



Sustainable Neighbourhood Action Plan (SNAP)

Project 1: Engaging the North End Neighbourhood Final Report

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1.0 Executive Summary

The project work outlined in this report was undertaken in order to support the City of Hamilton in preparing for a successful pilot implementation of the Sustainable Neighbourhood Action Plan (SNAP) program within the North End neighbourhood in Hamilton, Ontario. By following the three-phase SNAP framework developed by the Toronto Region Conservation Authority (TRCA), this project aims to develop the preliminary research necessary for creating comprehensive community-level climate mitigation and adaptation strategies. Specifically, this project focuses on phase one of the framework, which is intended to develop an understanding of local issues and identify stakeholders within the community. Data collection through the use of preliminary surveys and relationship-building with stakeholders is a key component of the initial phase. The focus of the report supports the work done within the initial phase of the project, seen through background research of the target neighbourhood, taking into account previous and ongoing development in the North End. This report will focus on the preliminary survey, key stakeholders, and asset identification.

2.0 Introduction

The North End Neighborhood of Hamilton, Ontario is an economically and socially diverse area, with an array of different needs. Its close proximity to the Hamilton Harbour and industrial sector indicates the presence of unique climate change challenges including rising water levels and air pollution. Over 2020, through funding acquired from the Federation of Canadian Municipalities (FCM) and support from the TRCA, the City of Hamilton aims to pilot

a SNAP project in the North End. The goal of this project is to develop a comprehensive understanding of the North End neighbourhood and to recognize the ways in which it can benefit from personalized climate mitigation and adaptation strategies. The scope of the entire project will extend to 2020 and led carried by the City of Hamilton. In fall of 2019, the City of Hamilton partnered with students from CityLAB Semester in Residence. The students of CityLAB were responsible for executing phase one of SNAP, by gathering baseline information about the North End neighbourhood, assisting with community engagement, and proposing project ideas informed by his research that the City can use to move forward.

2.1 What is CityLAB?

CityLAB Hamilton is an innovation hub that brings together student, academic, and civic leaders to co-create a better Hamilton for all. CityLAB students are a mix of McMaster, Mohawk and Redeemer students who want to learn, explore, and help the City of Hamilton develop meaningful solutions to contemporary issues. Projects are based on challenges relating to one of the following themes: Healthy Neighbourhoods, Climate Change, and Municipal Excellence. The vision of CityLAB is “to provoke students and city leadership to inspire, energize, and build a healthy, sustainable, and vibrant Hamilton” (CityLAB, 2019).

2.2 What is SNAP?

The SNAP is a framework created by the TRCA with the goal of implementing climate mitigation and adaptation projects based on community priorities and needs. These projects aim to achieve urban sustainability with a focus on the unique community throughout the process.

There are three phases in a “rapid” SNAP Action Planning process: (1) action research, (2) motivating neighbourhood themes, and (3) neighbourhood action plan. The first phase includes investigating issues, identifying stakeholders, and compiling past and current issues while conducting baseline characterization of the selected neighbourhood. Once community priorities and key stakeholders have been identified, an action planning workshop is conducted to initiate the second phase. From here, general themes are defined and key objectives are identified. Finally, the third phase includes the creation of an action plan and the initial implementation of projects, as well as a second action planning workshop. Upon completion of all phases, all of the collected data is compiled for a future project implementation. All three phases will be implemented within the North End through 2019 into 2020.

“RAPID” SNAP Planning Process - TRCA



Figure 1. “RAPID” SNAP Action Planning Process

1 Scoping Issues, Stakeholders and Interests	2 Defining Motivational Themes and Action Planning Concept Areas	3 Co-creating the Action Plan
What are the local issues and opportunities? What do you like/value in the neighbourhood? How would you like to be involved in this project? What actions have you already taken and what's next? What would you like this plan to achieve? 	PAST: What should we honour from the past? PRESENT: What are the current dynamics and hidden potential? FUTURE: What new possibilities excite us? PLACE: Desired experiences? Projects?	Do you like the action plan concept areas? Which of the example project ideas do you like best? Do you have other ideas? Do you have advice for moving forward? How can you or your group contribute? Can the projects achieve the key targets?
Engagement through: <ul style="list-style-type: none"> One on ones with key stakeholders Resident surveys Neighbourhood events or pop ups Project Management Team and working group(s) 	Engagement through: <ul style="list-style-type: none"> Thought Leaders Workshop #1 Experiential Neighbourhood Walks and other quick start projects and activities 	Engagement through: <ul style="list-style-type: none"> Thought Leaders Workshop #2 Virtual/Open House Neighbourhood events and activities Project Management Team and working group(s)
Products: <ul style="list-style-type: none"> Partnership formation and governance Project charter (outlining workplan and approach to Phases 2 & 3, roles, timeline and quick start project or other engagement activities) Draft sustainability objectives and targets Technical info and plans summary Demographic & community info summary, including stakeholder contact list Key baseline conditions (technical, behavioural) 	Products: <ul style="list-style-type: none"> TLW#1 Report Motivating neighbourhood themes Action Plan concept areas 	Products: <ul style="list-style-type: none"> TLW#2 and engagement reports Action Plan with motivating neighbourhood theme, integrated project concepts and renderings, baseline and targets and performance outcomes. Implementation and monitoring framework
Expertise required: <ul style="list-style-type: none"> Strategic planning, engagement and collaboration skills Local community knowledge Key technical knowledge Synthesis and compilation 	Expertise required: <ul style="list-style-type: none"> Creative future thinking activation Facilitation Mapping Events 	Expertise required: <ul style="list-style-type: none"> Strategic integrated planning, engagement and collaboration skills Integrated design and illustration Technical analysis in key areas Events

