive infrastructure is lacking, the large amounts of traffic common to large cities could be reasonably assumed to pose a deterrent for cyclists and pedestrians. Research indicates, for example, that larger cities (i.e., populations of over 1 million) tend to have lower rates of cycling than smaller ones (Pucher, Komanoff, & Schimek, 1999). The total population of the city of Helsinki is 628, 208 with the greater Helsinki region having a population of roughly

1.4 million (HelsinkiRegion.fi, 2017). The city of Ottawa has a higher population 934, 243 with the census metropolitan area totaling roughly 1.3 million (City of Ottawa, 2017). It is safe to say that Ottawa and Helsinki are roughly comparable with respect to total population.

***b. population density***

Population density is frequently cited as an important factor for levels of AT (Pucher & Buehler, 2006; Toronto Center for Active Transportation, 2010). Briefly, compact cities are thought to be more amenable to cycling and walking as trip distances between destinations could be expected to be shorter, making their choice more feasible. In addition, higher densities tend to support the expansion of public transit as they help to justify, particularly from an economic point of view, the provision of strong transit services.

Urban population densities for Helsinki and Ottawa are roughly 1, 900 and 1, 800 people per square kilometer respectively (Demographia, 2017, p.4). The urban level of measurement roughly refers to the recognizable built-up area of a city (Demographia, 2014), making it reasonable to compare from city to city, while city or metro levels of measurement are more subject to decisions concerning boundaries that can be influenced by a large number of considerations that are likely inconsistent between jurisdictions.

***c. climate***

While specific supporting studies are lacking, it is reasonable to speculate that significant differences in overall climate among cities are likely to affect levels of AT. Saneinejad (2010) for example, calculated that for commuters in Toronto having the option to choose among any of the major transportation modes (i.e., auto driver, auto passenger, transit, bike and walk), a climate change scenario including a 6<sup>0</sup>C increase in average temperatures could result in a 17% increase in cycling trips. Specific climatic factors cited as possibly having an influence on rates of AT

include, for example, temperature, precipitation, and hours of sunshine (Toronto Center for Active Transportation, 2010). Even though no scientific literature that examines the precise nature of links between climate and overall AT modal splits by city (which are normally calculated during non-winter months) could be found, the possibility that relationships exist is evident. With reference to Helsinki and Ottawa, for example, few cities with challenging winter climates (defined for our purposes as including consistent snowcover and average high temperatures below 0 degrees Celsius for the December-March time period) feature among the top ranked cities by AT modal splits. According to the figures of the European Platform on Mobility Management (n.d.a) only 9 cities populations more than 500 000) have AT modal splits of over 70 percent, and of these, only Helsinki has a particular challenging winter climate.

Special consideration, therefore, was given to choosing national and international level cities that experience relatively cold winter weather with significant amounts of snow accumulation. Helsinki's climate falls in the *humid continental* category. The warm season (average temperatures above 17° Celsius) lasts from June 3<sup>rd</sup> until September 5<sup>th</sup>, with the cold season (average temperature below 2° Celsius) lasting from December 9<sup>th</sup> to March 15<sup>th</sup>. During February, roughly 80 per cent of the total time is spent below 0° Celsius, and 20 per cent below -9° Celsius (Weatherspark, 2013a). Permanent snowcover typically arrives in December (This is Finland, 2008) with the Helsinki area having an average snow depth of roughly 30 cm on March 15<sup>th</sup> (the date at which, on average, snow accumulation is at its highest) (Finnish Meteorological Institute, 2014). Finland also features both many hours of daylight during the summer months (almost 19 hours of daylight on June 20) and very few hours of daylight during the winter months (5 hours and 48 minutes of daylight on December 21) (Weatherspark, 2013a).

Ottawa is also described as having a humid continental climate. The warm season is both slightly longer and hotter than Helsinki's with average temperatures above 20° Celsius between May 21<sup>st</sup> and September 15<sup>th</sup>. The cold season is slightly cooler and longer, lasting from December 3<sup>rd</sup> to March 10<sup>th</sup> with average temperatures below 0° Celsius during this period. During February, roughly 85 per cent of the time is below 0° Celsius, with a significant period (roughly 40 per cent of the time) with average temperatures below -9° Celsius (compared with 15 per cent of the time in the same temperature range for Helsinki) (Weatherspark, 2013b). Snow is relatively likely to be on the ground between November 21<sup>st</sup> and April 7<sup>th</sup>, with average snow depth on February 9<sup>th</sup> (the date at which, on average, snow accumulation is at its highest) being 27.9 cm. Fluctuations in hours of daylight are less pronounced, with roughly 16 hours of daylight on June 20<sup>th</sup>, and roughly 8 hours and 45 minutes on December 21 (Weatherspark, 2013b).

Generally, Ottawa's climate is a bit more extreme in terms of temperature, including both somewhat hotter summers and colder winters. Helsinki, however features much wider fluctuations in hours of daylight. Interestingly, snow accumulation during the winter appears very similar. Overall, Helsinki and Ottawa are quite comparable with respect to climate, and notably, in terms of their winter weather.

#### *d. topography*

Hilly terrain is thought to act as a deterrent to AT owing to the increased effort with respect to walking and cycling it requires. Cervero and Duncan (2003), for example, confirmed, in fact, that steep terrain in the San Francisco Bay area acts as deterrent for both walking and cycling. Concerning Helsinki and Ottawa, it is simply worth noting that both cities are essentially flat, meaning that this variable is highly unlikely to contribute significantly to explaining the noted differences in AT mode shares. The difference between the highest and lowest points in

Helsinki is roughly 70 m (<http://en-ca.topographic-map.com>). The difference between the highest and lowest points in Ottawa, meanwhile, is roughly 85 m (<http://en-ca.topographic-map.com>).

*e. car ownership*

Levels of car ownership were considered likely to influence rates of AT for the simple reason that the more people who have access to cars, the less they would appear likely to choose other modes of transportation. As documented by the Alliance for Walking and Biking, for example, American Community Survey data indicate that cities with higher levels of car ownership tend to have lower levels of bicycling and walking (Milne & Melin, 2014, p. 55). Levels of car ownership may also reflect the general level of cultural affinity for automobile use (Black & Nijkamp, 2002).

The possibility of an important relationship between levels of car ownership and AT is also highlighted by Pucher and Buehler (2006) in their comparison of the U.S.A and Canada with respect to levels of cycling. They speculate that the lower level of car ownership in Canada (541 cars and light trucks per 1000 inhabitants in Canada vs. 762 cars and light trucks per 1000 inhabitants in the US), is likely to influence rates of AT, and their statistical analysis supports this association.

Given that car ownership in particular cities may be affected by AT-related policies at the municipal level, and that the objective was to assess background-level considerations rather than the effects of municipal policy choices, car ownership was compared first at the country level. Briefly, it was assumed that country-level car ownership would be a better indicator of the cultural affinity for cars and their basic affordability than city-level car ownership. Interestingly, car ownership is higher in Finland (572 per capita) than in Canada (456 per capita) (Burgess et al., 2015). Furthermore figures for km driven per car in each country are almost identical, with

Finland at 15, 178 and Canada at 15, 621 (Burgess et al., 2015). Overall, these findings would indicate that Finnish people as a whole are more likely to own cars and that on average, Finnish people actually drive more than Canadians.

At the city level, however, Helsinki has considerably lower car ownership than Ottawa. Car ownership in Helsinki in 2012 was 404 cars per 1000 inhabitants (City of Helsinki, 2013). In Ottawa, the number of vehicles per person was 551 per 1000 inhabitants in 2011 (TRANS Committee, 2005). Taken all together, the facts above suggest that despite Finnish people owning more cars and driving more than Canadians overall, particular conditions in Helsinki (possibly the result of deliberate attempts to encourage AT) may have contributed to relatively low levels of car ownership at the municipal level.

**Criterion 4: Socioeconomic and cultural context.**

*The selected cities should exist within generally similar socioeconomic and cultural contexts. The specific factors considered included measures of a) Wealth; b.) Physical activity, and d.) Sex and age distributions.*

Briefly, the factors described above were selected as representative of socioeconomic and cultural characteristics that, while not frequently and explicitly identified as likely to affect AT, could reasonably be viewed as at least potentially important. Broadly, it should be noted that Helsinki and Ottawa are both relatively young capitals (each having had populations of less than 10 000 each at the beginning of the 19<sup>th</sup> century (Hietala, Helminen, & Lahtinen, 2009, p. 33; Taylor, 1986, p. 30)) of western democratic countries in which residents enjoy high standards of living. As is discussed more specifically below, they also share high levels of wealth and similar demographic characteristics in terms of age and sex distributions. Finally, their populations display comparable levels of physical activity overall.

*a. wealth*

Wealth was included in this evaluation, given the assumption that some relationships between wealth and transportation choices are likely. For example, research indicates that as income levels increase, car and vehicle ownership also increase (Dargay & Gately, 1999). According to the World Economic Forum's Global Competitiveness Rankings for 2016-2017 (which assesses the ability of a country to provide prosperity for its citizens), Finland placed 10th overall, with Canada 15<sup>th</sup> (Schwab, 2013). The measure of GDP per capita for Canada was \$42,158 USD in 2016, with Finland at \$43,090 USD (The World Bank, 2017). At the city level, in a ranking list of the top 100 metropolitan regions according to GDP per capita at purchasing parity, Ottawa ranked 57<sup>th</sup> with a GDP per capita of \$41,200 USD, with Helsinki ranking 84<sup>th</sup> at \$35,300 USD (Cox, 2009).

*b. levels of physical activity*

Higher overall rates of physical activity were considered as potentially indicative of the presence of cultural attitudes (i.e., a general affinity for physical activity and healthy lifestyle) that might facilitate AT promotion. Comparable figures for physical activity for Canada and Finland provided with the WHO indicate that Finland has a slightly higher overall prevalence of insufficient physical activity (23.5 per cent) than Canada (23.2 per cent) (World Health Organization, 2015). Comparable data pertaining to Ottawa and Helsinki were lacking.

*c. age and sex distributions*

Major age and sex distribution differences might potentially affect relative levels of AT mainly because cycling may be considered either too risky or physically demanding by certain sex or age groups. For example, as discussed by Garrard (2003), in some jurisdictions women appear considerably less inclined to cycle than men because of perceived safety concerns.

Evidently, a higher percentage of older people (who tend to have more mobility impairments) may find walking or cycling significant distances simply too demanding. The populations of Helsinki and Ottawa display similar distributions by age and sex. The median age of Helsinki's population is 40.5 (City of Helsinki Urban Facts, n.d.), with slightly more females (454, 935) than males (428, 455). In Ottawa, the median age of the population is 39.2. As in Helsinki, females outnumber males (331, 057 females, 297, 151 males) (Statistics Canada, 2016).

Table 1: Helsinki and Ottawa: Summary of AT characteristics

	<b>Helsinki (Finland)</b>	<b>Ottawa (Canada)</b>
<b>AT performance</b>		
<u>AT modal split</u> *given that the City of Ottawa's official boundaries include its major suburbs while Helsinki's do not, it is arguably more representative to compare Helsinki's regional modal split with Ottawa's city-level modal split. Accordingly, both figures are provided for Helsinki.	77 per cent (city) 65 per cent (region)	28.5 per cent (city)
<b>AT policy-level commitment</b>		
<u>AT infrastructure</u>	Metro and light rail km: 271 km Tram km: 97 km Dedicated busway: 0 km Traditional bus system: 100 + routes Multi-use path km: 3, 000km Pedestrianized streets: 87.5 km	Metro and light rail km: 8 km Tram km: 0 km Dedicated busway: 37.6 km Traditional bus system: 145 routes Multi-use path km: 600 km Pedestrianized streets: 1 km
<b>Potential AT correlates</b>		
<u>Total population</u>	628, 208 (city) 1.4 million (region)	934, 243 (city) 1.3 million (region)
<u>Urban population density</u> *referring to the population density of the continuously built up land mass of urban development within a metropolitan region or area	1, 800 people per square kilometre	1, 900 people per square kilometre
<u>Climate</u>	Humid continental Average snow accumulation at peak: 30 cm (March 15)	Humid continental Average snow accumulation at peak: 27.9 cm (February 9)
<u>Topography</u>	Difference between highest and lowest points: ~70m	Difference between highest and lowest points: ~85m
<u>Car ownership</u>	572 per 1000 people (Finland) 404 per 1000 people (Helsinki)	456 per 1000 people (Canada) 551 per 1000 people (Ottawa)
<b>Socioeconomic and cultural context</b>		
<u>Wealth</u>	World Economic Forum Global competitiveness ranking: 10th (Finland) GDP per capita: 43, 090 USD (Finland) GDP per capita at purchasing parity: 35, 300 USD (Helsinki)	World Economic Forum Global competitiveness ranking: 15 <sup>th</sup> (Canada) GDP per capita: 42, 158 USD (Canada) GDP per capita at purchasing parity: 41, 200 USD (Ottawa)
<u>Physical activity</u>	Prevalence of insufficient physical activity (adults, Finland): 23.5%	Prevalence of insufficient physical activity (adults, Canada): 23.2%
<u>Sex and age distributions</u>	Average age: 40.5 Distribution (f:m) 454, 935: 428, 455	Median age: 39.2 Distribution: (f:m) 331, 057: 297, 151

*Note:* Sources for the information in the above table are all noted in the section “Methodology Part B: Selection of Helsinki, Finland, and Ottawa, Canada”

## Methods

This research project employed semi-structured interviews (the primary method) and document review and analysis (the secondary method) in order to develop long-term understanding of major factors related to politics that might help to explain the large differences in AT success achieved in Helsinki and Ottawa. The collection and analysis of data were organized mainly according to key concepts (e.g., policy subsystems, external events, relatively stable parameters) of the ACF. As noted in the theoretical framework chapter, the aim in this project was not to test the validity of the ACF from a theoretical perspective but rather, to employ the ACF as a guiding structure for inquiry about the role of factors related to politics in the promotion of AT in Helsinki and Ottawa.

This approach, while developed with a view to the objectives of the research project, also reflected a review of relevant literature. Two sources in particular are noteworthy. The first, by well-recognized ACF scholars Weible and Sabatier, is “A Guide to the Advocacy Coalition Framework” (2007). The second is “Actors, Decisions and Policy Changes in Local Urbanization”, by Hersperger, Franscini, and Kübler (2014). As mentioned briefly in the earlier discussion of the ACF, Weible and Sabatier’s article was designed to explain how the ACF might be practically applied in order to help understand particular *policy areas* (e.g., such as municipal transportation policy in a given city). The article was written in order to enable those without particularly specialized policy backgrounds to apply the ACF (either formally or informally) so as to help understand and explain policy processes. The document outlines a basic version of the ACF including all of the major elements described in the theoretical framework chapter. This version of the ACF was considered appropriate for the current research project based on its

planned application for the development of long-term and generally practical understanding of major relevant political factors for AT promotion in Helsinki and Ottawa.

Using an analysis of water quality policy in the Lake Tahoe Basin as an illustrative example, the article outlines the major ACF-derived categories of political factors that researchers may aim to identify. These categories include, for example, advocacy coalitions, external events, relatively stable parameters, and major policy changes and causes. For some of categories, the authors provide rudimentary guidance concerning how the necessary elements might be identified. For example, they suggest that policy core beliefs may be ascertained by conducting interviews with policy participants and asking them to describe the seriousness of the problem in question, their perceptions of its causes, and/or their preferences for solving it.

This research drew on the suggestions provided by Weible and Sabatier with respect to the structuring of the interview questions and overall data analysis according to major ACF-derived categories. More specifically, the interview guides (see Appendix A and Appendix B ) and interview analysis template (see Appendix C) were organized according to ACF-derived categories including, for example, relatively stable parameters, external events, advocacy coalition identification, and policy-core beliefs, as well as major policy changes and causes.

The second article, by Hersperger, Francini, and Kübler (2014), discusses research in which ACF was applied in order to analyze policy decisions that affected the development of the built environment in three Swiss municipalities between 1970 and 2007. The authors aimed to explain why three municipalities (Jona, Rapperswill, and Freienbach) located in close proximity developed quite different built environments over the same time period (e.g., while one prioritized the preservation of green space, the others focused on increasing densities and intensifying land use). Examples of the research questions included: Who were the dominant

actors? What were the policy goals advocated by them? What kind of coalitions did they build? Which external events affected them? Which changes in spatial development policy eventually resulted?

The authors first employed document analysis in order to help select experts for a series of interviews and in order to help formulate interview questions. For each municipality, the first interview was conducted with a long-term employee of the municipal planning department, with further experts being selected using a “cascade” (Hersperger et al., 2014, p. 7) approach. As discussed later in this chapter, this process (in which each interview participant is asked to recommend further interview participants) would commonly be referred to as one of *snowball sampling* (or *chain referral*). Ultimately, 15 interviews (5 from each municipality) were conducted.

The interview data were organized according to ACF-derived themes. These included, namely, external context, policy beliefs (political priorities, problem definition, causes of problems, strategies and instruments), resources, decisions, and policy changes. Finally, documents were reviewed to help fill knowledge gaps that remained after the interviews. For this purpose, information was taken from project reports and decision records from municipal-council meetings.

The results were reported according to roughly the same ACF-derived themes described above. Briefly, Rapperswill was found to have been dominated by a “Social Democratic Coalition” motivated by beliefs including, firstly, the desire to improve quality of life. Rapperswill’s spatial policy focused on strict urban management, with traffic being banned from the city centre, parking removed from the streets, and few building permits being issued. In Jona, a “Liberal Coalition” influenced by policy priorities including both increasing quality of life and

the importance of guaranteeing individual freedom instituted lenient urban management leading to many building permits being issued and the expansion of the building area. Finally, Freienbach's policies were largely the result of the dominance of the Corporation Pfäffikon - a civic organization and very large land-holder that had long-dominated local urban management decisions), whose paramount priority was the importance of guaranteeing property ownership. Many mixed commercial/residential zones were created and intensity of land use increased significantly.

The authors describe the application of the ACF as assisting them in understanding a policy environment with many actors and coalitions, mainly by allowing the aggregation of actors into coalitions involved in the policy process. They conclude that ACF-based analysis helped to both explain the substantive goals pursued in the three municipalities and allowed more accurate understanding of urbanization patterns overall.

The article by Hersperger, Francini and Kübler (2014) was considered a useful example for the design of this research project because of its similar objectives (i.e., comparing differing policy outcomes in several municipalities) and its choice of the ACF as the theoretical framework. The methods and overall approach employed in this study appeared effective in developing meaningful conclusions concerning the policy processes connected with spatial planning in Switzerland. Accordingly, in addition to structuring the data collection and analysis according to ACF-derived categories as suggested by Weible and Sabatier (2007), this research also used interviews as the primary method (including the use of chain referral recruitment) and document analysis as the secondary method in a manner comparable overall to that of Hersperger, Francini and Kübler (2014).

**Primary method: The semi-structured interview.**

Broadly, the interview (Fontana & Frey, 2005) was selected because it appeared to be the most straightforward way to gain a deep understanding of the political factors related to AT in the chosen cities. As described by Fontana and Frey (2005), interviews allow researchers to gather detailed and nuanced information. Concerning the proposed research, speaking directly with some of the most important actors involved in AT promotion appeared necessary, for example, in order to figure out what were reasonably considered the most challenging obstacles overall, or what historical events might have favourably or adversely affected the prospects for greater political commitment to AT.

The semi-structured (or *focused*) interview is described by Yin (1994) as one in which respondents are interviewed for a relatively short period of time (e.g., approximately an hour), but which essentially remains open-ended and conversational. The interviewer normally proceeds according to a pre-determined set of interview questions (Yin, 1994). Typically, semi-structured interviewing begins with general questions, which often lead to more specific questions that are not necessarily prepared in advance (Case, 1990). This format was selected given that its question and discussion format (Pierce, 2008) seemed most likely to yield data that would be comparable from case to case, while still providing a significant degree of flexibility for both the researcher and participants. Given that the research aimed to develop an understanding of a potentially vast array of political factors related to AT, this flexibility was considered useful given the difficulty in predicting all worthwhile avenues of investigation ahead of time.

For this research, in a procedure similar to that employed by Hersperger, Franscini and Kübler (2014), participants were recruited via a process of *snowball sampling* (or *chain referral*),

one of the most well-known methods of non-probability sampling (i.e., where the goals do not involve generalizing from the sample to a larger population) (Tansey, 2007). As described by Babbie (2012) this technique is considered particularly useful when the population of interest is difficult to identify at the outset. Typically, the technique involves beginning with the identification of an initial list of interview subjects, and then asking those subjects to suggest other potentially relevant people to interview. Normally, this process continues in cascading fashion until either a large enough sample for the purposes of the study has been obtained, or until interview participants begin to repeatedly suggest the same names for further interviewing (Tansey, 2007).

In both Helsinki and Ottawa, initial interview participants were recruited based on their evidently strong involvement in municipal-level cycling-related advocacy (e.g., via personal referral or visibility in newspaper articles and public events). At each interview, participants were asked to suggest people to be contacted for further interviews. In this manner, a total of 47 subjects (23 in Helsinki and 24 in Ottawa) completed individual interviews that varied in length between approximately one and three hours (See Appendix D for individual descriptions of the roles and expertise of the participants) . Specific effort was made to speak with participants reflecting a wide range of AT-related expertise and involvement from many different types of organizations and fields. In particular, attention was given to recruiting people capable of providing relevant information concerning efforts to promote cycling, walking and public transit use from both governmental and non-governmental organizations. Ultimately, participants included, for example, municipal councillors, representatives from a variety of non-governmental advocacy organizations (some specifically focused on AT, others with AT promotion as part of their activities), senior employees from municipal government departments

(e.g., in roles related to transportation planning, urban planning, public works and the like) and higher levels of government, as well as people from within media (both traditional and non-traditional) and academia. Recruitment of participants stopped when it was believed enough information had been gathered to answer the research question with a considerable degree of confidence.

The interviews were conducted in Helsinki between October and December of 2014, with those in Ottawa between June, 2015 and July, 2016. All participants gave informed consent as part of a procedure that was approved by the Health Sciences and Science Research Ethics Board of the University of Ottawa (see Appendix E for the related the ethics approval notices and Appendix F for a copy of the consent form). All the interviews were recorded by audio as well as by handwritten notes.

The interview guide (see Appendix A) included questions designed to explore pre-identified themes derived mainly from the ACF including, for example, *external events*, *relatively stable parameters*, and *actor/ advocacy coalition identification*. Following the advice of Leech (2002) the interview guide also included an introductory *grand tour* question, in which participants were asked to describe the main high-level factors that they thought had affected their city's long-term ability to commit to policy that served to promote AT. The goal of this question was to engage participants while also maintaining focus on relevant subject matter (Leech, 2002). In all interviews, emphasis was placed on establishing rapport participants (Leech, 2002), and avoiding the use of leading questions.

Finally, the interview guide included questions related specifically to the issue of whether each city's winter climate, including snow, darkness and cold temperatures) had any particular effects on efforts to promote AT. This topic was given particular attention because the presence

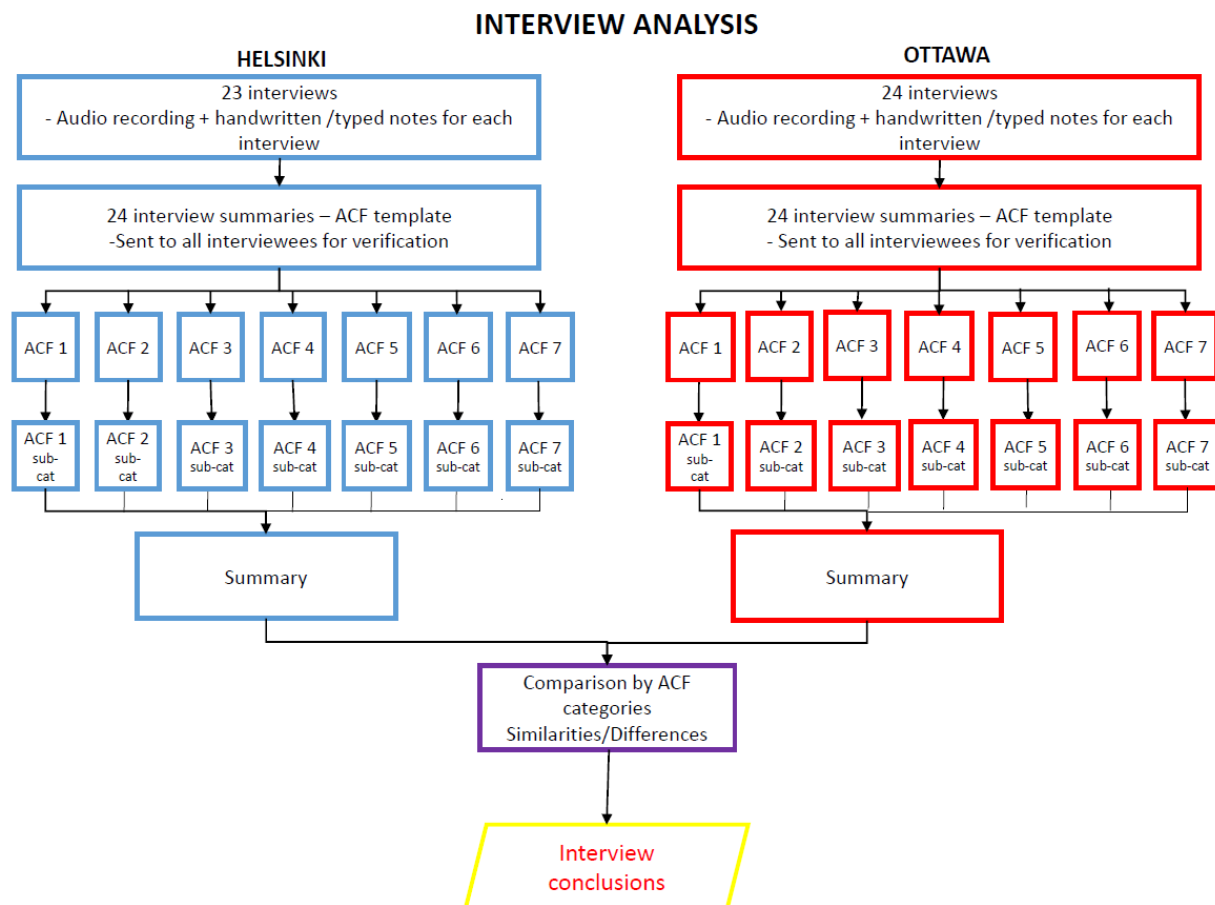
of challenging winter climates had been a particularly distinguishing feature of the two cities with respect to the selection of cases. While ultimately not being proving to be the case, it was considered (at the outset) a distinct possibility that noteworthy related data might emerge as a result.

Over the course of the initial interviews in Helsinki it became apparent that an abbreviated version of the interview guide was required in order to ensure that the most important questions were addressed in the time that was typically available. This version is provided in Appendix B. The shortened version of the interview guide ultimately served as the primary research instrument, with questions from the longer version often asked to explore noteworthy topics in more detail in cases when time allowed.

Bearing in mind both the literature described above and general guidance concerning the use of coding (or categorization) in the analysis of qualitative data (Creswell, 2007; Remler & Van Ryzin, 2010), a system involving both deductive and inductive categorization was developed (see Figure 1 for a visual representation of the interview data analysis procedure). Briefly, the deductive categories were based mainly on the same pre-identified ACF-derived themes noted above, while inductive sub-categories emerged from the data. Analysis began by reviewing both the audio recordings and handwritten notes to develop a template-based summary (see Appendix C for a copy of the interview analysis template) of each interview in which the major points expressed by participants were classified according to the same ACF-derived categories. The summaries were sent to participants for review and comment. All relevant commentary for each category (e.g., *relatively stable parameters– Ottawa*) was then grouped together and reviewed on category by category basis, allowing data-derived sub categories to also be identified (e.g., for *relatively stable parameters – Ottawa*, the sub category *North American sociocultural context*

was identified based on its frequent mention as representing an obstacle to AT promotion in Ottawa). Ultimately, the findings from each city were compared with each other on a category-by-category basis (e.g., *relatively stable parameters – Ottawa* was compared with *relatively stable parameters – Helsinki*) and overall. Particular attention was given to identifying the most noteworthy areas of difference between the two cities as these could reasonably be anticipated to most strongly assist in explaining the varying outcomes with respect to AT performance and thus helping to answer the research question (i.e., what factors related to politics might help to explain why Helsinki was able to prioritize the promotion of AT to a much higher degree than Ottawa over the long term?).

Figure 1: Interview data analysis procedure



**Secondary method: documentary review and analysis.**

In order to serve as a form of data triangulation, the collection, review and analysis of documents was employed as a secondary method. As noted by Yin, (1994, p. 79) documentary information is highly likely to be relevant for case study research and can include many formats including, for example, administrative documents, relevant formal studies or evaluations, and mass media articles. Yin also discusses the utility of archival information such as organizational records, maps, charts, and survey data. Notably, according to Yin (1994), “the most important use of documents is to corroborate and augment evidence from other sources” (p. 80).

Bearing the above in mind, the purposes of the document analysis in this research were to obtain necessary background information, to help verify the data generated from the interviews and to help fill any critical research gaps. Accordingly, while remaining open to unanticipated and contradictory (i.e., with reference to the interview data) findings, the gathering and analysis of documentary evidence (both with respect to topics and scope) was generally guided by findings from the interview data, with the overall aims being mainly corroboration and augmentation.

The documents for this research were collected via methods and sources including direct provision/recommendation by participants, direct inquiry with relevant authorities, web searches, consultation with document reference lists, and research carried out in archives/libraries. Of the latter, the most noteworthy were the City of Ottawa Archives, the Helsinki City Planning Department Library, the City of Helsinki Urban Facts office, the Ottawa Public Library (Ottawa Room), and Carleton University’s MacOdrum Library (Ottawa Resource Room). A very wide variety of search terms and topics were explored depending on what was deemed appropriate relative to topics or questions raised by interview data. Examples typical of the key words and

phrases used for searches include “urban sprawl and property development”, “City of Ottawa cycling policy”, “Ottawa Transitway”, and “Pedestrian planning, Helsinki”.

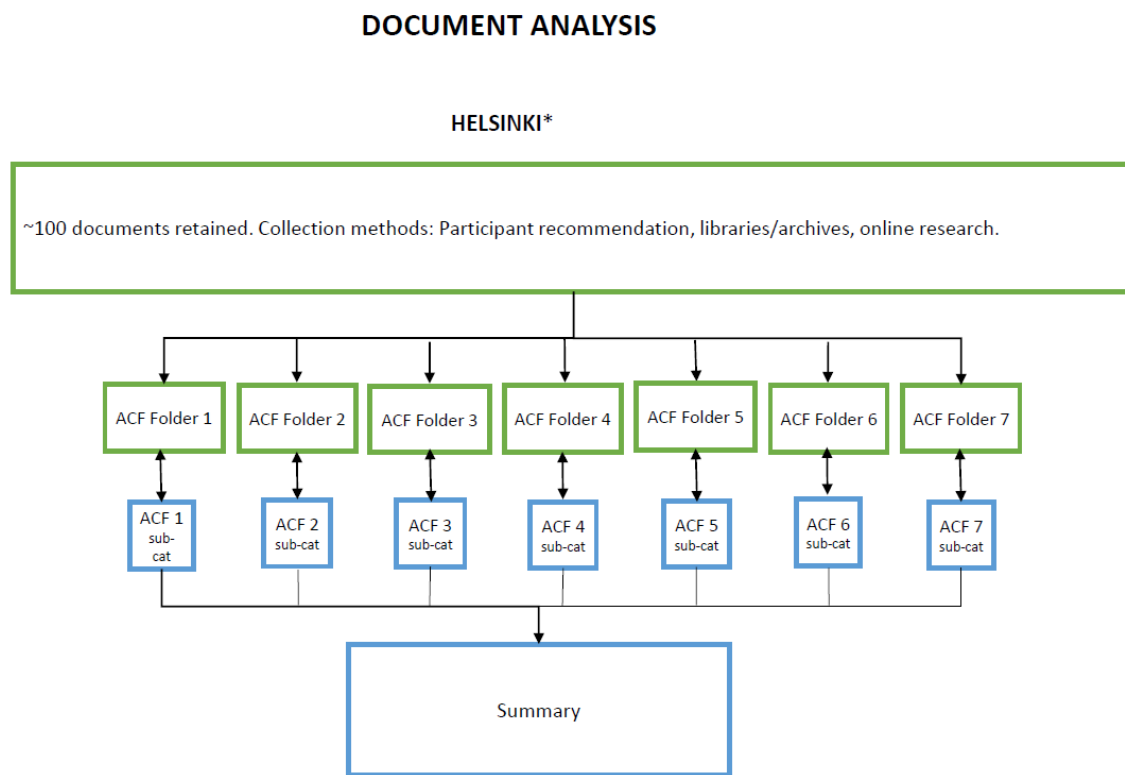
Concerning analysis, attention was given to suggestions provided by Bowen (2009). In particular according to Bowen, document analysis includes both superficial and thorough examination. Superficial examination is performed with a view to identifying meaningful and relevant information. Secondly, thorough examination involves a more focused review in which the information is categorized (or coded) according to either emerging or predetermined categories/themes.

For this research, documents were first initially screened for relevance with respect to the topics under consideration, with those considered useful for further review/analysis either kept in either hard copy, PDF format, or noted via bibliographic reference. Overall, well over 200 documents (more than 100 for each city) of a wide variety of types were retained. These included publications such as policy papers, scholarly literature, books, advocacy material, municipal planning documents, newspaper articles, statistical information, websites and web pages.

Following more detailed review and consideration, the documents were then classified according to the same ACF-derived categories used for the analysis of the interviews (see Figure 2 for a visual representation of the document analysis procedure). When documents did not clearly fit within an ACF-derived category but were nonetheless considered relevant they were classified in categories such as “Ottawa- Background Information and Basic Facts”. Frequently (e.g., when the relevant content of a given document was not immediately clear based on its title or short form description), point-form notes pertaining to relevance were made. For example, the document “The Journal of Public Transit in Ottawa, Volume 1”, was classified within the ACF-derived category of *relatively stable parameters* (Ottawa) and given the attached point-form

description “Political system – Raaymakers – describes problem of requirement for federal and provincial cooperation”. Where appropriate, documents were further classified into sub-categories (i.e., within the category of *relatively stable parameters* (Ottawa), the sub-category *development industry influence* was created).

Figure 2: Document analysis procedure



\*Same procedure for both cities

### Identification of most significant results.

The major steps in determining the most significant results were as follows. First, as described earlier, ACF category-based summaries of the major findings from the interview data were created for each city. Then, the documents (already classified according to ACF-derived themes) were reviewed in order to verify and augment the data as well as to fill any significant

research gaps. On this basis, it was possible to both review and compare the results from each city both overall and on a (ACF-derived) category by category basis. Finally, additional interviews (a total of 3, all in Ottawa), informal discussions (notably, with several people who had previously participated in interviews in Helsinki), and document collection were also conducted to verify particular findings as well as to further explore and clarify particular issues.

Ultimately, the process described above led to the identification of both the most significant findings with respect to each city and the areas of most striking difference/similarity between them. These findings formed the basis for the reporting in the form of the three journal articles presented here. The degree of emphasis given to the specific topics addressed in the articles was determined in consideration of what was most likely to help answer the research question, what was best supported by the evidence gathered, and what might be considered most noteworthy by the anticipated readership.

**Chapter 4: Health Promotion by Stealth: Active transportation success in Helsinki, Finland**

Notes:

- This article (Saidla, 2017a) was published online in *Health Promotion International*, 03 February, 2017. doi:10.1093/heapro/daw110
- References are according to the style required by *Health Promotion International*.

**Abstract**

The promotion of active transportation (AT – utilitarian trips including walking, cycling, and public transit use), represents a well-recognized opportunity for increasing physical activity. This study examines the strong AT success achieved in Helsinki, Finland (in 2013, the share of daily trips in Helsinki completed by AT was 77 per cent) from a political perspective. Helsinki represents a noteworthy example of AT success given important challenges including the region's relatively low population density, its difficult winter climate, and Finland's high driving rate. This research applied the advocacy coalition framework (ACF), a formal policy process theory from political science. Interviews were conducted with 23 AT experts in Helsinki. Document review was employed as a secondary method. Overall, the research indicates that Helsinki's success may be attributed to the long-term dominance of municipal transportation policy by a pro-AT advocacy coalition.

When viewed from the perspective of health promotion, it is striking that this success is not strongly attributable to health considerations or efforts from health-related fields. Rather, the data suggest that the coalition, comprised of members from a variety of non-health fields, was most strongly motivated by a desire to protect a high degree of livability. Importantly, a number of significant historical events and background-level factors greatly facilitated success. Overall, these results suggest that health promotion advocates may have very useful allies in non-health

sectors, and that awareness of the importance of political factors is likely to contribute to stronger health promotion efforts. Finally, several possibilities for related and further research are suggested.

## **Introduction**

Active transportation (AT), defined for this research as the practical use of walking, cycling, and public transit<sup>1</sup>, is of particular interest for health promotion because of its potential to assist in increasing physical activity levels (Active Living Research 2009, Larouche 2012). As is well-known, physical activity reduces the risk and severity of common conditions including cardiovascular disease, obesity, and diabetes. (Cavill, Kahlmeier et al. 2006). Physical inactivity is considered the world's fourth leading risk factor for mortality (World Health Organization 2016b), and is particularly prevalent in developed countries (World Health Organization 2016a). From a health promotion perspective, AT is also promising given its potential to help reduce air pollution (Bergeron, Cragg 2009, Transport Canada 2011), considered a very important health benefit (World Health Organization 2014). Finally, well-designed facilities and policies favourable for AT are likely to significantly improve safety for pedestrians and cyclists (Pucher, Dijkstra 2003).

Accordingly, the promotion of AT is supported by many national and international organizations including the World Health Organization (Edwards, Tsouros 2006, Dora, Hosking et al. 2011) and the International Society for Physical Activity and Health (International Society for Physical Activity and Health 2011). Generally, organizations like these have suggested that governments commit dedicated funds and implement transportation and planning policies that

---

<sup>1</sup> This definition incorporates public transit use as well as walking and cycling based on the fact that users of public transit normally walk in connection. The Public Health Agency of Canada considers AT similarly (Public Health Agency of Canada 2014).

support AT. Examples include investment in infrastructure such as public transit, sidewalks, multi-use paths, and dedicated bike lanes, land use planning that encourages the development of more compact communities and finally, policies that both encourage AT (e.g., social marketing campaigns) and discourage automobile use (e.g., increased fuel taxes and congestion charges). The promotion of AT is considered to belong to a category of policies often referred to as *health in all policies* (Ministry of Social Affairs and Health Finland 2013) or *healthy public policies* (World Health Organization 2015). Briefly, these approaches aim to address the social determinants of health through the explicit consideration of the health effects of policies that are outside the traditional health sector. Social determinants-focused health advocates have often struggled to have their recommendations translated into actual policy implementation (O'Neill, LeMieux et al. 1997, Raphael 2008, Gagnon, Turgeon et al. 2007). At least in part, this struggle may be attributable to the fact that these efforts have generally been led by researchers from the health field who do not have formal expertise in public policy (Fafard 2008, Bernier, Clavier 2011). According to this line of argument, it is too often assumed that the policy making process is essentially linear, progressing through stages of problem identification, research, the transfer of research to policy, and finally, to policy implementation (Bernier, Clavier 2011, Fafard 2008). The reality may be considered much more complex, involving the interaction of many factors external to the immediate policy environment including, for example, values, stakeholder interests, and public opinion (Hawkins, Parkhurst 2015, Fafard 2015, Fafard 2008).

