# Home is Where the Hearth is: Recognizing and Building Identity in an Urban Residential Area

by

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Submitted in partial fulfilment of the requirements for the degree of Master of Architecture

at

Dalhousie University Halifax, Nova Scotia July 2015

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#### **ABSTRACT**

This thesis report explores the relationships between the built environment, the social fabric of a neighbourhood, and a sense of belonging to a community.

The fabric of a neighbourhood community is shaped by the typologies and patterns of its buildings, and becomes a part of the identity of the place. This thesis project delves into the role of architecture in expressing and strengthening that identity.

The research into these topics included the investigation of two neighbourhoods, each with names synonymous with their community identities, and the mapping of city and neighbourhood hubs in the city of Halifax. These studies led to design principles that promote the existing fabric of a neighbourhood and provide a platform for social interaction among neighbours.

The design principles have then been applied to an urban residential area of Halifax to develop strategies for expressing and enhancing the identity, and establishing a neighbourhood in the city.

## **ACKNOWLEDGEMENTS**

I would like to express great appreciation and admiration for my supervisor and advisor, Niall Savage and Grant Wanzel, for their guidance and patience throughout this project. Their involvement helped to turn the seed of an idea into a larger, bolder concept.

To my classmates and colleagues, my family and my friends, I extend the deepest gratitude for their enthusiasm, encouragement, and inspiration.

#### **CHAPTER 1: INTRODUCTION**

Happiness is a house with many rooms, but at its core is a hearth around which we gather family, friends, the community, and sometimes even strangers to find the best part of ourselves. (Montgomery 2013, 39)

A community is simply a group of people who share an interest or element of their lives, such as the location of their homes. By this definition, each neighbourhood is a community, though it may be weak or strong. Communities become stronger when the members have more common ground and can relate to one another, and the built environment can create opportunities for that to occur.

The sense of belonging to a community of people is built on mutual trust and values. When people feel they belong, they take a larger interest in the issues that affect their community, and they take better care of community spaces.

The sum of such casual, public contact at a local level – most of it fortuitous, most of it associated with errands, all of it metered by the person concerned and not thrust upon him by anyone – is a feeling for the public identity of people, a web of public respect and trust, and a resource in time of personal or neighborhood need. The absence of this trust is a disaster to a city street, Its cultivation cannot be institutionalized. And above all, it implies no private commitments. (Jacobs 1961, 56)

The built environment influences how people move through space; where they move quickly to avoid being in the way, where they stop to chat or pause to check their directions. It affects the relationships between public and private space; where people come together and where they seek solitude.

In neighbourhoods the built environment consists mostly of private residential space, and the boundaries between public and private realms are blurred where private property meets public sidewalk. Neighbourhoods need distinguished public spaces in which social activity can take place comfortably. Although the architecture cannot ensure that all people will be friendly in their encounters, it can create environments where positive interactions are encouraged to take place.

Social activity in urban settings has been studied many times in modern history by great minds such as Jane Jacobs, Jan Gehl, and Walter Gropius. This thesis builds on their work to study the social threads in the fabric of a community and the shared identity of the neighbourhood. The strengthening of those social elements creates a sense of community identity, interest in local affairs, and a stronger, healthier, happier city.

Thesis question: How can architecture fortify the social fabric and express the shared identity of a neighbourhood?

## CHAPTER 2: NEIGHBOURHOOD CASE STUDIES

The fabric of a neighbourhood is composed of distances and forms that relate to the social values of the residents. The studies that follow consider two well-established urban neighbourhoods with distinctive character and fabric. Both neighbourhoods foster a sense of belonging and have strong boundaries, but the patterns that compose their fabrics vary greatly.

## 2.1 The Hydrostone

## 2.1.1 Background

The Hydrostone is a well known neighbourhood in Halifax. It is defined by its block patterns, its building patterns, and the materiality of its buildings. The Hydrostone neighbourhood is widely considered to be a desirable neighbourhood to live in, and was voted the second greatest neighbourhood in Canada in a Canadian Insitute of Planners Great Places contest in 2011 (Newswire 2011).