2.3 The North End Neighbourhood

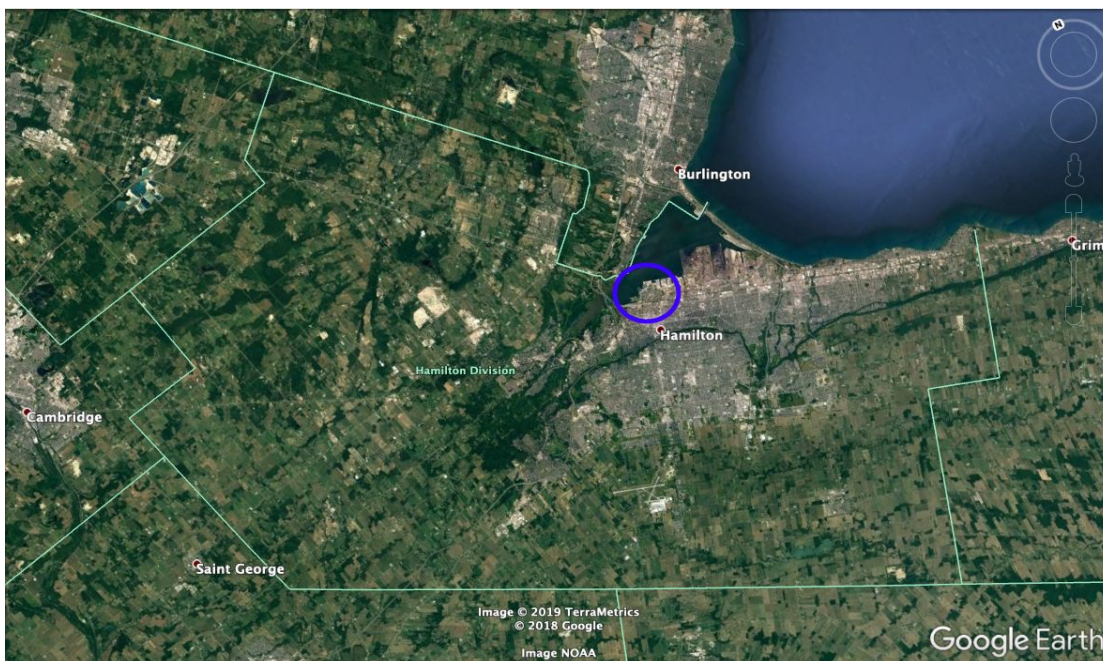


Figure 2. Boundary of Hamilton, ON highlighting North End neighbourhood. *Google Earth*

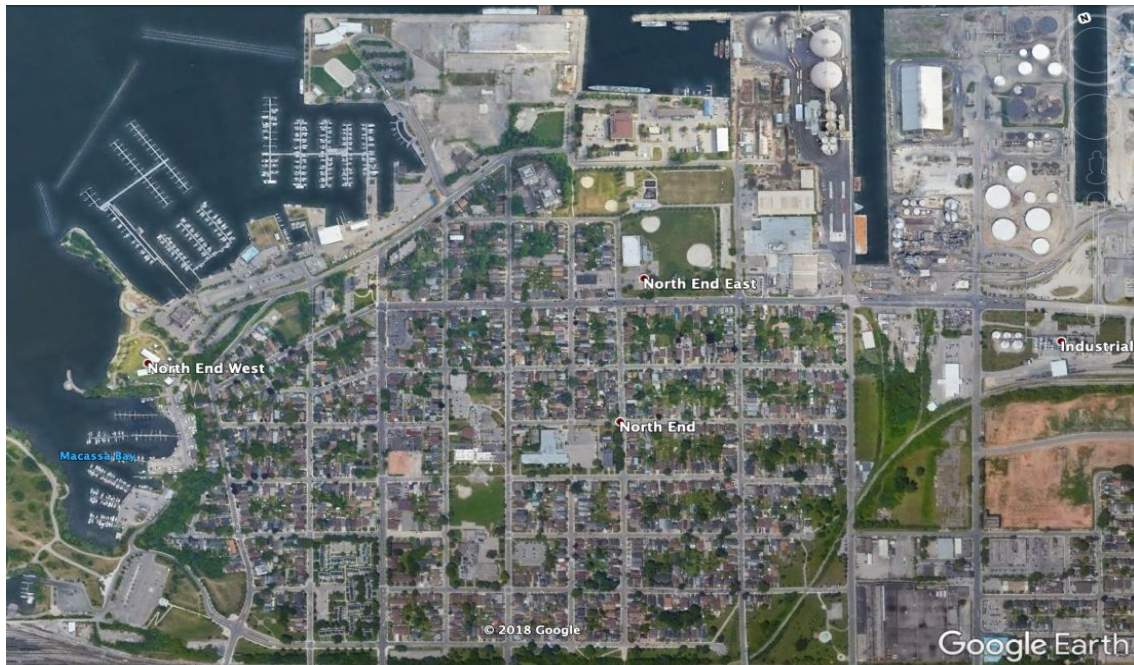


Figure 3. North End boundaries. *Google Earth*

The North End neighbourhood is one of the oldest neighbourhoods within the City of Hamilton and has a rich history. Over the years, there have been many demographic and industrial shifts within this community. While Hamilton was and is known for its metal industry, other industries such as the Williamson Vinegar Works or the Ontario Cotton Company were located in the North End, giving rise to an increased population of a working class community (Worker's City, n.d.). With the opening of the Great Western Railway yards in 1854, alongside the harbour (a large shipping canal), came a benefit for this community; this access to industry resulted in a stream of job-seeking immigrants. Specifically, settlement in the North End was concentrated at Port Hamilton at the end of James Street North, making it a compact community.

Many Irish immigrants came to Hamilton during the potato famine in the 1840s, making the North End demographics predominantly British and Irish (Worker's City, n.d.).

By the end of World War Two, the North End had changed significantly. Hamilton's industry shifted east, and many left the North End to move to Hamilton's suburbs due to the post-war economic boom. Urban renewal in the 1960s also pushed native North Enders out of the neighbourhood. By 1961, less than half of those in the North End claimed to be British or Irish; 20% identified as Italian, while another 15% were Eastern European (Worker's City, n.d.).

Presently, the North End continues to change due to current and upcoming development projects. It is the focus of the City of Hamilton's Waterfront Redevelopment, which includes projects such as Pier 8, Jamesville Redevelopment, Pier 5-7, and 500 MacNab St N's tower renewal (see Appendix A). All of the development brings a conversation about gentrification, defined as "an upgrading of the physical environment coupled with a rise in average incomes" (Harris, 2018). The rise in average incomes and upgraded environment means that many people are denied access to their neighbourhood and are forced to relocate to a more financially viable area. As a result, the demographics of the North End neighbourhood are constantly shifting. Although there is a lack of information at the neighbourhood level, the 2016 census information for Ward 2 shows a large amount of residents aged 25-29, couples with children, and those who participate in the labour force (Statistics Canada, 2016). A third of the ward identified as a visible minority on the census (Statistics Canada, 2016).