Given that the field of political science gives explicit attention to these factors, a number of authors (Breton, De Leeuw 2010, Gagnon, Turgeon et al. 2007, Bernier, Clavier 2011) have argued that more research that applies formal theoretical frameworks from political science is called for. While a number of these are potentially applicable, the Advocacy Coalition

Framework (ACF) (Jenkins-Smith, Sabatier 1994, Weible, Sabatier 2007, Sabatier 1988) is considered by some (Exworthy 2008, Fafard 2008, Gagnon, Turgeon et al. 2007) to be particularly relevant for the examination of social determinants-based health policy. This would appear to be significantly the result of the fact that its emphasis on advocacy coalitions and their composition of a wide range of actors from a variety of fields is thought to realistically reflect the health promotion-related policy environment. The ACF has, in fact, already been usefully applied in areas including mental health (Swigger, Heinmiller 2014), illicit drug policy (Kübler 2001) and tobacco control (Breton, Richard et al. 2008). More generally, the ACF is credited with offering a plausible and comprehensive model of the policy process that has held up well in applications from a very large number of researchers in a variety of fields (Schlager 1995, Weible, Sabatier et al. 2011, Kübler 2001). Accordingly, the ACF was selected as the theoretical framework for this research.

Helsinki was chosen for this analysis mainly for two reasons. The first is that it has achieved remarkable AT success at the international level. The second is that this is the case despite noteworthy potential political obstacles. The possibility of helping to explain what factors may have contributed to this somewhat surprising success makes Helsinki a particularly worthwhile case study. In 2013, Helsinki's AT *mode share* (the percentage of people using AT for daily trips) was 77 per cent (European Platform on Mobility Management 2016). Within the database of the European Platform on Mobility Management, which includes more than 450 cities overall, Helsinki occupies a place in an exclusive group of only four cities with a population of more than 500 000 and an AT mode share of over 75 per cent (European Platform on Mobility Management 2016). At the same time, Helsinki features potentially important obstacles to AT promotion, including its relatively low urban population density (1900 people per

square kilometre - similar to many North American cities) (Demographia 2014), the fact that it is situated in a country with the tenth highest level of car ownership worldwide (Burgess, Doyle et al. 2014), and its challenging climate which features cold temperatures, consistent snow cover and considerable darkness during the winter. Population density (Pucher, Buehler 2006), high levels of car ownership (Toronto Center for Active Transportation 2010), and challenging climates (Saneinejad, Roorda et al. 2012) have all been identified as constituting potentially important obstacles for the promotion of AT.

At one level, Helsinki's AT success could be attributed to its policy-level commitment to AT, or in other words, to deliberate decisions by policymakers. Briefly, it is clear that Helsinki has prioritized AT over a long time period. Helsinki's internationally-recognized public transit network (Helsingin Sanomat 2012) includes bus, tram, metro, commuter and long distance rail. There are 2,600 kilometres of bicycle facilities in the Helsinki metropolitan area (Sauri 2013). Pedestrian-oriented measures have included investment in numerous streets that prioritize walking (either accommodating low traffic volumes or being car free) as well as, in some cases, the installation of underground heating technology that keeps pedestrian areas clear of snow. Finally, Helsinki has worked consistently to limit parking downtown, to lower speed limits, and to implement extensive traffic calming. Given the above, this research was designed to develop understanding about what factors (e.g., advocacy efforts, values, sociocultural circumstances, and historical events) might explain Helsinki's particularly strong history of policy-level commitment to AT.

### **Theoretical Framework: The Advocacy Coalition Framework**

The advocacy coalition framework (ACF) (Jenkins-Smith, Sabatier 1994, Weible, Sabatier 2007, Sabatier 1988) is a comprehensive theory of the policy process that accounts for

the influence of major factors that are thought to influence policy choices<sup>2</sup>. It focusses on the role of *advocacy coalitions* (i.e., identifiable groups of actors from a wide range of organizations from both within and outside government) that share similar *policy core beliefs* (i.e., beliefs connected with objectives of policy informed by deeply held values) and that engage in a non-trivial degree of coordinated activity to influence policy outcomes. According to the ACF, often two or more advocacy coalitions compete with each other within a given *policy subsystem* (i.e., a policy area, such as transportation policy in a particular municipality). Ultimately, the ACF explains policy outcomes as reflecting the positions of the dominant advocacy coalition within a given policy subsystem.

Importantly, the ACF also considers a wide range of factors that influence the ability of advocacy coalitions to achieve this dominance, including *relatively stable parameters* such as the fundamental values of society at large and the basic constitutional structure, *external events* (i.e., major events occurring outside the policy subsystem but affecting policy choices) and advocacy coalition resources (e.g., money, skillful leadership and public opinion).

Finally, the ACF describes two categories of policy change. *Major policy change*, which occurs relatively infrequently, is considered to involve subsystem-wide alterations in policy at the level of policy core beliefs. Conversely, *minor policy change* is less fundamental and may concern, for example, more technical matters such as the specifics of budgets and performance evaluations.

The ACF may be applied in many different ways to assist in understanding policy-making challenges. Given the complexity of the policy process, research employing the ACF

---

<sup>2</sup> A visual representation of the ACF is available in Sabatier and Jenkins-Smith (1999).

often entails rigorous analyses of particular aspects of the theory. For example, some scholars have specifically examined the factors that explain stability and change in coalition membership over time (Zafonte, Sabatier 2004, Jenkins-Smith, St. Clair et al. 1991). In this paper, the ACF was employed more practically as a high level framework for gaining understanding about the overall and long-term policy process related to AT promotion in Helsinki.

### **Methods**

The results described here are mainly based on a series of focused (or semi-structured) interviews. Such interviews, guided by a set of pre-determined questions, remain essentially conversational and open ended (Yin 1994). This format was chosen based on its potential to yield data pertinent to the identified research areas of interest, while at the same time encouraging spontaneous discussion that might assist in the discovery of unanticipated yet relevant information. Individual interviews (one to three hours in length) were conducted with 23 people considered to be experts in the AT policy process in Helsinki. Interview participants, identified using a process of chain referral (Tansey 2007), included, for example, senior employees of the Helsinki City Planning Department and the Finnish Transportation Agency, members of Helsinki City Council, and representatives of prominent AT-focused non-governmental organizations. The time period to which the knowledge of these participants was considered relevant was from roughly 1965 until 2014. Approval for the interview procedure was obtained from the Health Sciences and Science Research Ethics Board of the University of Ottawa, and all participants were required to give informed consent.

The interview guide was designed to help gather information related to pre-identified themes derived from the ACF such as *advocacy coalition identification and characteristics*, *relatively stable parameters*, *external events* and *major policy changes*. The interviews were

recorded with both handwritten notes and audio. Analysis included the generation of a summary of each interview in which the major points expressed by participants were classified, where applicable, according to the pre-identified themes. The data were then categorized and reviewed on a theme-by-theme basis, during which data-derived sub-categories were also identified.

Review and analysis of relevant documents were also conducted to obtain necessary background information, to verify the interview data, and to fill any pertinent research gaps. The documents collected included a very wide range of publications including policy papers, academic works, books, advocacy material, statistical publications, newspaper articles, and web pages. Together, the review of the interview data and documentary evidence served as a form of data triangulation.

### **Major Findings: The Dominance of the Easy, Beautiful and Green (Pro-AT) Advocacy Coalition**

Overall, Helsinki's AT success was found to be largely the result of the long-term (i.e., 1970-2014) dominance of a pro-AT advocacy coalition that, reflecting some of the most visible motivations for AT promotion among participants, is named here the *easy, beautiful and green* coalition. The emergence and dominance of this coalition can be strongly attributed to a number of important political factors as outlined in the ACF. Specifically, these include favourable relatively stable parameters, as well as a number of important external events. This article suggests that together, these contributed to two major policy changes, both of them favourable to the promotion of AT.

The most significant long-term membership of the easy, beautiful and green coalition came from among the Helsinki City Planning Department, the Helsinki Regional Transport Authority (and predecessor organizations), the municipal Green Party, the municipal Social

Democratic Party, Enemmistö (“Majority” - a pro-AT nongovernmental organization), and the Helsinki Cyclists’ Association. While a number of actors who resisted the promotion of AT were clearly identified by participants, it was not possible to conclude that these actors represented members of a significant and longstanding opposing advocacy coalition. Mainly, the evidence did not indicate that these actors had engaged in a non-trivial degree of coordinated activity (as would be required according to the ACF’s characterization of an advocacy coalition). Bearing this in mind, the organizations considered to be the most significant obstacles to AT promotion included the Autoliitto (car drivers’ association of Finland), the Helsinki Chamber of Commerce, the municipal National Coalition Party, and finally, particular representatives from each of the political parties who supported automobile-oriented transportation planning (colloquially referred to as “the car party”).

#### **Relatively Stable Parameters.**

The following relatively stable parameters were identified as very important in facilitating Helsinki’s commitment to AT: (1) Helsinki’s location on a peninsula; (2) Finland’s strong commitment to the welfare state; (3) the City of Helsinki’s ownership of over 60 per cent of the land within its borders; (4) apartments being the dominant housing type in Helsinki; (5) Helsinki’s strong tradition of directive city planning; and (6) Helsinki’s political system.

The effects of these factors were undoubtedly considerable. For example, downtown Helsinki’s location on a narrow peninsula meant that there was very little room to accommodate increasing automobile traffic and participants indicated that policy makers, politicians and the public generally understood this natural limitation. Finland’s strong commitment to the welfare state, combined with a political system in which municipalities collect income tax at an average rate of roughly 20 per cent of total income (Association of Finnish Local and Regional Authorities

2014), has given the City of Helsinki considerable own-source revenues, creating a situation favourable to large and consistent investment in public transit and other AT-favourable infrastructure.

The combination of the City of Helsinki owning over 60 per cent of the land within its borders (City of Helsinki Real Estate Department n.d.) with a strong tradition of directive city planning appears to have made it relatively easy to conduct long term and coordinated planning of housing and transportation in a way that supported strong public transit ridership and short distance access to services and amenities. This was further facilitated by apartments (as opposed to single family homes, for example) being by far the dominant housing type, representing 86 per cent of all dwellings (Tikkanen, Selander 2014, p. 20). This assisted considerably in limiting urban sprawl and, therefore, making private automobiles less necessary.

### **Major policy changes and external events.**

Numerous important *external events* were found to have contributed to two periods of *major policy change* (both in favour of the promotion of AT), separated by a lengthy period of relative policy stability.

#### ***Major policy change 1: Late 1960s to mid-1970s.***

Arguably, with the rejection of a proposal (by the American-Finnish planning firm, Smith-Polvinen) (Klinge, Kolbe 2007) to build a gridiron style series of expressways and interchanges through its downtown, and the related commitment to eventually build a subway, Helsinki made its first major move towards the establishment of a policy tradition of “favouring” non-automobile transportation (“favouring” was used by interview participants to describe Helsinki’s attempts to limit the growth of traffic). Furthermore, the city began to study and implement a variety of specific measures that ultimately supported AT, including reductions

in speed limits (Helsinki City Planning Department 1971, Helsinki City Planning Department 1972), noise and pollution reduction (Helsinki City Planning Department 1972, Helsinki City Planning Department 1975), dedicated public transit lanes (Rice 2002), pedestrianized streets (Helsinki City Planning Department 1971, Helsinki City Planning Department 1969), and significant investment in cycling infrastructure (A. Naskila, personal communication, 16 March 2016).

To an important degree, these policy changes are attributable to several external events. The first of these was the rapid increase in automobile use throughout the 1960s as people became richer and as official restrictions on car imports were lifted (Klinge, Kolbe 2007). Consequently, in the late 1960s Helsinki grappled seriously with problems associated with car traffic for the first time. The resulting commitment to AT (generally referred to by participants as “sustainable transport”) was then shaped by two important external events that occurred in close succession in 1973: a New Year’s speech by then President Urho Kekkonen emphasizing the need to improve road safety, and the beginning of the first oil crisis in October of the same year. According to a private-sector actor, “the New Year’s speech and the oil crisis worked like a package to help improve conditions for sustainable transportation and ultimately resulted in a series of measures (reduced speed limits, traffic calming, safer roads, etc.) that improved non-automobile transportation of all types”.

Participants also mentioned the order by President Kekkonen for the establishment of a Parliamentary public transport committee in 1974 as being an important external event. According to a former Director of Transport and Traffic Planning with the City of Helsinki this committee contributed, alongside the oil crisis, to a number of valuable public-transit favourable

policy changes. These included, most notably, the establishment of a network of dedicated public transit lanes as well as some transit only streets.

Finally, two participants noted that the 1960s and 1970s were a period during which numerous powerful and mainly left-leaning youth movements in favour of a wide variety of causes emerged at the international level. In their view, this climate of activism likely contributed to the establishment (in 1968) of the influential nongovernmental organization, Enemmistö (translated as “Majority” –signifying representation of the non-car owning majority of Helsinki), to which they both belonged. Briefly, Enemmistö was formed to defend the rights of pedestrians, cyclists, and public transit users in Helsinki and grew to a peak of about 4000 members in the mid-1970s (R. Larjavaara, personal communication, March 12, 2016).

***Relative policy stability (late 1970s to mid-2000s).***

A lengthy period of relative policy stability followed the initial period of major policy change. Briefly, while automobile traffic increased substantially and significant investments in road infrastructure were made (Helsinki City Planning Department 1993), the pro-AT coalition maintained its position of dominance overall. Helsinki’s commitment to favouring non-automobile transportation remained well-entrenched as indicated by a large number of policy measures and investments favouring AT. These included, for example, the adoption of a new policy to prioritize the construction of housing along rail lines and a doubling of the overall planned level of future investment in public transit in 1989 (Murole n.d.).

**Major policy change 2 (mid-2000s to mid-2010s)**

Momentum in favour of a further significant increase in support of AT in Helsinki grew significantly starting in about 2005. During this period, Helsinki’s stance with respect to the promotion of non-automobile transportation may be described as having shifted from favouring

AT to having a goal of making personal vehicles largely unnecessary within the next 20-30 years (Greenfield 2016). Examples of this further increase in policy commitment to the promotion of AT include major additions to Helsinki's light rail/commuter network (Helsinki Regional Transport Authority 2016), the extension of the subway to the neighbouring municipality of Espoo (Länsimetro 2016), the building of the *Baana* bicycle superhighway through downtown (The European Prize for Public Space 2016), and the installation of heating systems beneath several pedestrian areas (Ramboll 2016). Perhaps more importantly, the most recent Helsinki City Master Plan (Helsinki City Planning Department General Planning Unit 2013) calls for major intensification and the transformation of numerous principal arteries into boulevards (which entails slowing traffic, prioritizing public transit and creating dense living space along them).

Finally, Helsinki is preparing to launch pilot projects of a concept known as *mobility as a service* (MAAS) (Heikkila 2014). Briefly, this project aims to dramatically reduce the need for private automobiles through the creation of a system whereby individuals would subscribe to a service provided by a *mobility broker* for the management of their transportation needs. Essentially, the brokers would commit to looking after a person's mobility within the city according to an agreed upon *level of service* (an amount of time in which it is guaranteed that someone will be able to reach their destination). The mobility broker would provide itineraries for each trip, coordinating journeys via a variety of modes including public transit, taxi services, walking, as well as bike share and car share systems.

Overall, a large part of this further increased commitment to AT is attributable to three external events: 1) growing awareness concerning the need to address climate change; 2)

generational values changes (more interest in addressing climate change, less interest in driving, more interest in urban living), and 3) the arrival of social media and mobile technology.

The most frequently mentioned external event during this period was the growing importance of environmentalism, particularly with respect to the need to address climate change. A significant number of participants described generation-related changes in values as being important in leading to improved AT conditions. These included a reduced interest in driving among younger people (with decreasing numbers of young people obtaining licenses) (Finnish Transport Safety Agency 2013), more interest in urban living that does not require driving and, as highlighted above, more concern for the environment. Finally, the dramatic increase in the popularity of mobile technology and social media from about 2000 onward was described by several participants as being an important external event. For example, a former member of Helsinki City Council stated: “Social media allowed people to re-imagine and promote cycling as something that could be done by normal people wearing normal clothing”. Furthermore, according to a member of National Parliament and Helsinki City Council: “Part of the reason that many young people are less inclined to drive cars in Helsinki is because they can accomplish creative work using mobile technology while taking public transit, something which is not possible while driving”.

### **Discussion: From a Health Promotion Perspective**

Considerations related to health promotion do not appear to have figured strongly in the overall, long-term development of Helsinki’s AT success. This is noteworthy given the considerable amount of attention given to the promotion of AT among health promotion advocates. Perhaps most striking is that the membership of the pro-AT advocacy coalition did not include any significant representation from health-based organizations. Furthermore, specific

health-related concerns were not strongly visible in connection with the analysis of the underlying motivations and objectives (i.e., policy core beliefs) of leading AT actors. To the degree that health-related considerations were identifiable, they were most visible in the categories of *evidence* and *arguments* considered to be useful by pro-AT advocates.

### **Advocacy Coalition Membership.**

The principal organizations contributing to the membership of the pro-AT advocacy coalition included a municipal government department (not health-related), the regional transport authority, two political parties, a nongovernmental organization, and a local cycling organization. The absence of health-based representation is surprising given growing international and Finnish concern with physical inactivity and related health conditions. More particularly, it is noteworthy that Finland has long been considered a leader in the previously mentioned health in all policies (HiAP) (Melkas 2013). Normally, one would consider AT to be exactly the type of policy that would be emphasized within an HiAP approach given that it addresses important population health goals through action in a non-health sector.

This study was not explicitly designed to explain this noteworthy finding, meaning that further research addressing this issue would be worthwhile. Bearing this in mind, some possible explanations may be briefly discussed. One is that by the time the idea of encouraging AT was firmly established in the health sector (which was generally not until the 2000s (Sallis, Frank et al. 2004)) Helsinki had already achieved remarkable AT success. With respect to AT's physical activity-related benefits, for example, a senior AT expert with Finland's National Institute for Health and Welfare noted that the first time AT promotion figured among the national health-enhancing physical activity recommendations was in 2008. This means that it would only have been a realistic possibility for health-based actors concerned with physical activity to join pro-AT

advocacy efforts in Helsinki within about the last eight years. By the beginning of this period Helsinki's AT rates were already very high (Helsinki Urban Facts Office 2004) and a well-established pro-AT advocacy coalition already existed, arguably leaving little incentive for health-based involvement.

Additional explanations worthy of exploration include the possibility that AT may be simply considered primarily a responsibility of transportation authorities, and that health-based actors continue to be focused on more traditional approaches. Related to the first possibility, it is worth noting that the author of this paper twice contacted officials with the national Ministry of Social Affairs and Health to identify interview participants and was directed to the Ministry of Transportation and Communications and the Finnish Transport Agency instead. Related to the latter possibility, commentary by representatives with the Helsinki Cyclists' Association (with respect to cycling specifically) included that health-based actors have generally focused on "sport" and "exercise" and have not been importantly involved in the promotion of cycling for transportation purposes.

### **Objectives and motivations of AT advocates.**

To investigate the objectives and motivations (i.e., policy core beliefs) of AT advocates, participants were asked to discuss why they thought the promotion of AT was worthwhile, or alternatively, what problems they believed necessitated its promotion. Overwhelmingly, the answers to these questions fell within the data-derived category of the desire to protect or create what might be termed a *livable city* (implying in a general sense, a city that is aesthetically appealing, safe, healthy, easy to move within, etc.) More specifically, many participants expressed concerns related to the negative effects of automobiles including danger, ugliness, pollution, noise and their consumption of public space. For example, a former member of

Helsinki city council and the Helsinki municipal planning board described his reasons for wanting to promote AT as follows: “It is a question of aesthetics and pleasure living in a city. It makes the city nice, beautiful, and easy to move around in.” Another former member of Helsinki city council offered the following summary of why he and his pro-AT allies favoured its promotion: “Urbanism and livable cities. These issues are at the core of the agendas for me and the people I associate with”. Finally, a more analytical perspective was offered by a senior-level manager with Helsinki Public Transport: “The promotion of AT is important in terms of the quality of the urban environment and life, for the prevention of the growth of car traffic and its side-effects, and to contribute to the attractiveness and competitiveness of the region”.

The next most prominent category of response referred to AT’s potential in terms of environmental protection and more particularly in recent years, with respect to limiting climate change. Motivations and objectives concerning health figured much less strongly. Furthermore, health only represented a significant category of response if issues related to physical activity, air pollution and traffic safety were all considered to belong to the same broadly defined category.

### **Evidence.**

Within the ACF, evidence is considered to be a resource that advocacy coalitions employ to influence policy choices. Resources would include, for example, information (including scientific evidence), money, public opinion, and skillful leadership.

The single most frequently mentioned piece of evidence was a particular study (Helsinki City Planning Department 2015) that employed the WHO Health Economic Assessment Tool (HEAT) approach for quantifying the economic benefits of cycling related to health (World Health Organization, Regional Office for Europe 2014). Briefly, the results demonstrated a potential return of €8 for every €1 invested in cycling in Helsinki. While this study is clearly

health-related, it is noteworthy that ultimately, the findings relate not to health per se. Instead, they point to the economic benefits of cycling, notably, the reduced spending on health care.

### **Arguments.**

While it did not emerge as particularly dominant within the category of *arguments*, it was in this area where health figured most strongly in the research findings. Participants were asked to discuss the most useful and the most frequently employed arguments in the promotion of AT. Overall, those relating to health were slightly less strongly cited than those concerning economic benefits or those connected with livable cities. Similar to the findings concerning objectives and motivations, however, this was only the case if the category of health was considered broadly, including all arguments related to physical activity, air pollution, and traffic safety together.

### **Conclusion: Implications for Health Promotion**

Theoretically informed awareness of political challenges is likely to be very useful for the development of effective health promotion strategies. This awareness allows a more strong understanding of the full magnitude of obstacles and also improves the likelihood of identifying specific opportunities for progress. From the perspective of health promotion, a number of important strategic considerations and areas for further research can be suggested.

First, policy decisions resulting in favourable health outcomes are not always the result of the efforts of health advocates or health-derived motivation. In the case of Helsinki, a municipal transportation system that supports a very high level of AT was developed with the support of an advocacy coalition not featuring significant health-based representation. Furthermore, this coalition was primarily motivated by concerns (e.g., livability, the environment) that would not be directly considered health-related. While the topic of health was visible among the resources and arguments employed by pro-AT actors, it is fair to say that overall, health-related

considerations played only a supporting role. It is evident, therefore, that health promotion advocates may have very useful allies in non-health areas. In Helsinki presently, not only would there appear to be a number of useful non-health allies with whom health promotion advocates could potentially work to develop even higher rates of AT, but these allies are clearly in a position of stronger influence than health actors.

Second, political factors that may not frequently be given consideration by health promotion advocates may have very important effects on the power of particular campaigns for policy change. While in Helsinki these factors facilitated progress in way that was ultimately good for health, in many cases their effects could be otherwise. In North America for example, society's long term embrace of the car could be considered a relatively stable parameter representing a major political obstacle. At the same time, political opportunities for making progress with AT or similar health-related policies may be made particularly identifiable if political factors are given thorough attention. If, for example, a national government announces strong funding for so-called green infrastructure, a politically informed AT advocate might likely see this development as a favourable external event, carrying with it the potential for important policy changes favouring AT based mainly on its environmental benefits. In other words, non-health political and policy shifts can offer significant opportunities for advancing healthy public policy.

Finally, areas for further related research are evident. The question of why health-based actors were not more visible in AT promotion efforts in Helsinki merits attention. While some possibilities were briefly discussed, they deserve thorough exploration that was not possible in the context of this study. Furthermore, acknowledging that a case study of one jurisdiction has limited generalizability, further research that applies formal political theory to the promotion of

AT or similar health-related policy efforts in additional jurisdictions would be worthwhile. Finally, this study did not attempt to determine if Helsinki's high rates of AT resulted in demonstrable effects on population health when measured by, for example, overall rates of physical activity or the incidence of a variety of health conditions that might be reduced by AT when compared with other jurisdictions. Accordingly, research which attempts to explicitly link political and public policy developments with measurable health outcomes could usefully contribute to the accomplishment of health promotion objectives.

## References

- ACTIVE LIVING RESEARCH, 2009-last update, Active Transportation. Making the Link from Transportation to Physical Activity and Obesity. Available: [http://activelivingresearch.org/sites/default/files/ALR\\_Brief\\_ActiveTransportation\\_0.pdf](http://activelivingresearch.org/sites/default/files/ALR_Brief_ActiveTransportation_0.pdf) [June 6, 2014].
- ASSOCIATION OF FINNISH LOCAL AND REGIONAL AUTHORITIES, 2014-last update, Kuntien vuoden 2015 tulo- ja kiinteistöveroprosentit. Available: <http://www.kunnat.net/fi/tietopankit/uutisia/2014/Sivut/tuloveroprosentit-2015.aspx#anchor-details> [August 26, 2016].
- BERGERON, K. and CRAGG, S., 2009. *Making the Case for Active Transportation - Bulletin # 4: Environmental Benefits*. Available: [http://www.cflri.ca/media/node/337/files/AT4\\_environment\\_eng.pdf](http://www.cflri.ca/media/node/337/files/AT4_environment_eng.pdf).
- BERNIER, N.F. and CLAVIER, C., 2011. Public health policy research: making the case for a political science approach. *Health promotion international*, **26**(1), pp. 109-116.
- BRETON, E. and DE LEEUW, E., 2010. Theories of the policy process in health promotion research: a review. *Health Promotion International*, **26**(1), pp. 82-90.
- BRETON, E., RICHARD, L., GAGNON, F., JACQUES, M. and BERGERON, P., 2008. Health promotion research and practice require sound policy analysis models: the case of Quebec's Tobacco Act. *Social science & medicine*, **67**(11), pp. 1679-1689.
- BURGESS, A., DOYLE, M., EMERY, I., FRANSHAM, J., GILBERT A., HEINE, C. and WILSON, C., eds, 2014. *The Economist Pocket World in Figures*. 2015 edn. London: Profile Books Ltd.
- CAVILL, N., KAHLMEIER, S. and RACIOPPI, F., 2006. *Physical activity and health in Europe: Evidence for action*. World Health Organization.
- CITY OF HELSINKI REAL ESTATE DEPARTMENT, n.d. *Building Helsinki*. Available: <http://www.hel.fi/static/kv/BuildingHelsinki.pdf>.
- DEMOGRAPHIA, 2014-last update, Demographia World Urban Areas (Built-Up Urban Areas or World Agglomerations). Available: <http://www.demographia.com/db-worldua.pdf> [June 10, 2014].
- DORA, C., HOSKING, J., MUDU, P. and FLETCHER, E., 2011. *Urban Transport and Health, Module 5g, Sustainable Transport: A Sourcebook for Policy-makers in Developing Cities*. Available: [http://www.who.int/hia/green\\_economy/giz\\_transport.pdf](http://www.who.int/hia/green_economy/giz_transport.pdf); Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and World Health Organization.

EDWARDS, P. and TSOUROS, A., 2006. *Promoting physical activity and active living in rural environments. The role of local governments*. Available: [http://www.euro.who.int/data/assets/pdf\\_file/0009/98424/E89498.pdf](http://www.euro.who.int/data/assets/pdf_file/0009/98424/E89498.pdf).

EUROPEAN PLATFORM ON MOBILITY MANAGEMENT, 2016-last update, TEMS - The EPOMM Modal Split Tool. Available: <http://epomm.eu/tems/index.phtml> [October 18, 2016].

EXWORTHY, M., 2008. Policy to tackle the social determinants of health: using conceptual models to understand the policy process. *Health Policy and Planning*, **23**, pp. 318-327.

FAFARD, P., 2008. *Evidence and Healthy Public Policy: Insights from Health and Political Sciences*. Available: [http://www.cprn.org/documents/50036\\_EN.pdf](http://www.cprn.org/documents/50036_EN.pdf): National Collaborating Centre for Healthy Public Policy.

FAFARD, P., 2015. Beyond the usual suspects: using political science to enhance public health policy making. *Journal of epidemiology and community health*, **69**(11), pp. 1129-1132.

FINNISH TRANSPORT SAFETY AGENCY, 2013. *Finnish Annual Road Safety Review, 2013*. Available: [http://www.trafi.fi/filebank/a/1385544081/aacede60b181fe7444e0cd3d57ddfc51/13667-Trafi\\_Tieliikenteen\\_turvallisuuskatsaus\\_2013\\_eng.pdf](http://www.trafi.fi/filebank/a/1385544081/aacede60b181fe7444e0cd3d57ddfc51/13667-Trafi_Tieliikenteen_turvallisuuskatsaus_2013_eng.pdf).

GAGNON, F., TURGEON, J. and DALLAIRE, C., 2007. Healthy public policy: A conceptual cognitive framework. *Health Policy*, **81**, pp. 42-55.

GREENFIELD, A., 2016. Helsinki's ambitious plan to make car ownership pointless in 10 years. *The Guardian*. Available: <http://www.theguardian.com/cities/2014/jul/10/helsinki-shared-public-transport-plan-car-ownership-pointless>.

HAWKINS, B. and PARKHURST, J., 2015. *The 'good governance' of evidence in health policy*. Policy Press.

HEIKKILA, S., 2014. *Mobility as a service - A proposal for action for the public administration. Helsinki case*, Aalto University.

HELSINGIN SANOMAT, 2012-last update, Study: Helsinki has second-best public transport in Europe. Available: <http://www.hs.fi/english/article/Study+Helsinki+has+second-best+public+transport+in+Europe/1135253061412> [June 19, 2014].

HELSINKI CITY PLANNING DEPARTMENT, 2015. *Bicycle Account 2015*.

HELSINKI CITY PLANNING DEPARTMENT, 1993. *Helsinki City Planning Department Annual Report 1993*.

HELSINKI CITY PLANNING DEPARTMENT, 1975. *Helsingin Kaupungin Kaupunkisuunnitteluvirasto Toimintarkertomus 1975*.

HELSINKI CITY PLANNING DEPARTMENT, 1972. *Helsingin Kaupunkisuunnitteluvirasto Toimintakertomus 1972*.

HELSINKI CITY PLANNING DEPARTMENT, 1971. *Helsingin Kaupunkisuunnitteluvirasto Toimintakertomus 1971*.

HELSINKI CITY PLANNING DEPARTMENT, 1969. *Helsingin Kaupunkisuunnitteluvirasto Toimintakertomus 1969*.

HELSINKI CITY PLANNING DEPARTMENT GENERAL PLANNING UNIT, 2013. *Helsinki City Plan. Vision 2050. Urban plan - the new Helsinki city plan*. Available: [http://www.hel.fi/hel2/ksv/julkaisut/yos\\_2013-23\\_en.pdf](http://www.hel.fi/hel2/ksv/julkaisut/yos_2013-23_en.pdf).

HELSINKI REGIONAL TRANSPORT AUTHORITY, 2016-last update, Ring Rail Line 2015. Available: <https://www.hsl.fi/en/ringrailline> [August 26, 2016].

HELSINKI URBAN FACTS OFFICE, 2004. *Traffic in Helsinki 2002*. Available: [http://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/04\\_03\\_18\\_sierimo\\_traffic.pdf](http://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/04_03_18_sierimo_traffic.pdf).

INTERNATIONAL SOCIETY FOR PHYSICAL ACTIVITY AND HEALTH, 2011. *Investments that Work for Physical Activity*. Available: <http://www.globalpa.org.uk/pdf/investments-work.pdf>.

JENKINS-SMITH, H.C. and SABATIER, P.A., 1994. Evaluating the Advocacy Coalition Framework. *Journal of Public Policy*, **14**(2), pp. 175-203.

JENKINS-SMITH, H.C., ST. CLAIR, G.K. and WOODS, B., 1991. Explaining change in policy subsystems: Analysis of coalition stability and defection over time. *American Journal of Political Science*, **35**(4), pp. 851-880.

KLINGE, M. and KOLBE, L., 2007. *Helsinki: Daughter of the Baltic: A Short Biography*. Otava.

KÜBLER, D., 2001. Understanding policy change with the advocacy coalition framework: an application to Swiss drug policy. *Journal of European public policy*, **8**(4), pp. 623-641.

LÄNSIMETRO, 2016-last update, From Ruoholahti to Kivenlahti. 13 new stations. 21 kilometres. Available: <http://www.lansimetro.fi/en/home.html> [August 26, 2016].

LAROUCHE, R., 2012. The environmental and population health benefits of active transport: a review. In: G. LIU, ed, *Greenhouse Gases - Emission, Measurement and Management*. InTech, pp. 413-440.

MELKAS, T., 2013. Health in all policies as a priority in Finnish health policy: a case study on national health policy development. *Scandinavian journal of public health*, **41**(11 suppl), pp. 3-28.

MINISTRY OF SOCIAL AFFAIRS AND HEALTH FINLAND, 2013. *Health In All Policies. Seizing opportunities, implementing policies*. Malta: Ministry of Social Affairs and Health.

MUROLE, P., n.d. *Ihmistä ei voi suunnitella – kiveä voi!* Itä-Helsingin Monistus Oy, Unigrafia Oy.

O'NEILL, M., LEMIEUX, V., GROLEAU, G., FORTIN, J. and LAMARCHE, P.A., 1997. Coalition theory as a framework for understanding and implementing intersectoral health-related interventions. *Health Promotion International*, **12**(1), pp. 79-87.

PUBLIC HEALTH AGENCY OF CANADA, 2014-last update, Mobilizing Knowledge on Active Transportation. Available: <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/mobil-transport-eng.php> [October 18, 2016].

PUCHER, J. and BUEHLER, R., 2006. Why Canadians Cycle More than Americans: A Comparative Analysis of Bicycling Trends and Policies. *Transport Policy*, **13**, pp. 265-279.

PUCHER, J. and DIJKSTRA, L., 2003. Promoting safe walking and cycling to improve public health: lessons from the Netherlands and Germany. *American Journal of Public Health*, **93**(9), pp. 1509-1516.

RAMBOLL, 2016-last update, Kamppi Centre. Available: <http://www.ramboll.com/projects/rfi/kamppicentre> [August 26, 2016].

RAPHAEL, D., 2008. Grasping at straws: a recent history of health promotion in Canada. *Critical Public Health*, **18**(4), pp. 483-495.

RICE, W., 2002. *Tramways of Helsinki*. Available: <http://www.raitio.org/english/tramways.htm>.

SABATIER, P.A., 1988. An advocacy coalition framework of policy change and the role of policy-oriented learning therein. *Policy Sciences*, **21**(2-3), pp. 129-168.

SABATIER, P.A. and JENKINS-SMITH, H.C., 1999. The advocacy coalition framework: An assessment. *Theories of the policy process*, **118**, pp. 188.

SALLIS, J.F., FRANK, L.D., SAELENS, B.E. and KRAFT, M.K., 2004. Active transportation and physical activity: opportunities for collaboration on transportation and public health research. *Transportation Research Part A: Policy and Practice*, **38**(4), pp. 249-268.

SANEINEJAD, S., ROORDA, M.J. and KENNEDY, C., 2012. Modelling the impact of weather conditions on active transportation travel behaviour. *Transportation research part D: transport and environment*, **17**(2), pp. 129-137.

SAURI, P., 2013. *Sustainability and quality of life in Helsinki, Finland*. Available: the Climate Action website: [http://www.climateactionprogramme.org/climate-case-studies/sustainability\\_and\\_quality\\_of\\_life\\_in\\_helsinki\\_finland](http://www.climateactionprogramme.org/climate-case-studies/sustainability_and_quality_of_life_in_helsinki_finland).

SCHLAGER, E., 1995. Policy making and collective action: Defining coalitions within the advocacy coalition framework. *Policy Sciences*, **28**(3), pp. 243-270.

SWIGGER, A. and HEINMILLER, B.T., 2014. Advocacy Coalitions and Mental Health Policy: The Adoption of Community Treatment Orders in Ontario. *Politics & Policy*, **42**(2), pp. 246-270.

TANSEY, O., 2007. Process tracing and elite interviewing: a case for non-probability sampling. *PS: Political Science & Politics*, **40**(04), pp. 765-772.

THE EUROPEAN PRIZE FOR PUBLIC SPACE, 2016-last update, Special Mention 2014. "Baana: Pedestrian", Helsinki (Finland). Available: <http://www.publicspace.org/en/post/special-mention-2014-baana-pedestrian-helsinki-finland> [August 26, 2016].

TIKKANEN, T. and SELANDER, P., eds, 2014. *City of Helsinki Urban Facts. 2013 Helsinki By District*. Keuruu, Finland: Otavan Kirjapaino Oy.

TORONTO CENTER FOR ACTIVE TRANSPORTATION, 2010-last update, Benchmarking Active Transportation in Canadian Cities. Available: [http://activelivingresearch.org/sites/default/files/ALR\\_Brief\\_ActiveTransportation\\_0.pdf](http://activelivingresearch.org/sites/default/files/ALR_Brief_ActiveTransportation_0.pdf) [June 6, 2014].

TRANSPORT CANADA, 2011. *Active Transportation in Canada: a resource and planning guide*. Available: the Transport Canada website: <http://www.tc.gc.ca.proxy.bib.uottawa.ca/media/documents/programs/atge.pdf> .

WEIBLE, C.M. and SABATIER, P.A., 2007. A Guide to the Advocacy Coalition Framework. In: F. FISCHER, G.J. MILLER and M.S. SIDNEY, eds, *Handbook of Public Policy Analysis Theory, Politics, and Methods*. pp. 123-136.

WEIBLE, C.M., SABATIER, P.A., JENKINS-SMITH, H.C., NOHRSTEDT, D., HENRY, A.D. and DELEON, P., 2011. A quarter century of the Advocacy Coalition Framework: An introduction to the special issue. *Policy Studies Journal*, **39**(3), pp. 349-360.

WORLD HEALTH ORGANIZATION, July 16, 2016, 2016a-last update, Global Health Observatory (GHO) data. Prevalence of Insufficient physical activity [Homepage of World Health Organization], [Online]. Available: [http://www.who.int/gho/ncd/risk\\_factors/physical\\_activity\\_text/en/](http://www.who.int/gho/ncd/risk_factors/physical_activity_text/en/) [October 19, 2016].

WORLD HEALTH ORGANIZATION, 2016b-last update, Global Strategy on Diet, Physical Activity and Health. Available: <http://www.who.int/dietphysicalactivity/pa/en/> [August 26, 2016].

WORLD HEALTH ORGANIZATION, 2015-last update, Adelaide Recommendations on Healthy Public Policy. Second International Conference on Health Promotion, Adelaide, South Australia, 5-9 April, 1998. Available: <http://www.who.int/healthpromotion/conferences/previous/adelaide/en/index1.html> [August 26, 2016].

WORLD HEALTH ORGANIZATION, 2014-last update, Ambient (outdoor) air quality and health. Available: <http://www.who.int/mediacentre/factsheets/fs313/en/> [June 6, 2014].

WORLD HEALTH ORGANIZATION, REGIONAL OFFICE FOR EUROPE, 2014-last update, Health economic assessment tool. Available: <http://www.heatwalkingcycling.org/> [August 26, 2016].

