



CityLAB
HAMILTON



Environment
Hamilton

2019 Final Report

Climate Ready Hamilton | CityLAB | City of Hamilton



Climate Ready Hamilton

Prepared by Interdisciplinary Students of McMaster University

Suffia Malik, Daniella Mikanovsky, Deepak Palanichimi, Jeremy Sewnauth and Claire de Souza

Completed December 6, 2019

Executive Summary

In March 2019, the City of Hamilton declared a climate change emergency (Imhoff, Smith, & Johnson, 2019, p. 4). This declaration was in recognition of the need to address climate change on a municipal and neighbourhood level. Environment Hamilton (EH) is a local non-profit that both advocates for municipal-level responses to climate change and community building to adapt to and mitigate the effects of climate change. In service of their efforts in Hamilton communities, EH has established the Climate Ready Hamilton (CRH) network.

Students within the CityLAB Hamilton Semester in Residence (SIR) program joined the CRH network project in September 2019. In collaboration with EH, the CRH working group and city staff, a group of 15 students worked on the initial stages of the CityLAB-CRH collaboration. Starting in October 2019, a group of six students continued with the project into December 2019.

The focus of the project was to build neighbourhood resilience to extreme weather and ensure that residents of Hamilton neighbourhoods are prepared for the adverse effects of climate change. The CRH mission aligns with the City of Hamilton's 2016-2025 strategic themes of healthy and safe communities; clean and green; and built environment and infrastructure. CRH contributes to the City of Hamilton's goal of being the best place to raise a child and age successfully.

CRH is currently piloting their network in the downtown neighbourhood of Beasley. During the first phase of the project, 15 CityLAB students envisioned a number of deliverables that were developed and completed by the 6-membered

student group during phase two of the project. The figure below shows these deliverables.

WEBSITE

Creation of a rebranded Climate Ready Hamilton (CRH) website, that includes resources, projects, events and the asset map.

BROCHURE

Development of a brochure providing information on CRH network to potential hubs, volunteers, partners and the public. The brochure also contains a checklist on steps to prepare for extreme weather.

DOOR HANGER

Development of a door hanger providing information on CRH and a checklist on steps to prepare for extreme weather, including a toolkit checklist.

ASSET MAP

Creation of an asset map displaying all resilience hubs, potential hubs and places where partnerships are being developed. The map is created using Google My Maps.



STICKER

Development of a sticker to be used at locations that have signed on to be resilience hubs as part of the Climate Ready Hamilton network (CRH).

LOGO

Redevelopment of a logo to be used for the rebranding of Climate Ready Hamilton (CRH) from Community Resilience to Extreme Weather (CREW).

WORKSHOP

Conducted a workshop on November 27th, 2019 for the CRH working group. The Student group gathered feedback and put together themes to be developed into the network.

NETWORK GUIDE

Creation of a guide based on literature from Brampton's emergency management office. The guide aims to lay out policy to inform the creation of new resiliency hubs.

Figure 1: Summary of Deliverables.

While working on this project, the student group applied many principles of design, dialogue, and community engagement. A key element of design that was used in the project process is the basic systems approach. This framework helped problem solve throughout the project and develop strong communication pieces.

To better collaborate with project partners and members of the community, the student group utilized dialogue and community engagement principles to build equitable and prosperous relationships. The student group ensured their work “provide[d] access to and opportunities to all residents and members of our communities” (Balch, 2016).

CityLAB Hamilton provided the student group a budget of \$400.00 for phase two of the project. This was intended to cover all the costs associated with the project

including, food, printing, workshop materials, gifts, and other unexpected expenses. A more comprehensive breakdown of costs can be found in the report.

While CRH has started their work in downtown Hamilton, the network hopes one day to extend into Hamilton's rural regions as well. However, there are a number of variables concerning the availability of resilience hubs that change depending on rural or urban living. Some of these variables are access to community services, availability/source of resources and residents' proximity to neighbours. The student group took these variables into consideration to envision a network that maximizes access to emergency preparedness resources. These modifications and extensions of existing resources were created to serve the needs of all residents.