The on-going development, extent of current projects, and potential for urban renewal are a part of the reasons that the North End neighbourhood was selected to pilot the SNAP framework in Hamilton.

3.0 Background Research

3.1 Previous SNAP Methods

Across SNAP's history and work throughout Toronto and its surrounding region, many strategies and initiatives have been implemented. One collective issue addressed by SNAP is stormwater management, with three common solutions: (1) biofilter swales, (2) depaving, and (3) rain gardens (TRCA, 2019).

Biofilter swales, a channel filled with vegetation to collect storm runoff seen in Figure 3, were implemented in Brampton SNAP as an attempt to add value to infrastructure renewal and improve water quality in Etobicoke Creek. This project also aims to reduce the City's burden of maintaining stormwater management ponds (TRCA, 2019).



Figure 4. Biofilter swales in Brampton

Another SNAP project in Burnhamthorpe focused on depaving basketball courts and other unused paved areas in order to transform them into community gardens (TRCA, 2017).

Since pavement cannot absorb stormwater and heats the area, it was important to craft a solution that fits the unique layout of the community (TRCA, 2019).

Finally, in order to absorb storm runoff, the SNAP in Sheridan created a rain garden in partnership with Ecosource and Sheridan Nurseries (TRCA, 2019). Each of these initiatives presents solutions that cater to the individual and varying needs of different communities. The three described SNAP projects serve as a demonstration of actions residents themselves can take in addition to managing stormwater. Finding solutions that residents are able to partake in as an attempt to mitigate climate change is a crucial part of the successful implementation of the SNAP project.

The SNAP stormwater management project in Black Creek, referred to as the *Harvest the Rain* initiative, focused on retrofitting homes so that they are better prepared to control excess water (TRCA, 2017). As a means to manage stormwater and prevent it from entering and eventually overwhelming the city's water system, three main actions were taken: disconnecting downspouts, installing rain barrels, and planting trees and gardens (TRCA, 2019). By reusing stormwater, these processes prevented several litres of water from entering storm drains, as well as saving residents money on utility bills. As part of this project, SNAP also hosted workshops focused on educating community members on their home gardens. Clear communication with community residents and partners is a fundamental part of fostering mutually beneficial relationships between SNAP researchers and the neighbourhood.

3.2 North End Neighbourhood Association (NENA) 2017 Survey

The North End Neighbourhood Association (NENA) is a collection of empowered residents that aim to preserve the rich history of the North End, while promoting it as a welcoming and safe community for families. Through advocacy and community involvement, NENA is able to identify concerns within the neighbourhood and develop strategies to face them. NENA generates discussion between residents, business owners, and the broader Hamilton social and political communities.

NENA has seven objectives that the group uses to guide decisions and movements. NENA aims:

1. To meaningfully engage in issues that are both North End-specific and Hamilton wide.
2. To encourage a strong feeling of community
3. To both develop and support activities that unite neighbours
4. To play a role in the City planning that impacts the North End
5. To foster a safe neighbourhood
6. To increase the sustainability of the local area
7. To be both credible and accessible voice for residents.

NENA (Appendix A) conducted an online survey in 2017 to gather community opinions around concerns, top priorities and to highlight positive aspects within the neighbourhood. Around 175 people filled out this survey; the top identified elements included the waterfront, walkability, people and location. The top concerns identified by residents were related to traffic, street parking, increased extent of development, and City involvement within their community. As the

What are the top 3 challenges our neighbourhood currently has?

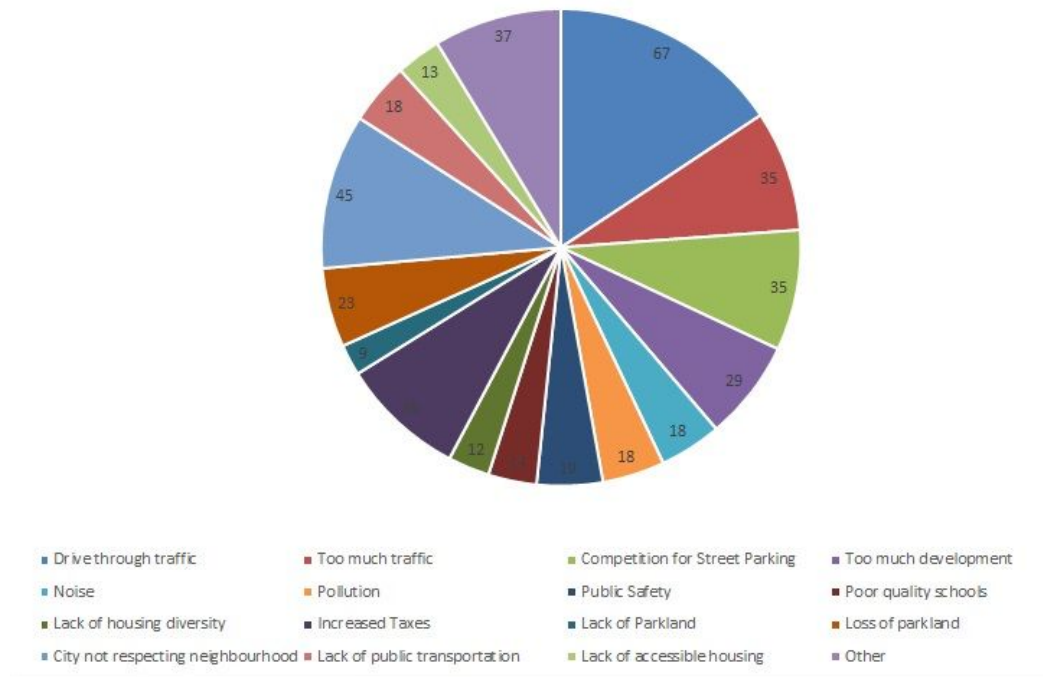


Figure 6. Challenges within the North End from NENA survey

4.0 SNAP Phase 1

In order to properly implement SNAP within a neighbourhood, a comprehensive knowledge and understanding of the area is required. At this stage, the priorities of the City of Hamilton are collecting foundational data and to build relationships with community members and stakeholders. By studying the North End’s history, previous initiatives within the neighbourhood, and previous project reports, a broad understanding of the North End can be gathered. Data was collected in two ways. One avenue of data collection was a physical walkaround of the neighbourhood to record visible assets and study the environment of the neighbourhood. A second aspect for data collection involves a short survey given to stakeholders

and residents which explores top concerns facing the North End. Applying more than one method of data collection generates a broader range of data, in hopes to reach a wider audience which ultimately can be incorporated into future SNAP project plans for Hamilton.

