Understanding Healthy Public Policy Processes: A Multiple Case Study of the Use of Road Modification Policy to Improve Active Transportation: City of Hamilton Case Study

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Prepared for the Canadian Partnership Against Cancer by the Propel Centre for Population Health Impact

This report highlights the following topics:
- routine accommodation,
- pedestrian planning,
- road projects,
- cost containment,
- decision-making tools
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1. INTRODUCTION

This case study provides a description of the City of Hamilton’s approach to developing their road modification policy to encourage active transportation. The case description was developed as part of a multiple case study that examined the key mechanisms, or processes, involved in developing municipal-level road modification policies that support active modes of transportation in Canada. The city was chosen as a case study because they adopted routine accommodation, a process that incorporates road modification into the infrastructure renewal process (City of Hamilton, 2012c). The focus of this case study is the Step Forward: Hamilton Pedestrian Mobility Plan (Pedestrian Mobility Plan) (2012) and policies which influenced the Pedestrian Mobility Plan’s development. Routine accommodation and the toolbox of solutions provided to city staff to guide all future road maintenance and road works projects is a shift from traditional road design because consideration of pedestrians and cyclists requirements rather than vehicle traffic are prioritized. Council’s adoption of the policy means that the toolbox of solutions will be embedded into the pending update to the Engineering Guidelines for Servicing Land Under Development Applications. Road modification recommendations outlined in the toolbox fall under the following categories: signals, crossing, lighting, intersection geometry (e.g. curbs), regulatory signs, transit, driveways, road diets (road restrictions), and parking (City of Hamilton, 2012b).

Additionally, the planning process for the development of the Pedestrian Mobility Plan (2012) used an innovative context sensitive design online mapping tool, which allowed citizen consultation, and engagement around specific road modifications. The toolbox of solutions outlines context sensitive design development patterns for staff providing them with guidance for choosing the ideal road modification for a specific area. Nine context areas are identified and include: natural, rural, village-hamlet, urban-village, suburban, urban general, urban core, downtown, and industrial. The recommendations for road modifications and infrastructure for each context is different (City of Hamilton, 2012c). For example, when the context is a natural area, the pedestrian mobility modifications would be multi-use recreational trails. When the context is a downtown area, the infrastructure would include sidewalks, pedestrian malls, street trees, pedestrian plazas, illumination, street furniture, crosswalks, and bike lanes. The Pedestrian Mobility Plan (2012) was an innovative and comprehensive process, which won awards for planning excellence from the American Planning Association and the Ontario Professional Planning Institute. Key mechanisms such as the role of champions, partnerships, and the use of evidence, as well as more detail on road modifications will be discussed within this case study. All documents examined in this report can be found in the reference section and where possible there will be a hyperlink. A glossary can also be found in Appendix A that defines terminology.

Please also note that the terms policy and plan are used interchangeably in the case description.
2. BACKGROUND AND CONTEXT

2.1. Geography and Demographics

The new City of Hamilton was formed after the amalgamation of the City of Hamilton and the surrounding towns and townships in 2001 (City of Hamilton, 2012a). The City of Hamilton is the 10th largest municipality in Canada and the 5th largest in Ontario with a population of 519,949 (Statistics Canada, 2011). It has a land area of 908,607.67 square kilometres, and a corresponding population density of 465.4 persons per square kilometre. There has been a 3.1% population growth rate between 2006 - 2011 (Statistics Canada, 2006; Statistics Canada, 2011).

The City of Hamilton uses different modes of transportation, but largely relies on vehicle use. The mode of transportation trends for the City of Hamilton is noted in Table 1 below. In 2011, based on the National Household Survey data 84.4% of people used vehicles, 9.9% used public transit, 4.9% walked, and 0.8% used a bicycle to commute to work. The City of Hamilton had a higher than provincial average of vehicle use for commuting to work and the rates for active transportation are lower than national averages (Statistics Canada, 2011). The active mode of transportation data for 2011 are lower using the National Health Survey data than the 2006 Statistics Canada survey data for Hamilton. This may be attributed to the variation in data collection method as the 2006 Statistics Canada Census was mandatory and the National Household Survey [NHS] was optional and resulted in a lower return rate for the NHS which impacted on validity.

Table 1: Key Characteristics of Case's Modes of Transportation

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<tr>
<td></td>
<td>2006</td>
<td>2011</td>
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<tr>
<td>% Workers commuting</td>
<td>84.6a</td>
<td>84.4b</td>
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<td>% Workers commuting</td>
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<td>by public transit</td>
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<td>% Workers commuting</td>
<td>5.1a</td>
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<td>by walking</td>
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<td>0.9a</td>
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<td>by bicycle</td>
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aCanada Census data (Statistics Canada, 2006)
bNational Household Survey data (Statistics Canada, 2011)

The City of Hamilton is located on the western coast of Lake Ontario and is a part of the Greater Golden Horseshoe (GGH) (see Figure 1 below for a map). The GGH is the name given to the area surrounding Toronto and is comprised of a variety of municipalities that house major urban centres as well as prime agricultural land. The GGH is significant because it generates 66% of
Ontario’s Gross Domestic Product (GDP) and over 20% of Canada’s GDP (Ontario Ministry of Infrastructure, 2006). Figure 1 below outlines the boundary for the City of Hamilton in Red and the boundary for Downtown Hamilton in purple (Google Maps, 2014).

Figure 1: Map of City of Hamilton and the Hamilton Downtown

2.2. Government

The Region of Hamilton-Wentworth transitioned from a two-tier government to a single tier government when it amalgamated with the surrounding municipalities of Ancaster, Dundas, Flamborough, Glanbrook, and Stoney Creek. The city is responsible for community and emergency services, planning and economic development, public health, and public works, which includes transportation. Elections are held every four years for the mayor and councillors (Ontario Ministry of Municipal Affairs and Housing, 2001). For more information on the structure of the municipal government, consult the Ontario Municipal Act (2001).