To move the work of CRH beyond its collaboration with CityLAB SIR, the student group developed a list of key recommendations. These include:

- Considerations on language used in communication materials
- A guide to building out the network
- A recommendation to pursue stronger municipal partnerships
- ArcGIS Asset Mapping

Climate Ready Hamilton aims to build resilience to climate change by preparing neighbourhood leaders and residents for more frequent extreme weather events. Community building is essential, as neighbourhood residents increasingly face the impacts of climate destabilization. This is why the work done by CRH alongside SIR students will be important for the creation of greater community resilience to climate change.

2019 FINAL REPORT

COMPLETED: DECEMBER 6, 2019



Community Art

Prepared By:
**Salo Rodríguez Solarte, Hannah
Lobb, Ada Zhu, Gurvir Chana, Ameya
Nair**



EXECUTIVE SUMMARY

Community art forms a chapter in the broader Art in Public Places policy that Ken Coit and Jen Anisef, the City partners on this project, have been developing before the CityLAB semester began. Their goal is to provide a variety of different ways through which art can be generated across Hamilton and foster a broader sense of belonging and beauty. The creation of the Art in Public Places policy, including a chapter on community art, is in line with the City's strategic plan and will allow Hamilton to create a culture of community engagement, participation, economic prosperity and growth, and healthy and safe communities among other benefits¹. Creating this encompassing policy can foster placemaking and holds the potential to lead the way for art to be used throughout Hamilton.

The partnership with CityLAB students consisting of Salo Rodríguez Solarte, Hannah Lobb, Ada Zhu, Gurvir Chana and Ameya Nair was intended to refine the Art in Public Places policy chapter relating to community art through various community engagement methods, data collection and analysis, and ultimately the creation of a toolkit. The Community Art Toolkit (Figure 1) serves as a

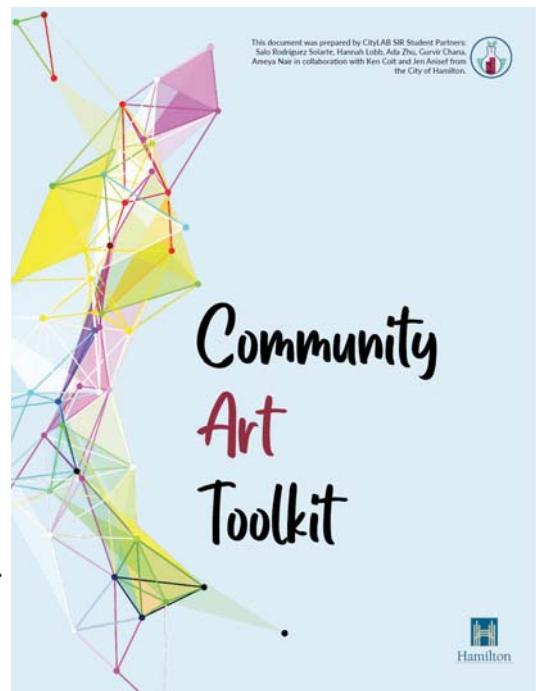


Figure 1: Community Art cover

¹ City of Hamilton, Strategic Plan, 2016-2025.

how-to guide for people interested in practicing community art in Hamilton, which will encourage its continued creation.

The toolkit is designed to be applicable in any of the different areas of Hamilton: urban, suburban, and rural. Due to the stark differences between the three settings, however, three main problem areas of partnerships, arts culture, and space for artwork were highlighted. In an urban setting, community art can thrive through a more flexible and spontaneous process due to the vibrant art industry and concentration of artists in the downtown core. In the suburban and rural settings, it would need a more rigid and formalized process to exist and thrive for a long term since these areas are almost solely residential in nature.