4.1 Preliminary Survey

A short preliminary survey was deployed as a tool to engage the North End Neighbourhood and gauge the concerns of its residents. The survey was created to open a dialogue with the residents and offer them a platform to voice their concerns. Stakeholders were used to distribute the survey within the North End Neighbourhood and the responses of the participants were collected and recorded anonymously.

The survey was comprised of three sections. The first section asked participants to identify their association with the North End. The second section asked the participants to identify the top three concerns they believed the North End faced. Lastly, they were given the opportunity to make further comments. A copy of the survey used is provided in Appendix C.

4.2 Survey Results

Association to North End	% of Respondents
Live	47%
Work	18%
Live and Work	13%
Did not Specify	22%

The survey was completed by 72 users of the North End, over half of which identified living, or living and working in the neighbourhood, around one fifth responded only working in the area and

Table 1: Distribution of Respondents' Association to North End

around one fifth did not specify. Detailed raw results can be found in Appendix G.

A variety of responses were expressed; however, some common themes emerged as environmental, health and safety, housing affordability and conditions and infrastructure priorities. It should be noted that the interpretation of these responses according to the above categories is subjective and raw data is provided in Appendix G. Among neighbourhood concerns, the most commonly expressed theme with 49 responses were related to housing affordability and concerns such as homelessness, housing prices and bed bugs among others. Similar prioritization of health and safety, environmental and infrastructure related concerns were expressed with 44, 43 and 42 responses respectively. were related to health and safety, the environment and infrastructure. Examples of health and safety responses were surrounding violence, hate, the opioid crisis and pedestrian/cyclist safety.

Response Category	Number of Responses
Health	44
Housing Affordability and Conditions	49
Infrastructure	42
Environmental	34
Other	13
Total	182

Top Priority Categorization of all Respondents

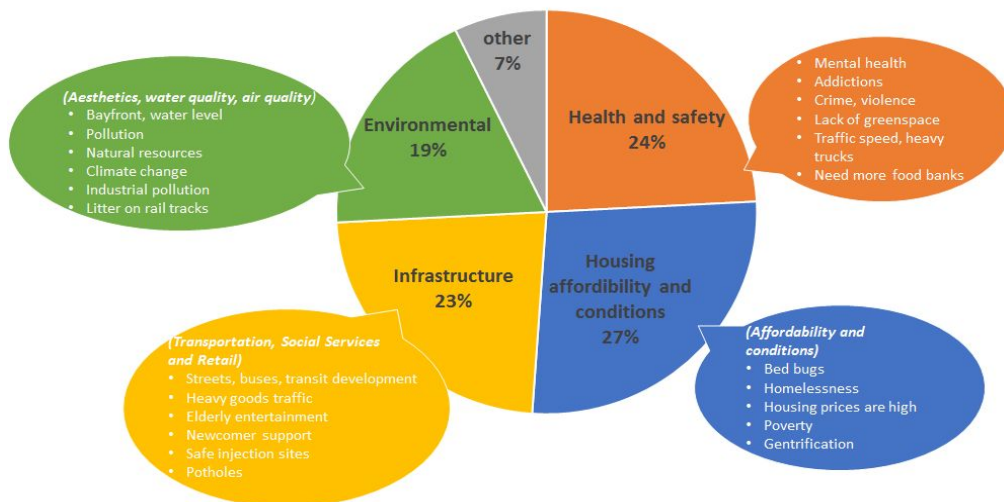


Figure 7: Thematic distribution of all respondents' priorities with associated examples

Examples of environmental responses were regarding climate change, pollution and flooding. Examples of infrastructure related responses related to transportation such as bussing and cycling accessibility, retail availability such as grocery stores and social service accessibility such as seniors services. Interestingly, the priorities of residents varied slightly according to their association to the North End. Notably, reponses addressing infrastructure needs were around three times more likely among those who live as compared to work in the North End at 29% vs 9% of responses. On the other hand, Environmentally focused responses were nearly three times more common among those who work as compared to live in the North End at 27% vs 10% of responses. These results will be further interpreted moving into in Phase Two.

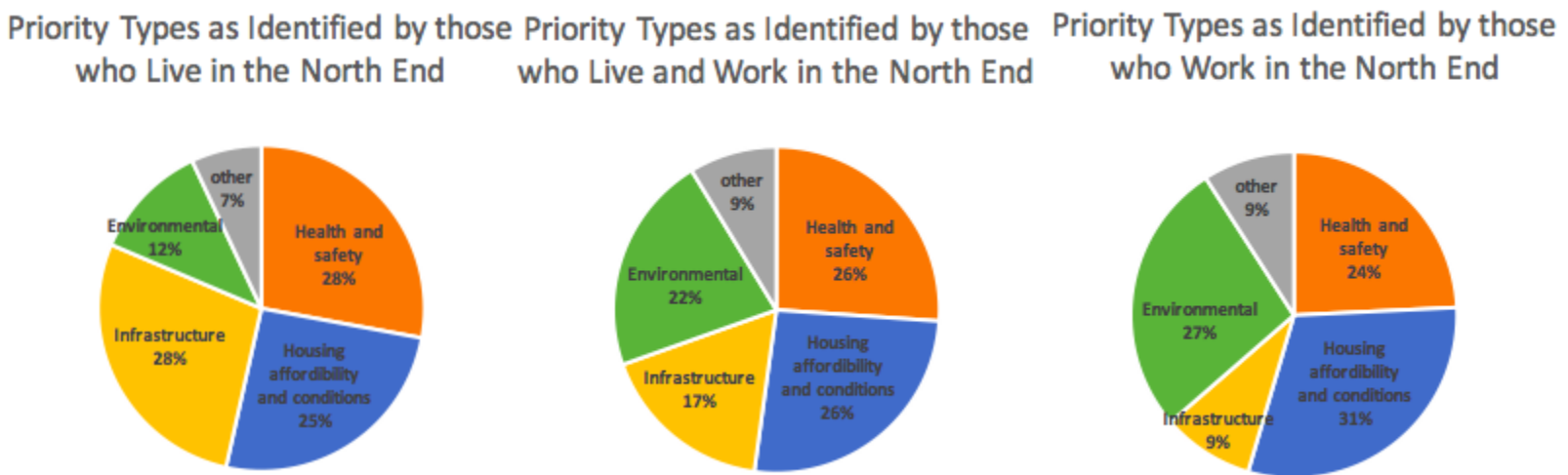


Figure 8. Thematic Distribution of respondents' priorities based on association to the North End.