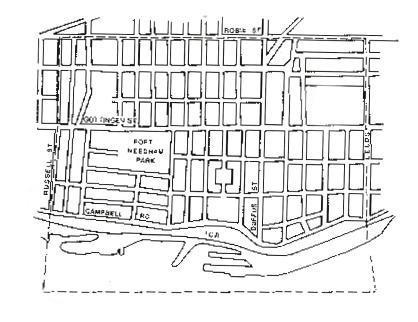
The Hydrostone neighbourhood is part of an area of Halifax that was designed by architect Thomas Adams after the Halifax explosion of 1917. The neighbourhood was intended to house those who had been displaced as a result of the explosion and rebuild a community in the aftermath of tragedy. Before the area was devastated it was simply called the Richmond district. The new plan proposed by Adams in collaboration with architects Ross and



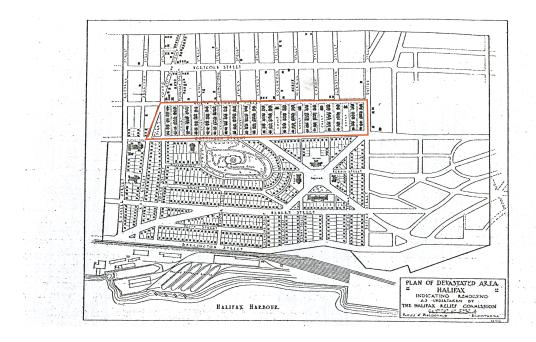
The Hydrostone is highlighted in red on this map of Halifax (Halifax Regional Municipality GIS Database 2009).



Hydrostone neighbourhood (Nova Scotia Archives 1921).



This map shows the block layout of the Richmond District before the Halifax explosion, sourced from an Atlantic Planners Institute document.



This rehousing development plan illustrates the scale of new buildings and lots, sourced from an Atlantic Planners Institute document. The Hydrostone boundaries are outlined in red.

Macdonald showed three distinct areas of housing.

The central neighbourhood was intended to serve as a barrier or screen between the lesser quality housing and industrial area to the west, and the higher quality residential area on the east side of Fort Needham park. The house construction would vary in each socially separate area, with frame houses to the west, hydrostone construction row houses in the central neighbourhood, and hydrostone homes mixed with privately developed houses on the east slope overlooking the harbour (Atlantic Planners Institute 2000).

Their plans included building 500 new homes, 350 of which would be in the Hydrostone neighbourhood. (Adams 1918, 679)





Overhead shot of a part of the Hydrostone District (Canada's Historic Places 1990).



Elevation and plan of Hydrostone row houses from the Contract Record (Adams 1918).

### 2.1.2 Structure and Identity

The Hydrostone is distinct from other neighbourhoods in Halifax. Having been a manager of Letchworth Garden City in England, and a member of the Garden City Association, Adams believed in the importance of living close to nature with pure air and water, and access to fields and parks (Adams 1911). These principles are evident in the layout of the Hydrostone. The neighbourhood features boulevards with large, grassy, communal outdoor spaces in which the children play and can be observed from any house on the block, and the houses are also accessed through a back laneway, which keeps as many vehicles out of the boulevards as possible. It has clear boundaries that separate it from adjacent neighbourhoods, but connecting streets weave the area into the city fabric.



Hydrostone block houses (Nova Scotia Archives 1921).





Boulevard communal spaces (top) and laneways (bottom).



Elevational collage of a Hydrostone neighbourhood block from across the central greenbelt.

The buildings in the Hydrostone neighbourhood were all built within a short time frame and constructed of the same stone blocks, for which the neighbourhood is named (Contract Record, 678). Although many of the homes now have additions or have been renovated, the original block construction still distinguishes the neighbourhood from surrounding communities.