Throughout the project, dialogue tools and principles of community engagement were used. The tools used included participatory action research and facilitation; communication styles were also taken into consideration during group work. Although the project did not have a major design component, design principles were prevalent throughout the process. The design components of the project display principles and concepts of design discussed in the CityLAB design lectures in class. The project also adhered to the principles of community engagement co-created by McMaster University and its community partners, ensuring the building of relationships with all those involved.

The spending for the project primarily consisted of catering. This included purchases from Relay Coffee for the interviews with community leaders and food from YWCA's cafe At the Table for the community art workshop. Most of the potential costs,

such as the cost of printing, were avoided thanks to the resources that were already available at CityLAB.

Moving forward, the three main ideas that may better a project like Community Art in Hamilton in the future are: an earlier workshop date, an expanded scope, and improved group communication. The crucial next step is to present the Community Art Toolkit to City Council in spring 2020 as a chapter of the Art in Public Places policy created by our City partners, along with the Best Practices research which will help to justify the toolkit and its creation. The broader Art in Public Places project should continue to follow the format that Ken Coit and Jen Anisef determined for us: continuous community engagement and active listening to the participants.

The foundation of a good project consist of caring and engaged participants and partners, a culture of creating high quality work, and supporting the long and winding process of success. City partners, CityLAB instructors, and CityLAB students began this term with an open mind to learning and failing which lead us to the success of our relationships, deliverables, and work process. It was understood that the development of new skills or different phases of the project were not a “one and done” process. This mindset continued until the conclusion of the community art project ensuring the satisfaction of our City partners, and will continue as a life skill in each of us.

COOTES PARADISE GREENWAY LOOP



CONNECT CONSERVE CELEBRATE



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 **Hamilton**

Prepared by: CityLAB Student Partners

Elizabeth Marr, Nicholas Leslie, Saadiya Pathan, Albert Mac, and Eleni McGowans

1.0 Cootes Greenway Loop Executive Summary

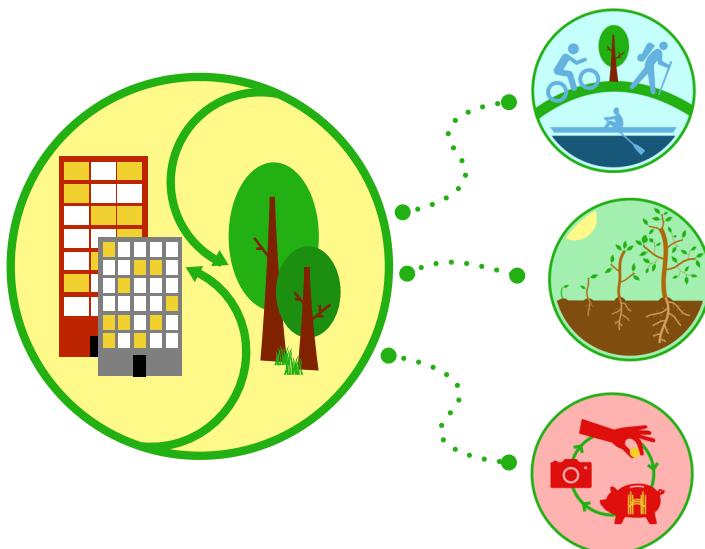
Created By: Elizabeth Marr, Nicholas Leslie, Albert Mac, Saadiya Pathan, and Eleni McGowans

1.1 Introduction

CityLAB Semester in Residence (SIR) is an interdisciplinary program for McMaster University, Redeemer University College, and Mohawk College students. The program is designed to give students an opportunity to work with City of Hamilton staff, community partners, and community members to work on innovative and sustainable projects in Hamilton. From October to December of 2019, a team of five CityLAB SIR students have worked in partnership with representatives from the City of Hamilton and the Hamilton Burlington Trails Council (HBTC) on the early stages of the Cootes Paradise Greenway Loop project. This project aims to apply the concept of a greenway - an outdoor active transportation network consisting of multi-use paths, pedestrian walkways, and on-street cycling facilities for both commuter and recreational use - to the Cootes Paradise region in Hamilton.