Despite the slight variation of response priorities among different groups, the general identification of challenges was similar. Moreover, from a climate change lens, many of the expressed concerns are connected by their likelihood to be exacerbated by the changing climate.

For example, increased storm intensity and frequency could lead to flooding that impacts transportation infrastructure such as cycling trails as well as housing conditions.

4.3 Stakeholders Identified

Multiple approaches were taken to identify stakeholders within the North End neighbourhood. This included physical surveying in the area, engaging with community centers, as well as attending community meetings. A comprehensive list of identified stakeholders, found in Appendix D, is organized into primary, secondary, and tertiary stakeholders and colour coded into different sectors. Primary stakeholders are stakeholders who could be potential partners and highly involved members of the project, secondary stakeholders are influential stakeholders but may be less involved, and tertiary are the remaining stakeholders in the neighbourhood who are to be informed but their direct involvement in project work may be limited.¹ All stakeholders were identified and organized in collaboration with the North End Neighbourhood Association and Welcome Inn Community Centre².

The list of stakeholders that were actively involved in the preliminary research phase of the project through the distribution of preliminary surveys were: Compass Community Health, New Horizons Thrift Store, Bennetto Recreation Center, Royal Hamilton Yacht Club, Hughson Street Baptist Church and Welcome Inn Community Center. The identified stakeholders for

¹ It is important to note that this is a point-in-time analysis meant to help inform initial stakeholder engagement strategies. As such, the initial stakeholder list has identified stakeholders in each of the three categories based on current knowledge and context. In future, various individuals or groups may become more or less involved in the project.

² Through pre-existing relationships with NENA and Welcome Inn, both were identified to participate in stakeholder identification in September, 2019. At a NENA meeting, on September 25th, the group collaborated a list of stakeholders in the area. The Welcome Inn Community Center had a staff meeting to map out other stakeholders in the neighbourhood the week of September 16th. Both groups shared their stakeholder assessments with CityLAB students the following week.

survey distribution were chosen based on availability, accessibility and range of services they offer. These locations were relatively central to the neighbourhood, accessible via personal vehicles, bus routes and sidewalks, and offer a wide range of services to reach a diverse group of individuals.



Figure 9. Location of survey distribution within the North End boundaries.

4.4 Asset Mapping



Figure 10. Identified assets. *Prototype North End Asset map.*

Assets

- Public art
- Restaurants
- Bike lane
- Community gardens
- Sobi
- Solar panels
- Parks
- Green houses
- Green Spaces

Vulnerabilities

- Potholes
- Road conditions
- Shoreline erosion
- Cracked sidewalks
- Vacant lot

As mentioned earlier, physical walkabouts were used to record assets and vulnerabilities in the North End. The CityLAB team split into three groups and each examined subsections of the neighbourhood. During the exploration of the subsections, the students collectively took pictures of assets including playground, open fields and empty lots and vulnerabilities such as potholes and cracked sidewalks. These pictures will be uploaded to an app created by City staff member Adam Munro to help identify new assets and vulnerabilities in the neighbourhood (See figure 10 for a prototype visual of what an app might look like). They also provide ideas for potential climate change initiatives such as depaving or rain gardens. These assets will be used to shape themes that can benefit the future phases of the SNAP framework.

5.0 Limitations and Challenges

This research is not intended to be an exhaustive examination of climate change within the North End, but rather acts as an introduction to the unique concerns within this community. The data collected thus far should only be used as preliminary information and eventually be coupled with more comprehensive data.

One of the major limitations is that data collection outlets (ie. locations of surveys distribution) were based primarily in public community spaces. This distribution suggests that only members of the community that visit these centers would have the opportunity to complete

a survey and as a result, certain members of the neighbourhood may have been excluded. A collaborative decision was made to keep the surveys in public spaces as the data collection was to be kept preliminary for this phase of the SNAP framework.

Additionally, after the surveys were collected, it was noticed that the majority of the stakeholders who participated were located at the centre of the North End neighbourhood. While the survey distribution outlets are geographically concentrated, it can be assumed that the services offered are used by a variety of people from across the neighbourhood. Despite this, it is important to acknowledge that only certain demographics may use these resources.

Since data was collected using paper surveys, the results were sometimes challenging to read and this may have caused the introduction of errors while digitizing the data. Additionally, the paper surveys were only offered in English and this may have deterred participation from community members who are not proficient in English.

Another limitation of the surveys is that there is no way of knowing if the surveys completed were disingenuous or were rushed/incomplete due to the environment that they were answered in. Within the scope of this preliminary survey, there was no system in place that could measure the rate of participation, as all surveys were distributed remotely. To increase clarity and transparency, information packages explaining the project and survey's purpose was left at each survey site (Appendix G).

6.0 Future Improvements

Through the process of planning and executing SNAP Phase One, the project team discovered many strengths and weaknesses pertaining to the project and have had the

opportunity to observe areas for improvement. Outlined below are some general directions for future groups engaging in SNAP methodology within the Hamilton North End.

- **Frequent communication with City staff and supervisors** of the SNAP Hamilton projects; this can make for a smoother process and can provide more clarity in terms of project deliverables such as an interim report.
- **Initiating an extensive relationship building process with key stakeholders earlier on in the planning process** and keeping them involved in the project agreement development. This can also help synchronize our different timelines, boost community morale, and participation in the various project goals.
- **Initial survey to be delivered to a larger geographical region** with an increased number of distribution locations. Not only will this lead to less biased results, but it will also allow the surveys to reach a broader audience.