The City of Hamilton has currently developed supportive infrastructure for active transportation including off-road multiuse trails, dedicated bicycle lanes, and pedestrian infrastructure to increase walkability including an innovative urban braille system designed with consideration for accessibility (City of Hamilton, 2010). Currently, the City of Hamilton is focusing on increasing the percentage of modal split that is encompassed by active transportation through the promotion and development of innovative road modifications in the downtown area and in other communities within the city (City of Hamilton 2009; City of Hamilton, 2012c). A brief review of the history of planning within the City of Hamilton is helpful in understanding the planning context today. Overall, active transportation was seen as a priority following
innovative sustainability policies that were developed in the early 1990s (Regional Municipality of Hamilton-Wentworth, 1997). These policies, which were developed at the city, regional, and provincial levels, also contributed to the city's current work of developing road modification policies that support active transportation. Table 2 summarizes the different policies and plans that were developed at these different levels of planning. An overview of some of these documents follows under the section, Historical Context.

**Table 2: Policies that include Active Transportation**

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<td>The Big Move: Transforming Transportation in the Greater Toronto and Hamilton Area (2008)</td>
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<td>The Green Energy Act (2009)</td>
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<td>Climate Ready: Ontario’s Adaptation Strategy and Action Plan (2009)</td>
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<td>Active and Safer Schools (2002)</td>
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<td>Active and Safer Schools (2002)</td>
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*Book 15: Pedestrian Crossing Facilities (2011) is currently under review and is expected to be updated.*
3. THE ACTIVE TRANSPORTATION POLICY CONTEXT

3.1. Regional and City Planning

Sustainability was at the forefront of the Vision 2020 plan, which was first, developed and adopted in 1992 and has been updated every five years. This document describes the vision for sustainable development in Hamilton. The plan stated that, “related to development issues are trends in transportation use and choices. Hamilton-Wentworth’s major manufacturing industries have significantly reduced the amount of air pollution they produce, meaning the private motor vehicle has become one of the major contributors to air pollution” (Regional Municipality of Hamilton-Wentworth, 1997 p.10). The task force set up to develop the report identified seven major issues of concern. One concern was the need for a multi-modal transportation system. The report stated, the “transportation system offers inadequate opportunities for cycling, pedestrian, and public transit” (Regional Municipality of Hamilton-Wentworth, 1997 p.20). As part of the implementation actions, a Regional Bicycle Commuter Project was implemented. As such, active transportation landed on the agenda, and planning processes began to generate evidence to move forward within specific initiatives. In 1997, the former City of Hamilton conducted the Hamilton-Wentworth Community Cycling Survey. Survey data was referenced as a good source of information on riders’ perceptions, as well as biking activity in the city (City of Hamilton, 2013b). This data helped set the stage for future cycling planning.

The Growth Related Integrated Development Strategy Study referred to as GRIDS, represented a series of master plans, including the Transportation Master Plan (2007). This plan includes:

- an active transportation focus through transit;
- transportation demand management;
- as well as a focus on road capacity optimization; and
- some road expansion and development (City of Hamilton, 2007c).

Two focused plans were also developed in conjunction with the Transportation Master Plan (2007) to focus on active transportation these were the Pedestrian Network Strategy (2007) and the Cycling Network Strategy (2007). The Cycling Network Strategy (2007) identified that “the city has a well-established network of cycling routes, including bicycle lanes, on-street routes, cautionary on-street routes, and multi-use paths and linear trails.” The report recommended:

- on street bicycle lanes or shoulder lanes;
- signs and pavement markings;
- widening lanes;
- new multi-use pathways;
- escarpment crossing and incline railway;
- promoting cycling awareness and safety;
- providing and maintaining bicycle facilities; and
- linking transit and cycling trips (City of Hamilton, 2007b).
In 2008, the Mayor for the City of Hamilton signed the *International Charter for Walking* (1999), and a *City of Hamilton Motion: International Charter for Walking* (2008) was brought forward to council. The charter is a document signed by governments to commit to strategies that promote walkability (Walk21, 2014). The Canadian Walking Master Class process included a questionnaire to benchmark against the *International Charter for Walking* (1999); a webinar to share issues, ideas, and initiatives; and, the master class which included workshops and presentations, walkability audits, best-practice notes, and a wrap-up with feedback comparing the city to the *International Charter for Walking* (1999) principles (Green Communities Canada, Canada Walks, Walk 21 and Transportation Canada, 2009).

### 3.2. Provincial Planning

Provincial legislation in Ontario also influences transportation planning within Hamilton notably, the *Environmental Assessment Act* (1990), the *Greenbelt Plan* (2005), the *Growth Plan for Greater Golden Horseshoe* (2006), and the *Big Move* (2008). The Environmental Assessment Act was created in 1990 and requires that all major public sector developments in Ontario with the potential for significant environmental impact undergo a standardized environmental assessment of ecological, cultural, economic, and social impact. Transportation projects are subject to this Act (Ontario Ministry of the Environment).

The *Greenbelt Plan* (2005) established a protective land area with development restrictions around Hamilton to prevent urban sprawl and protect agricultural and natural land (Ontario Ministry of Municipal Affairs and Housing). Similarly, the *Growth Plan for Greater Golden Horseshoe* (2006) is a land use planning document that forecasts population and employment growth in the Greater Golden Horseshoe and sets policies for how to deal with growth. The plan also designates downtown Hamilton as an urban growth centre with specific population density targets (Ontario Ministry of Infrastructure). These planning documents promote intensification, create population densities, limit infrastructure that supports a high modal split of single occupancy vehicles, and facilitate active transportation (City of Hamilton, 2013a).