YIN, R., 1994. *Case Study Research. Design and Methods*. Applied Social Research Methods Series, Volume 5 edn. Thousand Oaks, CA: SAGE.

ZAFONTE, M. and SABATIER, P., 2004. Short-Term Versus Long-Term Coalitions in the Policy Process: Automotive Pollution Control, 1963–1989. *Policy studies journal*, **32**(1), pp. 75-107.

## **Chapter 5: Active Transportation in Ottawa, Canada. The Challenge of Enduring Political Obstacles**

Notes:

- This article (Saidla, 2017b) was published in French in *Lien social et Politiques*, numéro 78, 2017. doi:10.7202/1039344ar. It is available at the following link:  
<https://www.erudit.org/fr/revues/lsp/2017-n78-lsp03015/1039344ar/>
- The French version differs slightly from the one presented here as a result of minor editorial changes made during translation.
- References are according to the style required by *Lien social et Politiques*.

### **Abstract**

The promotion of active transportation (AT) – utilitarian trips including walking, cycling, and public transit use, represents an opportunity for increasing physical activity. Ottawa is a noteworthy example of success when measured by AT rates and assessed in a North American context. At the same time, its AT performance is weak in comparison with those of the best international cities, suggesting that its failure to achieve higher AT rates may be related to factors associated with its North American location.

Through an application of the advocacy coalition framework (ACF), a formal policy process theory from political science, this paper highlights the importance of a category of enduring political obstacles (the ACF's *relatively stable parameters*) with respect to long-term AT promotion efforts in Ottawa. Individual interviews were conducted with 21 Ottawa-based AT experts. Document review was employed as a secondary method. Overall, the research indicates challenges related to Ottawa's North American sociocultural context and its political system constituted very strong obstacles to AT promotion.

Viewed from the perspective of attempts to promote health in urban settings, these findings suggest that in jurisdictions subject to challenges similar to those identified for AT promotion in Ottawa, health-based actors should be encouraged to direct advocacy efforts to areas not normally within their traditional domains. In the case of AT in Ottawa, these might include, for example, the municipal revenue system and traditions within the field of transportation and land use planning.

### **Introduction**

The promotion of active transportation (AT), defined here as the utilitarian use of walking, cycling and public transit<sup>1</sup>, enjoys strong support from health authorities (Dora, Hosking, Mudu et Fletcher, 2011; Edwards et Tsouros, 2006) on the basis of its potential benefits related mainly to physical activity, air quality, and traffic safety. Physical inactivity, which contributes to health conditions such as cardiovascular disease, obesity, and diabetes (Cavill, Kahlmeier et Racioppi, 2006) is the world's fourth leading risk factor for mortality (World Health Organization, 2016b) and is particularly prevalent in high-income countries (World Health Organization, 2016a). Reductions in air pollution are considered to be an important benefit with respect to cardiovascular disease, cancer, and a number of respiratory conditions (World Health Organization, 2014). Finally, prioritizing high quality environments for AT can be expected to result in substantial improvements in safety for non-motorized users (Pucher et Dijkstra, 2003).

In order to promote AT, proponents generally recommend that governments commit to transportation and planning policies including investment in infrastructure and services such as

---

<sup>1</sup> This definition incorporates public transit use as well as walking and cycling based on the fact that users of public transit normally walk in connection. The Public Health Agency of Canada considers AT similarly (Public Health Agency of Canada, 2014).

public transit, sidewalks, multi-use paths, and dedicated bike lanes. Additional recommended policies include those that relate to developing more compact communities and discouraging automobile use (e.g., increased fuel taxes and congestion charges).

Unfortunately, many jurisdictions display extremely low rates of AT, particularly in North America. Bassett et al., (2008) for example, examined overall AT mode shares (the percentage of people using primarily AT for daily trips) in 17 countries including the United States and Canada. While Canada and the United States had AT rates of roughly 11 per cent and 20 per cent respectively, eight European countries (e.g., Switzerland, the Netherlands, and Spain), had AT rates above 40 per cent (Bassett *et al.*, 2008 : 799). At the city level, some jurisdictions, (e.g., Paris, Helsinki, and London) have AT rates of over 75 per cent (European Platform on Mobility Management, 2016), while in Canada and the United States it is rare to find cities with AT rates approaching 30 per cent. (Statistics Canada, 2011, U.S. Department of Transportation, 2015). These numbers suggest the possibility that factors related to the North American context may at least partly explain the failure of North American cities to achieve higher AT mode shares.

This paper presents noteworthy findings from a qualitative case study examining the role

of political factors in the promotion of AT in Ottawa<sup>2</sup>, Canada between roughly 1970 and 2016. More specifically, it identifies several enduring political challenges that appear to have considerably limited AT progress in Ottawa. It will be shown these may fairly be considered to stem from Ottawa's North American sociocultural context and elements of its political system. The identification of the specific challenges was made possible via the application of the Advocacy Coalition Framework - a modern theory of the policy process from political science - through a series of focused interviews supported by document review.

### **Theoretical Framework: the Advocacy Coalition Framework (ACF)**

The selection of the ACF<sup>3</sup> (Jenkins-Smith et Sabatier, 1994; Sabatier, 1988; Weible et Sabatier, 2007) as the theoretical framework for this research was based on its identified utility for politically-based examination of health promotion challenges (Exworthy, 2008; Fafard, 2008; Gagnon *et al.*, 2007) and its previously successful application to a number of health-related policy areas (Breton *et al.*, 2008; Kübler, 2001; Swigger et Heinmiller, 2014). From this perspective, the ACF may be considered to realistically reflect the health promotion-related policy environment as a result of its explicit emphasis on the importance of interrelated political factors (e.g., sociocultural context, values, stakeholder interests, and public opinion) (Fafard, 2008; Fafard, 2015; Hawkins et Parkhurst, 2015) and the involvement of actors from a wide variety of fields in shaping public policy.

The ACF accounts for the effects of specific categories of political factors on policy choices. Broadly, the ACF deems policy choices to reflect the values of whatever *advocacy*

---

<sup>2</sup> "Ottawa", unless otherwise specified, refers to the territory of the former Regional Municipality of Ottawa-Carleton (RMOC) and the current City of Ottawa. The RMOC was created in 1970 by the Government of Ontario as a second tier level of government for what was then the City of Ottawa and its neighbouring municipalities. The RMOC was disbanded when 11 local municipalities were officially amalgamated to create the new City of Ottawa in 2001.

*coalition* is dominant within a *given policy subsystem*. *Advocacy coalitions* are groups of actors from governmental and nongovernmental organizations, that share similar *policy core beliefs* (beliefs connected with policy objectives informed by deeply held values) and that engage in non-trivial coordinated activity in order to achieve their goals. Policy subsystems may be described as policy areas (like municipal transportation in a particular city) in which advocacy coalitions compete for dominance.

Notably, the ACF suggests that several categories of political factors ultimately influence the ability of advocacy coalitions to achieve this dominance. These categories include, for example, *external events* (i.e., major events occurring outside the policy subsystem) and available *resources* (e.g., money, skillful leadership and public opinion).

This paper focusses on a discussion of findings related to the category of *relatively stable parameters*, which were found to be particularly influential in strongly constraining prospects for AT success in Ottawa over the long term. Relatively stable parameters are described as contributing to the broad societal context that affects (and may also be affected by) the policymaking process and are noted as including: 1.) basic attributes of the problem area; 2.) basic distribution of natural resources; 3.) fundamental sociocultural values and social structure and; 4.) basic constitutional structure (Sabatier et Weible, 2007 : 193). Generally, they are considered to be stable over time (Sabatier et Weible, 2007 : 193) and resistant to change (Weible et Sabatier, 2007 : 125-126). As a result, they are not usually the subject of strategic action by policy participants (Weible et Sabatier, 2007 : 125-126). At the same time, they are important because they “structure the nature of the problem, constrain the resources available to policy

---

<sup>3</sup> A visual representation of the ACF is available in the following: (Sabatier et Jenkins-Smith, 1999).

participants, establish the rules for changing policy and reaching collective decisions, and broadly frame the values that inform policymaking” (Weible et Sabatier, 2007 : 125).

The ACF may be applied in many different ways to assist in understanding policy-making challenges. Given the complexity of the policy process, political science research employing the ACF often entails rigorous analyses conducted in the interest of testing and exploring various aspects of the theory itself. For example, some scholars have specifically examined the factors that explain stability and change in coalition membership over time (Jenkins-Smith, St. Clair et Woods, 1991; Zafonte et Sabatier, 2004). In this research, the ACF was employed more practically as a high-level framework (or model) of the overall policy process to assist in the development of broad, contextual understanding of the role of political factors in long term efforts to promote AT in Ottawa. As will be discussed further with respect to methodology, the ACF’s theoretical categories of political factors (e.g., *external events, relatively stable parameters, advocacy coalitions, resources*) functioned as the basis for the identification of the most noteworthy real-world political challenges and enablers for the promotion of AT in Ottawa. The utility of employing the ACF in such a practical manner has been emphasized, for example, by ACF scholars Weible and Sabatier (2007).

## **Methodology**

### **Case selection.**

Ottawa was selected for this research based primarily on its relatively unique position as an AT leader within North America despite performing weakly relative to the top international cities. According to the City of Ottawa, 28.5 per cent of local trips are made by AT (15.5 per cent public transit, 11 per cent walking, and 2 per cent cycling), with the remaining 71.5 per cent by automobile (City of Ottawa, 2013d : 17). Ottawa has the highest AT mode share of Canadian

CMAs, narrowly ahead of Toronto and Montreal (Statistics Canada, 2011 : table 1.a). In the United States meanwhile, only 4 out of 383 metropolitan statistical areas have AT mode shares of over 25 per cent (U.S. Department of Transportation, 2015). Ottawa is thus a leading AT city within North America.

Ottawa's success may be to some degree the result of a relatively high level of deliberate policy commitment to AT. Indicative of this is Ottawa's internationally-recognized public transit service (Cervero, 1998), including the Transitway bus rapid transit system. Furthermore, the city is home to many neighbourhoods where conditions for walking are excellent (Centre for Research and Education in Community Services, University of Ottawa, 2016) and has a cycling network of more than 900 km (City of Ottawa, 2015). Despite this evidence of commitment, Ottawa's AT performance relative to the top cities in the world is weak. The European Platform on Mobility Management database shows 68 cities (populations of more than 100 000) with AT mode shares more than double Ottawa's (European Platform on Mobility Management, 2016).

Taken together, Ottawa's relatively high level of commitment and strong performance within North America combined with its weak status relative to the top international cities suggested that its failure to achieve higher AT rates may be at least partly related to political challenges associated with its North American location. Together, these considerations made Ottawa a particular worthwhile case study.

### **Methods.**

The primary research method was the focused (or semi-structured) interview (Yin, 1994). This format, in which the interview is guided by a set of specific questions yet remains conversational, was selected based on its potential to yield data pertinent to the identified research area while at the same time assisting in the discovery of unanticipated yet relevant

information. Individual interviews of one to three hours in length were conducted with 21 people considered to be experts in the AT policy process in Ottawa between June, 2015 and July, 2016. A process of chain referral (Tansey, 2007) was used to identify research participants. Briefly, as part of initial interviews with several pre-identified prominent Ottawa-specific AT advocates, participants were asked to recommend experts for subsequent interviews based on the likelihood of them being able to usefully answer the interview questions. During each interview, recommendations for further potential participants were requested. Ultimately, those interviewed included, for example, employees and former employees of the City of Ottawa's Transportation Planning and Traffic Services branches, the National Capital Commission, several members or former members of Ottawa City Council, and representatives of non-governmental organizations involved in AT promotion. Overall, the time period for which it was possible to gather relevant participant commentary was from roughly 1970 to 2016. All participants were required to give informed consent as part of an interview procedure that was approved by the Health Sciences and Science Research Ethics Board of the University of Ottawa.

The interview guide was designed to help gather information according to pre-identified themes derived from the ACF including, for example, *external events*, *relatively stable parameters*, and *actor/ advocacy coalition identification*. The interviews were recorded with audio as well as handwritten notes. Analysis began with the development of a template-based summary of each interview in which the major points expressed by participants were classified, where applicable, according to the same pre-identified themes as noted above. The summaries were sent to participants for review and comment. All relevant commentary for each theme was then grouped together and reviewed on a theme by theme basis, allowing data-derived sub categories to also be identified.

Relevant documents (classified where possible according to the same ACF-derived themes explored in the interviews) were reviewed in order to obtain necessary background information, to verify the interview data, to fill any pertinent research gaps, and to further explore noteworthy topics raised in the interviews. The documents were collected via archival (e.g., in particular, from the City of Ottawa archives) and on-line research using keywords and phrases such as “urban sprawl and property development”, “City of Ottawa cycling policy” and “Ottawa Transitway planning”. Additional documents were obtained through either direct provision or recommendation by interview participants. The documents included a wide range of publications including policy papers, books, advocacy material, municipal planning documents, newspaper articles, and web pages.

Using the information from both the interviews and the documents, an overall ACF-informed summary of significant long term developments and related political factors in the promotion of AT in Ottawa was developed. Ultimately, this process led to the identification of a number of particularly striking challenges for AT promotion related to the ACF-derived category of relatively stable parameters. Further documentary review was then conducted in order to verify and expand upon the participant commentary related to this particular category. Bearing all of the above in mind, the focus of this paper is a discussion of the identified relatively stable parameters. First, however, a plain language overview of the history of AT promotion efforts in Ottawa is included in order to provide relevant contextual information. This paper concludes with consideration of potential implications for efforts to promote health in urban settings.

### **Overview: Long term efforts to promote AT in Ottawa**

Viewed from a high-level perspective, efforts to promote AT in Ottawa have taken place in a policymaking environment that (since World War II) featured a strongly prevailing

automobile-oriented perspective. In the 1970s (following a period of particularly extreme automobile-oriented focus in the 1950s and 1960s) the newly created Regional Municipality of Ottawa-Carleton (RMOC) successfully managed to increase its commitment to public transit, especially in connection with the development of its first (1974) official plan (Fullerton, 2005 : 111; Gordon, 2015 : 278). This noteworthy shift (which overall, still left automobile transportation dominant) was enabled, notably, by favourable public opinion (Fullerton, 2005 : 109) and the commitment of important long-term financial support for public transit from the Provincial Government (OC Transpo, 2000).

During the 1980s and 1990s, despite increased attention to the merits of AT (significantly the result of growing environmental awareness) and the emergence and efforts of a number of pro-AT actors, expanding urban sprawl (Gordon, 2015 : 290), the increased affordability of cars (Lake, 1995 : 9-10), and a lack of adequate funds for public transit from higher levels of government appear to have strongly limited further AT progress. Starting in the mid-2000s, in response to factors including increased attention to climate change and technical constraints on further road network expansion, momentum for AT began to gain speed. The first stage of a comprehensive light rail project (the Confederation Line) is now being built and strongly increased policy-level and financial commitment to walking and cycling infrastructure is evident (City of Ottawa, 2013a; City of Ottawa, 2013b; City of Ottawa, 2013d). Even so, planned spending (from 2014 to 2031) for walking and cycling infrastructure combined equals less than one fifth of the amount anticipated for roads (City of Ottawa, 2013d : 37, 46, 72). Furthermore, if the city manages to achieve its current mode share targets (City of Ottawa, 2013d : 26), roughly 60 per cent of the population will still be travelling by car for daily transportation in 2031.

Overall, numerous efforts by individual actors and particular advocacy groups in favour of a variety of AT-favourable policy choices were identified over the period under consideration, with the following organizations and actors having been found to have made particularly important contributions: central area community associations and councillors, the Federation of Citizens Associations of Ottawa-Carleton, Citizens for Safe Cycling (cycling advocacy organization), Ottawalk (walking advocacy organization), particular employees with AT-related portfolios within the Regional Municipality of Ottawa-Carleton (RMOC), the City of Ottawa, the National Capital Commission (NCC) and OC Transpo, a variety of environmentally and socially-oriented non-governmental organizations (e.g., in recent years Ecology Ottawa, EnviroCentre, Ottawa Centre Ecodistrict, the Healthy Active Transportation Coalition), and Transport Action Canada (formerly Transport 2000). While many of their efforts led to noteworthy progress, long-term cooperation specifically aimed at increasing the relative amount of AT (i.e., including walking, cycling, and public transit use together as alternatives to automobile use) was not strongly identifiable.

Ultimately, municipal transportation policy in Ottawa may be considered to have been dominated overall by actors who assumed and accepted (consciously or unconsciously) that automobiles would be the most important mode of transportation. The specific entities identified via interview commentary as constituting prominent obstacles to the promotion of AT included people working in operations functions (particularly transportation engineers) with the City of Ottawa, the development industry, and suburban and rural councillors. Less frequently mentioned actors representing obstacles included vocal auto-oriented citizens and particular business improvement associations.

Overall, it became evident that pro-AT advocacy efforts were clearly constrained throughout the period under consideration by a number of challenges stemming from relatively stable parameters. As is discussed below, these related particularly to Ottawa's North American sociocultural context and its political system and appear to have contributed to a climate in which an assumption of the overall supremacy of the car was rarely subject to serious questioning.

### **Major findings and discussion: Relatively stable parameters as obstacles to AT promotion in Ottawa**

#### **Challenges related to Ottawa's North American sociocultural context.**

Overall, participants made particularly frequent reference to several specific challenges that may logically be related to Ottawa's North American sociocultural context. More broadly, however, several explicitly mentioned Ottawa's belonging to North America itself as challenging for AT promotion. Participant commentary on this subject related mainly to North American society's long-term and extremely strong embrace of the car, coupled with the general preference for low-density, segregated-use suburbs as ideal places to live and how this contributed to challenges for the promotion of AT.

A professional planner, for example, discussed how Ottawa's belonging to North America, in which car oriented sprawl is the norm, represented a significant challenge for AT promotion: "The advancing dream of the North American promise of, you know, it's big, it's wide open, there's a lot of land...came with that sort of aspiration that in the end, ends up being counterproductive to the very promise because, if everybody chases the same thing, then we're all stuck in traffic". The same participant also described the challenge of belonging to a demographically "suburban nation" and in connection said the following: "Even if you were to

say that 250 000 people in Ottawa live in a grid-pedestrian [sic] friendly part of town that means three quarters of a million don't, so you have three quarters of the population now that are tethered to their cars, and god forbid you do anything to slow them down and they're a political force. To deconstruct that is really the challenge."

Literature supports the argument that being in North America likely contributes to particular difficulties for the promotion of non-motorized travel, in particular with respect to sprawling urbanization "characterized by low overall densities, a rigid specialization of land uses, and a near total dependence on the automobile" (Filion, 2003 : 50). Filion (2003 : 57) for example, describes how the mobility provided by the car facilitated lower density development farther from city cores. In addition, the large amount of vehicles necessitated that space be devoted to parking and encouraged the rigid separation of land uses, leading to even further drops in density. As Filion notes, "from a transportation perspective, the overall effect of car-oriented development is to reduce the effectiveness of, and reliance on other modes" (Filion, 2003 : 57). Ultimately, sprawl results in longer distances between destinations and in consequence, hinders the development of high rates of AT (Seliske, Pickett et Janssen, 2015).

Blais (2011 : 149-158) cites a lengthy list of policies leading to prices in areas like property, mortgages, roads, parking, gas, car insurance, home heating, water and sewer services that, in the context of sprawl, underrepresent actual costs. Furthermore, externalities such as costs associated with air pollution, traffic congestion (Blais, 2011 : 153) and negative health consequences are not priced at all. Overall, the heavy subsidization of sprawl and driving contributes significantly to their appeal and growth.

Within this context, the following highlights specific categories of challenges to AT promotion that were encountered in Ottawa and that seem likely to reflect the city's North American sociocultural context.

***1. Sprawling Ottawa's car-oriented urban structure.***

Roughly half of the interview participants referred to elements of Ottawa's urban structure as important impediments to AT promotion. The latter included, most notably, Ottawa's generally low population density and its high quality road system, both tending to encourage the choice of automobiles over AT. According to one participant, for example: "The major things working against it (referring to transit): The road system is actually pretty decent. I mean you can get around the city...anywhere except the Queensway at rush hour", and later, "Building facilities does not always make them come if the facilities do not represent a rational service alternative, because volumes are low, because people are too spread out."

A review of Ottawa's urban development history confirms Ottawa's generally sprawling and auto-oriented pattern. An RMOC report (Regional Municipality of Ottawa-Carleton Planning Department, 1993) describes how the arrival of the automobile itself was responsible for a radical change in urban form in Ottawa after the 1920s:

"The introduction of widespread affordable personal mobility meant that urban development was not restricted by distance. People went to live on larger lots in the suburbs...Development was no longer constrained by location of transit lines and any piece of property had development potential. Suburban development was the trend and as a result urban densities declined, development became more scattered."

Overall, between 1906 and 1991, Ottawa's population increased from about 82, 000 to more than 600, 000 while the urban area grew from 1, 550 to 21, 900 hectares. The population

per hectare decreased by almost 50 per cent from a peak of 56.7 in 1925 to 27.8 in 1991 (Regional Municipality of Ottawa-Carleton Planning Department, 1993).

The first major master plan to be extensively implemented in Ottawa, completed by French planner Jacques Gréber in 1950 (Gréber, 1950), encouraged the development of a car-oriented city. As discussed in an interview with Alain Miguelez and outlined in his book “Transforming Ottawa” (Miguelez, 2015), Gréber’s plan aimed to exploit the mobility provided by the automobile while avoiding congestion through the creation of a low density city with dispersed centres of employment (Miguelez, 2015 : 268-269) and a high quality road network. The plan also recommended the removal of rail (for trains and streetcars) from the central areas and the relocation of Ottawa Central Station away from downtown. Overall, the Gréber plan contributed to the development of a city in which distances between destinations were longer than they otherwise might have been, where rail infrastructure had been removed, and which enjoyed a network of high speed roads. By the time that the automobile-centred transportation paradigm was first seriously questioned in the early 1970s, the region had already developed rapidly according to a car-oriented plan.

The next major master plan for the region was the newly-formed RMOC’s 1974 master plan (Regional Municipality of Ottawa-Carleton, 1976). While this plan did officially prioritize public transit over roads, neither it nor subsequent master plans fundamentally altered the low-density, dispersed nature of the city. The 1974 plan assumed the continuation of conventional suburban growth (Gordon, 2015 : 270). According to Cervero (1998 : 259-260), Ottawa’s revered bus rapid transit system (an outcome of the 1974 plan), was in fact chosen partly on the basis that its flexible format would serve spread-out housing more efficiently than rail (Cervero, 1998 : 259-260).

Documents (City of Ottawa, 1991; Regional Municipality of Ottawa-Carleton, 1989; Regional Municipality of Ottawa-Carleton Planning Department, 1993; Regional Municipality of Ottawa-Carleton, 1999) indicate that the negative consequences of sprawl were only given significant attention starting in the early 1990s. The 1997 RMOC master plan included, for example, the following objective: “To encourage denser, more compact and more balanced development on lands designated for urban purposes” (Regional Municipality of Ottawa-Carleton, 1999 : section 2.3 -2, p. 13). By that time, however, Ottawa’s population had already grown to more than three quarters of what it is today (City of Ottawa, 2013c; Regional Municipality of Ottawa-Carleton, 1999).

The current City of Ottawa Official Plan (City of Ottawa, 2003) outlines targets for reducing the growth of sprawl (City of Ottawa, 2003: Section 2). Specifically, the share of new housing to be built within the already built areas rises from 36 per cent to 44 percent for the period of 2007-2031. In fact, Ottawa met its target for 2007-2011, and appears on track to exceed it significantly for 2012-2016 (City of Ottawa Planning and Growth Management Research and Forecasting Unit, 2016: 11).

Acknowledging the evident progress, the enduring nature of urban structure suggests that Ottawa’s low-density automobile-oriented nature will remain a very important and ongoing challenge for strengthening AT. According to Gordon and Shirokoff (2014 : 28), the clear majority (77.5 per cent) of the Ottawa-Gatineau population (census metropolitan area – of which Ottawa makes up slightly more than 70 per cent of the population) today lives in *auto suburbs* and *exurban areas* characterized by low densities and the dominance of automobiles, with only the remaining 22.5 per cent living in *transit suburbs* or *active cores* where greater numbers of people use AT.

## ***2. Susceptibility to sprawl- and auto-oriented development interests.***

Related to a context in which auto-oriented sprawl is the norm is a planning environment which has proven susceptible to the strong influence of the development industry. Commentary by roughly one quarter of participants included remarks indicating that the overall preferences of the development industry worked against AT promotion. A senior manager with the City of Ottawa, for example, when asked to identify actors that represented obstacles to AT promotion, named developers specifically. She then described a case in which developers argued against the city's desire to protect a corridor for future transit use in connection with a planned development.

Most noteworthy on the subject of the development industry were the remarks of a former city councillor who suggested that “developers run city hall”, and have “wiped out the progressive councillors”. He argued that while public opposition to development projects was often lacking, developers were highly motivated. The participant asserted that they had been extremely effective in persuading the City of Ottawa cater to their interests in general and furthermore, that they and their allies had exploited electoral rules by contributing large sums towards the electoral campaigns of both city councillors and mayors. Furthermore, according to the participant development industry representatives had successfully convinced individuals to run for city council based on a commitment to help finance their campaigns. Overall, this individual concluded that very few councillors were willing to vote against policies favoured by developers.

A study (Grant, 2009) aimed at determining what factors explain the gap between theory (e.g., plans to limit sprawl, to promote a mix of land uses, and to create walkable communities) and practice (i.e., relaxed requirements leading to sprawl) in the development of residential neighbourhoods in Canada, supports the position that the development industry wields

considerable political power. Her research indicated a tendency for authorities to succumb to developers based on arguments including those related to consumer demand and pressure created by a shortage of municipal funding (Grant, 2009 : 27). Municipalities in Canada, relying on property taxes as their most important source of funds (Kitchen, 2002 : 22-28), face strong financial pressure flowing from reductions in transfers from higher levels of government and arguably, inadequate compensatory revenue sources (Kitchen, 2002 : 331-339; McAllister, 2005 : 246-248).

Document review suggests that indeed, developers have had more influence on municipal politics in Ottawa than one would normally consider reasonable in a system of responsible government. In 2006, for example, Ecology Ottawa (whose Executive Director was also an interview participant) reported on the City of Ottawa 2006 municipal election (Ecology Ottawa, 2009) and noted that all but six people who were ultimately elected to city council (out of a total of 23) had accepted money from the development industry. Beyond donations directly attributable to the development industry, many other actors with interests in development (e.g., construction and paving firms, friends and acquaintances) are able to finance campaigns and advocacy. Two Ottawa Citizen articles (Chianello, 2014a; Chianello, 2014b), for example, reported on a fundraising dinner hosted by development industry leaders that raised \$52 000 from individual donors for the successful mayoral campaign of Jim Watson.

Furthermore, documents indicate that the development industry, beyond contributing to the general creation of sprawl, has often successfully resisted efforts to implement policies specifically designed to promote AT. For example, briefing notes provided to City of Ottawa councillors on the 1991 City of Ottawa master plan (City of Ottawa, 1993) address a series of requests for amendments on behalf of the Ottawa Carleton Homebuilders Association et al.. In

one for example, (City of Ottawa, 1993 : 63), the Association objected to a proposed stipulation which encouraged the provision of sidewalks on at least one side of local and collector streets in or adjacent to new developments. City staff did not support this change, but noted that the policy did not require (only encouraged) the construction of these sidewalks.

Finally, an additional contributing factor to the power of the development industry noted by some participants was the tendency of the Ontario Municipal Board<sup>4</sup> (OMB – a provincially appointed body that adjudicates land-use disputes) to rule in favour of developers. As Tandon (2011) discusses, while both municipalities and the provincial government have made various policy and regulatory attempts to curb sprawl, it has continued to grow at an alarming rate, with OMB rulings tending to favour developers more than opposing groups. He concludes that OMB decisions have undermined efforts to prevent sprawl and suggests that this is mainly the result of provincial policies and regulations not being strong enough to withstand the powerful and well-financed efforts of the development industry.

### ***3. Auto-oriented transportation planning and traffic engineering traditions.***

The strong role of auto-oriented traditions in the fields of transportation planning and traffic engineering (henceforth referred to as transportation planning) in constraining efforts to implement AT-favourable policies was mentioned on multiple occasions by a variety of participants. A city councillor assessed “the status quo in transportation engineering and planning” as possibly the most important obstacle overall with respect to AT promotion. Similarly, a Senior Transportation Planner argued that the “profession (primarily of traffic

---

<sup>4</sup> The Ontario Municipal Board is “an independent, quasi-judicial, administrative tribunal responsible for handling appeals of land-use planning disputes and municipal matters” (Ministry of Municipal Affairs and Ministry of Housing, Government of Ontario, 2016).

engineering but even transportation planning to some degree) is set up in such a way that we tend to focus on building car travel versus transit or active modes”.

Two city employees provided numerous examples of how the existing transportation planning traditions affected the ability to promote AT. One explained that safety was frequently evaluated on the basis of the numbers of crashes at particular intersections. This approach often failed for cycling and walking because the totals were normally too low to generate statistically relevant findings. Another described how technical specifications in existing roadway design manuals had no or very limited details on how to design effective public transit projects (for example, adding light rail or bus-only lanes to a road median) and how traditional performance measures, mainly focused on the speed and fluidity of automobile traffic, did not make it possible to demonstrate success with respect to AT.

This commentary echoes literature indicating that the field of transportation planning has historically prioritized automobile transportation. As per Newman and Kenworthy, “since World War II, transportation planning has for the most part treated the automobile and the urban fabric it creates and supports as being the primary concern in all cities” (Newman et Kenworthy, 2015 : 141). Slack (2013), suggests that “...perhaps planning has failed and that the wrong questions have been asked. Rather than estimate traffic increases and then provide capacity to meet the expected growth, it is now accepted that what is required is better management of the transport system...”. This would include, for example, increasing housing density and concentrating development along public transit corridors, as well as implementing policies to decrease automobile use. While the above indicates that the field of transportation planning is beginning to become less car-oriented, this is a relatively recent phenomenon.

Mode share targets and funding decisions of regional authorities further reflect Ottawa's historical acceptance of its auto-oriented nature. Mode share targets for walking and cycling have been modest since they were first established in the region in 1997 (Regional Municipality of Ottawa-Carleton, 1999). The 2013 City of Ottawa Transportation Master Plan (City of Ottawa, 2013d) for example, reported a total AT mode share (2011, peak hour, including walking, cycling and public transit) of 34 per cent and a target, for 2031, of 41 per cent. Overall, even if achieved, this target would represent an increase of only 15 percentage points relative to 1995 levels (Regional Municipality of Ottawa-Carleton, 1997 : 16).

Finally, the auto-oriented perspective is also evident with respect to infrastructure investment. Ottawa has far more kilometres of roads than facilities for all other modes combined (6000 km of roads, 1, 890 km of paths and sidewalks, 600 km of bicycle facilities, 53 km of dedicated bus routes, and 8 km of light rail (City of Ottawa, 2013d : 13; City of Ottawa, 2015). Spending predictions (aside from Ottawa's current investment in the long anticipated light rail system) continue to reflect the auto-oriented approach. Between 2013 and 2031, the City of Ottawa planned to invest in infrastructure worth \$66.3 million for walking, \$70 million for cycling, and \$724.7 million for driving (City of Ottawa, 2013d : 36, 46, 72).

### **Obstacles related to Ottawa's political system.**

Specific obstacles most strongly identifiable via participant commentary included 1.) Ottawa's position within the broader Canadian political system, which had left it lacking dependable revenue for public transit investment; and 2.) Ottawa's political domination by suburban and rural municipal wards with strongly entrenched auto-oriented transportation preferences.

#### ***1. Lack of dependable revenue for public transit.***

As noted earlier, Canadian municipalities face significant financial pressure as result of several overlapping factors including the combination of relatively recent reductions in transfers from higher levels of government and a lack of compensatory revenue sources (Kitchen, 2002; McAllister, 2005). The Federation of Canadian Municipalities, for example, estimated that Canada had accumulated a municipal infrastructure deficit (i.e., the amount required to repair, replace and upgrade existing infrastructure) of \$123 billion as of 2007 (Mirza, 2007). Certainly, this situation is acknowledged by federal and provincial governments and in consequence, a variety of measures have been developed to improve the situation. At the moment, for example, the federal government plans to spend \$180 billion over the next 12 years in public transit infrastructure and five additional overarching infrastructure areas (social infrastructure, green infrastructure, trade and transportation infrastructure, and rural and northern communities infrastructure), much of it at the municipal level (Infrastructure Canada, 2017).

Over the period covered by this research, however, there is little doubt that access to revenue for public transit investment in Ottawa was considerably lacking overall. As outlined by a city Senior Transportation Planner, this has contributed to a trend whereby investment in major public transit projects generally happens only when the city is able to secure funding from provincial and/or federal levels. In consequence, there has been a continuing emphasis on auto-oriented road upgrades (being cheaper to implement in the short term), contributing to the development of an ever-expanding road network with only occasional investment in major transit projects.

Ottawa's history with respect to the funding of public transit projects supports this position. The major existing public transit infrastructure, the Transitway, was opened in stages between 1983 and 1996 with continuing 75 per cent financial support for capital expenditures by

the Ontario Government (OC Transpo, 2000). Subsequently, the only major public transit projects implemented have been the Trillium Line (8 km light rail) and the Confederation Line (12.5km of light rail - being built at the time of writing). While the former was funded entirely with municipal revenue (Transport Canada, 2010), thanks to the rail line existing already it was a relatively inexpensive project at \$21 million in capital costs. For the Confederation Line, major funding was required from both federal and provincial governments (\$600 million each) (Jackson, 2016).

Furthermore, even when funding is offered, the resulting need for cooperation from several levels of government in order to proceed with a major project imposes additional challenges that may delay investment. For example, according to interview commentary by a former city councillor and as documented by Hilton and Stoney (2007 : 12-13), an important factor in the decision to cancel a major proposed light rail project in 2006 (referred to as the north-south line) was the federal government wavering on its previous \$200 million commitment for the project. Just before the 2006 municipal election, John Baird, then the federal Treasury Board president, questioned the accuracy of the cost estimates and required that the new council review and vote once more on the project. Ultimately, this delay appears to have contributed to the project's cancellation. Subsequently, it took until 2015 to develop, approve and begin construction of the project's replacement, the Confederation Line. The requirement for cooperation between multiple levels of government to secure public transit funding thus contributed to a major delay in investment.

## ***2. The urban vs. suburban/rural AT divide.***

Participant commentary highlighted the existence of an urban vs. suburban/rural split in public and political support for AT, with AT-related efforts strongly supported by inner city

councillors and their constituencies, and frequently opposed by rural and suburban ones. Exemplifying this perspective was the director of a local environmental organization who estimated only about 6 councillors (all representing ridings in Ottawa's central area), out of a total of 23, could be considered firmly pro-AT.

Furthermore, according to Gordon and Shirokoff (2014) existing travel habits also suggest the strong likelihood of AT having significantly less support in outlying areas. Over three quarters of what is now Ottawa's (Ottawa-Gatineau CMA) population live in neighborhoods dominated by automobile-oriented travel choices (Gordon et Shirokoff, 2014 : 28). Gordon and Shirokoff's map (Gordon et Shirokoff, 2014 : Appendix C) of the region shows the *active core* (where walking and cycling rates are high), as occupying Ottawa's central area with the *transit suburbs* (featuring high levels of public transit use) radiating intermittently outwards from the centre. Finally, the *auto suburbs* (where almost all people commute by automobile) occupy the remaining and generally more outlying areas. Considering that the findings reflect existing travel preferences, Gordon and Shirokoff's research lends strength to the suggestion that political support in favour of AT is likely much stronger in central as opposed to suburban and rural areas.

Bearing the above in mind, the fact that Ottawa's political system features representation by geographic area (as opposed to, for example, according to political parties) is a specific contributing factor to the adversarial climate with respect to AT promotion. As discussed with a local journalist, a noteworthy example was the political struggle (ultimately successful) to build protected bicycle lanes as part of the recent refurbishment of Main Street – a major arterial road. While both local constituents and city employees favoured this project, some councillors of neighbouring wards (with many of their constituents using this road for car commuting) strongly

objected (Mueller, 2013). One councillor argued that this (and any future similar arrangements) would reduce convenience for drivers.

This issue was exacerbated by Ottawa's 2001 amalgamation, when the old City of Ottawa and its 10 neighbouring municipalities were merged. Owing to the now larger number of wards occupying primarily suburban and rural areas, the city's generally auto-oriented constituencies hold particular political weight. A representative of a local AT-oriented non-governmental organization outlined his understanding, for example, of how amalgamation led to stagnation in AT promotion at the municipal level. "Our political reality here is post-amalgamation..... prior to 2000...you had the City of Ottawa obviously light years ahead in walkability compared with the other municipalities in the area...and the other leader at the time was the regional government ....Apparently that [sic] core (implying coordinated AT promotion efforts) with the City of Ottawa and the regional level was lost... some would say that when it came to active transportation, you had more the suburbs taking over".

### **Conclusion**

This paper identified two noteworthy relatively stable parameters as constituting political obstacles to the promotion of AT in Ottawa: the city's North American sociocultural context and its political system. Relating to the city's North American sociocultural context were obstacles including its auto-friendly urban form, the susceptibility of planning to the influence of the development industry, and the entrenched tradition of auto-oriented transportation planning. Meanwhile, Ottawa's political system was found to have contributed to frequent revenue shortages for public transit investment and the development of a city that, in terms of population and political representation is dominated by automobile-oriented political wards.

Viewed from the perspective of attempting to promote health in urban settings, these findings suggest that in jurisdictions subject to obstacles similar to those identified for AT promotion in Ottawa, advocates should be encouraged to direct their efforts to areas that might often be neglected. As already noted, the ACF would suggest that relatively stable parameters are rarely targeted by policy participants as a result of their strong resistance to change. At least in the context of efforts to promote AT in Ottawa, there would appear to be strong reasons for advocates to attempt to address particular challenges that such parameters impose. First, conceding that some factors of this type may be not highly amenable to change, it is worth understanding them. For example, this paper identified a lack of municipal revenue as being an important challenge to AT promotion. While recognizing that municipalities have limited scope to significantly increase their own-source revenues, efforts to convince higher levels of government of the need to provide municipalities with consistent funding for this purpose may still be worthwhile.

Second, particular challenges related to background level factors may be at least somewhat amenable to change. For example, regarding automobile-oriented transportation planning, it would appear possible for AT advocates to assist in bringing about AT-favourable developments. Documentary evidence and participant commentary suggested that the general orientation within the transportation planning profession is presently growing more AT-friendly, indicating further potential scope for change in response to dedicated AT advocacy.

Third, while relatively stable parameters may indeed be resistant to change, in the case of AT in a city like Ottawa, failure to address their related challenges appears likely to result in severely limited prospects for progress with AT. When one considers the degree of difficulty experienced to date, it is difficult to imagine a scenario in which AT rates would dramatically

increase without at least some of the related obstacles having been explicitly addressed. This paper notes, for example, the strong negative effect of Ottawa's auto-oriented pattern of land use on the feasibility of increasing AT rates. If this were accepted as unchangeable, prospects for AT success would remain severely limited. On the other hand, if advocacy contributes to the implementation of a fundamentally different approach to land use planning, the potential for AT success will grow.