7.0 Conclusion

Despite its limitations, this report provides a strong foundation for moving forward with Phase Two and Three of the SNAP framework. The preliminary survey results will be further assessed by City staff and CityLAB students and used to inform the theme of an upcoming workshop, as well as identifying key stakeholders to attend. This future workshop will invite these stakeholders to discuss climate issues that exist within the North End community, with the goal of developing another, more in-depth climate change survey. Ultimately, this SNAP pilot project in the North End will be a guideline of how to implement this framework throughout Hamilton.

In order to fulfil the Phase 1 requirements, as referenced in Figure 1, this project has executed these objectives:

1. Scoping Issues, Stakeholders and Interests
Engagement through: <ul style="list-style-type: none">● Meeting with community stakeholders such as NENA, Compass Community Health and Welcome Inn● Conducting resident surveys● Conducting neighbourhood walk-about● Developing a project management team and working group(s) skills
Outcomes and Outputs: <ul style="list-style-type: none">● Partnership formation through ongoing communication● Gathered and analyzed survey results● Create a transition report for project 2● Create a final report to summarize our findings
Expertise Required: <ul style="list-style-type: none">● Interpersonal communication skills● Relationship building● Background knowledge

This project focused on relationship building and background research. Project 2, in accordance with Phase 2 will focus on the following:

2. Defining Motivational Themes and Action Planning Concept Areas
Engagement through: <ul style="list-style-type: none">● Organizing and hosting a workshop for community stakeholders and citizens● Using themes from survey to inform workshop

<p>Potential Products:</p> <ul style="list-style-type: none"> ● Final report on SNAP project 2 ● Analyzing themes from workshop ● Begin to develop concepts for Action Plan
<p>Expertise required:</p> <ul style="list-style-type: none"> ● Event organizing ● Evaluating workshop results ● Transparent and respectful communication

Phase 3 focuses on co-creating an Action Plan to pilot SNAP within the North End. Although the majority of Phase 3 will fall outside of the scope of CityLAB, the collected research, the relationships developed and the upcoming workshop will contribute to the fundamentals of this part of the project.

<h3>3 Co-creating the Action Plan</h3>
<p>Engagement through:</p> <ul style="list-style-type: none"> · Ongoing neighbourhood events and activities · Continuing to use Project Management Team and working group(s)
<p>Products:</p> <ul style="list-style-type: none"> · TLW#2 and engagement reports · Develop an Action Plan that accounts for discovered themes and develops baseline targets for SNAP project · Implementation of SNAP
<p>Expertise required:</p> <ul style="list-style-type: none"> · Strategic planning, maintained and transparent engagement · Technical analysis · Access to resources needed to enact plan

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Appendices

Appendix A

Background Information of the North End

North End Neighbourhood Association

In February 2019, NENA formed the Environment and Climate Change subcommittee which responds to the growing call for climate action both within the neighbourhood and throughout the city as a whole (NENA 2017). The group consists of formal NENA members as well as concerned residents. The Environment and Climate Change subcommittee has a wide variety of interests and looks to examine the role climate change plays within the North End, but so far has largely focused on the proposed development due to members' fears (NENA 2017). Their concerns closely intersect with other subcommittees, particularly in regards to Jamesville, a currently abandoned social housing unit. While some want to pursue further development within the North End, the environmental committee takes note of the mature trees that Jamesville development would damage. This concern must also be balanced by the growing need to expand within the urban boundary, rather than push development into rural areas (NENA, 2017).

Development in the North End

Bayfront Park Beach

- 40-acre park constructed on top of a former industrial landfill site. It was designed as a place where Hamiltonians could enjoy water activities, but high levels of E. coli

bacteria and Blue-Green Algae made the area unsafe for swimming 78% of the time during the 2015 swimming season. The beach was permanently closed for the 2016 swimming season, and in mid-2016 the City and Hamilton Waterfront Trust began a study on water quality issues (Hamilton, n.d.).

CityHousing Hamilton Jamesville Redevelopment

- Aims to replace the existing 91-townhouse complex on the site. It will have a 46-unit rent-geared-to-income apartment building and a 45 affordable housing units (Craggs, 2019).

Hamilton Downtown Mobility Street Master Plan

- Involves the redevelopment of many downtown streets with sections in the North End, some of which are underway. In the next 10 to 15 years, the goals are to: enhance the pedestrian amenity and civic image of mobility streets; strengthen linkages to the waterfront, the escarpment, to neighbourhoods and other key areas of the city; identify key civic spaces and priority areas for specific or special streetscape treatment; develop recommendations for the enhancement of open space resources within the city; establish a high standard of design as a model for private sector initiatives; enhance the character and sense of place within the core city (Hamilton, 2003).

Pier 5-7 Shoreline, Boardwalk, Commercial Village and Public Piazza

- Will consist of a new boardwalk at the water's edge for public use, a vibrant commercial village, and public piazza at the foot of James Street North. Phase 1 construction was stalled due to a \$11.5 million shortage as plans are more expensive than anticipated due to the intricacy of the plans (Taekema, 2019).

Pier 8 Waterfront Shores

- Vibrant, urban waterfront community designed to be enjoyed by all residents of Hamilton and visitors. It will have approximately 1500 residential units, approximately 13,000 square metres of commercial and institutional space, and over 1400 parking spaces with \$140 million budget and proposed completion around 2020. It is next to the Pier 8 Promenade Park which will be approximately 30 metres wide along the north and east edges of Pier 8 (gh3*, 2017).

500 MacNab St N Tower Renewal

- Aims to revamp a 148 unit high rise affordable housing building at 500 MacNab St N that has been closed for nearly 2 years. All units will be affordable at costs below market rent, and 74 units will be deeply affordable at 69.2% of median market rent. The MP for the area has promised the site's redevelopment will reduce the building's environmental impact and improve sustainability. The building's "passive house" design aims to realize energy savings of 75 per cent and reduce greenhouse gas emissions by 88% (Moro, 2019).