The *Big Move* (2008) is a plan adopted by Metrolinx, an agency of the Government of Ontario, which sets a regional transportation plan for the Greater Toronto and Hamilton Area. The plan identifies multimodal strategies, land use integration policies, and policy support for transportation planning (City of Hamilton, 2013a). Many municipalities (including Hamilton), have been aligning their local policies with this planning document. The City of Hamilton entered into a contribution agreement with Metrolinx to investigate the development of rapid transit services and supporting infrastructure. To begin the process, the City of Hamilton has completed a *Rapid Transit Feasibility Study* (2008). The resulting document was the *Rapid Ready: Expanding Mobility Choices in Hamilton* (2013), *which* recommended that Hamilton is not currently able to fund major rapid transit initiatives and should focus on making Hamilton rapid ready. One element to becoming rapid ready is promoting and supporting transportation modes such as walking and cycling (City of Hamilton, 2013a; City of Hamilton 2013b).
3.3. Current Context

In addition to a history of sustainability-focused planning, the process of the Rapid Ready Feasibility Study (2008) set the stage for Hamilton to develop two specific active transportation plans which are Shifting Gears: Hamilton’s Cycling Master Plan (2009) and Pedestrian Mobility Plan (2012). Shifting Gears (2009) was developed to guide operations of cycling infrastructure over the next 20 years. The project followed the environmental assessment protocol and involved significant public consultation by holding open houses across the city to obtain input and present the recommended cycling network (City of Hamilton, 2009). Shifting Gears (2009) incorporates cycling routes, end of trip facilities, promotion, and education. The plan had an implementation schedule with a long list of projects with significant costs attached to each project (City of Hamilton, 2009).

The Pedestrian Mobility Plan (2012) was developed to guide operations of pedestrian infrastructure over the next 20 years. The plan used:

- scientific research on chronic disease risk from physical inactivity and obesity;
- social media, including an interactive electronic mapping to identify major pedestrian destinations to understand positives and negatives about the destinations;
- inventories of existing pedestrian infrastructure;
- analyzed pedestrian/automobile collisions data and designed solutions matched with accident records;
- designed streetscapes into context zones using an urban transect and map to help understand each street’s uniqueness and pedestrian opportunities and constraints; and,
- promoted digital wayfaring techniques combined with air quality health monitoring to help better equip pedestrians (City of Hamilton, 2012b).

The Pedestrian Mobility Plan (2012) was briefly discussed in the introduction and will be the focus of this case study. The next section describes the policy window that opened to provide an opportunity for the Mobility Plan (2012) to get on the agenda.

3.4. Policy Window

As described in the previous section, transportation planning work that was developed over time, and at different levels of government, helped to set the development of current road modification policies that support active transportation. Continuity from previous transportation planning work was important for generating evidence, providing a framework for moving forward, and creating general momentum towards more progressive active transportation policy. One particular example is the International Charter for Walking (1999), which was “used as a framework initially for the [Pedestrian Mobility] Plan” (personal communication, January 9, 2014a). The Mayor’s signing of the City of Hamilton Motion: International Charter for Walking (2008) was also influential because it displayed “Hamilton’s commitment to improve mobility from provincial legislation and the International Charter for Walking” (personal communication, January 28, 2014). Some key informants also noted, “it was great to see that [previous efforts]
were actually taken into consideration in terms of moving forward” (personal communication, January 9, 2014a).

Another influential piece was the *Rapid Transit Feasibility Study Metrolinx: Draft Regional Transportation Plan* (2008). The study was a detailed examination of the transportation system as a whole and served as “a precursor to our Transportation Master Plan update” (personal communication, January 9, 2014b). The *Transportation Master Plan* (2007) also helped guide planning for active transportation by making clear that the city needed to optimize their existing roads first before considering costly roadway expansion. Active transportation was viewed as a solution to make the existing roadways more efficient through “accommodating more travel modes within those existing right-of-ways” (personal communication, January 9, 2014b).

In addition to these specific initiatives, the amalgamation of the City of Hamilton with surrounding municipalities necessitated discussions about how to best link the different areas of the new city, as well as adjust other plans to reflect all of the newly joined communities. This created an opportune time for active transportation discussions, and work like the *Rapid Transit Feasibility Study* (2008) described earlier in order to gain traction.

The aforementioned policy trends and political changes contributed to the emergence of a policy window for the *Pedestrian Mobility Plan* (2012) by generating support from multiple directions. “[Having] the province suggesting and telling us we need to do this...and...when you look at it from a provincial level down or a city level up, those documents and policies are driven all the way through... [these factors helped to] give a huge amount of credibility to” the recommendations in the *Pedestrian Mobility Plan* (2012) (personal communication, January 28, 2014).

In addition to the growing policy momentum towards active transportation road modification, ongoing issues within the City of Hamilton enabled active transportation to be desirable to the city. For instance, key informants noted that there was increasing recognition by council of challenges with existing city sidewalk infrastructure and associated safety issues. Additionally, road modification policy to support active transportation was increasingly being viewed as a way to address economic, health and environment concerns. How active transportation was promoted to address these concerns as well as how the concerns were addressed to get active transportation on the agenda, develop policy, and have the policy adopted will be presented throughout the following sections.

4. **KEY POLICY CHANGE MECHANISMS**

This section describes the key contextual issues, strategies, and processes that were important to developing the road modification policy that supports active transportation in the City of Hamilton. Key factors included the role of pre-existing policies and initiatives, gaining buy-in from stakeholders, collaboration among diverse partners, advocacy, and cultural norms.

4.1. **Partnerships & Champions**

Gaining buy-in from key stakeholders was also critical to developing the City of Hamilton’s road modification policies. Different partners that played a role included various departments within the City
of Hamilton, including Public Works and Public Health Services, council, and the Board of Health, citizens of the City of Hamilton, and community partners. These groups not only served as partners, but often as champions for the policy work. The roles of these different partners are described below.