Finally, this paper suggests possibilities for future research. It must be acknowledged that a case study of one North American city has limited generalizability. Accordingly, further studies which apply political theory to long-term AT promotion efforts or similar urban health-related challenges in a variety of jurisdictions would be worthwhile. Furthermore, from a theoretical perspective, the ACF's characterization of relatively stable parameters being rarely targeted by advocates deserves further consideration. While it is realistic to assume that factors belonging to this category are infrequently the subject of advocacy efforts in practice, this paper would suggest that in some cases, advocates would be wise to address them. Studies investigating further cases where relatively stable parameters have played important roles in determining the scope for success of advocacy efforts or which document efforts to address related challenges are therefore also warranted.

## References

- Bassett, David, John Pucher, Ralph Buehler, Dixie Thompson et Scott Crouter. 2008. « Walking, Cycling, and Obesity Rates in Europe, North America, and Australia », *Journal of Physical Activity and Health*, 5, 6 : 795-814.
- Blais, Pamela. 2011. *Perverse Cities: Hidden Subsidies, Wonky Policy, and Urban Sprawl*. Vancouver, UBC Press.
- Breton, Eric, Lucie Richard, France Gagnon, Marie Jacques et Pierre Bergeron. 2008. « Health Promotion Research and Practice Require Sound Policy Analysis Models: The Case of Quebec's Tobacco Act », *Social Science & Medicine*, 67, 11 : 1679-1689.
- Cavill, Nick, Sonja Kahlmeier et Francesca Racioppi. 2006. *Physical Activity and Health in Europe: Evidence for Action*. World Health Organization.
- Centre for Research and Education in Community Services, University of Ottawa. 2016. *Ottawa neighbourhood study. Walkability FR*. <[www.neighbourhoodstudy.ca/walkability-fr](http://www.neighbourhoodstudy.ca/walkability-fr)>. Page consultée le 30 octobre 2016.
- Cervero, Robert. 1998. *The Transit Metropolis: A Global Inquiry*. Washington D.C., Island press.
- Chianello, Joanne. 2014a, 22 aout. « Chianello: Watson Fundraiser Hardly Seems the Best Way to Convince Public Developers Don't Own City Hall », *Ottawa Citizen*. <[www.ottawacitizen.com/news/local-news/0821-watson](http://www.ottawacitizen.com/news/local-news/0821-watson)>. Page consultée le 30 octobre 2016.
- Chianello, Joanne. 2014b, 19 septembre. « Maybe We Should Be Having a Different Discussion on Campaign Contributions », *Ottawa Citizen*. <[www.ottawacitizen.com/](http://www.ottawacitizen.com/)>

news/local-news/0920-col-chianello >. Page consultee le 30 octobre 2016.

City of Ottawa. 2003. *City of Ottawa Official Plan. Volume 1. Official Plan.*

< [www.ottawa.ca/en/city-hall/planning-and-development/official-plan-and-master-plans/official-plan/volume-1-official](http://www.ottawa.ca/en/city-hall/planning-and-development/official-plan-and-master-plans/official-plan/volume-1-official) >. Page consultée le 30 octobre 2016.

City of Ottawa. 2013a. *Ottawa Cycling Plan*. <[www.documents.ottawa.ca/en/node/5842](http://www.documents.ottawa.ca/en/node/5842)>.

Page consultee le 30 octobre 2016.

City of Ottawa. 2013b. *Ottawa Pedestrian Plan*. <[www.documents.ottawa.ca/sites/documents.ottawa.ca/files/documents/opp\\_2013\\_en.pdf](http://www.documents.ottawa.ca/sites/documents.ottawa.ca/files/documents/opp_2013_en.pdf)>. Page consultée le 30 octobre 2016.

City of Ottawa. 2013c. *Population*. <<http://ottawa.ca/en/long-range-financial-plans/economy-and-demographics/population>>. Page consultée le 30 octobre 2016.

City of Ottawa. 2013d. *Transportation Master Plan 2013*.

City of Ottawa Planning and Growth Management Research and Forecasting Unit. 2016. *2015 Annual Development Report*.

City of Ottawa. 1991. *City of Ottawa official plan. Volume 1. Primary plan*.

City of Ottawa. 1993. *City of Ottawa Councillor's Briefing Notes. Official Plan. RMOC Planning Committee*.

City of Ottawa. 2015. *Cycling Network Information*. <[www.ottawa.ca/en/residents/transportation-and-parking/cycling/cycling-network-information](http://www.ottawa.ca/en/residents/transportation-and-parking/cycling/cycling-network-information)>. Page consultée le 30 octobre 2016.

Dora, Carlos, Jamie Hosking, Pierpaolo Mudu et Elaine Fletcher. 2011. *Urban Transport and*

*Health, Module 5g, Sustainable Transport: A Sourcebook for Policy-Makers in Developing Cities.*

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and World Health Organization. <[www.who.int/hia/green\\_economy/giz\\_transport.pdf](http://www.who.int/hia/green_economy/giz_transport.pdf)>. Page consultée le 30 octobre 2016.

Ecology Ottawa. 2009. *Do Developers Run City Hall? A Report Examining 2006 Municipal Election Campaign Contributions from Developers to Ottawa City Councillors and the Mayor.* <[www.renaud.ca/wordpress/wp-content/uploads/2010/05/Do\\_Developers\\_Run\\_City\\_Hall.pdf](http://www.renaud.ca/wordpress/wp-content/uploads/2010/05/Do_Developers_Run_City_Hall.pdf)>. Page consultée le 30 octobre 2016.

Edwards, Peggy et Agis Tsouros. 2006. *Promoting Physical Activity and Active Living in Rural Environments. The Role of Local Governments.* <[www.euro.who.int/\\_\\_data/assets/pdf\\_file/0009/98424/E89498.pdf](http://www.euro.who.int/__data/assets/pdf_file/0009/98424/E89498.pdf)>. Page consultée le 30 octobre 2016.

European Platform on Mobility Management. 2016. *TEMS — the EPOMM Modal Split Tool.* <[www.epomm.eu/tems/index.phtml](http://www.epomm.eu/tems/index.phtml)>. Page consultée le 30 octobre 2016.

Exworthy, Mark. 2008. « Policy to Tackle the Social Determinants of Health: Using Conceptual Models to Understand the Policy Process », *Health Policy and Planning*, 23 : 318-327.

Fafard, Patrick. 2008. *Evidence and Healthy Public Policy: Insights from Health and Political Sciences.* National Collaborating Centre for Healthy Public Policy. <[www.cprn.org/documents/50036\\_EN.pdf](http://www.cprn.org/documents/50036_EN.pdf)>. Page consultée le 30 octobre 2016.

Fafard, Patrick. 2015. « Beyond the Usual Suspects: Using Political Science to Enhance Public

Health Policy Making », *Journal of Epidemiology and Community Health*, 69, 11 : 1129-1132.

Filion, Pierre. 2003. « Towards Smart Growth? The Difficult Implementation of Alternatives to Urban Dispersion », *Canadian Journal of Urban Research*, 12, 1 : 48.

Fullerton, Christopher. 2005. « A Changing of the Guard: Regional Planning in Ottawa, 1945-1974 », *Revue d'histoire urbaine*, 34, 1 : 100-112.

Gagnon, France, Jean Turgeon et Clemence Dallaire. 2007. « Healthy Public Policy: A Conceptual Cognitive Framework ». *Health Policy*, 81 : 42-55.

Gordon, David et Isaac Shirokoff. 2014. *Suburban Nation? Population Growth in Canadian Suburbs, 2006-2011*. Council for Canadian Urbanism. <[www.canadianurbanism.ca/wp-content/uploads/2014/07/CanU%20WP1%20Suburban%20Nation%202006-2011%20Text%20and%20Atlas%20comp.pdf](http://www.canadianurbanism.ca/wp-content/uploads/2014/07/CanU%20WP1%20Suburban%20Nation%202006-2011%20Text%20and%20Atlas%20comp.pdf)>. Page consultée le 30 octobre 2016.

Gordon, David. 2015. *Town and Crown. An Illustrated History of Canada's Capital*. Ottawa, Invenire.

Grant, Jill. 2009. « Theory and Practice in Planning the Suburbs: Challenges to Implementing New Urbanism, Smart Growth, and Sustainability Principles », *Planning Theory & Practice*, 10, 1 : 11-33.

Greber, Jacques. 1950. *Plan for the National Capital: General Report Submitted to the National Capital Planning Committee*. National Capital Planning Service.

Hawkins, Benjamin et Justin Parkhurst. 2015. « The 'Good Governance' of Evidence in Health Policy », *Evidence & Policy: A Journal of Research, Debate and Practice*.

Hilton, Robert et Christopher Stoney. 2007. « Dreams, Deception and Delusion: The Derailing of Ottawa's Light Rail Transit Plans », *Revue Gouvernance*, 4, 1. <[www.revuegouvernance.ca/files/Spring2007/Hilton\\_Stoney.PDF](http://www.revuegouvernance.ca/files/Spring2007/Hilton_Stoney.PDF)>. Page consultée le 30 octobre 2016.

Infrastructure Canada. 2017. *Investing in Canada plan*. <<http://www.infrastructure.gc.ca/plan/about-invest-a-propos-eng.html>>. Page consultée le 22 novembre 2017.

Jackson, Emma. 2016, 21 février. « How Ottawa Compares Across Canada », *Ottawa Metro* <[www.metronews.ca/news/ottawa/2016/02/21/how-ottawa-lrt-compares-across-canada.html](http://www.metronews.ca/news/ottawa/2016/02/21/how-ottawa-lrt-compares-across-canada.html)>. Page consultée le 30 octobre 2016.

Jenkins-Smith, Hank et Paul Sabatier. 1994. « Evaluating the Advocacy Coalition Framework », *Journal of Public Policy*, 14, 2 : 175-203.

Jenkins-Smith, Hank, Gilbert St. Clair et Brian Woods. 1991. « Explaining Change in Policy Subsystems: Analysis of Coalition Stability and Defection Over Time », *American Journal of Political Science*, 35, 4 : 851-880.

Kitchen, Harry. 2002. *Municipal Revenue and Expenditure issues in Canada*. L' Association canadienne d'études fiscales.

Kübler, Daniel. 2001. « Understanding Policy Change with the Advocacy Coalition Framework: An Application to Swiss Drug Policy », *Journal of European Public Policy*, 8, 4 : 623-641.

Lake, Richard. 1995. *The Automobile in Ottawa-Carleton*. Transportation Department of the Regional Municipality of Ottawa-Carleton.

McAllister, Mary Louise. 2005. *Governing Ourselves?: The Politics of Canadian Communities*.

Vancouver, UBC Press.

Miguelez, Alain. 2015. *Transforming Ottawa. Canada's Capital in the Eyes of Jacques Gréber*. Ottawa, Old Ottawa Press.

Ministry of Municipal Affairs and Ministry of Housing, Government of Ontario. 2016. *Ontario Municipal Board*. <[www.mah.gov.on.ca/Page7096.aspx](http://www.mah.gov.on.ca/Page7096.aspx)>. Page consultée le 30 octobre 2016.

Mirza, S. 2007. *Danger ahead: The coming collapse of Canada's municipal infrastructure. A report for the Federation of Canadian Municipalities*. <[https://www.fcm.ca/Documents/reports/Danger\\_Ahead\\_The\\_coming\\_collapse\\_of\\_Canadas\\_municipal\\_infrastructure\\_EN.pdf](https://www.fcm.ca/Documents/reports/Danger_Ahead_The_coming_collapse_of_Canadas_municipal_infrastructure_EN.pdf)>. Page consultée le 22 novembre 2017.

Mueller, Laura. 2013, 25 juillet. << City Council Votes for Main Street to Be Made "Complete" >>. *Ottawa Community News*. <[www.ottawacommunitynews.com/news-story/3908972-citycouncil-votes-for-main-street-to-be-made-complete](http://www.ottawacommunitynews.com/news-story/3908972-citycouncil-votes-for-main-street-to-be-made-complete)>. Page consultee le 30 octobre 2016.

Newman, Peter et Jeffrey Kenworthy. 2015. *The End of Automobile Dependence*. Washington, D.C., Island Press.

OC Transpo. 2000. *The Ottawa-Carleton Transitway. OC Transpo Submion to APTA 2000 Awards Program*. OC Transpo.

Public Health Agency of Canada. 2014. *Mobilizing Knowledge on Active Transportation*. <[www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/mobil-transport-eng.php](http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/mobil-transport-eng.php)>. Page consultée le 30 octobre 2016.

Pucher, John et Lewis Dijkstra. 2003. << Promoting Safe Walking and Cycling to Improve Public

Health: Lessons From the Netherlands and Germany », *American Journal of Public Health*, 93, 9 : 1509-1516.

Regional Municipality of Ottawa-Carleton. 1976. *Official Plan, Ottawa-Carleton Planning Area*. Ottawa, The Council, 1976.

Regional Municipality of Ottawa-Carleton. 1989. *Official Plan of the Regional Municipality of Ottawa-Carleton. Volume 1. Text*.

Regional Municipality of Ottawa-Carleton. 1997. *Transportation Master Plan*.

Regional Municipality of Ottawa-Carleton. 1999. *Official Plan. Region of Ottawa-Carleton. As Approved by the Minister of Municipal Affairs and Housing, October 1997*.

Regional Municipality of Ottawa-Carleton Planning Department. 1993. *Urban Development in Ottawa-Carleton*.

Sabatier, Paul et Christopher Weible. 2007. « The Advocacy Coalition Framework: Innovations and Clarifications », dans Paul Sabatier (dir.). *Theories of the Policy Process*. Boulder, Westview Press : 189-220.

Sabatier, Paul. 1988. « An Advocacy Coalition Framework of Policy Change and the Role of Policy Oriented Learning Therein », *Policy Sciences*, 21, 2-3 : 129-168.

Sabatier, Paul et Hank Jenkins-Smith. 1999. « The Advocacy Coalition Framework: An Assessment », *Theories of the Policy Process*, 118 : 188.

Seliske, Laura, William Pickett et Ian Janssen. 2015. *Urban Sprawl and its Relationship with*

*Active Transportation, Physical Activity and Obesity in Canadian Youth*. <<http://www.statcan.gc.ca/pub/82-003-x/2012002/article/11678-eng.htm>>. Page consultée le 30 octobre 2016.

Slack, Brian. 2013. « Transport Planning », dans Jean-Paul Rodrigue, Claude Comtois et Brian Slack (dir.). *The Geography of Transport Systems*. 4e édition. Chapitre 9, concept 2. Abingdon, Routledge.

Statistics Canada. 2011. *Commuting to Work, National Household Survey (Catalogue no. 99-012-2011003)*. <[www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003\\_1-eng.cfm](http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003_1-eng.cfm)>. Page consultée le 30 octobre 2016.

Swigger, Alexandra et Bruce Heinmiller. 2014. « Advocacy Coalitions and Mental Health Policy: The Adoption of Community Treatment Orders in Ontario », *Politics & Policy*, 42, 2 : 246-270.

Tandon, Sumeet. 2011. *Centre for Urban Research and Education Policy Brief. The Evolution and Contradiction of Ontario's Land-Use Oversight Mechanisms and their Implications for Urban Sprawl*. Numéro 2, mai. <[www.carleton.ca/cure/wp-content/uploads/CURE-Policy-Brief-Number-2.pdf](http://www.carleton.ca/cure/wp-content/uploads/CURE-Policy-Brief-Number-2.pdf)>. Page consultée le 30 octobre 2016.

Tansey, Oisín. 2007. « Process Tracing and Elite Interviewing: A Case for Non-Probability Sampling », *PS: Political Science & Politics*, 40, 4 : 765-772.

Transport Canada. 2010. *O-train Light Rail Project*. <[www.data.tc.gc.ca/archive/eng/programs/environment-utsp-otrainlightrailproject-973.htm](http://www.data.tc.gc.ca/archive/eng/programs/environment-utsp-otrainlightrailproject-973.htm)>. Page consultée le 30 octobre 2016.

U.S. Department of Transportation. 2015. *Transportation and Health Tool Data in Excel*. <[www.transportation.gov/mission/health/transportation-and-health-tool-data-excel](http://www.transportation.gov/mission/health/transportation-and-health-tool-data-excel)>. Page

consultée le 30 octobre 2016.

Weible, Christopher et Paul Sabatier. 2007. « A Guide to the Advocacy Coalition Framework », dans Frank Fischer, Gerald Miller et Mara Sidney (dir.). *Handbook of Public Policy Analysis Theory, Politics, and Methods*. Boca Raton, FL, CRC Press : 123-136.

World Health Organization. 2014. *Ambient (Outdoor) Air Quality and Health*. <[www.who.int/mediacentre/factsheets/fs313/en](http://www.who.int/mediacentre/factsheets/fs313/en)>. Page consultée le 30 octobre 2016.

World Health Organization. 2016a. *Global Health Observatory (GHO) Data. Prevalence of Insufficient Physical Activity*. <[www.who.int/gho/ncd/risk\\_factors/physical\\_activity\\_text/en/](http://www.who.int/gho/ncd/risk_factors/physical_activity_text/en/)>. Page consultée le 30 octobre 2016.

World Health Organization. 2016b. *Global Strategy on Diet, Physical Activity and Health*. <[www.who.int/dietphysicalactivity/pa/en/](http://www.who.int/dietphysicalactivity/pa/en/)>. Page consultée le 30 octobre 2016.

Yin, Robert. 1994. *Case Study Research. Design and Methods*. Applied Social Research Methods Series, 5e édition. Thousand Oaks, CA, Sage.

Zafonte, Matthew et Paul Sabatier. 2004. « Short-Term Versus Long-Term Coalitions in the Policy Process: Automotive Pollution Control, 1963-1989 », *Policy Studies Journal*, 32, 1 : 75-107.

## Chapter 6: Active Transportation Promotion: Easier in a European City, but Why?

Note:

- This manuscript was prepared for submission to the journal *Health Behavior and Policy Review*. <https://parisscholarpublishing.org/>

### Abstract

This comparative case study examined political factors that might explain the notably different active transportation (i.e., walking, cycling, and public transit use) rates achieved in Helsinki, Finland (a leading European city) and Ottawa, Canada (a leading North American city, but which performs weakly in comparison with Helsinki).

Applying the Advocacy Coalition Framework - a policy process theory - individual interviews were conducted with 47 active transportation experts from the two cities. Document review was employed as a secondary method. Differences stemming from the ACF category of *relatively stable parameters* (i.e., stable background-level factors) including land use, transportation planning traditions, and political systems were identified as likely important in explaining to the discrepancy in AT rates.

### Introduction

The promotion of active transportation (AT - walking, cycling and public transit use)<sup>1</sup> is strongly supported by health organizations for its potential benefits in areas including physical activity, air quality and traffic safety (Dora, Hosking, Mudu, & Fletcher, 2011; Edwards & Tsouros, 2006; International Society for Physical Activity and Health, 2011). Physical inactivity

---

<sup>1</sup> This definition includes public transit use as well as walking and cycling based on the fact that users of public transit normally walk in connection with transit use. The Public Health Agency of Canada considers AT similarly (Public Health Agency of Canada, 2014).

contributes to conditions including cardiovascular disease, obesity, and diabetes (Cavill, Kahlmeier, & Racioppi, 2006) and is the world's fourth leading risk factor for mortality (World Health Organization, 2016). Air pollution, meanwhile, contributes to cardiovascular disease as well as cancer and respiratory conditions (World Health Organization, 2014). Furthermore, the development of secure environments for AT can create substantial safety improvements for non-motorized users (Pucher & Dijkstra, 2003).

As will be discussed, it may be reasonably assumed that overall, AT performance (i.e., as measured in terms of *AT modal split*<sup>2</sup>, meaning the total percentage of trips completed by AT for transportation) is strongly related to the degree of governmental commitment to public policies designed to support AT. Examples of such policies include investment in infrastructure and services such as traffic calming, sidewalks, dedicated bicycle facilities, and public transit, as well as ones designed to discourage automobile use (e.g., increased fuel charges and decreased parking availability). Furthermore, the development of more compact communities featuring mixed land uses that result in shorter distances between amenities is a critical example of policy that is favourable to AT.

Some jurisdictions display remarkable success when measured according to AT modal splits. European cities such as London, Paris, and Helsinki all have AT modal splits of more than 75 per cent (European Platform on Mobility Management, 2016). North American cities,

---

<sup>2</sup> According to its definition by Transportation-Dictionary.org ([http://www.transportation-dictionary.org/Modal\\_Split](http://www.transportation-dictionary.org/Modal_Split)) and employed by the European Platform on Mobility Management (EPOMM). (European Platform on Mobility Management, n.d.b). As modal split data are typically collected via surveys, there is no way to ensure direct comparability from city to city given differences in survey methods. Research by EPOMM indicates that despite differences in survey methods, modal split data are “relatively well comparable” (European Platform on Mobility Management, n.d.b) between cities in different countries.

however, rarely achieve AT modal splits of even 30 per cent (Statistics Canada, 2011, Table 1.a; U.S. Department of Transportation, 2015). While it has been convincingly demonstrated that North American jurisdictions have generally made less strong governmental commitment to policies designed to support AT than leading European ones (Pucher and Buehler 2008, Pucher, 1988) it is not clear why this is the case.

In light of the above, this investigation consisted of a comparative case study examining the role of political factors in explaining the varying levels of governmental commitment to AT-supportive policies and corresponding success AT rates in two cities from Europe and North America: Helsinki, Finland and Ottawa, Canada<sup>3</sup> between the late 1960s and today. Briefly, while Ottawa is among the top-performing North American cities for AT, with 28.5 per cent of people using AT for daily trips (City of Ottawa, 2013, p. 17), its success is weak relative to the 77 per cent achieved in Helsinki (European Platform on Mobility Management, n.d.a). This sizable difference is striking given that the cities share numerous potentially important AT-related challenges (to be discussed in further detail below) including low population densities, high driving rates in their respective countries, and cold winter climates. Helsinki, however, displays evidence of much stronger long-term governmental commitment to the promotion of AT than Ottawa when considered, for example, in terms of investment in AT infrastructure such as public transit, bicycle and walking facilities.

The research question was: What factors related to politics might help to explain why Helsinki was able to prioritize the promotion of AT to a much higher degree than Ottawa over the long term? In order to explore this question, this investigation applied the Advocacy Coalition

---

<sup>3</sup> This article compares the results from individual case studies concerning political factors and AT promotion in Ottawa and Helsinki respectively. In consequence, some of the information presented here is also discussed in Saidla (2017a) and Saidla (2017b).

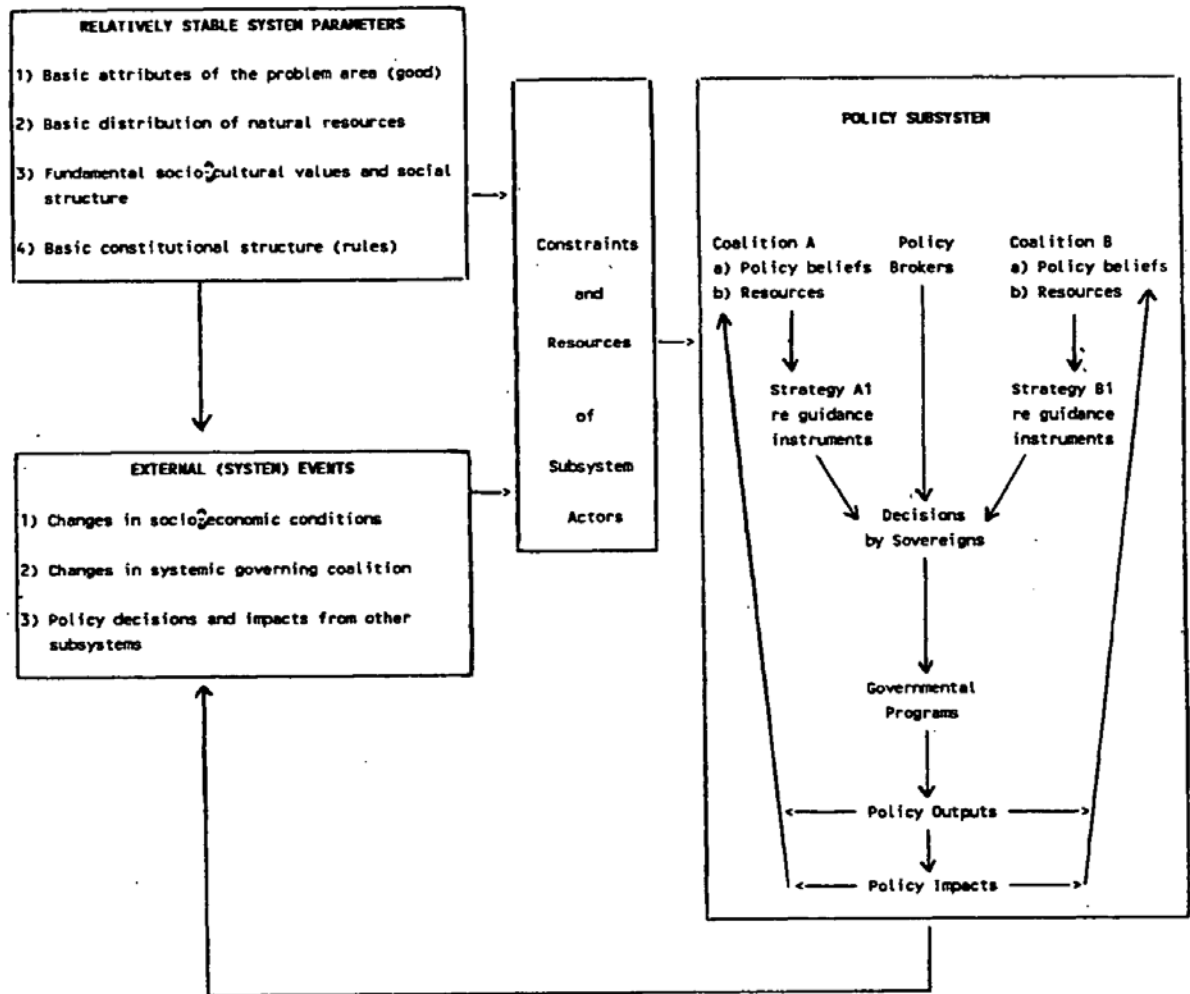
Framework (ACF) – a policy process theory from political science– through a series of focused interviews supported by the review of documents. Following a description of the research methods, including an overview of the theoretical framework and case selection, the results are presented in two parts. First, a summary of long-term AT advocacy efforts in each city is provided. Second, the paper presents the findings related to the ACF category of relatively stable parameters, where particularly noteworthy differences between the two cities were observed. Overall conclusions and implications for efforts to promote AT and similar healthy urban policies in challenging political environments are then discussed.

## **Methods**

### **Theoretical framework: The Advocacy Coalition Framework (ACF).**

The ACF (Jenkins-Smith & Sabatier, 1994; Jenkins-Smith, Nohrstedt, Weible, & Sabatier, 2014; Sabatier, 1988; Weible & Sabatier, 2007) was selected as the theoretical framework for this research based mainly on its suggested usefulness for the political examination of health promotion challenges (Exworthy, 2008; Fafard, 2008; Gagnon, Turgeon, & Dallaire, 2007). Realistically, the policy making process includes numerous political factors external to the immediate policy environment (e.g., values, stakeholder interests, public opinion) (Fafard, 2008, 2015; Hawkins & Parkhurst, 2015). Health promotion efforts, meanwhile, may involve a particularly diverse set of actors given the large number of policy areas that may have either direct or indirect effects on health outcomes. The ACF, given its realistic incorporation of diverse sets of political factors and its emphasis on the involvement of actors from a wide range of fields, was considered particularly applicable for this research. Furthermore, the ACF has already been successfully applied in investigating several health-related policy areas (Breton, Richard, Gagnon, Jacques, & Bergeron, 2008; Kübler, 2001; Swigger & Heinmiller, 2014).

Figure 1: Basic version of the advocacy coalition framework (1988).



*Note:* Reproduced from “An advocacy coalition theory of policy change and the role of policy-oriented learning therein,” by P.A. Sabatier, *Policy Sciences*, 21, p. 132. Copyright by Kluwer Academic Publishers/Business. Reprinted with permission.

Overall, the ACF considers policy decisions to reflect the values of whichever *advocacy coalition* holds the dominant position within a particular *policy subsystem*. *Advocacy coalitions* consist of actors from a wide range of organizations from both within and outside government.

Their members are considered to share similar *policy core beliefs* (beliefs related to policy objectives and affected by deeply held values) and to participate in a significant amount of coordinated and goal-oriented action. Policy subsystems, meanwhile, are defined by both substantive and geographic boundaries and may be informally described as policy areas (e.g., like municipal transportation policy in a given city) within which advocacy coalitions (often between one and four) (Sabatier & Jenkins-Smith, 1999) compete with each other.

According to the ACF, the relative strengths of advocacy coalitions are affected by several categories of political factors. These include *relatively stable parameters* (stable, background-level factors such as sociocultural values and the constitutional structure), *external events* (i.e., major occurrences outside the policy subsystem that affect policy choices) and *advocacy coalition resources* such as money, public opinion, and skilful leadership.

Finally, the ACF includes two categories of policy change. *Major policy change* is considered to involve subsystem-wide alterations in policy at the level of policy core beliefs and is described as infrequent. *Minor policy change* happens more often and is less fundamental. It may concern, for example, more technical matters such as budget specifics and performance evaluations.

The ACF can be applied in many ways in order to help understand policymaking challenges. For example, ACF-based research often involves detailed analyses related to particular aspects of the theory such as factors explaining change and stability in coalition membership over time (Jenkins-Smith, St. Clair, & Woods, 1991; Zafonte & Sabatier, 2004). Here, following guidance from Weible and Sabatier (2007) concerning practical application of the ACF, it was employed as a framework for the development of contextual understanding and the identification of noteworthy factors related to politics connected with the long-term

promotion of AT in Helsinki and Ottawa. As will be outlined with respect to methodology, the ACF's concepts and categories of political factors (e.g., *relatively stable parameters*, *external events*, *advocacy coalitions*) served in this study as the basis for identifying the most significant political challenges and enablers for the promotion of AT in Helsinki and Ottawa.

### **Case selection.**

The selection of Helsinki and Ottawa was based on the desire to compare a North American city with a high rate of AT (by North American standards) with a European city constituting an international AT leader. Furthermore, as will be discussed, this choice was made in consideration of the reasonable comparability of the two cities with respect to an identified list of characteristics often considered potentially important in affecting AT rates. Their selection thus facilitated the exploration of the possible role of different political contexts in explaining varying AT rates.

Ottawa, described as one of the least car-oriented cities in the English speaking world (Mees, 2010, p. 113) has the highest AT modal split (31 per cent), among Canadian census metropolitan areas (CMAs) (Statistics Canada, 2011, Table 1.a) (Ontario side, Ottawa-Gatineau CMA .) As measured at the city-level, Ottawa's AT modal split is 28.5 per cent (City of Ottawa, 2013, p. 17). In the United States, only four of 383 metropolitan statistical areas have AT modal splits of more than 25 per cent (U.S. Department of Transportation, 2015). The city is thus a North American AT leader. The City of Helsinki meanwhile, has an AT modal split of 77 per

cent<sup>4</sup>, making it one of only four cities with a population of more than 500 000 in the European Platform on Mobility Management's database (484 cities overall) (European Platform on Mobility Management, n.d.a) with AT modal splits of over 75 per cent. This leaves no doubt as to Helsinki's status as an international AT leader. The large difference in AT modal splits between the two cities may be considered somewhat surprising given that preliminary research demonstrated the two cities to be reasonably comparable with respect to a series of characteristics (see Table 1) that, based on a review of AT-focused literature<sup>5</sup>, may be considered potentially important with respect to AT performance.

---

<sup>4</sup> If one includes Helsinki's major suburbs of Espoo and Vantaa, the AT modal split is roughly 65 per cent (calculated based on EPOMM data, (EPOMM 2016)). While this lower figure is arguably more representative for the purposes of comparison with Ottawa (given that the City of Ottawa's official boundaries include its major suburbs while Helsinki's do not), it is still more than double Ottawa's, making Helsinki's overall superior AT performance clear.

<sup>5</sup> While space precludes a discussion of the relevant literature, the following is a selection of the sources considered:

- For population density (J. Pucher & Buehler, 2006; Toronto Center for Active Transportation, 2010),
- For total population (A. Pucher, Komanoff, & Schimek, 1999; Toronto Center for Active Transportation, 2010),
- For car ownership (Black & Nijkamp, 2002; J. Pucher & Buehler, 2006; Toronto Center for Active Transportation, 2010),
- For climate (Saneinejad, Roorda, & Kennedy, 2012),
- For topography (Cervero & Duncan, 2003).

Table 1: Helsinki and Ottawa: AT-related characteristics, governmental commitment, and performance

	<b>Helsinki (Finland)</b>	<b>Ottawa (Canada)</b>
<b>AT-related characteristics</b>		
<u>Total population</u>	628, 208 (city) 1.4 million (region)	934, 243 (city) 1.3 million (region)
<u>Urban population density</u> * *referring to the population density of the continuously built up land mass of urban development within a metropolitan region or area	1, 800 people per square kilometre	1, 900 people per square kilometre
<u>Climate</u>	Humid continental Average snow accumulation at peak: 30 cm (March 15)	Humid continental Average snow accumulation at peak: 27.9 cm (February 9)
<u>Topography</u>	Difference between highest and lowest points: ~70m	Difference between highest and lowest points: ~85m
<u>Car ownership</u>	572 per 1000 people (Finland) 404 per 1000 people (Helsinki)	456 per 1000 people (Canada) 551 per 1000 people (Ottawa)
<b>Governmental commitment to AT</b>		
<u>AT infrastructure</u>	Metro and light rail km: 271 km Tram km: 97 km Dedicated busway: 0 km Traditional bus system: 100 + routes Multi-use path km: 3, 000km Pedestrianized streets: 87.5 km	Metro and light rail km: 8 km Tram km: 0 km Dedicated busway: 37.6 km Traditional bus system: 145 routes Multi-use path km: 600 km Pedestrianized streets: 1 km
<b>AT performance</b>		
<u>AT modal split</u> * *given that the City of Ottawa's official boundaries include its major suburbs while Helsinki's do not, it is arguably more representative to compare Helsinki's regional modal split with Ottawa's city-level modal split. Accordingly, both figures are provided for Helsinki.	77 per cent (city) 65 per cent (region)	28.5 per cent (city)

*Note:* Data for urban population density from Demographia (2017, p. 4), for population from City of Helsinki Urban Facts (2016), HelsinkiRegion.fi (2017) and City of Ottawa (2017), for car ownership from Burgess et al. (2015), for climate from Weatherspark (2013a; 2013b) and the Finnish Meteorological Institute (2014), and for topography from topographic-map.com. Sources for all additional information are noted within the text below.

Helsinki, however, displays a much higher level of commitment to policies and investment favourable to AT than Ottawa. Helsinki's internationally recognized public transit system, including a dense array of metro and commuter trains, trams and buses, has repeatedly performed very strongly in international surveys of customer satisfaction (Leite & Aftret-Sandal, 2016). In total, there are 97 km of track for trams, 21 km of metro track (with a further 14 km under construction) (Helsinki Urban Facts office, personal communication, April 26, 2017) and roughly 250 km of rail with commuter services connecting the airport, suburbs, and outlying municipalities to the city centre (HSL Helsinki Regional Transport Authority, personal communication, May 5, 2017). Concerning both walking and cycling, the "cycle path" network (i.e., shared facilities for cycling and walking, also known as multi-use paths) stretches over 1, 200 km in the City of Helsinki (Helsinki City Planning Department, 2015, p. 12) and approximately 3, 000 km in the greater metropolitan region (Helsinki Regional Transport Authority, n.d.). Finally, there is a total of 87.5 km of pedestrian only streets in Helsinki (City of Helsinki Public Works department, personal communication, April 26, 2017)

While Ottawa's public transit network is recognized as successful within a North American context (Cervero, 1998; Mees, 2010, p. 116), it is nowhere near as extensive as Helsinki's. Currently (acknowledging that a 12.5 km light rail line is under construction), Ottawa's network consists of a bus rapid transit system with a unidirectional length of 37.6 km, a traditional bus system, and a light rail line of 8 km (OC Transpo, personal communication, May 2017). Meanwhile, with respect to walking and cycling, Ottawa offers much less than Helsinki in terms of dedicated facilities. For example, the City of Ottawa's multi-use path network (435 km) is a little more than one third the length of the City of Helsinki's (City of Ottawa., 2015) while there are about 600 km of multi-use paths in the wider region (National Capital Commission,

n.d.). Finally, the only pedestrianized street in Ottawa is the Sparks Street pedestrian mall (about 1km in length) (City of Ottawa, personal communication, May 18, 2017).

### **Data collection and analysis.**

The primary research method was the focused interview (Yin, 1994). In this format the interview, while conversational, is structured by a set of specific questions. This method offered the potential of generating data relevant to the specified research area while simultaneously assisting in the gathering of unanticipated yet pertinent information. Individual interviews (1 to 3 hours in length) were conducted with a total of 47 people considered to be experts in the AT policy process in Ottawa (24 people) and Helsinki (23 people) between October, 2014 and July, 2016. Following initial interviews with pre-identified AT experts in each city, subsequent participants were identified via a process of chain referral (Tansey, 2007). Those interviewed in both cities included, for example, municipal government employees engaged in functions related to transportation and urban planning, municipal council members, civil servants from higher levels of government, and actors from non-governmental organizations involved in AT promotion. Overall, the time period for which the participant commentary may be considered relevant was roughly 1965 to 2015. Ethics approval for the interview procedure was granted by the University of Ottawa Health and Science Ethics Review Board, with all participants being required to provide informed consent.

The questions of the interview guide were specifically designed to investigate pre-identified categories derived mainly from the ACF including, for example, *advocacy coalition identification and characteristics, relatively stable parameters, and external events*. Examples of interview questions include “Who do you believe were the main actors and organizations that supported the prioritization of AT in your city?” and “Can you please name and discuss any

background-level factors like geography, sociocultural values, social structure, or the political/constitutional structure that you think have particularly affected the ability (either positively or negatively) to promote AT in Ottawa/Helsinki?”

Each interview was recorded by audio and with handwritten notes. Analysis began with the preparation of summaries of each interview in which the major points expressed by participants were categorized on the basis of the pre-identified categories described above. Each participant was sent a copy of the summary for review and comment. The summaries were then reviewed together on a category-by-category basis, grouping the major statements of all interview participants within each one. Finally, data-derived sub-categories were identified.

In order to verify the interview findings, obtain necessary background information and fill noteworthy research gaps, more than 200 documents were gathered and classified according to the same ACF-derived categories explored in the interviews. Examples of the documents (obtained via internet and archival research as well as via recommendations from interview participants), included planning documents, statistical publications, policy papers, newspaper articles, web pages, books, and advocacy material. Together, the interview and document review processes were designed to serve as a form of data triangulation. Taking the balance of all the evidence into consideration, the findings for each city were then compared with each other on a category by category and overall basis.

Overall, the category that displayed the most striking differences between Helsinki and Ottawa was that of *relatively stable parameters*. As will be discussed, findings related to this category helped most strongly to explain the noted differences in the strength of policy-related commitment to AT and are thus the main focus of this article. In order to provide relevant context, an ACF-informed overview of long term advocacy efforts in both cities is provided first.