Appendix B

Annotated Bibliography

CityHousing Hamilton. (n.d.). 500 MacNab. Retrieved from

<http://www.cityhousinghamilton.com/page1.aspx?page=MacNabPropDev&tab=6&menu=672>

CityHousing Hamilton provides an overview of the development of 500 MacNab, an affordable housing retrofit with a focus on environmental sustainability. It includes sections on the project rationale, energy innovation, financial innovation, and community benefit innovation. This development project demonstrates the existing efforts currently underway to incorporate a climate change lens into projects, as is the objective of SNAP.

Black Creek SNAP. (2019). TRCA. Retrieved from

<https://trca.ca/conservation/sustainable-neighbourhoods/snap-neighbourhood-projects/black-creek-snap/>.

TRCA provides information about the several initiatives taken to battle climate change through SNAP that has been implemented in different cities within the GTA. The goals of both SNAP and the communities it is implemented in are combined to develop feasible solutions for the cities to maintain resilience to climate change. The Black Creek SNAP project is outlined on the TRCA website. It focuses on the different methods used to manage rainwater, conserve energy, and promote agriculture through home gardens.

Hamilton Naturalist Club and Environment Hamilton. (2018) *Trees Please*. Retrieved from https://d3n8a8pro7vhmx.cloudfront.net/environmenthamilton/pages/201/attachments/original/1561566716/North_End_Report_2018.pdf?1561566716

A citizen-based initiative was conducted within the North End in 2018 regarding tree cover and air quality, in collaboration with Environment Hamilton, and Hamilton Naturalist Club. The study had two components, one piece involved trained citizens going into the neighbourhood and identifying trees, where other trained citizens were able to test the air quality. From this data, a map was created in order to highlight areas of poor air quality and minimal tree cover. This data set can reinforce areas of concern identified from the citizens within the North End.

Hamilton Port Authority. (2018). Hamilton Port Authority Summary Report of Sustainability Actions in 2018. Retrieved from https://www.hamiltonport.ca/wp-content/uploads/2019/05/2018_HPA_SustainabilityRept_web.pdf

The Hamilton Port Authority summarizes its efforts relative to sustainability in its yearly reports. This 2018 report breaks down how the HPA has worked proactively with port tenants to address various issues such as sources of dust, truck scheduling and idling among others. HPA also promotes biodiversity by building pollinator corridors with the help of Environment Hamilton and Hamilton Naturalists' Club through the Hamilton Pollinator Paradise project. These efforts are beneficial to the North End as a whole, but can also be used as an example for other organizations and corporations in the area who need to have a more sustainable and climate-friendly outlook.

NENA. (2017). North End Neighbourhood Association (NENA): NENA Survey Results. Retrieved from <http://northendneighbours.blogspot.com/p/na-survey-dec-2017.html>

The North End Neighbourhood Association (NENA) outlines the results of an online-only survey they conducted around regional issues such as traffic and development. These results relate to the preliminary survey conducted in Phase 1 of SNAP, as they also asked residents their primary concerns for the neighbourhood. The survey provided insights into the North End community, as well as providing information on future events and meetings.

Neighbourhood Development Office. (2013). Jamesville Action Plan. Retrieved from <https://d3fp1f1m7bbt3.cloudfront.net/sites/default/files/media/browser/2015-03-09/jamesvilleactionplan.pdf>

The City of Hamilton outlines its Jamesville Neighbourhood Action Plan in this document. Jamesville is an area that spans over Central and North End neighbourhoods and is currently the location of an abandoned housing project which was recently bought by Indwell, a social housing developer. This report specifically discusses the Jamesville Community Development Team and its Neighbourhood Action Plan, which included some climate-focused initiatives proposed to the City: recycling in parks, community clean team event, strategies to prevent dumping, addressing contaminated land and pollution, implementing North End traffic management plan, traffic calming measures for the neighbourhood, promoting complete street models and providing more transit options for North End. These initiatives have had a positive impact and are in line with the SNAP framework, making this report an important resource.

Sustainable Neighbourhood Action Program. (n.d.). *SNAP Profile*. Retrieved from

<https://s3-ca-central-1.amazonaws.com/trcaca/app/uploads/2016/11/05162156/SNAP-Leveraging-integrated-infrastructure-Profile-Sheets-rv4-May6.pdf>.

The Toronto and Region Conservation Authority (TRCA) outlines the SNAP framework, including case examples such as Brampton and Black Creek. These examples provide a helpful insight into past initiatives and how they might be adapted into a North End context. One such initiative undertaken in Brampton was integrating bioswales to absorb rainwater, as well as to deal with traffic which has been identified as one of the major concerns of the North End Neighbourhood; therefore, this could be adapted.

Toronto and Region Conservation Authority. (2018). *A complete guide to building and maintaining a rain garden*. Retrieved from

<https://trca.ca/news/complete-guide-building-maintaining-rain-garden/>

In this article, the TRCA focuses on rain gardens as a specific action residents can implement into their own communities. It outlines definitions for stormwater and rain gardens, as well as explaining their benefits and how they function. From there, it details specific plants that can be used and how exactly to install one in your yard. This is useful to SNAP in Hamilton because it is a relatively simple and inexpensive way to become more sustainable, especially with the potential of flooding on the Bayfront and the consequent contaminated runoff. This is a resource that can easily be shared to many people with access to computers to inspire them to be more engaged with sustainability.

Toronto and Region Conservation Authority. (n.d.). *Projects: Depave Paradise*. Retrieved from <https://trca.ca/conservation/sustainable-neighbourhoods/snap-neighbourhood-projects/burnhamthorpe-snap/projects-depave-paradise/>

The TRCA summarizes one of the Burnhamthorpe SNAP actions to remove pavement from the area. Specifically, the community targeted an under-used basketball court to become a garden to share within the community. The TRCA article details the benefits of depaving and frames it as an inspiration for residents and stakeholders in the area. Like the bioswales, this initiative could be adapted in a North End context, therefore making it important to research.

Appendix C

Preliminary

Preliminary survey questionnaire. This survey was distributed within the North End Neighborhood at the identified stakeholder locations.



HAMILTON NORTH END



This survey has been created by CityLAB students together with City of Hamilton staff. CityLAB students are a mix of McMaster, Mohawk and Redeemer students who want to learn, explore, and help the City of Hamilton. This survey is the beginning of a City plan aimed at tackling climate change in the North End community.

In the North End neighbourhood I...