**City Staff**

Within the City of Hamilton, a high level of administrative and staff support for active transportation was reported. City staff were described as being motivated and invested in bettering their city and often placed in roles that enabled them to take actions that supported active transportation policies, as illustrated in this quote:

> We had really significant ... staff involvement right from the very beginning, and the staff involvement was from... senior [staff] in [the various] city departments. So, they were people that had a vested interest in the city and were in departments that had the opportunity to eventually make change, whether it be through policy or through engineering, and so on. (personal communication, January 28, 2014)

The process of collaboration across city departments during policy development appeared to help create a more acceptable end product, as well as strengthen the relationships between partners. The process began by setting up a team comprised of senior staff from different city departments, such as “Public Health, Transit, Operational people for snow removal” (personal communication, January 9, 2014b). One of the reasons for incorporating multiple perspectives early on in the policy development process was that it would help the project’s staff to better understand pedestrian issues, how to best frame the discussion to council, and to limit the number of questions that city staff would face when the policy was being reviewed.

There were added benefits identified for having senior staff from various departments engaged. In particular, the commitment from the top resulted in clear direction being given to staff around the implementation of projects. Engaging senior staff on the planning team also enabled collaboration across departments where they may not otherwise have existed. For example, within Public Health, “having the Medical Officer of Health be supportive of active transportation really enables [us] to do the work that we’re doing to support Public Works and other departments. So both our [Chronic Disease Prevention Section] and our Healthy Living [Section from our Public Health Service Division] supplied some of their support towards Public Works” (personal communication, January 9, 2014a).

**Key Partners and Champions**

Key informants also noted that having a project champion was very important for facilitating collaborations throughout the policy development process. The project team included a team of consultants, who identified that having a champion within the city who could “take the information that we were assembling and putting forward and relating it back internally, check the temperature of it with respect to other departments and senior management teams, and constantly be there to keep an eye on it” (personal communication, January 28, 2014), was very helpful to hone in on the most acceptable form and framing for the final policy report. The role of champions was not only important to the development of the policy, but was also seen as an important recommendation within the policy for future implementation. This was so important
that the City of Hamilton’s policy recommends a Pedestrian Mobility Coordinator to formalize a champion role when implementing the plan because “having a key staff person or persons that are supportive of a concept is important and having them there day to day as part of their role is very important” to building relationships and seeing the work through (personal communication, January 28, 2014).

**Public Health and Ontario Boards of Health**

Public Health Services, a department within the City of Hamilton, also influenced the development of policy. The department has a history of collaborations on various projects to increase active transportation, such as the *Canadian Walking Master Class* (2009), an initiative of Walk21. This project led to the signing of the *International Walking Charter* (1999). Public health played a leadership role in assisting Walk21, which hosted the *Canadian Walking Master Class* events in Hamilton (2009).

In addition to Public Health Services playing a leadership role in the Walk21 event they also prioritize health-related issues within the city. The role of public health staff changed over the years from one of a consultant invited to comment on transportation plans after they were completed to a participant at the planning table. They talked about teaching themselves how to provide commentary on city development policy and gaining knowledge and skills over the years to provide helpful comments on planning and policy documents. Buy-in from the Public Health Services was easy to garner given their commitment to policy and environmental changes that can improve the built environment and prevent chronic disease. Also, the *Ontario Public Health Standards* (2009), which guides public health action, includes a focus on healthy living, chronic disease prevention and the built environment (Ontario Ministry of Health and Long Term Care, 2014). A key feature of public health’s work in this area was described as follows, “Our main focus is active and sustainable transportation, trying to increase people’s physical activity through active transportation in their daily life as one of the risk factors for chronic disease” (personal communication, January 9, 2014a). The broader concern regarding the obesity epidemic was another motivating factor that facilitated buy-in among public health staff, “the whole obesity piece has come up again, that’s at the provincial level… [and we] are looking at those pieces as to how we can address obesity and how physical activity and active sustainable transportation can play a role in addressing that” (personal communication, January 9, 2014a).

The Board of Health also supported active transportation initiatives and were particularly attuned to issues that addressed “the social determinants of health here in our city” (personal communication, January 9, 2014a). In addition, the municipality was described as having a “mentality that investments made now, such as around road modifications to increase active transportation, will help reduce health burdens and tax burdens of citizens in the long run” (personal communication, January 9, 2014a).

**Council**

Council also played an important role in the policy development process. Council was described as supportive of the policy because it addressed an issue of ongoing concern, which was public safety. As one key informant noted, “safety is always something that councils and municipalities are looking at” (personal communication, January 28, 2014). Council recognized that road
modifications to accommodate active transportation would address some common safety concerns including, dangers of sharing roadway lanes with vehicles, sharing sidewalks with cyclists, and participating in active transportation on or adjacent to roadways with fast moving vehicles. It was also reported that some council members were advocates of active transportation, which helped to “shift the mindset of some other decision-makers [on council] to get things done” (personal communication, January 9, 2014b).

**Public**

Buy in from the public was a strong influencing factor that helped the City of Hamilton get road modification policy on the agenda and approved. Having advocates from the community “go in front of council and suggest we want more of these things [active transportation-supportive policy changes] has been a benefit because it’s one thing for staff to advise council, it’s another thing for the public to come out to meetings and to advocate for these things” (personal communication, January 9, 2014b). Key informants also indicated that as the public observed and experienced the city’s active transportation initiatives in the past, they began to “express greater interest...[particularly in] the last four or five years [for further policy change, recognizing [that] the status quo and the way things were done in the past haven’t been working” (personal communication, January 9, 2014b).

**Community Organizations and Business Support**

Additional to public support, community organization and businesses within the public sector were seen as valuable partners. Key informants noted that a variety of community advocates contributed to the policy process by providing evidence and promoting the initiative to their partners and networks. For instance, the Social Planning and Research Council of Hamilton (SPRC) and the Hamilton Chamber of Commerce were identified by more than one key informant as serving an influential role in promoting road modification policy that supports active transportation. Specifically it was noted that, “It’s kind of been from the ground up having that interest from our Chamber of Commerce and Social Planning Research ... for those people to get council’s interest in it gave us a better opportunity to integrate those themes into the overall transportation policy for the city” (personal communication January 9, 2014).