## Results

### **Overview: AT advocacy in Helsinki and Ottawa, 1970-2015.**

#### *Similarities in external events and AT momentum.*

By the late 1960s, the rapid increase in car ownership and driving in both cities motivated major consideration of how and to what degree it should be accommodated. Automobile use was much lower in Helsinki than in Ottawa at the time (e.g., public transit trips strongly outnumbered automobile trips in Helsinki (Salmivaara, 1981), while the reverse was true in Ottawa (Al-Dubikhi & Mees, 2010)). Each city, however, completed major transportation studies and plans in the late 1960s, with the resulting auto-oriented proposals (De Leuw, Cather & Company of Canada, 1965; Hammer, 1969; Klinge & Kolbe, 2007, p. 120-121) including extensive expressway networks in both cases. Strong public resistance ensued, with both cities ultimately rejecting them and choosing instead to adopt explicitly pro-public transit strategies (Klinge & Kolbe, 2007, p. 212; Regional Municipality of Ottawa-Carleton, 1976). Similar external events serving as contributing factors to these major policy changes were identified in both cities as follows: 1.) the rapid growth in automobile traffic; 2.) the rise of urban protest groups (e.g., anti-urban renewal, pro-AT); 3) the 1973 oil crisis, and; 4.) favourable decisions from higher levels of government (i.e., in Ottawa, the beginning of substantial ongoing funding for public transit from the Government of Ontario, and in Helsinki President Kekkonen's call for improved road safety nation-wide and the establishment of a parliamentary public transport committee).

Following substantial progress in the 1970s, AT promotion in both cities struggled to some extent in the 1980s and 1990s. According to the Helsinki Urban Facts Office (2004), the 1980s were a period of "great motorisation" (p. 26) in Finland as a whole. Furthermore, in Helsinki, with the exception of a period of economic recession during the early 1990s, numbers

of vehicles (p. 26-27) and traffic (p. 35-37) both grew significantly and “the rapid growth in the vehicle stock in the 1980s increased motoring and reduced the share of public transport” (p. 43). In Ottawa, the ambition to pursue a “transit-first” agenda was explicitly abandoned with the regional plan of 1988 (Regional Municipality of Ottawa-Carleton, 1989). The overall loss of momentum for AT promotion during this period appears attributable to expanding urban sprawl (Gordon, 2015 : 290), the increased affordability of cars (Lake, 1995 : 9-10), and the declining availability of funds for public transit as a result of an economic recession and reduced provincial subsidies (Mees, 2010, p. 115).

Momentum in favour of AT recovered and grew substantially in both cities from about 2005 onward. Helsinki, now arguably undergoing major policy change once again, is aiming for the virtual elimination of the need for private car ownership (Greenfield, 2016). This is being pursued through a suite of measures including intensification (Helsinki City Planning Department General Planning Unit, 2013) and major extensions to its public transit (Helsinki Regional Transport Authority, 2016; Länsimetro, 2016) and cycling networks (Helsinki City Planning Department, 2015). Finally, the city is experimenting with the concept of mobility as a service (in which instead of owning cars, people subscribe to mobility brokers to coordinate their travel via a variety of modes) (Heikkila, 2014). Ottawa, meanwhile, is building the first stage of a substantial light rail network (at a cost of \$3 billion), has increased policy-level and financial commitment to walking and cycling infrastructure substantially (City of Ottawa, personal communications, April 21, 2016; City of Ottawa Transportation Services Department, 2017, slide 3) has adopted a Complete Streets policy (which stipulates that the needs of all road users be taken into consideration in the design for new and rebuilt streets) (City of Ottawa, 2013b, p. 64-

67) and has exceeded recently implemented intensification targets (City of Ottawa Planning and Growth Management Research and Forecasting Unit, 2016, p. 11).

In Helsinki, external events identified as facilitating this pro-AT shift included growing climate change awareness, generational values changes (e.g., less interest in driving among young adults), and the arrival of mobile technology and social media that made driving less necessary and facilitated the marketing of AT. In Ottawa, identified AT-favourable external events included the acceptance of the need to address climate change, as well as the renewed availability of funding from higher levels of government and population growth necessitating efficient transportation solutions.

***Differences in the strength of advocacy.***

Over the course of the developments described above, the organizations identified as constituting the most important contributors to pro-AT advocacy in each city (See Table 2 for a list of the most prominently identifiable organizations) included municipal (and regional-municipal) transportation and planning departments, municipal councillors (in Ottawa coming mainly from central areas, and in Helsinki mainly representing left-of-centre political parties), the regional public transportation authorities, and advocacy organizations concerned with walking, cycling, and public transit. In addition to these types of organizations, Ottawa's pro-AT efforts included significant representation by local neighbourhood associations and a variety of groups connected with environmental causes. Meanwhile, organizations and actors representing obstacles to the promotion of AT in both cities (See Table 3) included particular city councillors (more numerous in Ottawa), business and development interests (considerably stronger in Ottawa than in Helsinki), and a portion of civil servants in traffic operations functions.

Table 2: Pro-AT organizations/actors (prominently identifiable)

<b>HELSINKI</b>	<b>OTTAWA</b>
Helsinki City Planning Department	Regional Municipality of Ottawa-Carleton (RMOC)-particular employees
Helsinki Regional Transport Authority (and predecessor organizations)	City of Ottawa-particular employees
Green Party (municipal political party)	National Capital Commission (NCC) (federal government agency responsible for Ottawa as the nation's capital)-particular employees
Social Democratic Party (municipal political party)	OC Transpo (regional transport authority)
Enemmistö ("Majority" - a pro-AT nongovernmental organization)	Central area community associations
Helsinki Cyclists' Association	Central area councillors
	Federation of Citizens Associations of Ottawa-Carleton
	Transport Action Canada (formerly Transport 2000 – public transit advocacy organization)
	Ottawalk (pedestrians' advocacy organization)
	Environmental and social NGOs (e.g., Ecology Ottawa, Envirocentre, Ottawa Centre Ecodistrict, the Healthy Active Transportation Coalition, Active Safe Routes to School)

Table 3: Obstacles to AT: organizations/actors (prominently identifiable)

<b>HELSINKI</b>	<b>OTTAWA</b>
Autoliito (car drivers' association of Finland)	Property development industry
Helsinki Chamber of Commerce	City councillors - primarily from suburban/rural wards
National Coalition Party (municipal political party)	Individual vocal, auto-oriented citizens
Particular city councillors (various political parties)	Business improvement associations
	City of Ottawa operations employees

Overall, the interview data suggested that pro-AT actors in each city shared similar policy core beliefs, valuing the promotion of AT most strongly for its potential to help in maintaining and creating a generally more livable city (e.g., featuring aesthetic appeal, a high level of safety, opportunities for healthy living, and efficient mobility) followed by its importance with respect to environmental protection.

While the actors involved in AT advocacy may thus be considered similar, AT efforts in Helsinki were stronger overall, displaying a noteworthy level of long-term coordination in the pursuit of the generally shared goal of reducing automobile traffic that was not similarly observed in Ottawa. Municipal transportation policy in Helsinki appears to have been dominated over the long term by a coalition of actors that favoured the promotion of AT, most strongly on the basis of the abovementioned concern for the maintenance of livability. With respect to coordination, for example, it is noteworthy that several actors who were members of the influential AT advocacy group *Enemmistö* (“Majority” – signifying the non-car driving majority of Helsinki residents and founded in the late 1960s) occupied influential positions in municipal politics and government. As confirmed directly by interview participants and by documentary evidence (Helsinki City Planning Department, 1985; Helsinki City Planning Department, 1994) at least two one-time *Enemmistö* members were elected to Helsinki’s city council and served as long-term appointees to the Municipal Planning Board – the body tasked with reviewing major transportation and planning decisions. Another (described by a participant as “Helsinki’s king of cycling”) worked for the Helsinki City Planning department in cycling-related roles from the 1970s until the late 2000s. This same individual was the key actor in the founding of numerous cycling advocacy organizations at national and municipal levels, including, for example, the Helsinki Cyclists’ Association.

In Ottawa, despite determined efforts by a variety of pro-AT actors, advocates never managed to establish a position of dominant overall strength within a generally auto-oriented municipal transportation policy environment. Overall, joint, long-term commitment by the diverse advocates (for walking, cycling, and public transit) to a mutually understood and overarching goal (e.g., overall reduction of automobile use) was not clearly identifiable. For

example, significant nongovernmental advocacy specifically favouring the promotion of practical cycling and walking did not appear to have materialized before the late 1980s. When this did emerge, it was in the form of distinct organizations (e.g., Citizens for Safe Cycling, Ottawalk) with relatively small memberships. In many cases, these efforts were also relatively short-lived. Citizens for Safe Cycling (CFSC), constituting the most prominent AT advocacy organization in Ottawa when considered over the long term, was founded only in 1984 (some 16 years after Helsinki's Enemmistö) and recently reached its highest membership ever, with about 375 members (while Enemmistö's peak was 4000) (R. Larjavaara, personal communication, March 12, 2016) With respect to walking, long-time Ottawa pedestrian advocate Chris Bradshaw explained that the first significant pedestrian advocacy organization, Ottawalk, was founded in 1988 and grew to a maximum of about 200 members before disbanding in about 2000. Mr. Bradshaw discussed several additional pedestrian-related advocacy groups and advisory committees (both governmental and nongovernmental) most of which either eventually disbanded or became largely inactive. Over the long term, the efforts made by pro-AT actors in Ottawa appear to have concentrated mainly on improving conditions for walking, cycling, and public transit individually, rather than contributing to an identifiable overarching attempt to increase overall AT rates. Reflective of this situation today, for example, are the generally mode-specific mandates of some of Ottawa's AT-focused organizations including CFSC (<http://www.bikeottawa.ca>), Walk Ottawa ([www.walkottawa.ca](http://www.walkottawa.ca)) and Transport Action Canada (<https://www.transportaction.ca>).

Finally, AT-related advocacy groups and actors do not appear to have been as successful as advocates in Helsinki with respect to strategic coordination. For example, when asked to comment on the degree to which AT advocacy actors collaborate with each other with respect to

efforts to influence public policy, a representative of a local environmentally-oriented nongovernmental organization responded: “Mostly people work in silos” and later, “I don’t even know who the players are on pedestrian issues...and I don’t think bus users...they don’t really have an organization as a champion there”. Similarly, a senior official with Ottawa Public Health, in commenting on the degree to which pro-AT actors in Ottawa coordinated their activities, said “There’s no collective”, and later “We’ve got a really progressive cycling community, but there’s kind of a split between active transportation (author’s note: implying practical cycling) and leisure, and the same with walking...we’ve got walking clubs...but that’s mostly leisure walking” and finally, with respect to AT advocacy efforts overall, “they’re not coordinated”.

**Main findings: Differences in relatively stable parameters help to explain varying AT success.**

A major part of the explanation for the contrasting levels of AT success appears to reflect differences connected with the ACF category of relatively stable parameters. The latter pertain to the overarching societal context that affects (and may also be affected by) the policy process (Weible & Sabatier, 2007, p. 193). They include (but are not limited to (Jenkins-Smith, Nohrstedt, Weible, & Sabatier, 2014)) 1) basic attributes of the problem area; 2) basic distribution of natural resources; 3) fundamental sociocultural values and social structure, and 4) basic constitutional structure (Weible & Sabatier, 2007, p. 193). Generally, they are important because they “structure the nature of the problem, constrain the resources available to policy participants, establish the rules for changing policy and reaching collective decisions, and broadly frame the values that inform policymaking” (Weible & Sabatier, 2007, p. 125).

This investigation suggests that challenges stemming from relatively stable parameters connected with land use, transportation planning traditions and political systems strongly contributed to a much more favourable overall environment for the promotion of AT in Helsinki than in Ottawa. Within the context of the resulting and markedly differing municipal transportation policy environments, it is not surprising that long term AT advocacy efforts proved stronger and more successful in Helsinki than in Ottawa.

### *1. Land use*

Participant commentary regarding Helsinki pointed to four specific background-level factors that appear to have contributed to the development of a well-organized urban structure conducive to the promotion of AT (in which for example, housing is strongly concentrated in the city's most central areas and along public transit corridors). These factors were: 1) a strong tradition in directive city planning; 2) the City of Helsinki's location on a peninsula; 3) The City of Helsinki's ownership of more than 60 per cent of the land within its borders, and 4) apartments being by far the most common type of dwelling.

A longstanding tradition in strong planning principles dating from the early 19<sup>th</sup> century (D. Gordon, 2006; Hietala, Helminen, & Lahtinen, 2009) was mentioned by several participants as common to Finland and the Nordic countries (Iceland, Norway, Denmark, Sweden) more broadly and advantageous with respect to the promotion of AT. In particular, participants discussed how it had been generally accepted practice for housing and transportation systems to be carefully planned to function efficiently together. For example, in responding to the question of what motivated Helsinki's obviously well-organized approach to urban and transportation planning, comments of a senior official of the Strategic Urban Planning Division of the Helsinki City Planning Department included: "A lot has to do with the planning ideology, strong public

planning - that has something to do with the social democrats and the comprehensive ideals – we have to plan everything and the public sector is strong – the Nordic model”. In connection with the above, downtown Helsinki’s location on narrow peninsula was another factor described by numerous participants as having positive effects for city planning and AT as it imposed a natural and publicly understood limit on the degree to which automobile traffic could be accommodated.

The fact that the City of Helsinki owns more than 60 per cent of the land within its borders was noted on multiple occasions by participants. In 1946 the national government annexed a very large amount of land surrounding what was then Helsinki, increasing its geographic size by five times and leaving the city in control of a very large quantity of undeveloped land (D. Gordon, 2006, p. 83). This gives the city considerable power related to urban planning, housing policy, and transportation. The City of Helsinki might be described as holding a monopoly over the planning process (Bramley et al., as cited in Knaap, 2007, p. 25) having maintained possession of a high percentage of this land through, among other policies, employing land lease arrangements with developers to retain ownership of property developed for rent and price-controlled housing (Myntti, 2007, p. 12). This situation appears extremely positive for the development of AT as it allows the City of Helsinki strong influence over urban development.

Finally, roughly 86 per cent of all dwellings in Helsinki are apartments (Tikkanen & Selander, 2014). Several participants noted this as being an important factor as it meant that less land was occupied on a per person basis than would otherwise have been the case. This made it easier to keep distances between housing, amenities (including public transit) and employment short, thereby facilitating the choice of AT. Apart from being the result of housing policies of the City of Helsinki itself (which has planned and constructed a great amount of real estate (City of

Helsinki, 2016), the high number of apartments is also explained (Hietala et al., 2009, p. 41) as being related to the expense of heating in a cold climate and mortgage rules that made it difficult for most people to afford larger homes until the early 2000s.

Overall, while the factors above did not prevent the development of a region with relatively low population density, they appear to have facilitated the creation of an urban structure that is nonetheless conducive to AT. Helsinki features, for example, numerous areas of high population density near the downtown area and concentrated along major transit routes as well as a large amount of green space organized in corridors that are frequently used for AT (Jaakola, 2012).

In contrast with the situation in Helsinki, in Ottawa the city's North American context appeared to create particular challenges for AT promotion related to land use. These included: 1) the city's longstanding auto-oriented urban structure, and 2) the Ottawa planning environment's susceptibility to development interests.

First, participants made numerous comments relating to the overall challenges imposed for AT promotion by Ottawa's location within generally car-oriented North America. For example, according to a professional planner "the advancing dream of the North American promise of, you know, it's big, it's wide open, there's a lot of land...came with that sort of aspiration that in the end, ends up being counterproductive to the very promise because, if everybody chases the same thing, then we're all stuck in traffic". As is well documented (Filion, 2010; Newman & Kenworthy, 1999, p. 31-33; Pucher & Lefèvre, 1996), cities in North America display a history of favouring sprawling, car-oriented development with low population densities and long distances between destinations. These conditions necessarily work against the use of non-motorized modes and the establishment of efficient public transit services.

With specific reference to Ottawa's pattern of land use, participants noted, for example, the city's low density sprawl and its good quality network of high-speed roads as impediments to the promotion of AT. According to a former City of Ottawa councillor, for example: "The major things working against it (referring to transit): The road system is actually pretty decent. I mean you can get around the city...anywhere except the Queensway (Ottawa's major expressway) at rush hour", and later, "Building facilities does not always make them come if the facilities do not represent a rational service alternative, because volumes are low, because people are too spread out."

The region's first efforts to specifically encourage AT did not take place until the major public transit initiatives of the 1970s, while it is clear that Ottawa had already developed rapidly and in low-density fashion from the early 20<sup>th</sup> century onward. Furthermore, this pattern of development continued relatively unchecked until very recently. Between 1906 and 1991, Ottawa's population grew from roughly 82, 000 to more than 600, 000. During the same period the urban area expanded even more rapidly (from 1, 550 to 21, 900 hectares), leading to a decrease in the number of people per hectare of almost 50 per cent (from a peak of 56.7 in 1925 to 27.8 in 1991) (Regional Municipality of Ottawa-Carleton Planning Department, 1993).

As highlighted in particular in an interview with a senior planner with the City of Ottawa and in his book (Miguelez, 2015), the development of Ottawa as a sprawled and auto-oriented city was encouraged by what was the city's first widely-implemented master plan, completed by French architect Jacques Gréber in 1950 (Gréber, 1950). Briefly, this plan specifically called for low-density development and the separation of land uses, the removal of rail (both street cars and conventional rail) from central areas, and the establishment of a high quality road network (Miguelez, 2015).

Ultimately, the negative consequence of sprawl (including, but not limited to its effects on AT) were not subject to significant attention by regional authorities until the 1990s (City of Ottawa., 1991; Regional Municipality of Ottawa-Carleton, 1989; Regional Municipality of Ottawa-Carleton Planning Department, 1993; Regional Municipality of Ottawa-Carleton., 1999). By that time, Ottawa's population had already reached reached three quarters of what it is today (City of Ottawa, 2013a; Regional Municipality of Ottawa-Carleton., 1999). The City of Ottawa did make a significant commitment to curbing the growth of sprawl starting in the early 2000s via the establishment and thus far successful pursuit of aggressive intensification targets (City of Ottawa, 2003, Section 2; City of Ottawa Planning and Growth Management Research and Forecasting Unit, 2016, p. 11).

Acknowledging that changing a city's overall urban structure is inevitably a long-term process, fundamental change to Ottawa's generally sprawling and car-oriented environment cannot so far be considered to have taken place. According to Gordon and Shirokoff (2014, p. 28), the clear majority (77.5 per cent) of the Ottawa-Gatineau population (census metropolitan area – of which Ottawa makes up slightly more than 70 per cent of the population) live in geographically defined *auto suburbs* and *exurban areas* characterized by low densities and the dominance of automobiles, with only the remaining 22.5 per cent living in *transit suburbs* or *active cores* where greater numbers of people use AT.

As identified through participant commentary and document review, contributing to the problem of Ottawa's auto-oriented nature was a planning environment apparently susceptible to the influence of the property and development industry. Roughly one quarter of participants made remarks suggesting that the overall preferences of the development industry (i.e., which tended to favour car-oriented development) frequently worked against the promotion of AT.

Particularly thought-provoking commentary in this regard came from a former city councillor who said that “developers run city hall” and that they have “wiped out progressive councillors”. He indicated that while developers are obviously highly motivated, public opposition to development projects was frequently lacking and as a group, developers had been very effective in persuading the municipal government to favour their interests. Furthermore, he asserted that developers had taken advantage of electoral rules by making considerable financial contributions to the election campaigns of candidates for municipal council. Finally, he believed that development industry representatives had successfully offered to help specifically selected individuals with financial contributions in an effort to persuade them to run for city council. This participant stated that in recent years, as a result of factors including all those above, there were very few councillors who would vote against the frequently car-favourable policies supported by the development industry.

Documents suggest that, indeed, developers have likely attempted to influence municipal politics, often in ways that would not normally be considered acceptable in a system of responsible government. A 2006 Ecology Ottawa report (Ecology Ottawa., 2009) indicates that 17 of 23 people who were elected as councillors via the City of Ottawa 2006 municipal election had received funds from the development industry for their campaigns. Beyond this, a variety of individuals and organizations connected with development (e.g., friends, acquaintances, sub-contractors) can and do legally contribute money to electoral campaigns via a variety of means. In 2014, for example, development industry representatives hosted a fundraising dinner in which \$52 000 from individual donors was raised for the successful election campaign of Mayor Jim Watson (Chianello, 2014a, 2014b).

## ***2. Transportation planning***

In addition to overall land use, the research findings highlighted differences related to traditions in the fields of transportation planning and transportation engineering (hereafter referred to as transportation planning) that may be considered as important in determining the varying levels of AT success in Helsinki and Ottawa. At the international level, the field of transportation planning has been the subject of considerable criticism, including from those specifically interested in the promotion of AT. As highlighted by Newman and Kenworthy, for example, “Since World War II, transportation planning has for the most part treated the automobile and the urban fabric it creates and supports as being the primary concern in all cities” (Newman & Kenworthy, 2015, p. 141). These same authors, after outlining the particularly strong embrace of this approach in US cities, note that efforts at political resistance came mainly from continental Europe where existing city structures were based on transit and walking (Newman & Kenworthy, 2015, p. 147).

In Ottawa, a member of city council stated that “the status quo in transportation engineering and planning” possibly constituted the strongest obstacle overall for AT. A senior City of Ottawa planning official, meanwhile, said that a very important explanatory factor in Ottawa’s failure to achieve higher rates of AT was that “the profession (primarily of traffic engineering but even transportation planning to some degree) is set up in such a way that we tend to focus on building car travel versus transit or active modes”. Furthermore, two City of Ottawa employees described specific types of AT-related difficulties. These included the fact that while safety was often evaluated by counting the numbers of accidents at particular intersections, the numbers of pedestrians and cyclists involved were often too low to have statistical relevance. In addition, one indicated that currently consulted roadway design manuals contained very limited

information about the design of desirable public transit projects (e.g., adding bus-only lanes or light rail to medians on arterial roads).

A review of the evolution of Ottawa's official objectives with respect to increasing AT rates indicates long-term acceptance of the dominance of automobiles in transportation planning. Modal split targets for AT including all non-automobile modes (i.e., walking and cycling as well as public transit) were first established only in 1997 (Regional Municipality of Ottawa-Carleton, 1999). These were based on a recorded 1995 AT peak-hour level of 26 per cent (Regional Municipality of Ottawa-Carleton, 1997, p. 16). As of 2011, the peak hour AT modal split was 34 per cent, representing only an eight percentage point improvement spread among three modes of transportation over a period of sixteen years. The targets (set separately for walking, cycling, and public transit use) for 2031 equal 41 per cent (City of Ottawa, 2013d), meaning that even if achieved they would only represent an actual increase of roughly fifteen percentage points relative to actual levels in 1995.

Automobile-oriented transportation planning traditions received more limited attention among participants in Helsinki, and overall, it was clear that Helsinki featured a more favourable transportation planning environment. As outlined both in an interview and in an article from 1981 entitled "Helsinki, the City of Public Transport" by Heikki Salmivaara (1981) (then the leader of Helsinki's Traffic Planning Division), Helsinki features a long history of employing an overall transportation planning approach that prioritized AT. In his article, Salmivaara explains that while not without controversy and discussion, "the traffic policy of the 70s favoured mass transit and pedestrian traffic as policymakers recognized the detrimental effects of freeways on the environment" (p. 16). He describes the natural limitations of Helsinki's location on a peninsula and the resulting need to restrict private automobile traffic coming into the city centre

(p. 17). Helsinki's successful efforts to regulate the distribution of trips are discussed and supported with statistics. These indicate, for example, that only 21 per cent of total commuting trips in the metropolitan area at the time were by car (Figure 4, p. 17). He also describes Helsinki's high public transit ridership as being the result of deliberate attempts to continually improve public transit service while limiting the number of parking spaces available for commuters (p. 17). Finally, he provides a detailed description of Helsinki's numerous efforts and plans to improve its public transit infrastructure by, for example, building and re-building stations, adding additional tracks and the metro and creating reserved bus lanes (p. 17-18).

At a more technical level, a pertinent example was provided by the interview commentary of a former Deputy Director of the City of Helsinki Planning Department's Traffic and Transportation Planning Division, who described the general approach for designing intersections in Helsinki. Particularly in the city centre and also in suburban residential areas, this was to begin with consideration of what would provide advantageous conditions for the most "vulnerable users" (i.e., people walking and cycling), before proceeding to the step of accommodating cars. While a more balanced strategy (in which the convenience of automobile traffic was considered on roughly equal footing with AT traffic) was typically employed for major arterials, he also explained that the city is aiming to gradually urbanize these in a manner that would naturally lead to increasing priority being ascribed to AT users. The above is strongly indicative of a technical tradition in traffic planning that clearly favoured the development of good conditions for AT.

### ***3. Political systems***

The research highlighted important differences in the respective political systems that significantly affected the ability to promote AT. In Ottawa, the city's lack of dependable access

to sufficient revenue for desired public transit investment constituted a major obstacle for AT promotion. In the Canadian political system property taxes constitute the most important source of municipal revenue (Kitchen, 2002, p. 22-28), with income tax being paid only to the provincial and federal governments. Following reductions in financial transfers from higher levels of government (particularly during the 1990s) municipalities came under strong financial pressure (Kitchen, 2002, p. 331-339; McAllister, 2005, p. 246-248), and arguably, have inadequate revenue to fulfill their practical responsibilities.

As described in an interview with a Senior Transportation Planner with the City of Ottawa, this has contributed to a trend whereby investment in major public transit projects generally happens only when municipalities are able to secure funding from higher levels of government. This participant explained that partially as a result, local auto-oriented road upgrades (being cheaper to implement in the short term), tend to continue with consistency. Over the long term, he maintained, this has led to the phenomenon of a gradual expansion of the road network and only ad hoc investment in major transit projects. This commentary is supported by the history of funding for major public transit projects. Of those completed and planned during the last 40 years (including the Transitway bus rapid transit system, the O-Train light rail line, and the currently being built Confederation line light rail/subway line), all, except for the O-Train, were heavily financed by higher levels of government. The O-Train was exceptionally affordable (roughly \$21 million) for several reasons, including the city's ownership of the existing rail line.

Furthermore, as described by several interview participants, the requirement for cooperation between at least three levels of government results in significant political challenges with respect to securing the support of all required parties simultaneously. Both a former City of

Ottawa councillor and documents (Hilton & Stoney, 2007, p. 12-13; Kenza Benali & Bernier, 2014) for example, described how in the lead-up to the 2006 municipal election, then President of the Treasury Board John Baird indicated that provision of supposedly agreed federal funding for the then proposed version of the light rail project (referred to as the north-south line) would require that the newly elected city council review and vote once more on the project. Ultimately, the new council cancelled the north-south line, and light rail planning for the region began once more. While the project's replacement is now being constructed, it has been delayed by roughly 10 years.

Finally, a further significant challenge resulting from Ottawa's political system was an urban vs. suburban/rural split in public and political support for AT, with AT-related efforts much more strongly supported by inner city councillors and their constituencies than those from suburban and rural areas. In Ottawa, members of council (23) are elected on a first-past-the post-basis, each representing particular geographically defined wards. When combined with the fact that the city's population is distributed into areas displaying distinctly different travel mode preferences (as discussed earlier with reference to Gordon and Shirokoff (2014) - with the more central areas having notably higher rates of AT than outlying ones), this appears to have contributed to a more adversarial climate for AT promotion than might otherwise have been the case. Most obviously, municipal councillors representing more auto-oriented wards (generally more suburban and rural) may have accurately assessed policies designed promote AT as politically unpopular. Overall, the director of a prominent local environmental organization estimated that only about 6 out of 23 councillors (all representing ridings in Ottawa's central area) could be considered firmly pro-AT.

Conflict of this type was in clear evidence, for example, in the planning of the refurbishment of Ottawa's Main Street as Ottawa's first *complete street* (i.e., designed to accommodate all types of AT as well as driving). While the local councillor and city planning employees were clearly in favour of the project, some councillors of neighbouring wards (particularly of ones from which many commuters used the road for driving) opposed it (Mueller, 2013), with one voicing the concern that the proposed plan would be inconvenient for drivers (Mueller, 2013). While the project was ultimately approved, the situation is indicative of potential challenges associated with geographically-based electoral systems for the promotion of AT.

In contrast with the situation in Ottawa, analysis of the interview data and review of documentary evidence resulted in the identification of Helsinki's political system, including its social democratic tradition as well as its structure and position within Finland, as contributing to its AT success. First, the evident public acceptability of paying relatively high taxes (that may assist with investment in public services such as AT infrastructure) should be noted. According to the most recent Organization for Economic Cooperation and Development (OECD) statistics, Finland had the eighth highest tax revenue per capita (collected by all levels of government) among 36 countries for which data were available, at 18.6 thousand US dollars (Organization for Economic Cooperation and Development, 2017). For purposes of comparison, Canadian tax revenues are approximately 13.8 thousand US dollars per capita making Canada the 18<sup>th</sup> ranked country by this measure (Organization for Economic Cooperation and Development, 2017). Exemplifying the generally supportive public opinion for paying relatively high taxes was the commentary of a long-term high-ranking official with the City of Helsinki Planning Department's Traffic and Transportation Planning Division. First, this participant noted that even

car-oriented actors did not object to public funds being spent on transit. Second, in responding to the question of whether people ever argue in favour of paying less tax and therefore receiving reduced public services (in general), the participant answered “No...because they get something in return. You don’t have to pay when your children go to school. If you are sick you can get doctor services and so on and it doesn’t cost very much....so because people get something with their tax they are willing to pay the tax.”

Finland has also generally performed strongly with respect to income equality, reflective of a society acknowledged to place a high degree of emphasis on collective responsibility (Raynault & Côté, 2015). According to the OECD, when measured according to the Gini coefficient (a measure of income inequality with 0 corresponding to perfect income equality and 1 corresponding to perfect inequality) after transfers and taxes in 2011, Finland scored 0.265, while Canada scored 0.316 (Organization for Economic Cooperation and Development, 2013). Some evidence suggested that this emphasis on collective responsibility may extend to underlying assumptions about the goals of municipal transportation policy. For example, a public transport planner with the City of Helsinki described how Helsinki’s emphasis on public transit is likely connected with Finland’s broad commitment to the welfare state, indicating that it is viewed as consistent with policy efforts that “take care of everybody”.

In addition, the fact that Finnish municipalities in particular have strong taxation power is obviously advantageous with respect to the availability of revenue required for public transit. Municipal-level taxation is levied primarily in the form of a proportional income tax, at an average of approximately 20 cent of across Finnish municipalities (<https://www.localfinland.fi/>), with Helsinki residents currently paying 18.5 per cent (City of Helsinki, 2017).

Overall, the factors described above certainly contributed to Helsinki having both strong revenue (total tax revenues were 3 billion Euros in 2015 (City of Helsinki, 2017)) and freedom to invest heavily in a range of public services, including Helsinki's extremely high-quality public transit network. In 2015, for example, the Helsinki Regional Transport Authority's operating income was 623 million Euros, of which just under half was covered by municipal contributions (with almost all of the remainder by ticket revenue) (Helsinki Region Transport, 2016, p. 26).

Finally, it would appear that relative to Ottawa, the city's electoral system may provide advantages for AT promotion. In Helsinki, municipal councillors (85) represent political parties in a system of proportional representation. Given that they do not represent defined geographic areas, the likelihood of conflict regarding AT investment of the type highlighted in Ottawa seems less strong. Interview participants made no specific reference, for example, to councillors taking firm positions on transportation-related issues related to the travel preferences of residents of particular neighbourhoods. Furthermore, Helsinki's electoral system makes it possible for political parties to clearly articulate pro-AT positions as part of their campaigns. Ultimately, this gives them strong mandates to pursue pro-AT policies if elected. The Green Party for example (now the 2<sup>nd</sup> strongest political party in Helsinki), has made the promotion of AT an important part of its political platform over several decades.

### **Conclusions and Discussion**

The application of political theory in an investigation of the contrasting levels of governmental commitment to AT and corresponding AT success achieved in two comparable cities from Europe and North America highlights the important role played by context-specific political factors. Concerning the research question (i.e., what factors related to politics might help to explain why Helsinki was able to prioritize the promotion of AT to a much higher degree

than Ottawa over the long term?) the results indicated that differences stemming from the ACF category of relatively stable parameters help to explain a considerable portion of the varying levels of political commitment to AT.

In particular, the most striking differences were observed in connection with traditions in land use and transportation planning, as well as political systems. In Helsinki, favourable circumstances with respect to all of the above facilitated relatively unified and well-coordinated AT advocacy efforts, with a pro-AT coalition managing to dominate municipal transportation policy over the long term. In Ottawa by contrast, the city's North American context contributed to a highly challenging environment for AT promotion. Advocacy efforts were found to be weaker, more fragmented and less well-coordinated, with pro-AT actors rarely being in positions of relative strength within the municipal transportation policy environment.

### **Implications for Policy**

From a practical perspective, the findings point to the advantages of theoretically informed political awareness and suggest a number of implications for those attempting to promote AT or similar healthy urban policies in challenging political environments. Specifically, the results from Ottawa highlight the very strong political challenges that may sometimes stem from stable, context-specific political factors (i.e., relatively stable parameters), while the results from Helsinki underscore the degree to which these may facilitate progress with particular policy objectives when they are more supportive. The ACF suggests that such factors, given their assumed resistance to change (Weible & Sabatier, 2007, p. 125-126), are rarely the subject of advocacy efforts. The degree of limitation that these were demonstrated to impose in Ottawa, however, suggests that working to address their effects would be necessary for fundamental AT progress to be made. It is also realistic to think that in many cases, this is possible.

A relevant example concerns the influence of the property development industry and the related problem of car-oriented development. Laws which allow the property development industry to contribute funds to electoral campaigns do not seem in keeping with responsible government, whether viewed from the perspective of transportation planning or a variety of other vantage points. Municipal councillors who receive money from the property development industry would appear to be in a clear position of conflict of interest with respect to making the most advantageous development decisions for cities overall. Meanwhile, the laws which typically govern campaign contributions are certainly possible to change, leaving an evident political opportunity available for advocates to improve the scope for AT promotion in many jurisdictions.

The urban vs. suburban/rural division in the political popularity of AT in Ottawa and the related political challenges as channeled through the ward-based electoral system represent another potential area for intervention by AT advocates. While there might normally exist a tendency to focus on AT promotion in more central parts of cities where AT is generally most popular at the moment, making explicit efforts to substantially increase the number of suburban/rural AT users and supporters (via, for example, the provision of improved infrastructure in outlying areas) might lead to significant increases in both public and political support in North American cities.

Additional strategic opportunities for AT advocacy highlighted by this study include the support of policies that would provide municipalities with stronger and more dependable revenues for public transit investment, and working to bring about changes in the automobile-oriented transportation planning environment by, for example, arguing for and assisting in the development of technical manuals and training requirements that give more emphasis to AT.

Apart from implications related strictly to the category of relatively stable parameters, practical conclusions may also be drawn from the observation that periods of distinct AT progress appeared to have been facilitated by favourable external events in both cities. This suggests that AT and health-related advocates in other jurisdictions would be wise to make explicit attempts to identify and exploit similar potential opportunities. In North America at the moment, topics including climate change and traffic congestion are problems subject to considerable public and political attention. These are challenges for which the promotion of AT offers at least partial solutions.

Finally, the success achieved in Helsinki via the efforts of a unified yet diverse and broad-based coalition motivated most strongly by livability-related concerns makes it reasonable to suggest that explicitly working to develop similar coalitions in more challenging environments may be worthwhile. While acknowledging that building politically powerful advocacy coalitions is likely to be much more difficult in North American cities given the many contextual factors discussed in this paper, the benefits of AT are increasingly well-understood and valued from numerous perspectives (e.g., health, safety, environmental, and urban). It would appear that now is a particularly opportune time to make attempts at building the necessary advocacy capacity.

### **Limitations**

It is acknowledged that the findings from a comparative case study of two jurisdictions employing qualitative methods and a non-random form of sampling (chain referral) have limited generalizability. While the goals of this research did not include scientific generalizability, the conduct of similar research concerning political factors and the ability to promote AT in additional jurisdictions would be worthwhile. Furthermore, the results of this study could

certainly be strengthened via the use of additional research methods such as surveys and focus groups.

Finally, this study did not attempt to determine if the differences in actual rates of AT could be associated with outcomes for which its promotion is theoretically beneficial, such as with respect to overall rates of physical activity or reductions in air pollution. Accordingly, research which attempts to explicitly examine the links between particular political contexts and related health outcomes would be useful.

## References

- Al-Dubikhi, S., & Mees, P. (2010). Bus rapid transit in Ottawa, 1978 to 2008: Assessing the results. *Town Planning Review*, 81(4), 407-424.
- Black, W. R., & Nijkamp, P. (2002). *Social change and sustainable transport*. Indiana University Press.
- Breton, E., Richard, L., Gagnon, F., Jacques, M., & Bergeron, P. (2008). Health promotion research and practice require sound policy analysis models: The case of Quebec's tobacco act. *Social Science & Medicine*, 67(11), 1679-1689.
- Burgess, A., Doyle, M., Davies, L., Emery, I., Gilbert, A., Heine, C., et al. (2015). *The Economist pocket world in figures* (2016 ed.). London: Profile Books Ltd.
- Cavill, N., Kahlmeier, S., & Racioppi, F. (2006). *Physical activity and health in Europe: Evidence for action*. World Health Organization.
- Cervero, R. (1998). *The transit metropolis: A global inquiry*. Island press.
- Cervero, R., & Duncan, M. (2003). Walking, bicycling, and urban landscapes: Evidence from the San Francisco Bay area. *American Journal of Public Health*, 9(93), 1478-1483.
- Chianello, J. (2014a, August 22). Chianello: Watson fundraiser hardly seems the best way to convince public developers don't own city hall. *Ottawa Citizen*.
- Chianello, J. (2014b, September 19). Maybe we should be having a different discussion on campaign contributions. *Ottawa Citizen*.
- City of Helsinki. (2016). *Rental housing*. Retrieved May 22, 2017, from <http://www.hel.fi/www/Helsinki/en/housing/housing/rental>
- City of Helsinki. (2017). *Taxes*. Retrieved May 22, 2017, from <https://www.hel.fi/helsinki/en/administration/strategy/taxes/>

City of Helsinki Urban facts. (2016). *Statistical yearbook of Helsinki, 2016* (14th ed.). Retrieved from:

[http://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/17\\_03\\_14\\_Statistical\\_yearbook\\_of\\_Helsinki\\_2016\\_Jaakola.pdf](http://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/17_03_14_Statistical_yearbook_of_Helsinki_2016_Jaakola.pdf)

City of Ottawa. (1991). *City of Ottawa official plan. Volume 1. Primary plan.*

City of Ottawa. (2003). *City of Ottawa official plan. Volume 1. Official plan.* Retrieved from:

<http://ottawa.ca/en/official-plan-0/volume-1-official-plan>

City of Ottawa. (2013a). *Population.* Retrieved August 8, 2013, from <http://ottawa.ca/en/long-range-financial-plans/economy-and-demographics/population>

City of Ottawa. (2013b). *Transportation master plan 2013.* Ottawa: City of Ottawa.