1.2 Project Focus

The vision of the Cootes Greenway Loop is to provide an accessible and sustainable trail network which connects residents and visitors to the natural, cultural, and heritage areas of the Cootes to Escarpment (C2E) EcoPark System. The project plans to promote these three principles:



Connect Hamilton residents and visitors with the exceptional natural environment around Cootes Paradise while simultaneously promoting a recreational lifestyle;

Conserve the natural environment by promoting active transportation and educating users on the importance of sustaining the biodiversity of Cootes Paradise;

Celebrate the beautiful natural area of Cootes Paradise by promoting tourism in the area and strengthening the local economy

To achieve these principles, background research was conducted on other greenways which have been implemented across North America; on municipal master plans; and on City of Hamilton priorities. This research informed the CityLAB SIR group's scope and deliverables.

1.3 Design and Dialogue

Two of the main components of the CityLAB SIR learning experience were design and dialogue.



Design

The design component included in-class lessons and out-of-class applications in the form of field design. The principles of design were applied to three deliverables:

- 1. Public Information Centre (PIC) Panels**
- 2. PowerPoint Presentation**
- 3. King Street East Route Design Proposal**



Dialogue

Central to our dialogue lessons were the principles of community engagement, and how these principles are relevant to work outside of the classroom. McMaster lists six principles: respectful relationships, reciprocity, equity, continuity, openness to learning, and commitment to act. These principles were crucial to the working group's development of two dialogue-related deliverables:

- 1. Cootes Greenway Loop Project Charter**
- 2. Cootes Greenway Loop Workshop**

1.4 Relevance to City Strategic Priorities

Hamilton City Council has highlighted six strategic priorities for 2016-2025. It was identified by City partners that the Cootes Greenway Loop would align primarily with the Clean and Green & Built Environment and Infrastructure goals, as represented below:



Built Environment and Infrastructure

Creates a well-connected transportation network that allows people to get around conveniently without a car, and not just for recreational purposes



Clean and Green

Improves active transportation options which will help to reduce our impact on the environment

1.5 Costing Estimate and Avoided Costs

The CityLAB SIR project group has a budget of \$400. Workshop materials and printing of final deliverables was budgeted for, with an estimated total cost of \$250. However, all workshop materials were provided by CityLAB SIR at no cost, and all deliverables were provided electronically to project partners – printing of the PIC panels and project charter was not deemed necessary. The

remaining budget is \$400. For the purpose of this report, the cost of the Cootes Greenway Loop is not included, however, that information can be found in Appendix H: Project Charter, Section 6.2.

1.6 Suburban and Rural Extensions

One of the main principles of the Cootes Greenway Loop is to connect Hamiltonians to natural lands and to each other. The Cootes Greenway will unite urban, suburban, and rural dwellings surrounding Cootes Paradise, and thus is an extension to suburban and rural scenarios in itself.

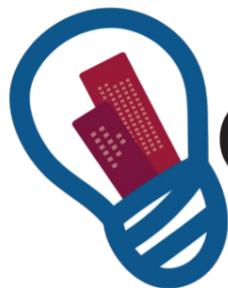
1.7 Key Recommendations

The success of the Cootes Greenway project is dependent on meeting the following short-term, mid-term, and long-term goals.



1.8 Key Conclusions

1. The PIC panels and PowerPoint presentation will support future community engagement;
2. The Cootes Greenway Project Charter will provide context of the project and its purpose to stakeholders;
3. The preliminary route design for King Street East will be used to inform future design plans by the W. Booth School of Engineering;
4. The Cootes Greenway project aligns with several goals from the City's strategic plans and vision to be the best place to raise a child and age successfully



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MINIMUM GRID | Final Report

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CityLAB | December 4th, 2019

This document provides an overview of the work done on Minimum Grid in the 2019 CityLAB community engagement project.

Executive Summary: Defining Hamilton's Minimum Grid

Understanding what a Minimum Grid of connected cycling infrastructure would entail for Hamilton.