The SPRC is a charitable organization funded to improve the quality of life in Hamilton through research, community development, community engagement, and service planning. The organization advocated for complete streets policy through the development of a council brief (Social Planning and Research Council of Hamilton [SPRC], 2014). At the time, complete streets policies had been adopted in over 500 communities within North America. The SPRC built on the work of Complete Streets for Canada, an organization with a mandate of conducting research on complete streets, as well as maintaining a website of resources (SPRC, 2013; Complete Streets Canada, 2014). The SPRC included a line in the draft policy, which stated, “The implementation of complete streets shall contribute to reducing the social, health and economic impacts of disparities between Hamilton’s neighbourhood” (SPRC, 2013, Complete Streets for Canada, 2014). Once they had the policy drafted they hosted a public event and received citizen support. With citizens backing their work, the SPRC brought forward a draft complete streets policy to the City of Hamilton Council for adoption. The City of Hamilton Council recommended that the Complete Streets Policy for Hamilton be referred to staff for review.
The Hamilton Chamber of Commerce also played an important role in the policy process by providing evidence illustrating the linkage between active transportation and improvements in the economy. For more information on the Hamilton Chamber of Commerce’s role, please see the section, entitled evidence-informed policy presented later in this report.

4.2. Community and Partner Engagement

Building partnerships and public engagement were critically important throughout the policy development process. Key factors included engaging a wide range of stakeholders early on in the planning process to build buy-in and ownership, using different strategies and techniques to engage stakeholders, and facilitate acceptance of routine accommodation.

Community Partnerships

Building partnerships and collaborating with different partners across city departments and with others who did not work for the city was critical to developing the road modification policies that supported active transportation. These collaborations were recognized as important because the policy would be integrated within the mandates of staff working across departments, such as Planning and Economic Development, Public Health, and Public Works. Additionally, key informants understood that the policy would have broad impact on citizens and various stakeholders, such as businesses. Partnerships were also a common way of working in the city as it formed a key feature in the development of policies and projects described earlier. The recent plans, *Shifting Gears: Hamilton Cycling Master Plan* (2009) and *Step Forward: Hamilton Pedestrian Mobility Plan* (2012) built on previous policies and projects, and were supported by developing and maintaining collaborative relationships with diverse stakeholders. For example, health advocates involvement in planning increased in 2002, and this participation was seen as a “stimulus for future collaboration” (personal communication, January 9, 2014a). One key informant talks about the expanding view of active transportation from a program to looking at the role of the built environment in facilitating more active transportation. Initially, they were “looking at active transportation as being a program, [then they began] incorporating health and physical activity, [and] injury prevention pieces around 2006/2007 into city documents. [Now they are] looking at a policy and environmental change, so looking at a bigger picture piece” (personal communication, January 9, 2014a).

Key informants discussed the importance of engaging different partners throughout the policy process in key ways. Firstly, and as discussed earlier, bringing different partners together to collaboratively work on policy change enhanced buy-in, and through their participation and input enhanced ownership of the initiatives. Secondly, different partners offered different perspectives, resources, knowledge, and skill sets that helped push policy efforts forward. For instance, public health was described as being “a partner at the table” and a key resource for providing the evidence needed to “make the case” for active transportation (personal communication, January 28, 2014). “One of the other big pieces” that helped garner buy-in was seeing “that accountability carry through the different processes” like the signing of the *International Charter for Walking* (2008) (personal communication, January 9, 2014a), which provided “a nice segue into that *Pedestrian Mobility Plan* (2012)” (personal communication, January 9, 2014a).
Engaging the Public

Within all Ontario public sector projects with the potential for significant environmental impact, the Environmental Assessment Act (1990) dictates that public consultation must occur (Ontario Ministry of Environment). However, there are various levels of engagement and the specifics of the approach are discretionary to the project team. Engaging the public in the policy development process was described as “absolutely critical to having this [policy] move forward” (personal communication, January 28, 2014). As such, the policy development initiative took a “really comprehensive approach” (personal communication, January 28, 2014), utilizing several mechanisms to engage the public to obtain buy-in and input into the planning process. Some of the key engagement mechanisms employed are described below.

Interactive mapping was used as a novel way to ensure context sensitive pedestrian needs assessment data was obtained:

[The interactive map] allowed the citizens of the city to comment back to us, to use the map that had icons. They could move the icons onto various pieces of the city, both the rural and the urban areas, and then they were allowed to type in comments to us, and those comments were categorized later by our study team. What was kind of interesting, we had more than two times the per capita average of all US cities in participation, so we had over 1,643 people participate in that online tool. Then, we took those, the number of markers and things they gave us, and we ranked them by the number of occurrences, and then sorted them very simply by what people felt were the most important things. (personal communication, January 28, 2014)

Context sensitive design was a strategy employed to address these specific pedestrian needs in a meaningful way, which is discussed later in the report.

Outreach

Another engagement strategy used was for city staff to go places people most frequented (e.g., the farmers’ markets) throughout different regions of the city rather than having them attend a meeting at a pre-determined time and location. According to key informants, this approach reached “different people from different parts of the city and [obtained] different perspectives on different issues, including those whose voices may otherwise not have been heard” (personal communication, January 9, 2014b).

Creating a Mailing List to Keep People Engaged

The project staff also created a mailing list distributed through various project partners, such as “senior staff and interest groups, mobility groups and accessibility groups in the city, Public Health, and various departments, to really get the word out there” (personal communication, January 28, 2014). The mailing list “grew fairly quickly and we gained a lot of great interest through the whole process” (personal communication, January 28, 2014). Obtaining a high level of feedback helped move the project forward, and the mailing list was seen as “one of the reasons we had such a high return rate” in the various engagement activities requiring feedback (personal communication, January 28, 2014). The “almost overwhelming response... meant that when we went to council ultimately, [we could] say with great confidence that ‘these are the concerns of
the citizens of the City of Hamilton, these are the fast issues’” (personal communication, January 28, 2014).