City of Ottawa. (2015). *Cycling network information.* Retrieved May 22, 2017, from

<http://ottawa.ca/en/residents/transportation-and-parking/cycling/cycling-network-information>

City of Ottawa. (2017). *2016 Census.* Retrieved May 30, 2017, from <http://ottawa.ca/en/city-hall/get-know-your-city/statistics-and-economic-profile/statistics/2016-census>

City of Ottawa Planning and Growth Management Research and Forecasting Unit. (2016). *2015 Annual development report.*

City of Ottawa Transportation Services Department. (2017, March). *Cycling mid-term review.*

Presentation to the to the transportation committee, Ottawa, ON.

De Leuw, Cather & Company of Canada. (1965). *Ottawa-Hull area transportation study.*

Ottawa.

Demographia. (2017). *Demographia world urban areas (built up areas or world*

*agglomerations)* (13th ed.). Retrieved from: <http://www.demographia.com/db-worldua.pdf>

- Dora, C., Hosking, J., Mudu, P., & Fletcher, E. (2011). *Urban transport and health, module 5g, sustainable transport: A sourcebook for policy-makers in developing cities*. Retrieved from: [http://www.who.int/hia/green\\_economy/giz\\_transport.pdf](http://www.who.int/hia/green_economy/giz_transport.pdf): Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and World Health Organization.
- Ecology Ottawa. (2009). *Do developers run city hall? A report examining 2006 municipal election campaign contributions from developers to Ottawa city councillors and the mayor*. Retrieved from: [http://renaud.ca/wordpress/wp-content/uploads/2010/05/Do\\_Developers\\_Run\\_City\\_Hall.pdf](http://renaud.ca/wordpress/wp-content/uploads/2010/05/Do_Developers_Run_City_Hall.pdf)
- Edwards, P., & Tsouros, A. (2006). *Promoting physical activity and active living in rural environments. The role of local governments*. Retrieved from: [http://www.euro.who.int/\\_data/assets/pdf\\_file/0009/98424/E89498.pdf](http://www.euro.who.int/_data/assets/pdf_file/0009/98424/E89498.pdf)
- European Platform on Mobility Management. (n.d.a). *TEMS - the EPOMM modal split tool*. Retrieved from: <http://epomm.eu/tems/index.phtml>
- European Platform on Mobility Management. (n.d.b). *TEMS - the EPOMM modal split tool: About TEMS*. Retrieved from: [http://www.epomm.eu/tems/about\\_tem.html](http://www.epomm.eu/tems/about_tem.html)
- Exworthy, M. (2008). Policy to tackle the social determinants of health: Using conceptual models to understand the policy process. *Health Policy and Planning*, 23, 318-327.
- Fafard, P. (2008). *Evidence and healthy public policy: Insights from health and political sciences*. Retrieved from: [http://www.cprn.org/documents/50036\\_EN.pdf](http://www.cprn.org/documents/50036_EN.pdf): National Collaborating Centre for Healthy Public Policy.
- Fafard, P. (2015). Beyond the usual suspects: Using political science to enhance public health policy making. *Journal of Epidemiology and Community Health*, 69(11), 1129-1132.

Filion, P. (2010). Reorienting urban development? Structural obstruction to new urban forms.

*International Journal of Urban and Regional Research*, 34(1), 1-19.

Finnish Meteorological Institute. (2014). *Snow statistics*. Retrieved June 10, 2014, from

<http://en.ilmatieteenlaitos.fi/snow-statistics>

Gagnon, F., Turgeon, J., & Dallaire, C. (2007). Healthy public policy: A conceptual cognitive framework. *Health Policy*, 81, 42-55.

Gordon, D. (Ed.). (2006). *Planning twentieth century capital cities*. Routledge.

Gordon, D. L., & Shirokoff, I. (2014). *Suburban nation? Population growth in Canadian*

*suburbs, 2006-2011*. Retrieved from: [http://www.canadianurbanism.ca/wp-](http://www.canadianurbanism.ca/wp-content/uploads/2014/07/CanU%20WP1%20Suburban%20Nation%202006-2011%20Text%20and%20Atlas%20comp.pdf)

[content/uploads/2014/07/CanU%20WP1%20Suburban%20Nation%202006-](http://www.canadianurbanism.ca/wp-content/uploads/2014/07/CanU%20WP1%20Suburban%20Nation%202006-2011%20Text%20and%20Atlas%20comp.pdf)

[2011%20Text%20and%20Atlas%20comp.pdf](http://www.canadianurbanism.ca/wp-content/uploads/2014/07/CanU%20WP1%20Suburban%20Nation%202006-2011%20Text%20and%20Atlas%20comp.pdf): Council for Canadian Urbanism.

Gréber, J. (1950). *Plan for the national capital: General report submitted to the national capital planning committee*. National Capital Planning Service.

Greenfield, A. (2016). Helsinki's ambitious plan to make car ownership pointless in 10 years.

*The Guardian*. Retrieved May 20, 2017 from

<http://www.theguardian.com/cities/2014/jul/10/helsinki-shared-public-transport-plan-car-ownership-pointless>

Hammer, G., Siler Associates. (1969). *Ottawa central area study, 1969*. Hammer, Greene, Siler Associates.

Hawkins, B., & Parkhurst, J. (2015). The 'good governance' of evidence in health policy.

*Evidence & Policy: A Journal of Research, Debate and Practice*, August 26, 2016.

Heikkilä, S. (2014). *Mobility as a service - A proposal for action for the public administration*.

Helsinki case. (Master of Science in Technology, Aalto University).

Helsinki City Planning Department. (1985). *Helsingin kaupungin kaupunkisuunnitteluvirasto toimintakertomus 1985*. [Helsinki City Planning Department Annual Report 1985].

Helsinki City Planning Department. (1993). *Helsinki city planning department annual report 1993*.

Helsinki City Planning Department. (1994). *Helsinki city planning department annual report 1994*.

Helsinki City Planning Department. (2015). *Bicycle account 2015*. Retrieved from:

[https://www.hel.fi/hel2/ksv/julkaisut/julk\\_2015-1\\_en.pdf](https://www.hel.fi/hel2/ksv/julkaisut/julk_2015-1_en.pdf)

Helsinki City Planning Department General Planning Unit. (2013). *Helsinki city plan. Vision 2050. Urban plan - the new Helsinki city plan*. Retrieved from:

[http://www.hel.fi/hel2/ksv/julkaisut/yos\\_2013-23\\_en.pdf](http://www.hel.fi/hel2/ksv/julkaisut/yos_2013-23_en.pdf)

Helsinki Region Transport. (2016). *Annual report 2015*. Retrieved from:

[https://www.hsl.fi/sites/default/files/uploads/hsl\\_vuosikertomus\\_en\\_2015\\_sivut.pdf](https://www.hsl.fi/sites/default/files/uploads/hsl_vuosikertomus_en_2015_sivut.pdf)

Helsinki Regional Transport Authority. (2016). *Ring rail line 2015*. Retrieved August 26, 2016, from <https://www.hsl.fi/en/ringrailline>

Helsinki Regional Transport Authority. (n.d.). *Cycling*. Retrieved May 9, 2017, from

<https://www.hsl.fi/en/cycling>

Helsinki Urban Facts Office. (2004). *Traffic in Helsinki 2002*. Retrieved from:

[http://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/04\\_03\\_18\\_sierimo\\_traffic.pdf](http://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/04_03_18_sierimo_traffic.pdf)

HelsinkiRegion.fi. (2017). *Facts about the Helsinki region*. Retrieved May 30, 2017, from

<https://www.helsinginseutu.fi/hs/en/city-information>

- Hietala, M., Helminen, M., & Lahtinen, M. (Eds.). (2009). *Helsinki. Historic towns atlas* (Scandinavian Atlas of Historic Towns, New Series, No.2, Suomi-Finland ed.).  
Hameenlinna, Finland: City of Helsinki Urban Facts/Helsinki City Archives.
- Hilton, R., & Stoney, C. (2007). Dreams, deception and delusion: The derailing of Ottawa's light rail transit plans. *Revue Gouvernance*, 4(1).
- International Society for Physical Activity and Health. (2011). *Investments that work for physical activity*. Retrieved from: <http://www.globalpa.org.uk.proxy.bib.uottawa.ca/pdf/investments-work.pdf>
- Jaakola, M. (2012). Helsinki, Finland: Greenness and urban form. In T. Beatley (Ed.), *Green cities of Europe* (pp. 109-110-128). Washington, DC: Island Press.
- Jenkins-Smith, H. C., Nohrstedt, D., Weible, C. M., & Sabatier, P. A. (2014). The advocacy coalition framework: Foundations, evolution, and ongoing research. In P. A. Sabatier, & C. M. Weible (Eds.), *Theories of the policy process* (Third ed., pp. 183-223). Boulder, Colorado: Westview Press.
- Jenkins-Smith, H. C., & Sabatier, P. A. (1994). Evaluating the advocacy coalition framework. *Journal of Public Policy*, 14(2), 175-203.
- Jenkins-Smith, H. C., St. Clair, G. K., & Woods, B. (1991). Explaining change in policy subsystems: Analysis of coalition stability and defection over time. *American Journal of Political Science*, 35(4), 851-880.
- Kenza Benali, P., & Bernier, E. (2014). Le train léger sur rails d'Ottawa: Les rebonds d'un projet de transport durable conflictuel. *Revue Gouvernance*, 10.
- Kitchen, H. M. (2002). *Municipal revenue and expenditure issues in Canada*. L'Association canadienne d'études fiscales.

- Klinge, M., & Kolbe, L. (2007). *Helsinki: Daughter of the Baltic: A short biography*. Keuruu, Finland: Otava.
- Knaap, G. (2007). *Incentives, regulations and plans: The role of states and nation-states in smart growth planning*. Edward Elgar Publishing.
- Kübler, D. (2001). Understanding policy change with the advocacy coalition framework: An application to Swiss drug policy. *Journal of European Public Policy*, 8(4), 623-641.
- Länsimetro. (2016). *From ruoholahti to kivenlahti. 13 new stations. 21 kilometres*. Retrieved August 26, 2016, from <http://www.lansimetro.fi/en/home.html>
- Leite, M. E., & Aftret-Sandal, G. (2016). *BEST – Benchmarking European service of public transport*. Retrieved from: [http://nordicpublictransport.com/wp-content/uploads/Session-5-Hall-A-Norway-BEST-Helsinki\\_16062016.pdf](http://nordicpublictransport.com/wp-content/uploads/Session-5-Hall-A-Norway-BEST-Helsinki_16062016.pdf)
- McAllister, M. L. (2005). *Governing ourselves? The politics of Canadian communities*. Vancouver: UBC Press.
- Mees, P. (2010). *Transport for suburbia: Beyond the automobile age*. London: Earthscan.
- Miguellez, A. (2015). *Transforming Ottawa. Canada's capital in the eyes of Jacques Gréber*. Ottawa: Old Ottawa Press.
- Mueller, L. (2013, July 25), City council votes for Main street to be made 'complete'. *Ottawa Community News*. Retrieved from: [http://www.ottawacommunitynews.com/news-story/3908972-city-council-votes-for-main-street-to-be-made-complete-/](http://www.ottawacommunitynews.com/news-story/3908972-city-council-votes-for-main-street-to-be-made-complete/)
- Myntti, C. (2007). *Putting Finnish housing design into context: The Helsinki experience* No. 2 ISSN 1796-7228, ISBN 978-952-473-847-7), Urban Research Unit. City of Helsinki Urban Facts.

National Capital Commission. (n.d.). *The capital pathway: Multi-use paths in the capital.*

Retrieved June 6, 2014, from <http://www.ncc-ccn.gc.ca/places-to-visit/parks-paths/capital-pathway-multi-use-paths-capital>

Newman, P., & Kenworthy, J. (1999). *Sustainability and cities: Overcoming automobile dependence.* Washington, D.C.: Island Press.

Newman, P., & Kenworthy, J. (2015). *The end of automobile dependence.* Washington, D.C.: Island Press.

Organization for Economic Cooperation and Development. (2013). *OECD stat extracts, income distribution and poverty.* Retrieved August 8th, 2013, from <http://stats.oecd.org/Index.aspx?DataSetCode=IDD>

Organization for Economic Cooperation and Development. (2017). *Tax revenue.* Retrieved May 22, 2017 from <https://data.oecd.org/tax/tax-revenue.htm>

Public Health Agency of Canada. (2014). *Mobilizing knowledge on active transportation.*

Retrieved October 18, 2016, from <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/mobil-transport-eng.php>

Pucher, J. (1988). Urban travel behaviour as the outcome of public policy: The example of modal-split in Western Europe and North America. *Journal of the American Planning Association*, 54(4), 509--520. doi:10.1080/01944368808976677

Pucher, J., & Buehler, R. (2006). Why Canadians cycle more than Americans: A comparative analysis of bicycling trends and policies. *Transport Policy*, 13, 265-279.

Pucher, J., & Buehler, R. (2008). Making cycling irresistible: Lessons from the Netherlands, Denmark, and Germany. *Transport Reviews*, 28(4), 495-528.

- Pucher, J., & Dijkstra, L. (2003). Promoting safe walking and cycling to improve public health: Lessons from the Netherlands and Germany. *American Journal of Public Health, 93*(9), 1509-1516.
- Pucher, A., Komanoff, C., & Schimek, P. (1999). Bicycling renaissance in North America? Recent trends and alternative policies to promote bicycling. *Transportation Research A, 33*(7/8), 625-654.
- Pucher, J., & Lefèvre, C. (1996). *The urban transport crisis in Europe and North America*. Houndmills, Basingstoke, Hampshire and London: MacMillan Press Ltd.
- Raynault, M., & Côté, D. (2015). *Scandinavian common sense - policies to tackle social inequalities in health*. Montreal, Québec: Baraka Books.
- Regional Municipality of Ottawa-Carleton. (1976). *Official plan, Ottawa-Carleton planning area*. Ottawa: Ottawa: The Council, 1976.
- Regional Municipality of Ottawa-Carleton. (1989). *Official plan of the regional municipality of Ottawa-Carleton. Volume 1. Text*.
- Regional Municipality of Ottawa-Carleton. (1997). *Transportation master plan*.
- Regional Municipality of Ottawa-Carleton Planning Department. (1993). *Urban development in Ottawa-Carleton*.
- Regional Municipality of Ottawa-Carleton. (1999). *Official plan. Region of Ottawa-Carleton. As approved by the minister of municipal affairs and housing, October 1997*.
- Sabatier, P. A. (1988). An advocacy coalition framework of policy change and the role of policy-oriented learning therein. *Policy Sciences, 21*(2-3), 129-168.
- Sabatier, P. A., & Jenkins-Smith, H. C. (1999). The advocacy coalition framework: An assessment. *Theories of the Policy Process, 118*, 188.

- Salmivaara, H. K. (1981). Helsinki - the city of public transport. *ITE Journal - Institute of Transportation Engineers*, 51(8), 16-19.
- Saidla, K. (2017a). Health promotion by stealth: Active transportation success in Helsinki, Finland. *Health Promotion International*, doi:<https://doi.org/10.1093/heapro/daw110>.
- Saidla, K. (2017b). Le transport actif à Ottawa (Canada) face à des obstacles politiques tenaces. [Active Transportation in Ottawa, Canada. The Challenge of Enduring Political Obstacles] *Lien Social et Politiques*, 78, 171-172-192. doi:10.7202/1039344ar
- Saneinejad, S., Roorda, M. J., & Kennedy, C. (2012). Modelling the impact of weather conditions on active transportation travel behaviour. *Transportation Research Part D: Transport and Environment*, 17(2), 129-137.
- Statistics Canada. (2011). *Commuting to work, national household survey* (Catalogue no. 99 - 012- 2011003). Retrieved from: [http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003\\_1-eng.pdf](http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003_1-eng.pdf)
- Statistics Canada. (2016). *Focus on geography series, 2011 census*. Retrieved May 30, 2017, from <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-csd-eng.cfm?LANG=Eng&GK=CSD&GC=3506008>
- Swigger, A., & Heinmiller, B. T. (2014). Advocacy coalitions and mental health policy: The adoption of community treatment orders in Ontario. *Politics & Policy*, 42(2), 246-270.
- Tansey, O. (2007). Process tracing and elite interviewing: A case for non-probability sampling. *PS: Political Science & Politics*, 40(04), 765-772.
- Tikkanen, T., & Selander, P. (Eds.). (2014). *City of Helsinki urban facts. 2013 Helsinki by district*. (M. Gräsbeck Trans.). Keuruu, Finland: Otavan Kirjapaino Oy.

- Toronto Center for Active Transportation. (2010). *Benchmarking active transportation in Canadian cities*. Retrieved June 6, 2014, from [http://activelivingresearch.org/sites/default/files/ALR\\_Brief\\_ActiveTransportation\\_0.pdf](http://activelivingresearch.org/sites/default/files/ALR_Brief_ActiveTransportation_0.pdf)
- U.S. Department of Transportation. (2015). *Transportation and health tool data in excel*. Retrieved October 19, 2016, from <https://www.transportation.gov/mission/health/transportation-and-health-tool-data-excel>
- Weatherspark. (2013a). *Average weather for Helsinki, Finland*. Retrieved June 6, 2014, from <http://weatherspark.com/averages/28670/Helsinki-Uusimaa-Finland>
- Weatherspark. (2013b). *Average weather for Ottawa, Ontario, Canada*. Retrieved June 6, 2014, from <http://weatherspark.com/averages/28316/Ottawa-Ontario-Canada>
- Weible, C. M., & Sabatier, P. A. (2007). A guide to the advocacy coalition framework. In F. Fischer, G. J. Miller & M. S. Sidney (Eds.), *Handbook of public policy analysis theory, politics, and methods* (pp. 123-136)
- World Health Organization. (2014). *Ambient (outdoor) air quality and health*. Retrieved June 6, 2014, from <http://www.who.int/mediacentre/factsheets/fs313/en/>
- World Health Organization. (2015). *Prevalence of insufficient physical activity among adults*. Retrieved May 30, 2017, from <http://apps.who.int/gho/data/node.main.A893?lang=en>
- World Health Organization. (2016). *Global strategy on diet, physical activity and health*. Retrieved August 26, 2016, from <http://www.who.int/dietphysicalactivity/pa/en/>
- Yin, R. (1994). *Case study research. Design and methods* (Applied Social Research Methods Series, Volume 5). Thousand Oaks, CA: SAGE.
- Zafonte, M., & Sabatier, P. (2004). Short-Term versus Long-Term coalitions in the policy process: Automotive pollution control, 1963–1989. *Policy Studies Journal*, 32(1), 75-107.

## **Chapter 7: Conclusion**

This study concerned the role of political factors in efforts to promote AT, a behaviour considered to have substantial benefits with respect to the promotion of physical activity and many additional health, environmental, economic and social objectives. At one level, this study contributes to the emerging health promotion literature giving greater attention to the role of politics in health. More specifically, it responds to calls for the application of formal political science frameworks to health promotion challenges. At another, this research was conducted with a practical goal in mind – that being greater understanding of political challenges to the promotion of AT and the development of related practical suggestions for AT advocates.

Recognizing that leading international cities have achieved much higher AT rates than ones in Canada and North America, this study aimed to explore the possible role of political factors in explaining varying levels of AT success. Accordingly, the project consisted of a comparative case study including two cities, from Europe and Canada respectively: Helsinki - a leading city in AT at the international level, and Ottawa - a top-performing AT city within Canada and North America, but where the AT rate is weak relative to that of Helsinki. Particular effort was made to select cities that were comparable with respect to a number of characteristics considered likely to affect AT rates (e.g., total population, levels of car ownership, climate, and topography) so as to lend more strength to potential findings related to the effects of political factors on AT commitment and performance. The formal research question was: What factors related to politics might help to explain why Helsinki was able to prioritize the promotion of AT to a much higher degree than Ottawa over the long term?

Bearing in mind the body of health promotion-based literature discussing the particular challenges of implementing healthy public policies (a category to which AT belongs) and the utility of formal political theories for exploring them, the ACF – a policy process theory from political science - was selected as the theoretical framework. Briefly, the ACF is considered to have particular relevance for healthy public policy research given its emphasis on interrelated political factors (e.g., sociocultural context, values, stakeholder interests, and public opinion) and the involvement of actors from a wide variety of fields (Exworthy, 2008; Fafard, 2008; Gagnon, Turgeon, & Dallaire, 2007). Further consideration suggested the likelihood of the ACF being particularly applicable to municipal transportation policy, an area likely subject to important values-based conflicts of a type the ACF was designed (in part) to address.

The semi-structured interview was selected as the primary research method based on its usefulness for the gathering of detailed and nuanced information and offering the most straightforward means of gaining a deep understanding of the role of political factors in the promotion of AT. Document review constituted the secondary method, and was performed mainly to corroborate and add to the interview data, as well as to fill pertinent research gaps. Overall, 47 interviews were conducted with a wide range of participants considered experts in the AT policy process in both cities, and more than 200 AT-related documents were retained and reviewed.

The collection and analysis of both interview data and documentary evidence were structured according to ACF-derived categories (e.g., relatively stable parameters, external events, and advocacy coalition identification) in order to develop long-term ACF-informed accounts of the role of political factors in AT promotion in both cities. The findings were ultimately compared with each other on a category by category basis as well as overall. The main

results were presented in three articles submitted to peer-reviewed journals. The first two articles discussed the findings from Helsinki and Ottawa respectively, while the third compared the most noteworthy results from both cities.

“Health promotion by stealth: active transportation success in Helsinki, Finland” (Saidla, 2017a), discusses political factors that might help explain the city’s achievement of a very impressive 77 per cent AT modal split (European Platform on Mobility Management, n.d.a.). The main findings included that Helsinki’s success appeared to reflect the long-term dominance of municipal transportation policy by a pro-AT advocacy coalition displaying policy core beliefs connected most strongly with the development of a generally livable city. Importantly, the emergence and dominance of this coalition was found attributable to very favourable circumstances connected with the ACF categories of both relatively stable parameters (e.g., the strong tradition in directive city planning, city ownership of a high percentage of land, Finland’s strong commitment to the welfare state, etc.) and external events (e.g., the 1973 oil crisis and President Kekkonen’s New Year’s road safety speech).

The article also devotes considerable attention to the fact that health-based representatives were not identified as being among the main actors involved in Helsinki’s AT success, and that the identified motivations (or policy core beliefs) of pro-AT actors were most strongly associated not with health, but with livability. An identified implication for health-based actors was that AT advocates might have powerful potential allies in non-health areas, with whom they might usefully collaborate.

The second article, “Active transportation in Ottawa, Canada: the challenge of enduring political obstacles” (Saidla, 2017a), reports uniquely on the results from Ottawa. Overall, obstacles related to the category of relatively stable parameters were found to have contributed to

a strongly unfavourable environment for the promotion of AT. Relating to Ottawa's North American sociocultural context were challenges including Ottawa's longstanding sprawling, car-oriented structure (established well before the beginning of the first major efforts to promote AT), the Ottawa planning environment's susceptibility to frequently car-oriented property development interests, and strongly auto-oriented transportation planning and traffic engineering traditions. Relating to Ottawa's political system were a lack of dependable revenue for public transit (owing considerably to the requirement for financial support from higher levels of government) and an evident urban vs. suburban/rural split in political and public support for AT. Bearing in mind the significance of these challenges, the struggling AT advocacy efforts (displaying a lack of strong coordination among walking, cycling and public transit advocates and never managing to establish a position of substantial overall strength) was not considered surprising.

The third and final article, "Active Transportation Promotion: Easier in a European City, but Why?" concentrates on a discussion of the most identifiable and noteworthy areas of difference with respect to political factors and their influence on AT promotion. The article begins with an ACF-informed overview of AT-related advocacy in the two cities between 1970 and 2015. Two main points regarding this overview are noteworthy. First, AT efforts in both cities appeared to have been affected by similar external events (e.g., the 1973 oil crisis, the growth in automobile ownership in the 1980s, and growing environmental awareness in the 2000s), with momentum in favour of AT gathering speed in the early 1970s, slowing to some extent in the 1980s and 1990s, and then accelerating again in the mid-2000s. Second, the overview also includes a description of the strong differences in the strength of AT-related advocacy observed in Helsinki and Ottawa. Briefly, while similarities with respect to the types of

actors and organizations involved and their policy core beliefs were evident, AT efforts in Helsinki were much stronger overall, displaying a stronger degree of long-term coordination in the pursuit of what appeared to be a commonly accepted goal of limiting automobile traffic that was not observed in Ottawa.

The main focus of the article is the identified divergence in findings related to the category of relatively stable parameters in each city. Briefly, while in Helsinki the effects of relatively stable parameters were found highly favourable to the promotion of AT, in Ottawa they constituted major obstacles. More specifically, factors related to land use, transportation planning traditions and political systems strongly contributed to a much more favourable overall environment for the promotion of AT in Helsinki than in Ottawa.

### **Main conclusions and implications**

Overall, the application of political theory in an investigation of the contrasting levels of AT success achieved in two somewhat comparable cities facing a number of similar AT-related challenges highlighted the important role played by factors related to politics. The findings point to the advantages of theoretically informed political awareness and suggest a number of implications for those attempting to promote AT.

Concerning the research question of what factors related to politics might help to explain why Helsinki was able to prioritize the promotion of AT to a much higher degree than Ottawa over the long term, the results indicated that differences in factors stemming from the category of relatively stable parameters help to explain a considerable portion of the varying levels of political commitment to AT. More specifically, the results from Ottawa highlighted the very strong political challenges that may sometimes stem from this category, while the results from Helsinki underscored the degree to which supportive factors related to relatively stable

parameters may sometimes considerably facilitate progress toward particular policy objectives. While the data do not make it possible to confirm that the highlighted differences in relatively stable parameters explain all the observed disparities with respect to the structure and strength of AT advocacy and corresponding AT rates, there can be little doubt that a relationship exists. For example, throughout the history of explicit efforts to promote AT (i.e., beginning in about 1970), AT advocacy in Helsinki clearly benefitted from having a very large pool of AT users from which to draw resources and political support. In Ottawa, meanwhile, AT users were strongly outnumbered by car drivers throughout the period under consideration. At one level at least, this situation may be considered the result of the contrasting long-term effects of relatively stable parameters. For example, Helsinki's long tradition in directive planning inevitably helped to make AT a popular choice, even well before the beginning of explicit efforts to promote AT. In Ottawa by contrast, the longstanding pattern of auto-oriented sprawl inevitably contributed to automobiles being by far the most popular mode of transportation.

The ACF suggests that relatively stable parameters, given their assumed resistance to change (Weible & Sabatier, 2007, pp. 125-126), are rarely the subject of advocacy efforts. Bearing in mind, however, the juxtaposition of their negative ramifications in Ottawa with their positive effects in Helsinki, working to account for and address them would, in many cases, appear to constitute a worthwhile political strategy. In fact, the degree of limitation that challenges stemming from relatively stable parameters were demonstrated to impose in Ottawa suggests that it will be very difficult to fundamentally alter transportation planning priorities in an AT-favourable manner without accounting and/or directly addressing them. Overall, this suggests that this category of political factors is worthy of considerable attention by AT advocates.

As discussed in the Ottawa-focused article (Saidla, 2017b), there are several reasons why this is the case. First, even if some factors of this type may be not amenable to change, it is worth understanding them and taking them into account. For example, the research in Ottawa identified a lack of municipal own-source revenues as constituting an important challenge to public transit investment. While recognizing that municipalities in Canada have limited scope to significantly increase their own-source revenues, efforts to convince higher levels of government to provide consistent funding for public transit investment would appear a strategy potentially worth pursuing. Second, particular challenges related to relatively stable parameters may be somewhat amenable to change. Regarding automobile-oriented transportation planning, for example, it would certainly appear possible for AT advocates to assist in bringing about significant changes supporting AT given sufficient effort and motivation. Existing technical manuals and training requirements for the relevant professions are subject to revision, while new AT-focused resources and training may be continuously developed and delivered.

Practical implications also arise from the finding that periods of distinct AT progress appeared to have been facilitated by favourable external events in both cities. This suggests that it would be worthwhile for AT advocates to make concerted efforts to identify similar potential opportunities in the interest of exploiting them. In Canada at the moment, topics such as climate change, congestion, and the aging population are subject to considerable public and political attention, and involve issues for which the promotion of AT offers at least partial solutions. At the same time, it is not clear that governmental authorities are conscious of the full merits of AT for addressing such issues. For example, the promotion of cycling for transportation purposes appears extremely promising for addressing climate change. In Ottawa, the cycling modal split in 2011 was only 2 per cent (City of Ottawa, 2013b, p.17), while a recent survey indicates that

roughly 60 per cent of the population was interested in cycling, but prefer bike lanes and separated cycling facilities for safety reasons (City of Ottawa, 2013a, p. 39). Given the low cycling modal splits Canada-wide (Statistics Canada, 2015), there is likely a very strong opportunity to increase rates of practical cycling substantially, thereby strongly reducing greenhouse gas emissions and also helping in the accomplishment of other objectives such as health. So far, however, despite the vast array of measures being implemented or contemplated in order to address climate change at several levels of government, no major source of funding (e.g., on a billion dollar scale) has yet been allocated specifically for investment in bicycle infrastructure. In this case, politically aware AT promotion advocates from all fields have what would appear to be a significant opening to advance their objectives by highlighting the strong climate change benefits likely to be derived from cycling infrastructure investment.

Finally, the fact that Helsinki's AT success was associated with the long-term dominance of a relatively diverse pro-AT coalition may suggest that explicitly working to build similar coalitions (i.e., broad-based but unified in support of increasing overall AT rates) in more challenging environments (e.g., such as Ottawa) is likely to be worthwhile. For specifically health-based actors, the importance of this suggestion is underscored by the fact that Helsinki's AT success was not found to be strongly related to health actors or health-related motivation, pointing to the particularly strong likelihood of the usefulness of collaboration with actors from other fields. Overall, building broad-based pro-AT coalitions and highlighting the many societal advantages would appear likely to facilitate the development of more powerful arguments and stronger political mobilization than might otherwise be the case. In so doing, AT advocates could present more robust opposition to transportation planning environments that have (i.e., in North America) been long dominated by heavily car-oriented perspectives. Ultimately, regardless of the

precise nature of the strategies to be pursued, addressing major political challenges of the type outlined in this study will undoubtedly require thorough reflection and a high degree of discipline and energy. Stronger understanding of political challenges would, therefore, appear a logical goal for AT advocates.

### **Theoretical implications**

The practical application of the ACF proved to be an effective means of achieving strong, high-level understanding of a complex policy area in two separate jurisdictions over a long time period. The ACF's concepts of advocacy coalitions and policy subsystems were helpful in guiding the identification of the major actors, how they were positioned in terms of support for AT, what motivations lay behind their policy preferences, and how and to what degree they collaborated with each other. As noted earlier, health promotion scholars have previously identified the ACF as particularly applicable to questions of healthy public policy, partly as a result of the ACF's emphasis on the involvement of a wide range of actors from a variety of fields and several levels of government. Overall, the experience in this study lends support to that approach.

The comprehensive nature of the ACF, in accounting for a very wide range of factors considered to affect policy choices (in particular, the concepts of relatively stable parameters and external events), was very useful in this study. As noted earlier, the ACF's emphasis on the role of a particularly wide range of interrelated political factors is one of its distinguishing features. In this research project, the discovery of differences connected with varying societal contexts is what most strongly contributed to answering the research question. From a theoretical perspective, this may be considered of particular interest given that the category of relatively stable parameters is not frequently a focus of ACF-based research (Jenkins-Smith, Nohrstedt,

Weible, & Sabatier, 2014). Furthermore, while the category of relatively stable parameters is undoubtedly considered to affect policy outcomes, it is not among the *traditional areas of emphasis* of the ACF, including coalitions, learning, and policy change (Jenkins-Smith et al., 2014). While this study was conducted more in the interest of practical than theoretical purposes, the results of this research imply that more theoretical attention might usefully be given to the role of relatively stable parameters in the policy process. In particular, theoretically-focused ACF-based comparative policy research focusing on the effects of relatively stable parameters might yield worthwhile findings.

With respect to the ACF's practical application in this study, it must be acknowledged that the overall complexity of the ACF (i.e., in terms of the number of categories that are considered to affect policy, the complex relationships between them, and the level of potential detail that could potentially be pursued) made it a considerable challenge to apply, particularly for a single researcher working within a limited time-frame. While not eliminating these difficulties, the choice of the simplified version of the ACF was clearly advantageous as it narrowed the scope of the investigation and facilitated the focusing of attention on the most significant ACF categories. Accordingly, the further development of an explicitly user-friendly, practically-oriented version of the framework (together, perhaps, with specific suggestions for its application in terms of research design) would seem to be a potentially productive undertaking.

### **Effectiveness of the methodology**

#### **Case selection.**

Given the large number of potential variables affecting AT rates among jurisdictions, there was no way to ensure direct and complete comparability among the cases for this research. This being acknowledged, it is clear that making a considerable effort to choose reasonably

comparable jurisdictions was worthwhile. Most importantly, this approach should help to address questioning of the overall research findings based on a variety of alternative explanations which are already accounted for via the case selection. For example, given that the selection took account of climate and topography (with these being similar in Helsinki and Ottawa), the suggestion that either of these factors might explain the relatively large difference in AT performance between the two cities is largely rendered moot. Overall, the comparability between the two cities with respect to the specified factors adds support to the evidence-based suggestion that the particular factors affecting politics identified here are in fact important in explaining the noteworthy differences in AT performance.

In addition to the advantages offered by their comparability with each other, the fact that both cities have noteworthy characteristics common to many North American cities (e.g., both being young, having relatively low population densities, experiencing challenging winter weather and being situated in countries with high levels of car ownership) adds to the relevance of this research when viewed from a Canadian or North American perspective. For example, decision-makers often point to characteristics such as those just noted as either explaining existing low rates of AT or as constituting major obstacles to its promotion, thereby indirectly justifying weak or absent progress (see, for example Woods (2014) and Sutcliffe (2014, May 22)). In particular, Helsinki's success demonstrates that it is possible to achieve world-leading rates of AT despite the presence of numerous conditions frequently considered to work against this objective.

### **Methods.**

This research focused on the perceptions of AT-advocates and experts in the respective cities concerning the role of factors affecting politics on AT promotion, making the semi-

structured interview format a relatively obvious choice among methods. A particular advantage of the semi-structured interview related to the fact that for none of the research participants in Helsinki was English the first language. This meant that both interview questions and responses often had to be clarified to the satisfaction of both the researcher and the participants.

Furthermore, despite efforts to frame questions in clear and plain language, clarification (particularly concerning ACF-based themes) was often required for participants in both cities. In the context of a semi-structured interview, providing this type of clarification is relatively straightforward. Clearly, this challenge would be more difficult to overcome with methods such as the survey, for example.

While the semi-structured interview format was found time-consuming (in terms of the requirement to identify and schedule a large number of interviews, the sometimes lengthy interviews themselves, and the large volume of data produced) it did lead to the type of in-depth discussion required for the generation of rich and nuanced findings. For the most part, participants left the impression of feeling comfortable to speak freely, often even appearing eager to do so. This appeared to assist in the delivery of candid commentary and assessments on relevant topics, some of which might not have otherwise surfaced. Furthermore, the rapport created with participants (arguably facilitated by the semi-structured format) led to the establishment of useful and much appreciated professional relationships. Some participants, for example, were repeatedly asked for advice about where to find further information and were consulted about a variety of research-related topics as these materialized.

The documentary evidence, meanwhile, proved to be of critical importance for being able to compile the necessary background information, to verify findings from the interviews, and to fill particular gaps in knowledge. Given the very large volume of literature that could potentially

have been consulted (particularly in Ottawa, where no natural limit was imposed by the availability of those written in English), using documents as a secondary source of data was logical. Apart from being used for background research and the confirmation of basic facts (e.g., the major characteristics of the two cities, their transportation systems, their AT performance) the documentary research was conducted to a considerable extent based on areas identified as requiring either confirmation or further exploration via the interview data. This approach, in combination with the use of theoretical categories of the ACF for classification, gave a much-needed and useful structure for focusing and limiting the documentary research to the most useful sources.

### **Limitations.**

This study has a number of generally evident methodological and substantive limitations which should nevertheless be acknowledged. With respect to methodology, as described by Yin (1994) for example, a major criticism of case study research is that the small number of cases does not allow for significant generalization. While this is both acknowledged and accepted, it must be emphasized that this study did not prioritize generalizability in its design. Rather, the goal was to explore a specific research question related to two particular cases via a rigorous and theoretically informed process. While it was anticipated that the findings might result in practically applicable suggestions for additional jurisdictions with somewhat similar characteristics, scientific generalizability (i.e., in a statistical sense) was not sought and no claims to this effect are being made.

At a higher level of detail, both the chain referral style of recruitment and the interview as a research method have been subject to a variety of general criticisms. First, as a non-random sampling method, chain referral is considered by some to be inferior to random sampling

techniques because it cannot be considered to lead to statistically measurable representativeness (O'leary, 2004, p. 109). In the case of this study, the chain referral method was nevertheless deemed appropriate mainly because the target population (i.e., AT advocates and experts in the respective cities) would have been difficult to identify otherwise, particularly in Finland where documents are not readily available in English. In fact, chain referral is a strategy that is specifically recommended when the population being studied is not easily identifiable (O'leary, 2004, p. 110; Pierce, 2008, p. 92). While it is true that the samples cannot be considered statistically representative, considerable effort was made to select a wide-ranging set of respondents (e.g., from governmental and non-governmental organizations, with expertise related to different time periods, from advocacy efforts related to walking, cycling and public transit individually) in order to increase the overall credibility of the findings.

Second, interviews of any type have inherent weaknesses. Most obviously, as discussed by Yin (2009, p.108), in reporting about and explaining how events occurred, participant commentary is inevitably subject to problems including bias, weak recall, and the struggle to articulate thoughts clearly. Furthermore, particularly with respect to semi-structured interviews, there are a variety of ways that a researcher may either compromise responses or fail to maximize opportunities for data collection. The researcher may, for example, fail to establish an atmosphere conducive to the development of thorough responses, inadvertently ask leading questions or give out unconscious signals (Sociology Central, n.d.) that affect participant responses. While not downplaying their significance, attempts were made to account for these potential pitfalls. With respect to problems such as bias and recall, the main countermeasures were conducting a sufficient quantity of interviews so that major findings were supported by the accounts of multiple participants and reviewing a considerable volume of related documentary

evidence for purposes including corroboration. Concerning the conduct of the interviews themselves, potential problems including such those described were identified ahead of time and conscious effort was made to avoid them.

Finally, documentary evidence also has potential problems for research. The information that documents contain may be inaccurate, biased, and cannot be universally accepted as statements of fact (R. K. Yin, 2009, p. 103). Another potential difficulty is that the researcher may be biased in selecting which documents to consult and review, or in how the related information is reported. For reasons including the above, the document review was employed as secondary (rather than primary) research method. Accordingly, findings from the documentary evidence (not including basic facts and background information) were evaluated alongside interview data as a form of triangulation. Furthermore, the large volume of documents collected often allowed for corroboration of noteworthy findings via multiple sources.