## 2.1.3 Public Space

The neighbourhood is bordered by Fort Needham Memorial park, which provides space in which to gather, play, exercise, or simply be close to nature. The central green spaces in the boulevards of the Hydrostone draw residents out of their homes and into the outdoor space, where the children play while their guardians look on. The location of the shared



Fort Needham Memorial Park (Shape Your City Halifax 2013).



Diagrammatic mapping of the Hydrostone neighbourhood.

green space accommodates fairly constant surveillance from community members. The communal space is a neutral ground for the people of the block, where they might see each other and wave in passing, or stop and chat without being in the roadway. Benches at the ends of the grassy spaces invite the residents to sit and observe the life of the block.

These shared green spaces contribute to the identity of the Hydrostone neighbourhood, along with the laneways, building patterns, and building materials. They strengthen the community by encouraging interaction and by allowing each household equal access to the communal space. They are one reason why the Hydrostone neighbourhood is a desirable place to live.

The neighbourhood is capped by a small shopping area on Young Street, called The Hydrostone Market. When the weather allows, it is an area bustling with activity. People from across the city come to visit this small, vibrant, historical area that is brimming with small-town character. The market is the hearth of the neighbourhood, where the community gathers for events and where the essence of the Hydrostone neighbourhood is expressed.

The combination of the community hearth and the patterns that form the neighbourhood fabric creates a strong identity, to which each community member can relate.



Street section, relating public streets, share green spacses, and semiprivate inner courtyards. Scale = 1:2000.



Hydrostone Market (Saunders 2013).

## 2.2 Beacon Hill

## 2.2.1 Background

Boston, Massachusetts is a city known for its character and its many distinct neighbourhoods. It is a city developed around the topography of the peninsula and has an irregular plan as a result.

In areas of Old Boston, the neighbourhoods have remained much the same as they were two hundred years ago. As such, there is an immense sense of history and identity to these neighbourhoods. Surveys report that a high percentage of Boston residents feel they can trust their neighbours, particularly in the older neighbourhoods of the city.



This key map highlights the Beacon Hill neighbourhood in Boston.



This portion of an illustration by A.E.Downs depicts Beacon Hill and the Boston Commons in 1899. The neighbourhood has not changed in aesthetics (Boston Public Library).

Beacon Hill is an example of one of these neighbourhoods that has maintained its charm since it was first conceived in 1795. Before it became a neighbourhood, the area was a grazing pasture and used for military drills. It was originally called the Trimountain region for the three hills that lined the ridge in the center of the city.

As one of the highest points in the city, it was the ideal location for a new State House which was constructed in 1795 (Beacon Hill 2010). A beacon was also erected that would be the namesake of the future neighbourhood.

The location drew wealthy residents who would build mansions on the South slope, including architect Charles Bulfinch. The area was levelled to allow for development; the Beacon Hill one might visit today is drastically different than the Trimountain region it once was.

Mansions were built along Mount Vernon Street, and are still distinguishable today because they are set back further from the street than their neighbours. The mansions were eventually subdivided into row houses, and more row houses were built throughout the neighbourhood.



The blue area in this map of Beacon Hill in 1814 is the area that was purchased by Mount Vernon Proprietors, a group of wealthy developers (Library of Congress).



Mansions were set back further from the road, they are the only buildings in the neighbourhood to have front yards (Google Maps 2015).

As the South slope was developed by the wealthy, the North slope became an extension of the Westend neighbourhood and was inhabited by the African American community, who lived in much more modest accommodations of wooden houses (Chalmers Bartlett 1996, 9). In 1806 the African Meeting House was built in the center of the community. This building would be the key gathering space and would play a role in Boston's abolition movement.

The African American population increased and began to migrate to other neighbourhoods that could better accommodate the size of the community. European immigrants took their place at Beacon Hill, and the African Meeting House was converted to a Jewish synagogue in 1904. The row houses on the North slope were replaced by tenement buildings with more units to house the growing population. (Chalmers Bartlett 1996, 10)

In 1955 the Beacon Hill neighbourhood was declared a historic district to protect it from the urban renewal projects that had demolished other neighbourhoods, particularly the West End.