**Using Active Listening and Responding to Needs**

The quality of engagement was enhanced when project staff demonstrated active listening to the public and demonstrated that the public was heard. Key informants noted that, “there's way more information available to people nowadays and people are way more knowledgeable about issues, so you don't have to kind of start from square one in educating them on what some of the issues are” (personal communication, January 9, 2014b). This enabled staff more time to focus on “listening to peoples’ issues or concerns so that when information was framed, it included those things that were important to people” (personal communication, January 9, 2014a).

Demonstrating to the public that they were heard was also important to the policy development process and gaining and maintaining public buy-in to the policy change. Project staff demonstrated that they listened by ensuring that “each time we got together, whether it was the staff meetings, the public, or other, they would get a recap and say… ‘These are the pieces of information we’ve discovered since the last time we got together and heard what you said, and here are some options or solutions’” (personal communication, January 28, 2014).

**Using Media to Promote Policy Change, Convey Evidence, and Educate the Public**

In addition to public engagement, the project team also used various forms of media to promote awareness and educate the public, such as social media (i.e. Twitter and Facebook), newspapers, and a project website. In particular, the public media was approached ahead of time so that stories could be evidence-informed:

> The [Hamilton] Spectator was very good…[We gave] them advanced notice of what we’re doing, kept them communicating with us in terms of the study updates, but also when the public meetings came up, we always of course invited the councillors and the council members. Many did attend and we tried to give the Spectator and the other newspapers useful information. Often times, we had a fact sheet or a summary sheet, or some quick facts or quick takeaway, and provided imagery if they needed it…. We found that they were really well balanced [in their media portrayals], and because they had good background information... and because we had the support of citizens coming forward rather than being in an antagonistic or opposition mode, the newspaper was quite interested in interviewing people or talking to people... so they were quite helpful. (personal communication, January 28, 2014)

**Using a Team of Experts**

The policy development process also engaged “a team from across the country of the best experts” some of whom had been involved with previous projects with the City of Hamilton (personal communication, January 28, 2014). Members of the consulting team included G O’Connor Consultants, in association with McKibbon Wakefield Inc., CIMA+,Toole Design Group from Seattle, and Don McLean from DMD Consultancy in Vancouver & Associates Ltd. They won the Planning Excellence Awards from both the American Planning Association (Upstate New York
Chapter) and the Ontario Professional Planning Institute (OPPI) for the *Pedestrian Mobility Plan* (2012).

The aim of bringing together this expertise was that, “we tried to bring a lot of that previous thinking and previous public process and previous knowledge into this, and we sought out the best experts in the field to help us” (personal communication, January 28, 2014). Overall, the team used an amalgamation of professional expertise and Hamilton-specific experience. Engagement of this range of expertise was important to give guidance on key elements to include in the policy. One particular area in which the expert team was highlighted to be beneficial was to help explain a new strategy that was proposed in the policy – routine accommodation and context sensitive design. In addition, their involvement was also said to help with council’s understanding of the policy during the development process and gave credibility to the strategies pitched in the policy.

### 4.3. Framing the Issue

How the policy was framed was important for gaining council and public support. This was accomplished in a variety of ways including, framing the policy change around the benefits it can provide, as one of “modal choice” (personal communication, January 9, 2014b), building on legislation and previous policies, making policy easy to implement through use of routine accommodation, and making the policy easy to read.

**Incorporating Legislative Considerations**

The *Pedestrian Mobility Plan* (2012) included a section on legislation considerations where the team “tried to consolidate all of the applicable documents from a provincial level to a regional level, from the previous structure of the City of Hamilton, which had a region, down to current documents, and related studies that spoke to pedestrian mobility, transit-oriented design and transit-friendly facilities” (personal communication, January 28, 2014). That process of reviewing the relevant policies, documents, and literature allowed the team to draw out “key comments or considerations that we needed to think about, and try to relate those back to how the city would go forward with something of this scale” (personal communication, January 28, 2014).

Another key consideration was the City of Hamilton’s vision to be “the best place in Canada to raise a child, promote innovation, engage citizens and provide diverse economic opportunities, and we tried to make this plan inclusive for all levels of mobility, where it refers to transportation modes that use pedestrian facilities, including walking, running, strollers, scooters, wheelchairs and walkers” (personal communication, January 28, 2014).

**Making the Policy Feasible to Implement through Routine Accommodation and Context Sensitive Design**

Routine accommodation, as proposed in the *Pedestrian Mobility Plan* (2012) enabled the council to see that the policy could be feasibly implemented. Routine accommodation utilizes a toolbox of potential solutions to allow for simple, routine accommodation of various pedestrian considerations (City of Hamilton, 2012b). Routine accommodation is a strategy meant to ensure that “every time you do a project in the city, consider pedestrians, consider these things, use the tools we’ve given you and make the right choices” (personal communication, January 28, 2014).
Using this approach increased the cost per project slightly by 2% to 7% and allowed change to happen progressively over time without having to commit to large projects with large budgets. Overall, the approach was described as one that could help to address the financial barriers of large projects.

As mentioned before, an important factor that made routine accommodation feasible in the City of Hamilton was that the city was reviewing their standards and related policies, so recommendations could be incorporated into the process of developing new standards. In addition, the supporting upper tier documents were seen as helpful to ensure that the recommendations were within the current planning initiatives and directions to ease adoption and acceptance.