Authors: Deborah Quist, Gabriella Christopher, Hannah Stoesz, Maryam Rana, Parsa Ayani, Tad Moretti | an interdisciplinary team of Semester at CityLAB students from McMaster University

Introduction:

As a quickly growing city in the midst of a Climate Emergency (Verlinden et al, 2019), Hamilton has an interest in increasing cycle-based transportation through creating a Minimum Grid network. The goal of this project was to inform future change within the existing cycling network to increase accessibility for all ages and abilities. In doing so, a *Subway-Style Cycling Map* prototype was used to identify areas of concern and positive features within the current network through community engagement. Together, themes from this analysis along with further background research contributed to a holistic understanding of Hamilton's Minimum Grid while outlining case-studies for potential infrastructure improvements. Working towards a Minimum Grid is fully aligned with the City of Hamilton six strategic priorities as well as its vision to “be the best place to raise a child and age successfully” (Verlinden et al, 2019).

Project Focus:

This project focused on establishing a community informed and context specific understanding and definition of a Minimum Grid for the City of Hamilton. Being introduced to a draft *Subway Style Cycling Map*, which is supposed to influence more Hamiltonians to cycle, has allowed for a considerable amount of time to be allocated towards utilizing this resource. Throughout the course of this project the *Subway-Style Cycling Map* was converted into an interactive tool using Google MyMaps. An analysis was conducted on the *Subway-Style Cycling Map* through utilizing cycling and transportation documents, data specific to the City of Hamilton, and community engagement. A collaborative community engagement workshop was planned and facilitated to evaluate the *Subway-Style Cycling Map* and the infrastructure within its routes. Informed by the results and outcomes from this workshop as well as engagement with other stakeholders, a concise Minimum Grid Report¹ was written on the meaning and components of a Hamilton specific Minimum Grid.

Dialogue and Design:

¹ [Click Here](#) to see the Minimum Grid Report written by the Minimum Grid Authors with the submission date of December 13th, 2019

Firstly, the definition of Hamilton's Minimum Grid was established through collaboration, dialogue, and engagement with local community members. From a dialogue perspective, this involved active listening in understanding the concerns of Hamiltonians regarding cyclability and appreciative inquiry in establishing the positive features to be mirrored throughout the network. Furthermore, an equity lens was applied in understanding how the network could be designed to increase accessibility for those currently underrepresented within the cycling community. In regard to design based thinking, working towards a Minimum Grid in Hamilton requires supporting people-centered, rather than motorist-centered design in Hamilton. This involved a systems thinking approach to understanding the interaction of natural and built features of the environment when developing case-study street designs. Lastly, visual design principles were applied for the development of deliverables including a Google MyMaps, an adapted Subway Style-Cycling Mapping tool, and a Minimum Grid Report.

Relevance to Strategic Priorities:

Establishing a Minimum Grid in Hamilton supports the City's vision "to be the best place to raise a child and age successfully" and aligns with its strategic priorities. Firstly, establishing a network of cycling connectivity that is informed by **community engagement and participation**, contributes to **clean and green** developments to the **built environment and infrastructure**. By increasing accessibility of cycling for **people** of all ages and abilities, this Minimum Grid project further supports **healthy and safe communities** that bring together people of **diverse cultures** while supporting **economic prosperity and growth** (Further outlined in section 6.1).

Costing:

The following demonstrates the budget of the project being \$400 budget and the avoided costs being \$159.74. The catering was for the stakeholder workshop and the gifts for key community partners and city staff who played a role in the project.

Category	Cost (\$)
Catering by At the Table	203
Gifts for Stakeholder meetings (Lindt chocolates)	37.26
Total Spent	240.26
Total Possible Budget	400
Avoided Costs	159.74

Figure 1. Incurred project related expenses and remaining funds

Suburban and Rural Extension:

Consideration of suburban and rural scenarios are integrated throughout the project as a city-wide Minimum Grid outlines a connected cycling network between all wards in Hamilton. That said, community engaged comments outlined the poor cyclability in many of Hamilton's boroughs. As such, further work towards the Minimum Grid should prioritize improving connectivity with Hamilton's suburbs as well as connecting such areas with the downtown core.