Today the neighbourhood is considered an "elite enclave" in the city. The uniformity of brick row houses is softened by a variety of details that make each dwelling unique.



The North slope highlighted in blue (Boston Redevelopment Authority 2013).

#### 2.2.2 Structure and Identity

The identity of Beacon Hill is in its buildings, streets, and landmarks. The front faces of the neighbour-hood's historic buildings create a continuous façade of brick around most blocks, defending the semi-private courtyards within. The narrow cobblestone streets are consistent throughout the neighbourhood and memorable as belonging to that era and place.

..the components of structure and identity (which are the parts of the image in which we are interested) seem to leapfrog as the observer moves up from level to level. The identity of a window may be structured into a pattern of windows, which is the cue for the identification of a building. The buildings themselves are interrelated so as to form an identifiable space, and so on. (Lynch 1960, 84)

Many of the original buildings constructed in Beacon Hill were designed by Bulfinch, whose work was heavily influenced by the Federal style. In the early nineteenth century, houses in the neighbourhood were built mostly by housewrights, who were influenced by the works of Asher Benjamin in a similarly Federal-era style.

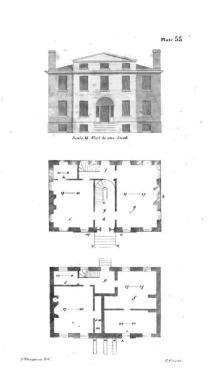


Plate 55 from Asher Benjamin's American Builder's Companion (1827).



Facades of Beacon Hill a street (Google Maps 2015).

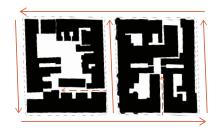


Most of these buildings are still standing and the arched entrances, flat facades, and brick masonry of the style are still apparent. Later on in the century, many of the homes were altered with Victorian-inspired details.

Lynch described the streets of Beacon Hill as confusing, but having a "thematic unit" distinct from the rest of the city, and therefore having a strong image (Lynch 1960, 68). Beacon Hill has strong boundaries and a lack of connecting streets, at least since the destruction of the Westend neighbourhood. It is a unit within itself, but this separation from the surrounding districts lends the area additional exclusivity which its residents may enjoy.



Block pattern of Beacon Hill neighbourhood. This neighbourhood does not rely on the clarity of its grid organization.

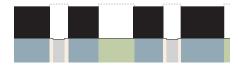


The buildings of the block form a continuous wall protecting the inner courtyard.

## 2.2.3 Public Space

With the exception of the mansions, the homes of Beacon Hill are not set back and the entries open directly onto the sidewalk. Most homes do not have stoops or any significant thresholds on which to stand and socialize. However, the small cobblestone streets force vehicular traffic to be slow and careful, so the streets are a relatively safe place for pedestrians. The streets themselves are spaces for socialization.

In addition to its proximity to the Boston Commons, the neighbourhood is recognized as the home of the State House and the Black Heritage trail. It also contains one commercial street and is bordered by another, making the neighbourhood highly walkable.



Street section, relating public streets and semi-private inner courtyards. Scale = 1:2000.



Beacon Hill Map, scale = 1:10,000

### 2.3 Findings

Each of the neighbourhoods studied has a structure that is made up of building proportions and their relations to the street and to each other. The structure is maintained throughout the neighbourhood, yet every home is uniquely decorated with details. Together, these elements create the thematic unit that Lynch described.

The Hydrostone and Beacon Hill neighbourhoods both have strong identities as places within their respective cities, and as pleasant, well-kept areas. They have names that are inherently linked to their identities, and are recognized across their cities. Both neighbourhoods also have strong boundaries defining the community extents, however the block patterns within their boundaries are very different.