The toolbox of solutions that was developed as part of routine accommodation planning was intended to guide staff on how to approach road modifications in context-specific ways. Specifically, the toolbox of solutions presents a number of recommendations for staff to address the unique needs of the citizens and infrastructure that surrounded the locations targeted for road modification. The road modifications outlined in the toolbox include:

- parking recommendations including, parking restrictions at intersections to improve visibility, and back-in angle parking to provide better vision to on-coming traffic;
- sidewalk recommendations for example, clearance widths of 1.5 m and heights of 2.4 m to increase access and reduce obstructions, sidewalk buffers, and recommendations to improve visibility of transit stops;
- curb considerations such as, extensions to minimize travel time to cross the street, curb radius reconstructions to create sharper turns, and reduce turning speeds, curb ramps to allow for smooth transitions from the sidewalk to the street;
- a number of recommendations around driveway design are provided to improve safety including consolidation of driveways;
- several recommendations around lighting are made including, good quality illumination at pedestrian crossings, and illumination along corridors;
- numerous recommendations around signals such as, intelligent transportation systems with video detection to allow for extended pedestrian signal phase if required, half signals to allow pedestrians to cross on demand without unnecessary delays, push buttons to allow for crossing, leading pedestrian interval which provides 4 to 7 seconds between the green and walk signals, and mid-block staggered signals with pedestrian island half way for crossing multi-lane roadways, pedestrian indicator countdowns signal and timing to determine when to cross;
- reducing vehicle lane widths to encourage slower speeds;
- marked crosswalk locations indicating preferred pedestrian crossings and high visibility crosswalk marking to aid in visibility;
- design considerations for medians;
- paved shoulders for roadways;
- protected left turn phase allowing pedestrians to cross;
driving restriction recommendations including, right in right out driveways allowing only right turns, and right turn on red restrictions;

• right turn slip lane with directional island for pedestrians;

• reducing the number of lanes on multi-lane roadways;

• sidewalk buffers between pedestrians and vehicle traffic; and

• avoidance of skewed intersections (City of Hamilton, 2012c)

The toolbox of solutions was established because specific community needs were identified and it was noted “pedestrian issues are so microscopic” (personal communication, January 9, 2014b). In addition, using context sensitive design allowed for the use of local data in regards to specific community needs and ultimately allowed the planning staff to prove that they were actively listening to the public. When asked how context-specific design is working, a key informant said, “It still comes down to individual sites, locations. I think it's still an ongoing learning process of what people's views are depending how they’re immediately impacted” (personal communication, January 9, 2014b). Key informants also noted that having project staff meet with staff from different city departments (e.g., Operations and Road Maintenance, Engineering and Planning) to train them on how to implement the strategy helped them to “really embed it into the regular everyday processes” (personal communication, January 9, 2014b). For more detail on routine accommodation, detailed descriptions of road modifications solutions and the context sensitive design framework see the City of Hamilton Pedestrian Mobility Plan Appendix 17: Routine Accommodation and Toolbox of solutions, as of Fall 2011

Presenting the Plan as a Response to Higher Direction and Previous Policy

A key factor that helped gain council’s acceptance of the new policy was that it was developed within higher level policy and presented as being in-line with the current political agenda. The link to higher level policy and the link to other policies through routine accommodation helped council understand the relationship to provincial strategy “relating back to big-picture provincial policy, big-picture thinking, show them how these documents really are driven from top-down government policy, how they come through official plans, and then show very simply that we’re not building a list of projects” (personal communication, January 28, 2014). When policy was adopted it was noted, “council felt very strong with the document, that it was well grounded, that it related from provincial documents all the way down to city/municipal documents” (personal communication, January 28, 2014).

Understanding Council

Consultations with council during the policy development process, and staff experience working with council on previous policy were also identified as important factors that influenced council’s approval. This history of experience culminated in a sound understanding of council’s needs, what they considered in the decision-making process, including issues they supported. “Council, especially in recent years, [were] supportive [of] initiatives with a public health focus” (personal communication, January 9, 2014b). This understanding enabled experienced senior personnel to instruct staff on how best to present the policy for approval. In addition to understanding what council wanted, the project staff were also cognizant of what council didn’t want and shaped the policy and the way in which it was presented accordingly. Quite simply, “what we tried to do was
give them a list of concerns and a range of solutions and say, ‘here’s how you can solve those problems and here’s how you can address them incrementally over a period of time with a modest cost increase to your capital and operations budget’” (personal communication, January 28, 2014).

The project staff also educated council about the advantages of the proposed strategy prior to submitting the policy for adoption through workshops and meetings. In particular, highly respected consultants were used to convey the validity in the proposed policy approach and address specific areas of concern. This was done multiple times through meetings with council as well as with other key stakeholders to help convey concepts and help keep them informed of upcoming changes and incorporate their concerns.

**Framing Messaging around the Benefits of Policy Change**

How messages were framed was also important to gaining council and public support. Messaging was framed around the benefits of the policy, and primarily emphasized ...health, but also the economy, and to a lesser extent the environment, by “reinforcing the idea of a walkable city that would attract residents and businesses” (personal communication, January 28, 2014). Key informants also noted that messaging was tailored to the needs and preferences of different audiences, as illustrated in this quote

> When you’re speaking to council, it’s often about that economic piece...When you’re speaking to a community, you needed to know what’s important to them...and each school itself has different values and interests in what they want, so [we really had to] shape our messaging. (personal communication, January 9, 2014a)

**Framing Messaging around Modal Choice**

The policy was also framed to promote the notion of modal choice; “We're really trying to be more complete and more balanced, and I think we try to avoid saying that we're making it pedestrians first or cycling first or cars first. It's kind of, what's the best balance of all the travel modes at any given time. So in some situations, it might be pedestrian first. In some situations, it’d be car first. It's really about providing modal choice” (personal communication, January 9, 2014a). The thinking behind this approach was that efforts to rebalance road design would give people choice in how they got around and that this in turn, might help shift the city's vehicle-focused culture around transportation.

**Making the Report Easy to Read**

One simple consideration that the project staff made was to consider readability of the final document. “We spent a significant number of months rewriting almost the entire document...[based on] peer review by staff in different departments ...to simplify to four or five pages with take away [messages] so if nothing else, council would read those few pages at the front, and if they could get those big bullet points, then we had a win” (personal communication, January 28, 2014).
4.4. An Evidence-Informed Policy

An extensive amount of evidence was used throughout the policy process including scientific, local data, best practice, needs assessments, surveys and expert consultation. “The [Pedestrian] Mobility Plan was an evidence-based research project” (personal communication, January 9, 2014b), that utilized evidence and facts generated through public consultations, research reports, best practices in other municipalities, and information obtained from project partners. The evidence was used “to come up with our strategy in how... to implement... how to come up with a different toolbox of solutions that could be applied to any given matter within the context sensitive situations... how we came up with an overall strategy and plan, and how we framed that discussion to the public and as well to decision-makers” (personal communication, January 9, 2014b).