Key Recommendations:

As the City goes forward with establishing a Minimum Grid cycling network, emphasis should be placed on empowering community engagement. Not only will this ensure the network is tailored to community needs, it will also aid in marketing the Minimum Grid by increasing

interest of, connection to, and knowledge about cycling infrastructure. While the *Subway-Style Cycling Map* can be an effective tool in this process, its limitations in demonstrating realistic wayfinding options for unfamiliar cyclists should be recognized. In addition, in regard to informing the development of the infrastructure itself, emphasis should be placed on improving safety and connectivity both in the improvement of existing routes as well as in the planning of future additions. Cycling infrastructure should be built according to community identified needs, not only as haphazard additions to automobile-dominant development plans.

Main Conclusion:

Throughout the duration of this project, the main focus was determined by considering the Climate Emergency declared in Hamilton. Through the use of the *Subway Style Cycling Map*, this project has been able to identify areas of concern and positive features. This was done by conducting a workshop that consisted of participants from the cycling community as well as city staff and residents of Hamilton. The main outcomes from the workshop revealed that Hamilton is underprepared for the release of the *Subway-Style Cycling Map*. It was also found that existing mapped routes lack protected infrastructure that do not align with being accessible for all ages and abilities. Through extensive research and community feedback, the definition of a Minimum Grid in Hamilton has been determined as the following:

A Minimum Grid is a cycling network that is easily navigable, providing routes within 250 metres of every major destination. This involves connecting both institutions and community hubs within every ward to each other and their respective city center hubs. This network of routes must be safe and accessible for people aged 8-80, facilitating usage for all ages and abilities. This entails cycling infrastructure that feels safe and comfortable to all people and is conducive to proper sharing of the road between cyclists, pedestrians, and automobile users to achieve a Vision Zero of no traffic collisions.

This definition was determined by considering Hamilton's strategic priorities along with All Ages and Accessibilities. Taken into account were also the community comments and feedback related to safety, connectivity (or lack thereof), accessibility, wayfinding, general key features of a minimum grid or map design. Acknowledging the previously stated outcomes has contributed to establishing the framework of a Minimum Grid. Moving forth with future Minimum Grid projects, intensive planning of future bicycling infrastructure is necessary to create a vibrant, healthy, and green city with a cycling backbone.

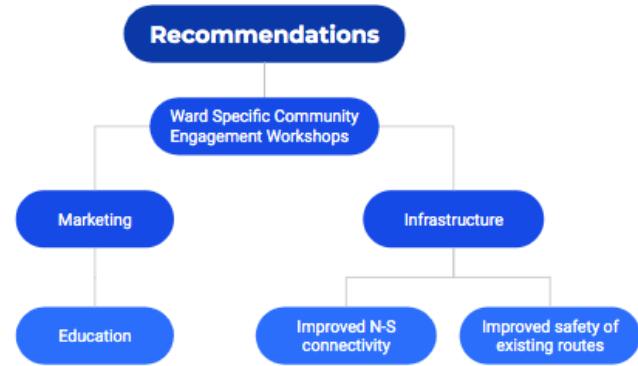


Figure 2. Key Recommendations



Sustainable Neighbourhood Action Plan (SNAP)

Final Academic Report

Project 2: Community Relationship-Building Workshop

In collaboration with: The City of Hamilton, the North End Neighbourhood Association, and CityLAB Hamilton.

Completed: December 6th, 2019

Prepared by: Taylor DeCoste, Nicole Graziano, Abigail S. Laulman, Frank Liang, Paerhati Najiman and Sam Patrick.