The block patterns are important because they connect the neighbourhood to the city circulation, and prevent the neighbourhood from becoming isolated. Ideally the boundaries of a neighbourhood should define the area, but also stitch one community together with the next. This type of boundary occurs at the Hydrostone; the area of the neighbourhood is clear and contained, but there are many connecting streets that weave the neighbourhood into the rest of the city.

Beacon Hill is separated from the city by a major roadway on its north side, and flanked by the city commons on its south side. The surroundings isolate the area, but its historical charm, landmarks, and shopping streets attract activity nonetheless. It is the identity and the public spaces of Beacon Hill that bring people into the neighbourhood, and that create the place to which residents feel they belong.

## CHAPTER 3: STUDY NEIGHBOURHOOD

The goal of this thesis project is to decipher the existing fabric of an area of Halifax to understand its patterns and values, and to fortify those patterns to create a strong sense of identity in that area. After studying two neighbourhoods that are perceived to have a strong community, the findings can be further explored, and the principles that govern their strength of community can be applied to any area.

This thesis will test the principles put forth by applying them to an urban area of Halifax that is not yet identifiable as a neighbourhood. By applying the principles governing the identities of the Hydrostone and Beacon Hill neighbourhoods, and giving the area a name to symbolize its identity, the area will become a neighbourhood. The chosen area is relatively central on the peninsula, and it is bounded by some important areas to the city including the Halifax commons. It is not as homogenous as either the Hydrostone or the Beacon Hill neighbourhood; it contains a mixture of building types and demographics, low income and high income, students and elderly. Each street has a character of its own. Despite it's diversity, the area has a pleasant character and a suburban atmosphere. These aspects make it a definable area to study and to apply the design principles that will be proposed by this thesis. In a neighbourhood as varied as this area, it is especially important to have a shared sense of community identity.



Study neighbourhood key map

#### 3.1 Site Information

## 3.1.1 Bounding Streets

The test neighbourhood is bounded by Coburg Road, Robie Street, Quinpool Road, and Oxford Street. Each of these streets has an identity of their own. The neighbourhood is near Halifax's central green area, which includes the Halifax Commons and the Citadel. For the purposes of this thesis, the neighbourhood will be named Westgreens, for its relative location.

Coburg is the home of Dalhousie University, which is attended by more than 18,000 students each year (Dalhousie University 2015), many of whom live off-campus in residential neighbourhoods nearby.

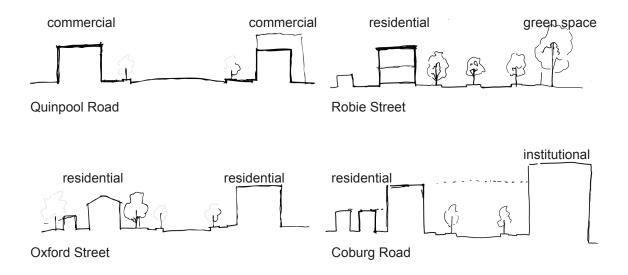
Robie Street is an artery of the city, connecting areas such as Spring Garden Road and the Halifax Commons. Robie Street marks the boundary between residential districts of the city and commercial or green space districts.

Quinpool Road is lined with shops and businesses, and is also a high-traffic road.

Oxford street is another artery road, and separates the higher-income waterfront properties to the west from the central area of the city.



Bounding streets of the Westgreens neighbourhood.





Boundary conditions of the Westgreens neighbourhood.

### 3.1.2 Composition

The Westgreens neighbourhood is divided by secondary streets that run through the entire neighbourhood and connect it to the adjacent areas of the city.

The neighbourhood is primarily a residential area, however it is also home to other building types as well. Commercial buildings line Quinpool Road and are sprinkled through the neighbourhood, with a small concentration on Jubilee Road. There are several institutional buildings in the Westgreens as well, mainly churches near the perimeter and schools that are more central to the neighbourhood. The neighbourhood house typology is mostly detached homes, but there are also apartment buildings within the neighbourhood. Most of these buildings are located around the boundaries of the neighbourhood, and keeping most commercial or institutional activity to the exterior of the residential zone. The buildings that are on the interior of the neighbourhood are small shops, businesses and schools that are mainly for the use of the neighbourhood residents.