Other Partners and Production of Evidence

A variety of individuals from Public Health, non-governmental agencies, the Hamilton Chamber of Commerce and McMaster University, contributed to the policy process by providing evidence. For instance, different divisions in Public Health (e.g., Health Protection and Healthy Living) provided their experiences and evidence “from the air, water, health side of things” Environment Hamilton and Green Venture (personal communication, January 9, 2014b), two non-governmental agencies also provided a strong voice for the environmental issues around active transportation and were involved in local data collection that informed the policy.

As mentioned previously, the Hamilton Chamber of Commerce played an important role in the policy process. This organization provided evidence linking walkable communities to the economy-generating creative class and promoted this message to the community with a report titled Walkability and Economic Development: How Pedestrians and Transit-oriented Environments Attract Creative Jobs in Hamilton (Hamilton Chamber of Commerce, 2012). This provided valuable evidence for the potential economic gains by attracting desirable qualified personable to enable growth of businesses the creative class sector.

McMaster University helped to conduct a literature review and also “…played a role in some of the environmental pieces from an air quality perspective as well” (personal communication, January 9, 2014a).

Engaging other partners proved mutually beneficial for both policy development planning, and raising awareness more broadly about some of the partners’ own initiatives:

So, the university was able to also identify to us some concerns they had about transit interface, about public and pedestrian movements, cycling concerns, and we were able to relay those back to the appropriate departments... So, the [planning process] actually became an interesting vehicle for the public and, in this case, McMaster, or other agencies to communicate directly. So, that was, I think, an unexpected or unanticipated benefit of this, as well. (personal communication, January 28, 2014)
5. SUMMARY OF KEY FINDINGS AND LESSONS LEARNED

The City of Hamilton is an innovative municipality that used road modification policy to support active transportation. This case report described the development of the city’s *Pedestrian Mobility Plan (2012)* and policies which influenced its development. Several key processes were identified that led to the successful development of the policy and are summarized below.

The City of Hamilton hired a manager with extensive experience in active transportation who embraced this mode of travel in his own life; the work environment was supportive with knowledgeable directors, who were willing and able to assist staff to successfully understand, prepare, and deliver reports to council. Additional champions to the process were the Public Health Services whose staff had advocated for changes to support active transportation for many years. Their involvement in policy development changed over time, initially they provided recommendations on transportation projects after they were completed however; in the *Pedestrian Mobility Plan (2012)* public health staff was a member of the planning team throughout the development process. Additionally, Public Health Services staff demonstrated to council the possibilities of achieving active transportation success with their own Active and Safe Routes to Schools Project. The city planning expertise was enhanced when they hired the award-winning consultant team, Glenn O’Connor Consultants Inc., to guide the policy development process. The work of the consultants was so extensive that it forms multiple appendices on the City of Hamilton web site. The consultants searched through scientific data, best practices, and local data to come up with creative solutions. Additional contributions to evidence informed policy development came in the form of strong community support from the Hamilton Chamber of Commerce and the Social Planning and Research Council of Hamilton, organizations who both championed urban design and road modifications to facilitate active and safe transportation. Even international champions lent their support to the City of Hamilton when the Walk21 team came down to facilitate educational forums, a walking audit, and obtain the Mayor’s signature on a *City of Hamilton Motion: International Charter for Walking (2008)*.

The planning team was able to build on their past experiences, relevant policies at the municipal and provincial levels, the signing of the *City of Hamilton Motion: International Charter for Walking (2008)*, and past active transportation program to open a policy window. With directions from council to begin planning for pedestrian infrastructure they began to develop the policy and to creatively assess barriers and engage citizens in an innovative two-year planning process for policy development. The *Pedestrian Mobility Plan (2012)* integrated both municipal and provincial policies to demonstrate to council how the current *Pedestrian Mobility Plan (2012)* was building on these directions in other policies. Additionally, the innovative consultation process of interactive online context sensitive mapping, which allowed citizens to indicate to city staff just where road modifications were needed, was so successful it had a higher participation rate than other municipalities who had also used the tool. Along with exceptionally high citizen participation, as well as good media relationship, there was a high degree of support for this plan.

Policy plans typically come with a large list of recommendations and an estimated cost associated with them, which sometimes can present a barrier for council who have multiple projects competing for resources. In the *Pedestrian Mobility Plan (2012)*, the consultants, through their research, found an approach called routine accommodation. This approach integrated road
modifications to increase active transportation into the existing roadway maintenance and development plans. The recommendation for routine accommodation, a process of integrating a context sensitive solution for each road maintenance project would add 2-7% cost onto each project and over a 20 year period of time transform the roadways to a multimodal system; this recommendation removed the financial barrier. Council supported the Pedestrian Mobility Plan in 2013.

The Pedestrian Mobility Plan (2012) was a policy, which recommended organizational transformation of the way road maintenance, and development was conducted. The recommendation was to integrate routine accommodation into Engineering Guidelines for Servicing Land Under Development Applications (2006). Additionally, there would be a staff training process; The Pedestrian Mobility Plan (2012) even developed a toolbox for staff to use. The toolbox included an assessment process involving a checklist outlining specific items, which staff would use when they were undertaking roadway maintenance evaluations. This checklist was also linked to a nine point context sensitive rating scale so that each road maintenance project would be assessed to determine which of the potential 36-road modification infrastructure projects within the toolbox fit with the area they were assessing. It is not surprising that this planning process and resulting Pedestrian Mobility Plan (2012) won the Planning Excellence Awards from both the American Planning Association (Upstate New York Chapter) and the Ontario Professional Planning Institute (OPPI) for the Pedestrian Mobility Plan (2012).
6. REFERENCES


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