1.0 Executive Summary

The North End's unique history, diverse range of needs, and proximity to the Hamilton Harbor and industrial sector, make this neighbourhood the ideal grounds for a Sustainable Neighborhood Action Plan (SNAP) pilot in Hamilton Ontario. The SNAP model aims to create and implement unique climate mitigation and adaptation projects based on a specific community's priorities and needs. This framework couples urban sustainability, with locally-based projects and community well-being. Through consultation from the Toronto and Region Conservation Authority (TRCA), the City of Hamilton has partnered with CityLAB as a means of beginning to initiate Phase 1 and Phase 2 of the SNAP framework. Phase 1, which was explored in CityLAB's first SNAP project, calls for establishing contact with stakeholders and beginning to develop a comprehensive understanding of community needs and interests. Phase 2 required more extensive community engagement through a well-informed neighbourhood workshop and the creation of possible SNAP projects that can be implemented in the North End. Although developing a finalized "Action Plan" for a future SNAP pilot within the community ultimately fell outside of the scope of this project, the CityLAB project team was still able to share reflections regarding the opportunities for enhanced sustainable infrastructure in the North End.



Figure 1.0 "Rapid" SNAP planning process.

In March 2019, the City of Hamilton declared a climate emergency and asserted its commitment to reaching net-zero carbon emissions by 2050 (Craggs, 2019). In order to pursue this goal, there must be climate action at the municipal, corporate and community levels. The culmination of this project was a community workshop that was intended to recognize the need for locally-based solutions, strengthen relationships with both residents and stakeholders, while providing an opportunity to reflect upon the previous research. Through several discussions, reflections and interactive activities, the team was able to foster transparent dialogue and identify community assets and vulnerabilities. The workshop consisted of three major activities: watching a video tour of the neighbourhood accompanied by a facilitated discussion period, an interactive game to outline resident's concerns and priorities, and finally a mapping exercise that highlights assets, vulnerabilities and potential collaborations within the North End. Furthermore, this workshop served as a means to validate the work achieved by the CityLAB SNAP team; including existing research, as well as the results from a preliminary survey that was collected in October.

Dialogue skills played a fundamental role in this project and were an integral part of the CityLAB team's community outreach. In order to better connect project partners and the North End neighbourhood, the CityLAB team utilized both the City of Hamilton's Strategic Priorities and McMaster's Principles of Community Engagement as guiding principles. Connecting these goals in a meaningful way ensured that this project encouraged purposeful and continued collaboration. According to the Community Engagement Department at McMaster University, "any successful partnership must be built on trusting and respectful relationships guided by integrity" (McMaster University, n.d.).

Designing a workshop for the North End community required that the project team acknowledge the existence of sustainable infrastructure and climate-resiliency projects. Although there is room for many developments to be strengthened by the community engagement offered by the SNAP model, any design must not only account for but also appreciate the existing efforts to combat climate change. All proposed design potentials examine existing eco-friendly infrastructure and how it can be expanded across the North End. Furthermore, it is crucial to acknowledge the pre-existing organizations and foster collaboration when designing a SNAP pilot. There have been a number of valuable community collaborations, including partnership with the North End Neighbourhood Association (NENA). NENA is a key stakeholder in the North End, is well informed of community issues and has expressed interest in climate mitigation strategies through their Environment and Climate sub-committee.

As this project progresses with a new team in 2020, the current CityLAB team recommends that the City of Hamilton regularly consult with community stakeholders and collaborate with existing projects. Moreover, it is crucial that the City recognize the resident's unique and meaningful insight into their own community. This project can only succeed through ongoing transparency, dialogue and community engagement. All research done thus far can serve as a guide for the City of Hamilton Staff and will hopefully promote collaboration. If successful, this project has the potential to be extended to other neighbourhoods across Hamilton, both rural and urban. Each SNAP model is unique in its own right, but can use previous efforts, such as this project, as a fundamental piece of research and recommendations. This final SNAP report details the background research and guiding principles that led to the production of the community workshop, so that this and other SNAP projects can progress forward.