Live

what is the postal code or closest intersection of your residence _____

Work

what is the postal code or closest intersection of your workplace _____

If you are responding as a community stakeholder please specify any affiliations if applicable _____

What are your top 3 concerns facing the North End



We welcome any further comments _____

if you are interested in following up or receiving more information please contact:
Andrea McDowell, Project Manager, Air Quality and Climate Change at City of Hamilton: Andrea.McDowell@hamilton.ca

Appendix D

Identified Stakeholders

Stakeholder mapping. This figure maps the stakeholders in North End into primary, secondary and tertiary categories based on their role and interest in the SNAP project.

Stakeholder Mapping			Legend	Sectors
Primary	Secondary	Tertiary		
CN Railway	Developers	Steel Companies	Yellow	Industry
GO Transit	Bunge	Sylvite	Green	Health Care
NENA	Hutch's	Collective Arts	Orange	Residents
Renters	Yacht Club	Fishers Pub	Light Blue	Services/Businesses
Jason Farr	New Horizons Thrift Store	Liuma	Dark Blue	Government
Compass Community Health	SOBI	Port Authority	Light Purple	Not-For-Profit
	West Harbour Neighbourhood	Waterfront Trust		
	North End Breezes	Northender of the Year		
	Book Mobile	Park Users		
	Bennetto Rec Centre	Cooperative Buildings		
	Bennetto Public School	City Housing Hamilton		
	St.Lawrence Catholic School	Worker's Arts & Heritage Centre		
	Welcome Inn Community Centre	MP/MPP		
	Hughson Baptist Church	Environment Hamilton		
	Green Venture	Hamilton Naturalists Club		
		Compass Children's Garden		
		Hamilton Health Sciences		
		Hamilton General Hospital		

This stakeholder map has been made in collaboration with
NENA and Welcome Inn Community Centres

Appendix E

Preliminary Survey results

Themed Response	<i>Priority 1</i>	<i>Priority 2</i>	<i>Priority 3</i>	Total Identified Priorities
Environmental	11	16	14	41
Housing	24	8	8	40
Transportation	8	10	13	31
Need of Infrastructure/Services	6	12	9	27
Security	11	6	2	19
Socioeconomic	2	5	6	13
Health	2	2	5	9
Other	1	1	3	5



Appendix F



Sustainable Neighbourhood Action Program

Pilot Project

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What is CityLAB?

CityLAB Hamilton is an innovation hub that brings together student, academic, and civic leaders to co-create a better Hamilton for all. CityLAB students are a mix of McMaster, Mohawk and Redeemer students who want to learn, explore, and help the City of Hamilton.

Background

The City of Hamilton has partnered with the Toronto and Region Conservation Authority (TRCA), with funding from the Federation of Canadian Municipalities to pilot a Sustainable Neighbourhood Action Program (SNAP) project in Hamilton. The SNAP project developed by the TRCA is a framework that works to develop and implement climate mitigation and adaptation projects. Addressing impacts of climate change is particularly important at the community level, such as in Hamilton's North End neighbourhood. The North End Neighbourhood Association (NENA) has expressed an interest in developing climate initiatives with the City of Hamilton, which has declared a state of climate emergency. The City of Hamilton needs to develop neighbourhood-level strategies to support and scale-up initiatives aimed at climate change mitigation and adaptation. The challenge that the City of Hamilton wishes to achieve is implementing a sustainable neighbourhood action plan pilot in the North End Neighbourhood in 2020.

CityLAB Goals

Our goal as CityLAB students is to:

1. Identify stakeholders, initiate relationships, discover their needs, understand the issues and establish the existing supports that exist in the North End neighborhood.
2. Use the collected data to inform and prepare for a successful implementation of the SNAP model while also increasing awareness of this model.
3. Gather information on existing mitigation/adaptation assets and vulnerabilities in the North End neighbourhood.

Appendix G

Preliminary Survey Raw Data

Appendix H

“RAPID” SNAP Action Planning Process

“Rapid” SNAP Action Planning Process



1 Scoping Issues, Stakeholders and Interests	2 Defining Motivational Themes and Action Planning Concept Areas	3 Co-creating the Action Plan
<p>What are the local issues and opportunities? What do you like/value in the neighbourhood? How would you like to be involved in this project? What actions have you already taken and what's next? What would you like this plan to achieve?</p>	<p>PAST: What should we honour from the past? PRESENT: What are the current dynamics and hidden potential? FUTURE: What new possibilities excite us? PLACE: Desired experiences? Projects?</p>	<p>Do you like the action plan concept areas? Which of the example project ideas do you like best? Do you have other ideas? Do you have advice for moving forward? How can you or your group contribute? Can the projects achieve the key targets?</p>
<p>Engagement through:</p> <ul style="list-style-type: none"> One on ones with key stakeholders Resident surveys Neighbourhood events or pop ups Project Management Team and working group(s) 	<p>Engagement through:</p> <ul style="list-style-type: none"> Thought Leaders Workshop #1 Experiential Neighbourhood Walks and other quick start projects and activities 	<p>Engagement through:</p> <ul style="list-style-type: none"> Thought Leaders Workshop #2 Virtual/Open House Neighbourhood events and activities Project Management Team and working group(s)
<p>Products:</p> <ul style="list-style-type: none"> Partnership formation and governance Project charter (outlining workplan and approach to Phases 2 & 3, roles, timeline and quick start project or other engagement activities) Draft sustainability objectives and targets Technical info and plans summary Demographic & community info summary, including stakeholder contact list Key baseline conditions (technical, behavioural) 	<p>Products:</p> <ul style="list-style-type: none"> TLW#1 Report Motivating neighbourhood themes Action Plan concept areas 	<p>Products:</p> <ul style="list-style-type: none"> TLW#2 and engagement reports Action Plan with motivating neighbourhood theme, integrated project concepts and renderings, baseline and targets and performance outcomes. Implementation and monitoring framework
<p>Expertise required:</p> <ul style="list-style-type: none"> Strategic planning, engagement and collaboration skills Local community knowledge Key technical knowledge Synthesis and compilation 	<p>Expertise required:</p> <ul style="list-style-type: none"> Creative future thinking activation Facilitation Mapping Events 	<p>Expertise required:</p> <ul style="list-style-type: none"> Strategic integrated planning, engagement and collaboration skills Integrated design and illustration Technical analysis in key areas Events