Secondary streets



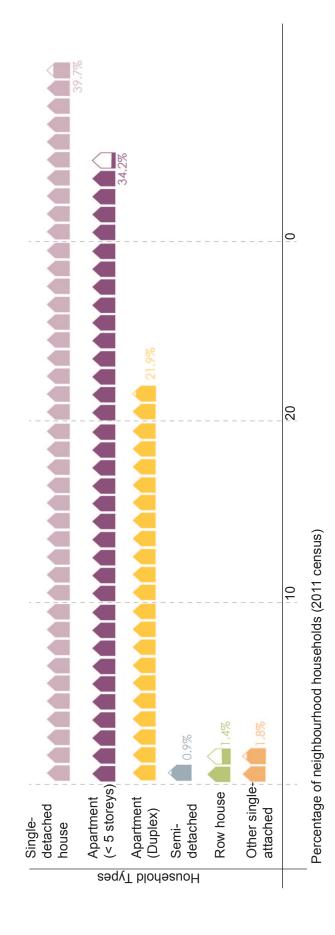
Commercial buildings



Institutional buildings



Apartment buildings, 4 or more floors

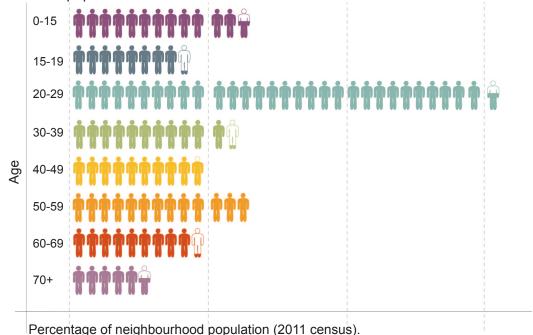


majority of the buildings in the neighbourhood are single-detached dwellings, the largest portion of the neighbourhood population live in the few This graphic compares the household types found within the neighbourhood as stated in the 2011 census data. It illustrates that although the apartment buildings in the nieghbourhood.

#### 3.1.3 Population

The graph below compares the age groups within the Westgreens neighbourhood. The overall population of the neighbourhood is approximately 4000 people, and more than thirty percent of the population is between the ages of twenty and twenty-nine. This large group is likely caused by the proximity to Dalhousie and Saint Mary's Universities. The other age group populations are fairly similar in size.

Considering the census data on the household types and population groups together, it is reasonable to deduce that the large amount of apartment building households is related to the large grouping of student-aged people. Apartment buildings do not have the same social opportunities or access to nature that detached dwellings have, and the neighbourhood is in need of public spaces where apartment dwellers may enjoy these aspects, particularly for the student population.



## CHAPTER 4: IDENTITY AND NEIGHBOURHOOD FABRIC

Obviously a clear image enables one to move about easily and quickly: to find a friend's house or a policeman or a button store. But an ordered environment can do more than this; it may serve as a broad frame of reference, an organizer of activity or belief or knowledge. (Lynch 1960, 4)

In *The Image of the City* (1960), Kevin Lynch describes the elements that constitute the visual perception of the city. One aspect that is particularly important to the mental image, says Lynch, is the city's legibility. (2) This quality is created or strengthened by structure and clarity in the city's layout.

The visual perception Lynch described has to do with the recognizability of an area as a "place". It is memorable and has an identity.

Where a person dwells becomes part of his or her personal identity, just like age or race. This aspect of self-identity is shared among all of the people in a neighbourhood, and where the other aspects of the population's personal identities may vary greatly, it is the shared aspect of place that binds a community.

The findings of the neighbourhood case studies suggest that the success of a neighbourhood as a memorable place is related to its consistency in its image, or its identity.

#### 4.1 Structure

A neighbourhood's place in the city is defined by the bounding streets, how the area relates to the grid and other districts, and any landmarks that can describe its location.