With respect to substantive limitations, it should first be noted that this study addressed political challenges related to the promotion of an activity (AT) that must be addressed via changes in numerous complex, connected and overlapping policy areas (e.g., health promotion, transportation policy, land use policy, tax policy, and housing policy). In addition, the research investigated developments related to AT promotion in two jurisdictions over a 40 year period. As a result, constraints including time, resources, and the choice of the article-based thesis format precluded the thorough exploration of numerous related subjects which would undoubtedly benefit from further empirical and theoretical investigation.

For example, the research highlighted a number of particular areas of difference that ultimately helped to explain the widely varying levels of AT success achieved in Helsinki and Ottawa including, for example, traditions in urban and transportation planning as well as with

respect to electoral and taxation systems. With more time, resources and space, each of these areas could have been further investigated and described at a higher level of detail.

Furthermore, it was not possible to discuss a wide range of findings concerning all the ACF-derived categories (e.g., policy core beliefs, advocacy coalition resources and strategies, venues, etc.) for which data were gathered. It was also not possible fully explore the large number of possible relationships between the major findings in each category. Instead, given that the findings related to the ACF-derived category of relatively stable parameters provided particularly compelling overall explanations for the markedly differing levels of AT success in the two cities, effort was made to discuss this category with particular depth.

#### **Possibilities for future research.**

The results of this study help to suggest a number of possibilities for future research. First, the findings of the selected cases could be strengthened via the conduct of additional interviews and or the use of additional research methods. Survey research and focus groups, for example, could be employed to verify, strengthen and expand on the results discussed here. Overall, this approach would permit stronger and more detailed conclusions related specifically to the selected cases.

Some useful possibilities for deepening the scope of this study are also evident. With respect to the specific findings from Helsinki, further exploration of the question of why health-based actors were not more obviously present in AT promotion efforts would clearly be worthwhile. Regardless of the precise nature of potential findings, understanding more about the apparent lack of health-based involvement in a jurisdiction that has achieved remarkably high rates of AT appears likely to yield relevant information connected with how, when, and where health promotion actors may be most useful in AT promotion.

Concerning both jurisdictions, further research in several areas would help to provide a more complete assessment of the links between political context, public policy, and health outcomes in connection with AT promotion. For example, one obvious question worthy of exploration would be whether Helsinki's high rate of AT actually results in measurably better health outcomes than in Ottawa in terms of, for example, cardiovascular disease, diabetes, and respiratory ailments. Another potential avenue of research would be to perform a detailed and comparative review of AT-related policies in each city (e.g., what were the specific policies used to promote AT in each city, how effective were they with respect to altering modal splits, and how do they compare from a costs vs. benefits perspective?). At one level, information of this type might simply add to the growing evidence base pointing to the effectiveness of particular types of policies for AT promotion and resulting health benefits. More importantly, however, when combined with the assessment of political context as conducted in this study, it might be possible to usefully assess more precise links between political factors, public policy, AT, and health.

Finally, perhaps the most obvious connected research possibility would be to employ roughly the same protocol in additional jurisdictions in order to compare findings among a larger number of cases. This might eventually make it possible to draw somewhat wider conclusions about the relative differences in challenges for the promotion of AT in, for example, Canada and or/North America versus Northern/Western Europe. More specifically, exploring contextual political challenges in a wider variety of jurisdictions appears likely to yield relevant findings from both practical and theoretical perspectives. From a practical standpoint, one might then be able to develop, for example, more concrete and universally applicable advice for AT advocates dealing with challenges similar to those discovered in Ottawa. From the point of view of theory

and the ACF, meanwhile, this type of research could lead to worthwhile consideration of the effects of a category of factors (i.e., relatively stable parameters) that has so far not been given a high degree of attention.

## References

- Active Living Research. (2009). Active transportation. Making the link from transportation to physical activity and obesity. Retrieved from:  
[http://activelivingresearch.org/sites/default/files/ALR\\_Brief\\_ActiveTransportation\\_0.pdf](http://activelivingresearch.org/sites/default/files/ALR_Brief_ActiveTransportation_0.pdf)
- Anderson, J. E. (1975). *Public policy-making*. New York: Praeger.
- Babbie, E. (2012). *The practice of social research*. Belmont, CA: Wadsworth Cengage Learning.
- Badland, H., & Schofield, G. (2005). Transport, urban design, and physical activity: An evidence-based update. *Transportation Research Part D: Transport and Environment*, 10(3), 177-196.
- Banister, D. (2005). *Unsustainable transport: City transport in the new century*. New York: Routledge. Taylor and Francis Group.
- Bassett, D. R., Pucher, J., Buehler R., Thompson, D. L., & Crouter, S. E. (2008). Walking, cycling, and obesity rates in Europe, North America, and Australia. *Journal of Physical Activity and Health*, 5, 795-814.
- Baumgartner, F. R., & Jones, B. D. (2010). *Agendas and instability in American politics*. Chicago, IL: University of Chicago Press.
- Bergeron, K., & Cragg, S. (2009a). *Canadian fitness and lifestyle research institute. Making the case for active transportation - bulletin #7: Increasing social capital*. Retrieved from:  
[http://www.cflri.ca/sites/default/files/node/340/files/AT7\\_social\\_capital.pdf](http://www.cflri.ca/sites/default/files/node/340/files/AT7_social_capital.pdf):
- Bergeron, K., & Cragg, S. (2009b). *Canadian fitness and lifestyle research institute. Making the case for active transportation - bulletin # 4: Environmental benefits*. Retrieved from:  
[http://www.cflri.ca/media/node/337/files/AT4\\_environment\\_eng.pdf](http://www.cflri.ca/media/node/337/files/AT4_environment_eng.pdf).

- Bernier, N. F., & Clavier, C. (2011). Public health policy research: Making the case for a political science approach. *Health Promotion International*, 26(1), 109-116.
- Besser, L. M., & Dannenberg, A. L. (2005). Walking to public transit: Steps to help meet physical activity recommendations. *American Journal of Preventive Medicine*, 29(4), 273-280.
- Birkland, T. A. (2001). *Introduction to the policy process*. Armonk, NY; London: ME Sharpe.
- Black, W. R., & Nijkamp, P. (2002). *Social change and sustainable transport*. Indiana University Press.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40.
- Bratzel, S. (1999). Conditions of success in sustainable urban transport policy - policy change in 'relatively successful' European cities. *Transport Reviews*, 19(2), 177-190.
- Breton, E., & De Leeuw, E. (2010). Theories of the policy process in health promotion research: A review. *Health Promotion International*. Advance online publication.  
doi:10.1093/heapro/daq051
- Breton, E., Richard, L., Gagnon, F., Jacques, M., & Bergeron, P. (2008). Health promotion research and practice require sound policy analysis models: The case of Quebec's tobacco act. *Social Science & Medicine*, 67(11), 1679-1689.
- Brewer, G. D., & DeLeon, P. (1983). *The foundations of policy analysis*. Dorsey Press  
Homewood, IL.
- Buehler, R., Pucher, J., & Kunert, U. (2009). *Making transportation sustainable: Insights from Germany*. Washington DC: The Brookings Institution, Metropolitan Policy Program.

- Buehler, T., & Handy, S. (2007). *Fifty years of bicycle policy in Davis, CA*. Retrieved from: [http://www.des.ucdavis.edu/faculty/handy/Davis\\_bike\\_history.pdf](http://www.des.ucdavis.edu/faculty/handy/Davis_bike_history.pdf).
- Buehler, T. J. (2007). *Fifty years of bicycle policy in Davis, CA*. (Unpublished University of California, Davis), Retrieved from: <http://www.davisbicycles.org/docs/BuehlerThesisFinalDraft.pdf>.
- Burgess, A., Doyle, M., Davies, L., Emery, I., Gilbert, A., Heine, C., . . . Wroe, P. (2015). *The Economist pocket world in figures* (2016 ed.). London: Profile Books Ltd.
- Campbell, R., & Wittgens, M. (2004). *The business case for active transportation. The economic benefits of walking and cycling. Go for Green. The active living and environment program*. Retrieved from: [http://thirdwavecycling.com/pdfs/at\\_business\\_case.pdf](http://thirdwavecycling.com/pdfs/at_business_case.pdf).
- Canadian Medical Association. (2008). No breathing room: National illness costs of air pollution. *Summary Report*. Ottawa, ON: Canadian Medical Association (CMA),
- Case, D. D. (1990). *The community's toolbox: The idea, methods and tools for participatory assessment, monitoring and evaluation in community forestry*. Rome: Food and Agriculture Organization of the United Nations.
- Cavill, N., Kahlmeier, S., & Racioppi, F. (2006). *Physical activity and health in Europe: Evidence for action*. Retrieved from: [http://www.euro.who.int/\\_data/assets/pdf\\_file/0011/87545/E89490.pdf](http://www.euro.who.int/_data/assets/pdf_file/0011/87545/E89490.pdf): World Health Organization.
- Cervero, R., & Duncan, M. (2003). Walking, bicycling, and urban landscapes: Evidence from the San Francisco Bay area. *American Journal of Public Health, 93*(9), 1478-1483.
- Cervero, R. (1998). *The transit metropolis: A global inquiry*. Washington, DC: Island press.

City of Helsinki. (2013). Facts about Helsinki. Retrieved from:

[http://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/13\\_06\\_18\\_taskutilasto\\_13\\_en.pdf](http://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/13_06_18_taskutilasto_13_en.pdf)

City of Helsinki Urban Facts. (n.d.). *Facts about Helsinki, 2016*. Retrieved from:

[https://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/16\\_06\\_16\\_Facts\\_about\\_Helsinki\\_2016\\_As\\_kelo.pdf](https://www.hel.fi/hel2/tietokeskus/julkaisut/pdf/16_06_16_Facts_about_Helsinki_2016_As_kelo.pdf):

City of Ottawa. (2013a). *Ottawa cycling plan*. Retrieved from:

<http://documents.ottawa.ca/en/node/5842>:

City of Ottawa. (2013b). *Transportation master plan 2013*. Ottawa: City of Ottawa.

City of Ottawa. (2015). Cycling network information. Retrieved from:

<http://ottawa.ca/en/residents/transportation-and-parking/cycling/cycling-network-information>

City of Ottawa. (2017). 2016 census. Retrieved from: <http://ottawa.ca/en/city-hall/get-know-your-city/statistics-and-economic-profile/statistics/2016-census>

Colley, R. C., Garriguet, D., Janssen, I., Craig, C. L., Clarke, J., & Tremblay, M. S. (2011).

*Physical activity of Canadian adults: Accelerometer results from the 2007 to 2009 Canadian health measures survey*. Retrieved from:

<http://www.statcan.gc.ca.proxy.bib.uottawa.ca/pub/82-003-x/2011001/article/11396-eng.htm>.

Colley, R. C., Garriguet, D., Janssen, I., Craig, C. L., Clarke, J., & Tremblay, M. S. (2014).

*Physical activity of Canadian children and youth: Accelerometer results from the 2007 to 2009 Canadian health measures survey*. Retrieved from:

<http://www.statcan.gc.ca.proxy.bib.uottawa.ca/pub/82-003-x/2011001/article/11397-eng.htm>.

Costello, A., Abbas, M., Allen, A., Ball, S., Bell, S., Bellamy, R., . . . Patterson, C. (2009). Lancet and University College London institute for global health commission. Managing the health effects of climate change. *The Lancet*, 373(May 16), 1693--1733.

Cox, W. (2009). *Rating world metropolitan areas: When money is an object*. Retrieved from: <http://www.newgeography.com/content/00934-rating-world-metropolitan-areas-when-money-object>.

Creswell, J. W. (Ed.). (2007). *Qualitative inquiry and research design. Choosing among five approaches*. Thousand Oaks, California: Sage Publications.

Dargay, J., & Gately, D. (1999). Income's effect on car and vehicle ownership, worldwide: 1960–2015. *Transportation Research Part A: Policy and Practice*, 33(2), 101-138.

Demographia. (2014). Demographia world urban areas (built-up urban areas or world agglomerations). Retrieved from: <http://www.demographia.com/db-worldua.pdf>

Demographia. (2017). Demographia world urban areas (built up areas or world agglomerations) (13th ed.). Retrieved from: <http://www.demographia.com/db-worldua.pdf>

Dora, C., Hosking, J., Mudu, P., & Fletcher, E. (2011). *Urban transport and health, module 5g, sustainable transport: A sourcebook for policy-makers in developing cities*. Retrieved from: [http://www.who.int/hia/green\\_economy/giz\\_transport.pdf](http://www.who.int/hia/green_economy/giz_transport.pdf); Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and World Health Organization.

Edwards, P., & Tsouros, A. (2006). *Promoting physical activity and active living in rural environments. The role of local governments*. Retrieved from: [http://www.euro.who.int/\\_data/assets/pdf\\_file/0009/98424/E89498.pdf](http://www.euro.who.int/_data/assets/pdf_file/0009/98424/E89498.pdf).

European Conference of Ministers of Transport. (2004). *Implementing sustainable urban transport policies: Moving ahead, national policies to promote cycling*. Retrieved from:

[http://www.ecf.com/wp-content/uploads/ECMT-2004\\_National-Policies-to-Promote-Cycling.pdf](http://www.ecf.com/wp-content/uploads/ECMT-2004_National-Policies-to-Promote-Cycling.pdf):

European Platform on Mobility Management. (n.d.a). TEMS - the EPOMM modal split tool.

Retrieved from: <http://epomm.eu/tems/index.phtml>

European Platform on Mobility Management. (n.d.b). TEMS - the EPOMM modal split tool:

About TEMS. Retrieved from: [http://www.epomm.eu/tems/about\\_tem.html](http://www.epomm.eu/tems/about_tem.html)

Exworthy, M. (2008). Policy to tackle the social determinants of health: Using conceptual models to understand the policy process. *Health Policy and Planning*, 23, 318-327.

doi:10.1093/heapol/czn022

Fafard, P. (2008). *Evidence and healthy public policy: Insights from health and political sciences*. Retrieved from: [http://www.cprn.org/documents/50036\\_EN.pdf](http://www.cprn.org/documents/50036_EN.pdf): National Collaborating Centre for Healthy Public Policy.

Fafard, P. (2015). Beyond the usual suspects: Using political science to enhance public health policy making. *Journal of Epidemiology and Community Health*, 69(11), 1129-1132.

doi:10.1136/jech-2014-204608 [doi]

Finnish Meteorological Institute. (2014). Snow statistics. Retrieved from:

<http://en.ilmatieteenlaitos.fi/snow-statistics>

Fontana, A., & Frey, J. H. (2005). The interview: From neutral stance to political involvement. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd edition ed., pp. 695-708). Thousand Oaks, CA: SAGE.

Fowler, E. P., & Layton, J. (2002). Transportation policy in Canadian cities. In E. P. Fowler, & D. Siegel (Eds.), *Urban policy issues: Canadian perspectives* (Second ed., pp. 108-138). Don Mills, Ontario: Oxford University Press Oxford.

Gagnon, F., Turgeon, J., & Dallaire, C. (2007). Healthy public policy: A conceptual cognitive framework. *Health Policy, 81*, 42-55.

Garrard, J. (2003). Healthy revolutions: Promoting cycling among women. *Health Promotion Journal of Australia, 14*(3), 213-215.

Hall, P. A. (1993). Policy paradigms, social learning, and the state: The case of economic policymaking in Britain. *Comparative Politics, 25*(3), 275-296.

Halperin, S., & Heath, O. (2012). *Political research. Methods and practical skills*. New York: Oxford University Press.

Hancock, T. (1985). Beyond health care: From public health policy to healthy public policy. *Canadian Journal of Public Health, 76*(Supplement 1), 9-11.

Hawkins, B., & Parkhurst, J. (2015). The 'good governance' of evidence in health policy. *Evidence & Policy: A Journal of Research, Debate and Practice*, August 26, 2016.  
doi:<http://dx.doi.org/10.1332/174426415X14430058455412>

Heart and Stroke Foundation of Canada. (2009). *Shaping active healthy communities toolkit*.

Retrieved from:

[http://www.saskatchewaninmotion.ca/public/images/ActCommunities/Shaping\\_Active\\_Healthy\\_Communities\\_-Heart\\_Stroke\\_w.pdf](http://www.saskatchewaninmotion.ca/public/images/ActCommunities/Shaping_Active_Healthy_Communities_-Heart_Stroke_w.pdf):

Helsinki City Planning Department. (2015). *Bicycle account 2015*.

Helsinki Regional Transport Authority. (n.d.). Cycling. Retrieved from:

<https://www.hsl.fi/en/cycling>

HelsinkiRegion.fi. (2017). Facts about the Helsinki region. Retrieved from:

<https://www.helsinginseutu.fi/hs/en/city-information>

- Hersperger, A. M., Franscini, M. G., & Kübler, D. (2014). Actors, decisions and policy changes in local urbanization. *European Planning Studies*, 22(6), 1301-1319.
- Hietala, M., Helminen, M., & Lahtinen, M. (2009). *Helsinki. Historic towns atlas* (Scandinavian Atlas of Historic Towns, New Series, No.2, Suomi-Finland ed.). Hameenlinna, Finland: City of Helsinki Urban Facts/Helsinki City Archives.
- International Society for Physical Activity and Health. (2011). *Investments that work for physical activity*. Retrieved from: <http://www.globalpa.org.uk.proxy.bib.uottawa.ca/pdf/investments-work.pdf>:
- Jaakola, M. (2012). Helsinki, Finland: Greenness and urban form. In T. Beatley (Ed.), *Green cities of Europe* (pp. 109-110-128). Washington, DC: Island Press.
- Jann, W., & Wegrich, K. (2007). Theories of the policy cycle. In F. Fischer, G. J. Miller & M. S. Sidney (Eds.), *Handbook of public policy analysis* (pp. 43-62). Boca Raton, Florida: CRC Press. Taylor and Francis Group.
- Jenkins, W. I. (1978). *Policy analysis: A political and organisational perspective*. London: Martin Robertson.
- Jenkins-Smith, H. C., Nohrstedt, D., Weible, C. M., & Sabatier, P. A. (2014). The advocacy coalition framework: Foundations, evolution, and ongoing research. In P. A. Sabatier, & C. M. Weible (Eds.), *Theories of the policy process* (Third ed., pp. 183-223). Boulder, Colorado: Westview Press.
- Jenkins-Smith, H. C., & Sabatier, P. A. (1994). Evaluating the advocacy coalition framework. *Journal of Public Policy*, 14(2), 175-203.

- Jenkins-Smith, H. C., St. Clair, G. K., & Woods, B. (1991). Explaining change in policy subsystems: Analysis of coalition stability and defection over time. *American Journal of Political Science*, 35(4), 851-880.
- John, P. (2012). *Analyzing public policy* (Second ed.). New York, NY: Routledge.
- Keeler, J. T. (1993). Opening the window for reform mandates, crises, and extraordinary policy-making. *Comparative Political Studies*, 25(4), 433-486.
- Kingdon, J. W. (2002). *Agendas, alternatives, and public policies* (Longman classics edition) Longman Publishing Group London.
- Kingdon, J. W., & Thurber, J. A. (1984). *Agendas, alternatives, and public policies*. Little Brown, Boston.
- Kübler, D. (2001). Understanding policy change with the advocacy coalition framework: An application to Swiss drug policy. *Journal of European Public Policy*, 8(4), 623-641.
- Lachapelle, U., Frank, L., Saelens, B. E., & et al. (2011). Commuting by public transit and physical activity: Where you live, where you work, and how you get there. *Journal of Physical Activity and Health*, 8(Suppl 1), S72-S73-S82.
- Larouche, R. (2012). The environmental and population health benefits of active transport: A review. In G. Liu (Ed.), *Greenhouse gases - emission, measurement and management* (pp. 413-440) InTech.
- Lasswell, H. D. (1956). *The decision process: Seven categories of functional analysis*. Bureau of Governmental Research, College of Business and Public Administration, University of Maryland.
- Leech, B. L. (2002). Asking questions: Techniques for semistructured interviews. *PS: Political Science and Politics*, 35(4), 665-668.

- Leite, M. E., & Aftret-Sandal, G. (2016). *BEST –Benchmarking European service of public transport*. Retrieved from: [http://nordicpublictransport.com/wp-content/uploads/Session-5-Hall-A-Norway-BEST-Helsinki\\_16062016.pdf](http://nordicpublictransport.com/wp-content/uploads/Session-5-Hall-A-Norway-BEST-Helsinki_16062016.pdf):
- Litman, T. (2017). *Evaluating active transport benefits and costs. Guide to valuing walking and cycling improvements and encouragement programs*. Retrieved from: <http://www.vtpi.org/nmt-tdm.pdf>: Victoria Transport Policy Institute.
- Litt, J. S., Reed, H. L., Tabak, R. G., Zieff, S. G., Eyler, A. A., Lyn, R., & Tompkins, N. O. (2013). Active living collaboratives in the United States: Understanding characteristics, activities and achievement of environmental and policy change. *Preventing Chronic Disease, 10*
- Marshall, A. (2002). *How cities work: Suburbs, sprawl, and the roads not taken*. Austin: University of Texas Press.
- Mees, P. (2010). *Transport for suburbia: Beyond the automobile age*. London; Sterling VA: Earthscan.
- Milio, N. (1981). *Promoting health through public policy*. Philadelphia: F.A. Davis Co.
- Milio, N. (2001). Glossary: Healthy public policy. *Journal of Epidemiology and Community Health, 55*(9), 622-623.
- Milne, A., & Melin, M. (2014). *Bicycling and walking in the United States. 2014 benchmarking report. Alliance for walking and biking*. Retrieved from: <http://www.bikewalkalliance.org/storage/documents/reports/2014BenchmarkingReport.pdf>:
- Mowat, D., Gardner, C., Mckeown, D., Tran, N., Mologhney, B., Bursey, G.(2014). *Improving health by design in the greater Toronto-Hamilton area. A report of medical officers of health*

*in the GTHA*. Retrieved from:

<https://www.peelregion.ca/health/resources/healthbydesign/pdf/moh-report.pdf>:

National Capital Commission. (n.d.). The capital pathway: Multi-use paths in the capital.

Retrieved from <http://www.ncc-ccn.gc.ca/places-to-visit/parks-paths/capital-pathway-multi-use-paths-capital>

National Collaborating Centre for Healthy Public Policy. (2013). What we do. Retrieved from:

[http://www.ncchpp.ca/62/What\\_We\\_Do.ccnpps](http://www.ncchpp.ca/62/What_We_Do.ccnpps)

Newman, P., & Kenworthy, J. (1999). *Sustainability and cities: Overcoming automobile dependence*. Washington, DC; Covelo, CA: Island Press.

OC Transpo. (2017). Reports and stats. Annual performance reports. Retrieved from:

<http://www.octranspo.com/about-octranspo/reports>

O'Leary, Z. (2004). *The essential guide to doing research*. London, Thousand Oaks CA, New Delhi: Sage Publications.

O'Neill, M., LeMieux, V., Groleau, G., Fortin, J., & LaMarche, P. A. (1997). Coalition theory as a framework for understanding and implementing intersectoral health-related interventions. *Health Promotion International*, 12(1), 79-87.

Pierce, R. (2008). *Research methods in politics. A practical guide*. Thousand Oaks, CA: SAGE.

Przeworski, A., & Teune, H. (1970). *The logic of comparative social inquiry*. New York: Wiley-Interscience.

Public Health Agency of Canada. (2014). Mobilizing knowledge on active transportation.

Retrieved from: <http://www.phac-aspc.gc.ca/hp-ps/hl-mvs/pa-ap/mobil-transport-eng.php>

- Pucher, J. (1988). Urban travel behaviour as the outcome of public policy: The example of modal-split in Western Europe and North America. *Journal of the American Planning Association*, 54(4), 509--520. doi:10.1080/01944368808976677
- Pucher, J. (2012). Walking and cycling in Western Europe and the United States: Trends, policies, and lessons. *Transportation Research News*, (280), 34-42.
- Pucher, J., & Buehler, R. (2006). Why Canadians cycle more than Americans: A comparative analysis of bicycling trends and policies. *Transport Policy*, 13, 265-279.
- Pucher, J., & Buehler, R. (2008). Making cycling irresistible: Lessons from the Netherlands, Denmark, and Germany. *Transport Reviews*, 28(4), 495-528.
- Pucher, J., & Buehler, R. (2012). Making cycling irresistible: Lessons from the Netherlands, Denmark, and Germany. *Urban Planning International*, 27(5), 26-42.
- Pucher, J., & Dijkstra, L. (2003). Promoting safe walking and cycling to improve public health: Lessons from the Netherlands and Germany. *American Journal of Public Health*, 93(9), 1509-1516.
- Pucher, J., Komanoff, C., & Schimek, P. (1999). Bicycling renaissance in North America? Recent trends and alternative policies to promote bicycling. *Transportation Research A*, 33(7/8), 625-654.
- Remler, D. K., & Van Ryzin, G. G. (2010). *Research methods in practice: Strategies for description and causation*. Sage Publications.
- Richards, R., Murdoch, L., Reeder, A. I., & Amun, Q. (2011). Political activity for physical activity: Health advocacy for active transport. *International Journal of Behavioral Nutrition and Physical Activity*, 8(52)

- Richards, R., Murdoch, L., Reeder, A. I., & Rosenby, M. (2010). Advocacy for active transport: Advocate and city council perspectives. *International Journal of Behavioral Nutrition and Physical Activity*, 7(5)
- Roseland, M. (Ed.). (1997). *Eco-city dimensions: Healthy communities, healthy planet*. Gabriola Island, BC: New Society Publishers.
- Sabatier, P. A., & Weible, C. M. (2007). The advocacy coalition framework: Innovations and clarifications. In P. A. Sabatier (Ed.), *Theories of the policy process* (pp. 189-220). Boulder, CO: Westview Press.
- Sabatier, P. A. (1988). An advocacy coalition framework of policy change and the role of policy-oriented learning therein. *Policy Sciences*, 21(2-3), 129-168.
- Sabatier, P. A., & Jenkins-Smith, H. C. (1999). The advocacy coalition framework: An assessment. *Theories of the Policy Process*, 118, 188.
- Saidla, K. (2017a). Health promotion by stealth: Active transportation success in Helsinki, Finland. *Health Promotion International*, doi:<https://doi.org/10.1093/heapro/daw110>.
- Saidla, K. (2017b). Le transport actif à Ottawa (Canada) face à des obstacles politiques tenaces. [Active Transportation in Ottawa, Canada. The Challenge of Enduring Political Obstacles] *Lien Social et Politiques*, 78, 171-172-192. doi:10.7202/1039344ar
- Saneinejad, S. (2010). *Modelling the impact of weather conditions on active transportation travel behaviour* (Master of Applied Science).
- Schiller, P. L., Bruun, E., & Kenworthy, J. R. (2010). *An introduction to sustainable transportation: Policy, planning and implementation*. London; Washinton, DC: Earthscan.
- Schwab, K. (2013). *The global competitiveness report 2013–2014*. Retrieved from: [http://www3.weforum.org/docs/WEF\\_GlobalCompetitivenessReport\\_2013-14.pdf](http://www3.weforum.org/docs/WEF_GlobalCompetitivenessReport_2013-14.pdf).

- Stake, R. (2005). Qualitative case studies. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed., pp. 443-444-466). Thousand Oaks, CA: SAGE.
- Sociology Central. (n.d.). *Sociological research methods. Focused (semi-structured) interviews*. Retrieved from: <http://www.sociology.org.uk/notes/methfi.pdf>:
- Statistics Canada. (2015). National household survey (NHS), analytical products, 2011, Commuting to work, table 1.a - Proportion of workers commuting to work by car, truck or van, by public transit, on foot, or by bicycle, census metropolitan areas, 2011. Retrieved from: <http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/2011003/tbl/tbl1a-eng.cfm>
- Statistics Canada. (2016). Focus on geography series, 2011 census. Retrieved from: <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-csd-eng.cfm?LANG=Eng&GK=CSD&GC=3506008>
- Sutcliffe, M. (2014, May 22). Does a city with harsh winters need more bike lanes? *Ottawa Citizen*
- Swigger, A., & Heinmiller, B. T. (2014). Advocacy coalitions and mental health policy: The adoption of community treatment orders in Ontario. *Politics & Policy*, 42(2), 246-270.
- Tansey, O. (2007). Process tracing and elite interviewing: A case for non-probability sampling. *PS: Political Science & Politics*, 40(04), 765-772.
- Taylor, J. H. (1986). *Ottawa. An illustrated history*. Toronto: James Lorimer and Company, Publishers and Canadian Museum of Civilization, National Museums of Canada.
- The World Bank. (2017). GDP per capita. Retrieved from: <http://data.worldbank.org/indicator/NY.GDP.PCAP.CD>

This is Finland. (2008). Finland's weather and light. Retrieved from:

<http://finland.fi/public/default.aspx?contentid=160033>

Toronto Center for Active Transportation. (2010). Benchmarking active transportation in Canadian cities. Retrieved from:

[http://activelivingresearch.org/sites/default/files/ALR\\_Brief\\_ActiveTransportation\\_0.pdf](http://activelivingresearch.org/sites/default/files/ALR_Brief_ActiveTransportation_0.pdf)

TRANS Committee. (2005). City of Ottawa urban transit area. Retrieved from: <http://www.ncr-trans-rcn.ca/wp-content/uploads/2013/03/OttawaUTA.pdf>

Transport Canada. (2010). The social implications of sustainable and active transportation.

Retrieved from: <http://www.tc.gc.ca/eng/programs/environment-utsp-socialimplications-1013.htm>

Transport Canada. (2011). *Active transportation in Canada: A resource and planning guide*.

Retrieved from:

<http://www.tc.gc.ca.proxy.bib.uottawa.ca/media/documents/programs/atge.pdf>:

U.S. Department of Health and Human Services. (2014). *National prevention strategy. Active living*. Retrieved from:

<https://www.surgeongeneral.gov/priorities/prevention/strategy/active-living.pdf>:

U.S. Department of Transportation. (2015). Transportation and health tool data in excel.

Retrieved from: <https://www.transportation.gov/mission/health/transportation-and-health-tool-data-excel>

United Nations Economic Commission for Europe. (2009). *The PEP implementation*

*mechanisms and workplan: Workshop of safe and healthy walking and cycling in urban areas*. Retrieved from:

<http://www.unece.org/fileadmin/DAM/thepep/en/workplan/urban/documents/Pruhonice-Prague/Pruhonice.Report.e.pdf>:

Weatherspark. (2013a). Average weather for Helsinki, Finland. Retrieved from:

<http://weatherspark.com/averages/28670/Helsinki-Uusimaa-Finland>

Weatherspark. (2013b). Average weather for Ottawa, Ontario, Canada. Retrieved from:

<http://weatherspark.com/averages/28316/Ottawa-Ontario-Canada>

Weber, J. (2016). *Policy entrepreneurs, windows, and cycles: Exploring policy change through bicycle infrastructure at the municipal level* (Ph.D.).

Weible, C. M., & Sabatier, P. A. (2007). A guide to the advocacy coalition framework. In F. Fischer, G. J. Miller & M. S. Sidney (Eds.), *Handbook of public policy analysis theory, politics, and methods* (pp. 123-136). Boca Raton FL: CRC Press. Taylor and Francis Group.

Woods, M. (2014, August 6th, 2014). No "car culture" in Ottawa, says Mayor Jim Watson.

*Ottawa Citizen*

World Health Organization. (1986). *Ottawa charter for health promotion*. Geneva: WHO.

World Health Organization. (2013). The 8th global conference on health promotion, Helsinki, Finland, 10-14 June 2013. Retrieved from:

[http://www.who.int/healthpromotion/conferences/8gchp/statement\\_2013/en/](http://www.who.int/healthpromotion/conferences/8gchp/statement_2013/en/)

World Health Organization. (2015). Global health observatory data repository. Prevalence of insufficient physical activity among adults. Data by country. Retrieved from:

<http://apps.who.int/gho/data/view.main.2463>

World Health Organization. (2016). Ambient (outdoor) air quality and health. Retrieved from:

<http://www.who.int/mediacentre/factsheets/fs313/en/>

World Health Organization. (n.d.). Global strategy on diet, physical activity and health.

Retrieved from: <http://www.who.int/dietphysicalactivity/pa/en/>

Yin, R. (1994). *Case study research. Design and methods* (Applied Social Research Methods Series, Volume 5 ed.). Thousand Oaks, CA: SAGE.

Yin, R. (2003). *Case study research: Design and methods* (3rd ed.). Thousand Oaks, CA; London; New Delhi: Sage Publications Inc.

Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, CA; London; New Delhi: SAGE.

Zafonte, M., & Sabatier, P. (2004). Short-Term versus Long-Term coalitions in the policy process: Automotive pollution control, 1963–1989. *Policy Studies Journal*, 32(1), 75-107.

Zwald, M. L., Eyler, A., & Moreland-Russell, S. (2016). Opening the window of opportunity for active transportation policies. *Health Behavior and Policy Review*, 3(4), 293--303.

doi:<http://dx.doi.org/10.14485/HBPR.3.4.1>

## **Appendix A: Interview Guide**

### **Participant Information**

In consideration of today's discussion about active (sustainable) transportation (including walking, cycling, and public transit), please describe the relevant positions you have occupied, as well as the associated time periods.

Please indicate whether you would consider yourself an expert on cycling, walking, public transit, or any combination of those categories.

### **Introductory (*grand tour*) Question**

1. At a high level, what would you say are the main factors that have affected your city's long-term ability (either positively or negatively) to commit to policy (including, notably investment) that promotes AT?

### **Identification of the Policy Subsystem**

2. In consideration of the issue of the promotion of active transportation in your city, how would you describe the geographic boundary of the issue?
3. Who would you say were the main organizations and actors involved in debate concerning the issue of the promotion of active transportation (whether they be in favour, against, or otherwise with respect to the issue).

### **Theme 1: External context and events**

4. When would you say that your city began to prioritize (versus automobile transportation, notably) the promotion of AT (or specifically, either walking, cycling, or public transit)?
5. Were there particular events, factors, organizations, or people that you would say had a major effect on the feasibility (negative or positive) of promoting AT in your jurisdiction?

Probe: These could be things like change or stability in political leadership, economic circumstances, the election of a particular high-level politician, the dominance of a particular political party, changes in cultural attitudes, or a particular change in circumstances that affected everyday living conditions.

6. To what degree would you say that political parties at any level of government played a role in the AT policy process?

Probe: Would you be able to elaborate on the role of political parties (at any level of government) played in the AT policy process?

7. Given that more than one level of government is normally involved in the AT policy process, would you be able to comment on the degree to which this either facilitated or hampered the promotion of AT in your jurisdiction?
8. Apart from particular events, factors, organizations and people, was there anything about underlying conditions (e.g., social, political, economic) that you think either particularly favoured or challenged the feasibility of promoting AT during particular time periods?
9. Would you say that the climate of your city, particularly with respect to the relatively cold, dark, and snowy winters, has had any particular effect on the ability to promote AT?

## **Theme 2: Actors and Advocacy Coalitions**

10. Who do you believe were the main actors and organizations that supported the prioritization of AT in your city?
11. Were these actors concentrated at the municipal level of government, or did they come from other levels of government or outside government (e.g., academic, advocacy groups, journalists, policy analysts, etc.)?

12. Would you say that there was an identifiable coalition (or several coalitions) of people and groups supporting AT during your tenure?

Probe: According to the ACF, a coalition includes a group of actors that engage in a non-trivial degree of cooperation/coordination in order to achieve policy objectives.

13. If so, would you be able to describe these coalitions and their members?

Probe: In particular, did members come from a wide variety of backgrounds like health, safety, the environment, urban planning, and transportation, or did they originate from mainly one area?

14. Would you say that one or several of these groups dominated within a given coalition?

15. Assuming the existence of one or several identifiable pro-AT coalitions, how did these develop and change over time?

16. Was there an identifiable coalition or coalitions (official or unofficial) of people and groups opposing AT?

17. Assuming the existence of identifiable coalitions that were not supportive of AT, how did these develop and change over time?

18. Assuming the existence of coalitions concerned with the promotion of AT, during your tenure, would you say that there was a clearly identifiable coalition in the dominant position in terms of ultimate policy decisions? If so, please identify the members of this coalition.

Probe: If the coalition holding the dominant position changed over time, can you identify during which periods each coalition held the dominant position and comment with respect to what caused the changes?

19. Would you say that there were cases in which the dominant coalition modified important aspects of its position based on the arguments of an opposing coalition, scientific evidence, or as a response to external factors like public opinion?
20. Were there organization or actors who you would say served as brokers between competing coalitions? By brokers I refer to people who looked to build consensus between opposing sides by looking for compromises that would be acceptable to both sides.
21. Would you say that at any point during your tenure that there was a major policy change in your jurisdiction that was largely the result of a decision imposed by a hierarchically superior jurisdiction?

### **Theme 3: Values and policy objectives**

22. From of the perspective of the actors involved in the promotion of AT, what do you believe was the main problem that these actors hoped to address through the promotion of AT?  
  
Probe: For example, was it physical inactivity? Was it to prevent environmental degradation and climate change? Was it to deal with traffic congestion? Was it to improve social life? Was it related to a desire to emphasize more equitable forms of transportation? Was it motivated by economic considerations?
23. For groups and actors in favour of the promotion of AT that you are familiar with (including yourself), on a scale of 1 to 5 (with 1 being the level of almost inconsequential, and 5 being a level of utmost importance), at what level would you place the main problem you identified above. In other words, how serious was this problem viewed as being?

24. If you identified more than one main problem above that motivated the desire to promote AT, in what order of importance would you rank these problems?
25. In terms of the actors and organizations involved in the promotion of AT that you are familiar with, what would you say were the main methods (or policies) that they preferred for dealing with the identified problems?
26. How would you characterize the underlying values of the actors and organizations that have supported the promotion of AT?  
  
Probe: By values, I refer to what the ACF calls deep core and policy core beliefs. An example of a deep core belief would be the relative value of individual freedom vs. social equality. An example of a policy core belief would be the relative importance of economic development vs. health of the population.
27. Would you say that there were any particular organizations or people who worked (either directly or indirectly) against those who wanted to promote active transportation? If so, who were these actors and organizations?
28. Assuming the existence of actors and organizations that worked against the promotion of AT, can you comment on how you think these people may have viewed the problems identified above? For example, did they consider them to be problems at all, or did they have different levels of seriousness from their point of view relative to those who were actively working to promote AT?
29. Assuming the existence of actors and organizations that worked against the promotion of AT, how would you characterize the underlying values of their members?
30. Would you say that there was a major, identifiable values-based conflict concerning the value of AT promotion?

31. If so, what was the basis of this conflict?
32. Would you say that some AT favourable decisions were made mainly in the pursuit of non-AT specific goals?

Probe: An example would be a recreational trail network that is designed for recreational and leisure purposes, but that ends up being used for utilitarian transportation.

#### **Theme 4: Venues, Strategies and decisions**

33. Can you describe what you believe were the main places (venues) that the debate concerning AT took place (e.g., municipal council, media, within particular government departments, traditional and social media etc.)?
34. Can you provide an overview of what you believe were the main arguments made both in favour or against (directly or indirectly) the promotion of AT?
35. Would you be able to describe some of the strategies employed by those trying to promote AT that you believe were particularly effective?
- Probe: Strategies might include, for example, the creation of alliances, sharing of resources, and developing approaches that are complementary to those of allies.
36. Can you describe any strategies that were designed to promote AT but that ultimately did not prove to be successful?
37. Can you comment on any of the strategies (particularly with respect to their effectiveness) employed by those not fully in favour of the promotion of AT?
38. Was there ever a situation in which a major relevant decision was made because those on opposing sides had reached an unacceptable situation of impasse in which the only way forward appeared to be compromise? If so, please elaborate on this situation.

39. What role, if any, did the winter climate of your city play in terms of determining the strategies chosen by both those favouring the promotion of AT and those who were in some way opposed?

### **Theme 5: Resources and evidence**

40. What would you say were the most important resources at the disposal of advocates of AT?

Probe: Resources might include, for example, money, skillful leadership, favourable public opinion, mobilizable supporters, useful technical information, and members in positions with substantial legal authority.

41. Similarly, what would you say were the most important resources at the disposal of those not in support of AT?
42. To what extent would you say that technical information or evidence (health, environmental, social studies, data, etc.) played a role in the promotion of AT?
43. What was this technical information or evidence and how was it used by proponents (or opponents) of AT?
44. Who was responsible for generating this evidence and can you speculate as to whether or not this evidence was generated with particular objectives in mind?

### **Theme 6: Policy Outcomes**

#### **Interview questions**

45. In terms of policies that were actually implemented, which ones do you think were the most important in terms of contributing to the increase on maintenance of AT mode shares in your city?

46. Are you aware of evidence that supports or questions the effectiveness of particular policies (as implemented in your jurisdiction) with respect to the promotion of AT?
47. Can you describe any policies that were implemented with the goal of increasing levels of AT but that you believe were not successful or of questionable value?
48. Can you describe any policies that have been implemented in order to support AT that you would consider promising, but that require further time and analysis to confirm?
49. Would you say that there were policies adopted as a result of efforts of those not supportive of AT?

Probe: If so, what were they and what effects would you say these had with respect to AT promotion?

50. Would you say that your city made a conscientious effort to promote AT in winter conditions?
51. If you answered “yes” to the above, what would you say are the main policies implemented in your city designed to promote AT in winter?

Probe: Can you comment with respect to their degree of success?

## **Appendix B: Interview Guide (Abbreviated)**

### **Participant Information**

-In consideration of today's discussion about active transportation (AT), including walking, cycling, and public transit, please describe your relevant experience and the positions you have held (as well as associated time periods).

-Please indicate whether you would consider yourself to be an expert mainly on cycling, walking, public transit, or AT in general.

### **“Grand Tour” Questions**

-At a high level, what would you say are the main factors that have affected your city's long-term ability (either positively or negatively) to commit to policy (including, notably investment) that promotes AT (or walking, or cycling, or public transit specifically)?

-Would you say that there were some critical time periods during which the promotion of AT (or one of its components) was particularly strong? If so, when were they, and what, in your opinion, made these periods critical? In other words, what factors would you say facilitated the progress achieved (either for AT or for car-oriented mobility) during those time periods?

### **Theme 1: Major policy changes and causes**

*Explanatory note for participants:*

*The Advocacy Coalition Framework (ACF) describes major policy change as occurring when there are subsystem-wide alterations in policy. Roughly, this means a level of policy change connected to relatively deeply held values about the relative importance of particular policy challenges and how to meet them. Conversely, minor policy change concerns relatively smaller alterations in thought concerning, for example, the specifics of budgets and performance*

*evaluations in particular parts of policy subsystems. This research project is chiefly concerned with major policy change.*

-Looking at the issue of the promotion of AT in your city broadly, what would you say have been the most important major policy changes over the long term, and what factors do you think contributed to the development of those changes?

### **Theme 2: External Events**

*Explanatory note for participants:*

*External events are developments outside the policy subsystem that nonetheless have important effects on policy decisions. Largely, this is because they often shift public attention and resources either toward or away from policy subsystems. Categories of external events include (1) major socioeconomic changes, (2) changes in public opinion, (3), changes in the systematic governing coalition, and (4), policy decisions and impacts from other subsystems.*

-Particularly in consideration of any major policy changes as outlined above, would you say that at any point during your tenure/experience there were important or major external factors or events that made it either easier or more difficult to promote AT (e.g. economic considerations, major changes in public opinion, major changes in policies in other areas, the election of particular politicians, etc.)?

### **Theme 3: Relatively Stable Parameters**

*Explanatory note for participants:*

*According to the ACF, the category of “relatively stable parameters” includes the basic attributes of the problem area or good, the basic distribution of natural resources, the fundamental sociocultural values and social structure, and the basic constitutional structure. They are described as being stable over long periods of time (100 years), and being important as*

*they structure the nature of the problem, constrain the resources available to policy participants, establish rules and procedures for changing policy and reaching collective decisions, and broadly, frame the values that inform policymaking. They are said to be resistant to change and therefore generally not targeted by policy participants.*

- Can you please name and discuss any background-level factors like geography, sociocultural values, social structure, or the political/constitutional structure that you think have particularly affected (either positively or negatively) the ability to promote AT in Ottawa/Helsinki? These would be factors that would be relatively stable over periods 100 years or more.

#### **Theme 4: Policy Subsystem**

- **Territorial boundary**

-In consideration of the issue of the promotion of AT in Helsinki/Ottawa, how would you describe the practical geographic boundary of the issue?

- **Actors and Advocacy Coalition Identification**

-Who would you say were the main organizations and actors involved in debate concerning the issue of the promotion of AT (whether they be in favour, against, or otherwise with respect to the issue)?

#### **Theme 5: Actor and Advocacy Coalition Characteristics**

*Explanatory note for participants:*

*ACF scholars recommend asking policy participants to identify the major interest groups and government agencies involved to help delimit the policy subsystem. With respect to the participation of these actors and organizations in advocacy coalitions advocacy coalitions include representatives from a variety of governmental and non-governmental organizations who share a basic set of normative and causal beliefs, allowing them to act collectively. To be*

*considered an advocacy coalition, policy participants must both (1) share similar policy core beliefs and (2) engage in a non-trivial degree of coordination.*

- **Pro-AT actors and organizations**

*Identification of pro-AT actors/organizations*

-What were the main organizations and who were the main actors that worked to promote AT in your city, particularly during any of the critical time periods if these were identified earlier?

*Evidence of coordination*

-Considering the actors working to promote AT in your city, can you comment on the connections between these actors and the degree to which they worked together in a coordinated manner to influence policy decisions related to AT?

*Policy core beliefs*

-What would you say was the main (or major) factor (s) that motivated those people involved (including you personally, if applicable) to promote active transportation (e.g., obvious factors would be physical activity, traffic, congestion, the environment, social life, aesthetics, etc.).

-Another way of phrasing this would be to ask “what was the main problem that they were trying to address with the promotion of AT?”

Probe: What do these actors view as being the cause of the problem, and how do they think it should be resolved?

*Seriousness of the problem*

-On a scale of 1 to 5 (1 being low priority, 5 being high priority), where would you score the level of seriousness of the problem being addressed in your own mind and the minds of those working to promote AT?

*Strategies*

-What do you believe were some of the most useful strategies used in the promotion of AT in Ottawa/Helsinki?

#### *Resources*

-What would you say were some of the most useful resources at the disposal of AT advocates? Examples would include money, skillful leadership, public opinion and willing participants for advocacy.

#### *Policy preferences*

-What are some of your major preferences with respect to policy designed to promote AT? I.e. what policies do you think are the most important in the promotion of AT? Examples would include policies related to AT-favourable infrastructure investment, tax incentives or economic policies designed to influence choice of transportation modes, land use/urban planning, and marketing. These policies could be ones that were actually implemented in your city, or ones that you think hold considerable promise.

Probe: To what degree do these policies focus on improving conditions for AT as compared with discouraging the use of automobiles?

### **Obstacles to AT – actors and organizations**

#### *Identification of actors/organizations representing obstacles to AT*

-Who would you say were the main organizations and people who represented obstacles to the promotion of AT, particularly during any of the critical time periods if these were identified earlier?

-What would you say was the main (or major) factor (s) that motivated those people involved to oppose AT? -Another way of phrasing this would be to ask “what was/is the main problem that they were/are trying to address by favouring more less AT-friendly policies?”.

-On a scale of 1 to 5 (1 being low priority, 5 being high priority), where would you score the level of seriousness of the problem being addressed in the minds of those working to oppose AT?

*Evidence of coordination*

-Considering the actors representing obstacles to the promotion of AT in your city, can you comment on the connections between these actors and the degree to which they worked together in a coordinated manner to influence policy decisions related to AT?

*Strategies*

-What do you believe were some of the most useful strategies used in the opposition of AT in Ottawa/Helsinki?

*Resources*

-What would you say were some of the most useful resources at the disposal of those representing obstacles to AT? Money? Skillfull leadership? Public opinion? Willing participants, etc?

*Policy preferences*

-What are some of the major preferences with respect to policy that ultimately results in the prioritization of less active, sustainable modes of transport? In other words, what important policies are preferred by those interested (explicitly or otherwise) in better conditions for driving automobiles before alternative modes?

**Theme 6: Policy Brokers**

-Were there organizations or actors who you would say served as brokers between competing coalitions? By brokers I refer to people who attempted to build consensus between opposing sides by looking for compromises that would be acceptable to both sides.

**Theme 7: Venues**

-Can you describe what you believe were the main places (venues) that the debate concerning AT took place (e.g., municipal council, elections, media, within particular government departments, social media, other places?)

### **Concerning the specific challenge of winter**

*Explanatory note for participants:*

*One of the distinguishing reasons for the choice of Ottawa/Helsinki as a case for this study was the fact that these cities experience significant challenges for the promotion of AT as result of cold temperatures, snow and darkness during the winter months. Accordingly, participants are asked about their perspectives on winter-related considerations the promotion of AT in their respective cities.*

-Would you say that the climate of your city, particularly with respect to the relatively cold, dark, and snowy winters, has had any particular effect on the ability to promote AT?

Probe: If so, to what degree are the problems created by these challenges technical (e.g., the challenge of having to remove snow from sidewalks, bike lanes, and public transit routes), and to what degree are they more political (e.g. the challenge of investment in AT-friendly infrastructure and maintenance not being politically popular based on arguments such as “nobody will bike in the winter so it isn’t worth building the infrastructure or maintaining it in the winter”)

-Would you say that your city/jurisdiction made a conscientious effort to promote AT in winter conditions?

-If you answered “yes” to the above, what would you say are the main policies implemented in your city in order to promote AT in the winter?

Probe: Can you comment with respect to their degree of success?

**Additional Comments**

-Given our discussion today, is there anything of particular relevant to the promotion of AT in Ottawa/Helsinki that has not already been discussed but that is worth mentioning?

**Suggestions for additional interview participants and documents to consult**

-Would you be able to recommend additional people to conduct interviews with that would be able to provide similar information to we discussed today related to the promotion of either AT generally, cycling, walking, public transit or in the city of Ottawa/Helsinki?

-Are there documents that you could either recommend or consult of relevance to the topics we discussed today?

**Appendix C: Interview Analysis Template****INTERVIEW ANALYSIS TEMPLATE****Category:** Walking or Cycling or Public Transit or General Active Transportation**Interview participant - name:****Interview participant – relevant positions held:****Interview participant – relevant time period:**

<b>RELATIVELY STABLE PARAMETERS</b>
<b>POLICY SUBSYSTEM- GEOGRAPHIC BOUNDARY</b>
<b>POLICY SUBSYSTEM - ACTORS AND ADVOCACY COALITIONS- IDENTIFICATION</b>
<b>ACTORS AND ADVOCACY COALITIONS - CHARACTERISTICS</b>
<u>Policy actors in favour of AT (possible coalition members)</u> <ul style="list-style-type: none"> <li>• Policy core beliefs – problem definition</li> <li>• Policy core beliefs – serious ness of problem</li> <li>• Evidence of coordination</li> <li>• Strategies</li> </ul>

<ul style="list-style-type: none"> <li>• Resources</li> <li>• Policy preferences</li> </ul> <p><u>Policy actors in some way opposed to AT (possible coalition members)</u></p> <ul style="list-style-type: none"> <li>• Policy core beliefs – problem definition</li> <li>• Policy core beliefs – seriousness of problem</li> <li>• Evidence of coordination</li> <li>• Strategies</li> <li>• Resources</li> <li>• Policy preferences</li> </ul>
<b>POLICY BROKERS</b>
<b>KEY VENUES</b>
<b>EXTERNAL EVENTS</b>
<b>MAJOR POLICY CHANGES/CAUSES</b>
<b>CONCERNING WINTER AS AT POLICY CHALLENGE</b>

<b>ADDITIONAL COMMENTS AND INFORMATION</b>
<b>RECOMMENDATIONS FOR ADDITIONAL PEOPLE TO INTERVIEW/DOCUMENTS TO REVIEW</b>

### Appendix D: Interview Participant List

Notes:

1. While participant names have been omitted, all participants consented to having their identities revealed.
2. Roles and titles are as recorded in the interviews and should not be considered exact.

#### Helsinki

Participant #	Roles/titles – as described
1.	<p><b>At time of interview:</b> -Paid position for Helsinki Cyclists.</p> <p><b>Previously:</b> -Helsinki City Council, (Green Party). Vice Chair of the Committee for Infrastructure. -Also on City Council Board (includes 30 of the 85 total councillors). - Initiator of the Kaupunkifillari (City cyclists) blog. -Employed as an assistant to Member of Parliament. -For the past 2 years employed by the European Cyclists' Federation in Brussels.</p>
2.	<p><b>At time of interview:</b> -Vice-chairman of Helsinki Cyclists for 2 years (with the organization for 5 years)</p>
3.	<p><b>At time of interview:</b> -Member of Helsinki Cyclist Board (for 1 year)</p>
4.	<p><b>At time of interview:</b> -Employee of Finland Futures Research Centre, (University of Turku, Department of Economics, since 2013) -Volunteer with Dodo (NGO concerned with urban challenges in Finland)</p> <p><b>Previously:</b> -Bachelor's thesis (Political Science) concerning Helsinki's Cycling Policy in 2010. This was one of the first studies on urban cycling and related policies in Finland from a political science perspective. -Employee of Finland Futures Research Centre,</p>

	(University of Turku, Department of Economics, since 2013 <b>Relevant time period:</b> 2009-
5.	<b>At time of interview:</b> -Retired <b>Previously:</b> -Special Planner – Cycling, Helsinki City Planning Department (retired in 2009) (head of cycling planning in City of Helsinki) -Employed in a variety of positions (most connected with cycling) between 1971 and 2009 within Helsinki City Planning Department. -Described by many as “Mr. Cycling” in Helsinki for his acknowledged role as the leader of the development of Helsinki’s cycling network from the 1970s until 2009.
6.	<b>At time of interview:</b> -Traffic engineer, Responsible Cycle Transport, Helsinki City Planning Department. -Leads the Helsinki City Planning Department’s efforts to promote cycling. <b>Relevant time period:</b> 2008-
7.	<b>At time of interview:</b> -Bureau Chief, Helsinki Department of Transport and Traffic. <b>Previously:</b> -From 2008 onwards was in charge of the City of Helsinki’s efforts to promote cycling for transportation. <b>Relevant time period:</b> 2008-
8.	<b>At time of interview:</b> -Private consultant: Urban Policy Advisor -Urban planning blogger.
9.	<b>At time of interview:</b> -Contract employee of Helsinki City Planning Department. Title: Transportation Engineer, Helsinki City Planning Department <b>Previously:</b> -Master’s Degree in Transport Planning and Road Engineering from Aalto University School of Engineering – Concerning concept of <i>mobility as a service</i> (MAAS) -Earlier studies concerned telecommunications, Finnish energy models, and rail transportation.
10.	<b>At time of interview:</b>

	<p>-Transport Engineer, Public Transport Planner, Helsinki City Planning Department. Project Manager: Helsinki's Urban Mobility Policy</p> <p><b>Previously:</b></p> <p>-Master's Thesis concerned a GIS system to support public transport planning.</p>
11.	<p><b>At time of interview:</b></p> <p>Transport Planner, HSL (Helsinki Regional Transport Authority), 2011-2014.</p> <p><b>Previously:</b></p> <p>-Master's thesis concerned congestion charges.</p>
12.	<p><b>At time of interview:</b></p> <p>-Enemmistö (pro-AT NGO) Executive Board</p> <p><b>Relevant time period:</b> 1968-present</p>
13.	<p><b>At time of interview:</b></p> <p>-Enemmistö (pro-AT NGO) Executive Board</p> <p><b>Relevant time period:</b> 1982-</p>
14.	<p><b>At time of interview:</b></p> <p>-Retired</p> <p><b>Previously:</b></p> <p>-Worked for private planning firms, including his own firm (which is now WSP, based in Montreal), from the mid-1960s until the late 2000s.</p> <p>-Consultant in urban and transportation planning for 40 years.</p> <p>-Author of a book about the history of urban planning in Finland/Helsinki called "You cannot plan people. You can plan stone)</p> <p>His website: <a href="http://www.penttimurole.fi/Pentti-Murole-CV">http://www.penttimurole.fi/Pentti-Murole-CV</a></p> <p><b>Relevant time period:</b> 1955-</p>
15.	<p><b>At time of interview:</b></p> <p>-Head of Strategic Planning Division, Helsinki City Planning Department</p> <p>-Involved in planning for Espoo/Vantaa and Ostersunden (suburbs outside Helsinki city boundary)</p> <p><b>Previously:</b></p> <p>-Conducted research with the Centre for Urban and Regional Studies (University of Helsinki, now Aalto)</p> <p><b>Relevant time period:</b></p> <p>-2005- (but significant knowledge concerning longer term history)</p>

16.	<p><b>At time of interview:</b> Retired</p> <p><b>Previously:</b> Member of municipal Labour party (no longer exists), then the Green party from the 60s to the 90s. -Member of the City Planning Board from 1970 to 1992. (Labour party until 1989, Green Party between 89 and 92) -Lawyer, specializing in planning and environmental legislation. This included time working with the EU Ministry of Environment (planning, building, and nature conservation law). -Specialist in EU directives in these files.</p> <p><b>Relevant time period:</b> 1960-</p>
17.	<p><b>At time of interview:</b> -Retired</p> <p><b>Previously:</b> -1971-1999 Head of Traffic Planning, Helsinki City Planning Department -1964-1971, Planning Engineer, Helsinki City Planning Department -1962-63, completed academic training at Berkeley, California.</p> <p><b>Relevant time period:</b> 1964-</p>
18.	<p><b>At time of interview:</b> -Retired</p> <p><b>Previously:</b> -Deputy Traffic Planning Chief, Helsinki City Planning Department, Traffic Planning Division 2005-2011 (retired) -Bureau Chief, Helsinki City Planning Department, Traffic Planning Division, Traffic Signals Group, 1991-2005 -Helsinki City Planning Department, Traffic Planning Division, 1974-2011</p> <p><b>Relevant time period:</b> 1974-2011</p>
19.	<p><b>At time of interview:</b> -Member of National Parliament. -Member of Helsinki City Council (since 1985).</p> <p><b>Previously:</b> -Former leader of the national Green Party (2001-2005). -Former Minister of Health and Social Services. -Licentiate degree in statistics.</p> <p><b>Relevant time period:</b> 1965-</p>

20.	<p><b>At time of interview:</b> -Retired</p> <p><b>Previously:</b> -Director of Transport and Traffic Planning, Helsinki City Planning Department.</p> <p><b>Relevant time period:</b> 1971-</p>
21.	<p><b>At time of interview:</b> -Finnish Transport Agency - Specialist, Sustainable Mobility.</p> <p><b>Previously:</b> -Sociologist by training</p>
22.	<p><b>At time of interview:</b> Helsinki City Planning Department, Architect, (in charge of pedestrian projects in downtown Helsinki.</p>
23.	<p><b>At time of interview:</b> HSL (Helsinki Public Transport), Group Leader.</p> <p><b>Relevant time period:</b> 1994-. Has worked in traffic system planning for the last seven years, and generally on sustainable transport related topics since 1994.</p>

### Ottawa

Participant Name	Roles/titles – as described
1.	<p><b>At time of interview:</b> -Manager, Disease Promotion and Prevention. Ottawa Public Health.</p> <p><b>Relevant time period:</b> 2011 –</p>
2.	<p><b>At time of interview:</b> -Employee of KPMG (private firm)</p> <p><b>Previously:</b> -Chair – Centretown Citizens Planning Committee 1973-1974 -Municipal Councillor, Ottawa. 1975-1985 -Chair, Transportation Committee at Region, 1980-1985 -Member of OC Transpo Commission -Comprehensive Review of OC Transpo – 1998-1999 -Feasibility study of commuter rail – led to O Train -Risk assessment, funding sources, LRT -Studies of winter road/sidewalk maintenance and many other municipal functions.</p>

3.	<p><b>At time of interview:</b> - City Councillor, Capital Ward, since 2010.</p> <p><b>Previously:</b> -Author of several books about sustainable management. Co-founder of Clean Air Champions. -3 years with National Round Table on the Environment and the Economy.</p> <p><b>Relevant time period:</b> 2010 - (and certainly before this to a significant degree)</p>
4.	<p><b>At time of interview:</b> - Manager, Transportation Planning, City of Ottawa.</p> <p><b>Relevant time period:</b> 2005-</p>
5.	<p><b>At time of interview:</b> -Citizens for Safe Cycling – Advocacy Working Group. -Friends of the O-Train (public transit lobby group) -Planning blogger: westsideaction.com</p> <p><b>Previously:</b> -B.A., M.A., Geography – focus on land use and transportation -Canadian Transport Commission -Ministry of State for Urban Affairs – Urban Networks Branch -Transport Canada – Urban Networks Branch, Strategic Planning -Dalhousie Community Association of Ottawa – founding member</p>
6.	<p><b>At time of interview:</b> Director, Federal Approvals and Environmental Management, National Capital Commission</p> <p><b>Relevant time period:</b> 2012-</p>
7.	<p><b>At time of interview:</b> Journalist. Fellow with the Canadian Council for Democracy (<a href="http://thecommons-ccd.com/about/">http://thecommons-ccd.com/about/</a>). -Contributes regularly to the Ottawa Citizen. Blogger.</p> <p><b>Relevant time period:</b> 2010-</p>
8.	<p><b>At time of interview:</b> -Author, most recently of the soon to be published “Transforming Ottawa” concerning the long-term</p>

	<p>effects of the Gréber plan.          -City of Ottawa: Program Manager, Zoning Intensification and Neighbourhoods, Planning and Growth Management Department.  <b>Relevant time period:</b> 1945- (given research for book)</p>
9.	<p><b>At time of interview:</b>          -Architect (Barry Padolsky Associates Inc.)  <b>Previously:</b>          - Part of Action Sandy Hill and numerous other citizen-based efforts related to preserving/improving community livability.  <b>Relevant time period:</b> 1965-</p>
10.	<p><b>At time of interview:</b>          - Executive Director (and co-founder), Ecology Ottawa.  <b>Previously:</b>          -Executive Director of Climate Action Network Canada          -20 years experience (international) in social and environmental justice  <b>Relevant time period:</b> 2005-</p>
11.	<p><b>At time of interview:</b>          -Urban planning blogger  <b>Previously:</b>          -Political Assistant to Councillor Dianne Holmes, 1982-2014          -Founder of Ottawalk (Ottawa pedestrian lobby group).          Relevant time period: 1970-</p>
12.	<p><b>At time of interview:</b>          -Retired  <b>Previously:</b>          -Independent consultant          -Professor of Geography at the University of Ottawa,          - Ministry or State for Urban Affairs  <b>Relevant time period:</b> 1975-</p>
13.	<p><b>At time of interview:</b>          -Retired  <b>Previously:</b>          - Founder, key member of numerous Ottawa-based walking advocacy groups, notably</p>

	<p>Ottawawalk, Gottawalk, and most recently, Walk Ottawa.</p> <p>-Leader of the Green Party of Canada between 2001 and 2003.</p> <p>-Presented with award as father of the pedestrian advocacy movement of North America at the Congress of Pedestrian Advocates in Oakland CA in 2001.</p> <p><b>Relevant time period:</b> 1988-</p>
14.	<p><b>At time of interview:</b></p> <p>-Senior Engineer, Road Safety Studies, City Operations Portfolio, Public Works Department.</p> <p><b>Previously:</b></p> <p>Civil engineer (Calgary). Work involved studies on road safety.</p> <p><b>Relevant time period:</b> 1995-</p>
15.	<p><b>At time of interview:</b></p> <p>-Project Manager, Cycling Programs, City of Ottawa.</p> <p><b>Previously:</b></p> <p>-From 1999 worked for the City of Ottawa on cycling-related issues.</p> <p>-Was the first person hired by the amalgamated City of Ottawa to look after cycling for the city.</p> <p>-Member (as an advocate) for a cycling advisory group for the RMOC towards the end of the 1990s.</p> <p>-Prior to this he was a transportation planning consultant.</p> <p><b>Relevant time period:</b> Late 1990s-</p>
16.	<p><b>At time of interview:</b></p> <p>- Executive Director. Ottawa Centre Ecodistrict</p> <p><b>Previously:</b></p> <p>- Environmental sustainability consultant for last 25 years. Developed 12 sustainable community plans, active transportation frequently being a core component.</p> <p><b>Relevant time period:</b> 2012-</p>
17.	<p><b>At time of interview:</b></p> <p>President, Citizens for Safe Cycling</p> <p><b>Relevant time period:</b> 2009-</p>
18.	<p><b>At time of interview:</b></p> <p>Program Manager, Strategic Transportation Planning, City of Ottawa, Transportation Planning Branch, Planning and Growth Management.</p>

	<b>Relevant time period:</b> 1995-
19.	<p><b>At time of interview:</b> -Retired</p> <p><b>Previously:</b> -OC Transpo General Manager, 1981-1993. -Director -Planning, OC Transpo 1973-79 -Assistant General Manager, OC Transpo 1980 -Director Transportation Planning, RMOC 1976-79</p> <p><b>Relevant time period:</b> 1970-</p>
20.	<p><b>At time of interview:</b> -Transport Action Canada – Treasurer (former President) -Heritage Ottawa- President -Friends of the O-Train</p> <p><b>Previously:</b> Professional Engineer</p> <p><b>Relevant time period:</b> 1989-</p>
21.	<p><b>At time of interview:</b> -Retired</p> <p><b>Previously:</b> -Ottawa City Councillor, Capital Ward 1997-2010. -Candidate for Mayor, 2010. -Author: Urban Meltdown (concerning environmental sustainability and politics)</p> <p><b>Relevant time period:</b> 1997-2010</p>
22.	<p><b>At time of interview:</b> - Executive Director, Transit Ottawa (transitottawa.ca)</p> <p><b>Relevant time period:</b> 2007- (considerable knowledge about earlier years as well)</p>
23.	<p><b>At time of interview:</b> -Active and Safe Routes to School Program Coordinator – Ottawa &amp; Eastern Ontario, Green Communities Canada</p> <p><b>Relevant time period:</b> 2009-present</p>
24.	<p><b>At time of interview:</b> - Project leader: SJAM (Sir John A. MacDonald) Winter Trail</p> <p><b>Relevant time period:</b> 2015-</p>

**Appendix E: Ethics Approval Notices**

Copies of official approval notices are provided in the following pages.



**Université d'Ottawa**  
Bureau d'éthique et d'intégrité de la recherche

**University of Ottawa**  
Office of Research Ethics and Integrity

## Ethics Approval Notice

### Health Sciences and Science REB

**Principal Investigator / Supervisor / Co-investigator(s) / Student(s)**

<u>First Name</u>	<u>Last Name</u>	<u>Affiliation</u>	<u>Role</u>
Jean	Harvey	Health Sciences / Human Kinetics	Supervisor
Karl	Saidla	Health Sciences / Human Kinetics	Student Researcher

**File Number:** H08-14-09

**Type of Project:** PhD Thesis

**Title:** Explaining Active Transportation Success in Cities with Winter. Helsinki and Ottawa: A Comparative Political Analysis

<b>Approval Date (mm/dd/yyyy)</b>	<b>Expiry Date (mm/dd/yyyy)</b>	<b>Approval Type</b>
09/08/2014	09/07/2015	Ia

**(Ia: Approval, Ib: Approval for initial stage only)**

**Special Conditions / Comments:**

N/A

**Université d'Ottawa**

Bureau d'éthique et d'intégrité de la recherche

**University of Ottawa**

Office of Research Ethics and Integrity

This is to confirm that the University of Ottawa Research Ethics Board identified above, which operates in accordance with the Tri-Council Policy Statement (2010) and other applicable laws and regulations in Ontario, has examined and approved the ethics application for the above named research project. Ethics approval is valid for the period indicated above and subject to the conditions listed in the section entitled "Special Conditions / Comments".

During the course of the project, the protocol may not be modified without prior written approval from the REB except when necessary to remove participants from immediate endangerment or when the modification(s) pertain to only administrative or logistical components of the project (e.g., change of telephone number). Investigators must also promptly alert the REB of any changes which increase the risk to participant(s), any changes which considerably affect the conduct of the project, all unanticipated and harmful events that occur, and new information that may negatively affect the conduct of the project and safety of the participant(s). Modifications to the project, including consent and recruitment documentation, should be submitted to the Ethics Office for approval using the "Modification to research project" form available at: <http://www.research.uottawa.ca/ethics/forms.html>.

Please submit an annual report to the Ethics Office four weeks before the above-referenced expiry date to request a renewal of this ethics approval. To close the file, a final report must be submitted. These documents can be found at: <http://www.research.uottawa.ca/ethics/forms.html>.

If you have any questions, please do not hesitate to contact the Ethics Office at extension 5387 or by e-mail at: [ethics@uOttawa.ca](mailto:ethics@uOttawa.ca).

**Signature:**

Protocol Officer for Ethics in Research  
For Chair of the Health Sciences and Sciences REB



**Université d'Ottawa**

Bureau d'éthique et d'intégrité de la recherche

**University of Ottawa**

Office of Research Ethics and Integrity

## Ethics Approval Notice

### Health Sciences and Science REB

#### Principal Investigator / Supervisor / Co-investigator(s) / Student(s)

<u>First Name</u>	<u>Last Name</u>	<u>Affiliation</u>	<u>Role</u>
Jean	Harvey	Health Sciences / Human Kinetics	Supervisor
Karl	Saidla	Health Sciences / Human Kinetics	Student Researcher

**File Number:** H08-14-09

**Type of Project:** PhD Thesis

**Title:** Explaining Active Transportation Success in Cities with Winter. Helsinki and Ottawa: A Comparative Political Analysis

<b>Approval Date (mm/dd/yyyy)</b>	<b>Expiry Date (mm/dd/yyyy)</b>	<b>Approval Type</b>
09/08/2015	09/07/2016	Approved

#### Special Conditions / Comments:

N/A

**Université d'Ottawa**

Bureau d'éthique et d'intégrité de la recherche

**University of Ottawa**

Office of Research Ethics and Integrity

This is to confirm that the University of Ottawa Research Ethics Board identified above, which operates in accordance with the Tri-Council Policy Statement (2010) and other applicable laws and regulations in Ontario, has examined and approved the ethics application for the above named research project. Ethics approval is valid for the period indicated above and subject to the conditions listed in the section entitled "Special Conditions / Comments".

During the course of the project, the protocol may not be modified without prior written approval from the REB except when necessary to remove participants from immediate endangerment or when the modification(s) pertain to only administrative or logistical components of the project (e.g., change of telephone number). Investigators must also promptly alert the REB of any changes which increase the risk to participant(s), any changes which considerably affect the conduct of the project, all unanticipated and harmful events that occur, and new information that may negatively affect the conduct of the project and safety of the participant(s). Modifications to the project, including consent and recruitment documentation, should be submitted to the Ethics Office for approval using the "Modification to research project" form available at: <http://www.research.uottawa.ca/ethics/forms.html>

Please submit an annual report to the Ethics Office four weeks before the above-referenced expiry date to request a renewal of this ethics approval. To close the file, a final report must be submitted. These documents can be found at: <http://www.research.uottawa.ca/ethics/forms.html>

If you have any questions, please do not hesitate to contact the Ethics Office at extension 5387 or by e-mail at: [ethics@uOttawa.ca](mailto:ethics@uOttawa.ca).

**Signature:**

Ethics Coordinator  
For Chair of the Health Sciences and Sciences REB



**Université d'Ottawa**

Bureau d'éthique et d'intégrité de la recherche

**University of Ottawa**

Office of Research Ethics and Integrity

## Ethics Approval Notice

### Health Sciences and Science REB

#### Principal Investigator / Supervisor / Co-investigator(s) / Student(s)

<u>First Name</u>	<u>Last Name</u>	<u>Affiliation</u>	<u>Role</u>
Jean	Harvey	Health Sciences / Human Kinetics	Supervisor
Karl	Saidla	Health Sciences / Human Kinetics	Student Researcher

**File Number:** H08-14-09

**Type of Project:** PhD Thesis

**Title:** Explaining Active Transportation Success in Cities with Winter. Helsinki and Ottawa: A Comparative Political Analysis

<b>Approval Date (mm/dd/yyyy)</b>	<b>Expiry Date (mm/dd/yyyy)</b>	<b>Approval Type</b>
09/08/2016	09/07/2017	Approved

#### Special Conditions / Comments:

N/A

**Université d'Ottawa**

Bureau d'éthique et d'intégrité de la recherche

**University of Ottawa**

Office of Research Ethics and Integrity

This is to confirm that the University of Ottawa Research Ethics Board identified above, which operates in accordance with the Tri-Council Policy Statement (2010) and other applicable laws and regulations in Ontario, has examined and approved the ethics application for the above named research project. Ethics approval is valid for the period indicated above and subject to the conditions listed in the section entitled "Special Conditions / Comments".

During the course of the project, the protocol may not be modified without prior written approval from the REB except when necessary to remove participants from immediate endangerment or when the modification(s) pertain to only administrative or logistical components of the project (e.g., change of telephone number). Investigators must also promptly alert the REB of any changes which increase the risk to participant(s), any changes which considerably affect the conduct of the project, all unanticipated and harmful events that occur, and new information that may negatively affect the conduct of the project and safety of the participant(s). Modifications to the project, including consent and recruitment documentation, should be submitted to the Ethics Office for approval using the "Modification to research project" form available at: <http://www.research.uottawa.ca/ethics/forms.html>

Please submit an annual report to the Ethics Office four weeks before the above-referenced expiry date to request a renewal of this ethics approval. To close the file, a final report must be submitted. These documents can be found at: <http://www.research.uottawa.ca/ethics/forms.html>

If you have any questions, please do not hesitate to contact the Ethics Office at extension 5387 or by e-mail at: [ethics@uOttawa.ca](mailto:ethics@uOttawa.ca).

**Signature:**

Ethics Coordinator  
For Chair of the Health Sciences and Sciences REB

**Appendix F: Interview Consent Form**

A copy of the Interview Consent Form given to participants is provided in the following pages.



uOttawa

**Université d'Ottawa**

École des sciences  
de l'activité physique

Centre de recherche  
sur le sport dans  
la société canadienne

**University of Ottawa**

School of  
Human Kinetics

Research Centre for Sport  
in Canadian Society

Title of the study: Explaining Active Transportation Success in Cities with Winter. Helsinki and Ottawa: A Comparative Political Analysis.

Name of researcher:

Karl Saidla

Department of Human Kinetics, Faculty of Health Sciences

Name of supervisor:

Dr. Jean Harvey

Department of Human Kinetics, Faculty of Health Sciences.

Invitation to Participate: I am invited to participate in the abovementioned research study conducted by Karl Saidla and supervised by Dr. Jean Harvey. This study is being conducted as part of Mr. Saidla's Ph.D. Thesis.

Purpose of the Study: The purpose of the study is to investigate the role of political factors (e.g., political systems, public opinion, economic interests, values, and the way that these affect advocacy efforts) in the promotion of active transportation (defined for this research to include the utilitarian use of walking, cycling, and public transit) in the cities of Helsinki, Finland, and Ottawa, Canada.

Participation: My participation will consist of completing a single one hour interview during which I will be asked to answer relatively open-ended questions concerning my knowledge related to the active transportation policy process in either Helsinki or Ottawa. Provided that my permission is given, the interview will be audio-recorded. The interview will be conducted in English. The interview has been scheduled at both a time and location of my choice.

Risks: There are no foreseeable risks. I have received assurance from the researcher that every effort will be made to minimize any risks that might materialize.

Benefits: My participation in this study will help to fill an identified research gap in the understanding of the way that political factors might

613-562-5800 (4250)

613-562-5497

125 Université / University (227)  
Ottawa ON K1N 6N5 Canada

www.uOttawa.ca

influence the promotion of active transportation. The promotion of active transportation has the potential to bring major health and other (e.g., environmental, social, economic) benefits to society at large and to Canadians in particular. Given Canada's current and extremely high rates of physical inactivity and obesity, this area is extremely relevant as it has significant potential to contribute to the alleviation of both.

Possible benefits for me personally include the satisfaction to be derived from contributing to increasing knowledge with respect to the promotion of active transportation.

Confidentiality and anonymity: I have received assurance from the researcher that any information I share will remain both confidential and not directly attributed to me without my permission. Should the investigator wish to quote any of my remarks directly, he will contact me to obtain my permission before doing so.

I have been assured that should I desire to remain anonymous (which I may indicate later in this form), the investigator will make every effort to ensure this. In this case, I will be assigned a pseudonym that will only be known to the investigator and the supervisor. In the case that a pseudonym is assigned to me, I understand that my position, title, and/or organization may be revealed. Any documents or information that link the pseudonym to my name and the information that I provide during the interview process will be stored on a computer with a password known only to the investigator. Furthermore, the computer will be stored in either the locked private residence of the investigator or a locked office shared only with one other graduate student.

If I consent to having my identity revealed, it is acknowledged that my name may appear in all publications stemming from this project, including the thesis, presentations, and scientific articles.

Conservation of data: The data collected, including interview recordings and the investigator's hand-written or type-written interview notes, will be kept in a secure manner. Electronic data (in the form of MP3 and Word documents) will be stored on the personal laptop computer of the investigator that can only be accessed with a secure password. When the investigator is not in possession of the laptop it will be stored at either his private residence or a locked office. A copy of the data will be stored on a secure computer belonging to the Human Kinetics department of the University of Ottawa for a retention period of 5 years. The data will only be available with the use of a password known only to the investigator and

the supervisor. Hard copy data will be either kept directly with the lead investigator or in a locked filing cabinet belonging to the investigator. After 5 years all data will be either deleted or destroyed.

Voluntary Participation: I am under no obligation to participate and if I choose to participate, I can withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequences. If I choose to withdraw, all data gathered until the time of withdrawal will be voluntarily deleted or destroyed.

Acceptance: I, \_\_\_\_\_ agree to participate in the above research study conducted by Karl Saidla of the department of Human Kinetics, University of Ottawa, whose research is under the supervision of Dr. Jean Harvey.

I consent to have my identity revealed and my name used in all publications: YES:  or NO:

I consent to the audio recording of my interview: YES:  or NO:

If I have any questions about the study, I may contact the researcher or his supervisor.

If I have any questions regarding the ethical conduct of this study, I may contact the Protocol Officer for Ethics in Research, University of Ottawa, Tabaret Hall, 550 Cumberland Street, Room 154, Ottawa, ON K1N 6N5  
Tel.: (613) 562-5387  
Email: [ethics@uottawa.ca](mailto:ethics@uottawa.ca)

There are two copies of the consent form, one of which is mine to keep.

Participant's signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Researcher's signature: \_\_\_\_\_ Date: \_\_\_\_\_