Patterns in the fabric of a city are necessary for efficiency and navigability. The patterns of a city may be planned or they may develop over centuries, but in either case they are a result of the history, politics, and culture of the city as much as the topography or environment.

The grid, the block patterns, and the landmarks within a neighbourhood define its character and its place in the city.

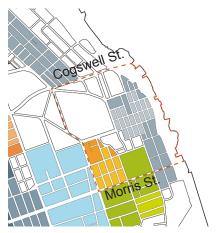
The fabric of a neighbourhood is made up of physical patterns and social patterns, which are directly related to one another. The physical elements are shaped by social values and rules. People rely on the built environment to indicate social boundaries; to define which space is available for pedestrians or for cars, and which spaces are public or private. These physical indicators help us to navigate our environment, from the city arteries to the sidewalk.

#### 4.1.1. Grids

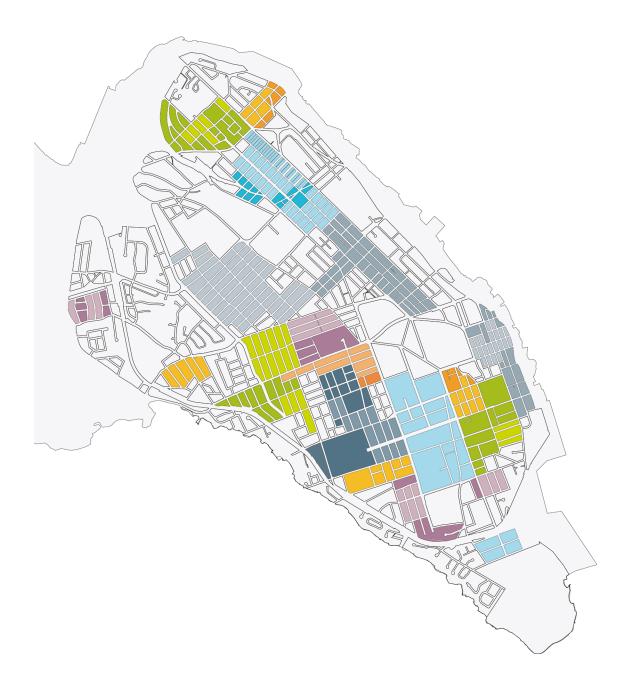
The patterns of city blocks can define the boundaries between neighbourhoods and communities. Often districts of the city can be described by the streets which act as boundaries between grid patterns.

For example, the core of the downtown area of Halifax is bounded by Cogswell Street and Morris Street.

The grid pattern within these boundaries is distinct from the pattern to the north, or to the south.



The area of Downtown Halifax is defined by the grid patterns.



The Westgreens neighbourhood is a meeting place of many different grid patterns, and is described by arterial roads and the boundaries of other city districts. The character of this neighbourhood can be strengthened by identifying the strongest grid patterns within it and using those patterns as guidelines to create pathways through the neighbourhood.

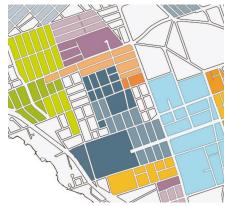
#### 4.1.2 Block Patterns

People need an identifiable spatial unit to belong to. (Alexander et al. 1977, 81)

The main block pattern of a neighbourhood describes the identity of the community because it is representational of the typical building types, sizes, and spacing as well as the social values and traditions that are typical of households in that neighbourhood.

Within the Westgreens neighbourhood there are many block types which have different compositions of residential, commercial, and institutional buildings. The block types of the neighbourhood were categorized in order to compare the types and identify the dominant block pattern. Ideally, the dominant pattern could be applied to every block within the neighbourhood that is solely for residential use in order to strengthen the structure. If this were the case, then the blocks with public spaces would be exceptions to the pattern, and the change would indicate that the space in that block is something different than residential space.

In the case of the Hydrostone neighbourhood, the

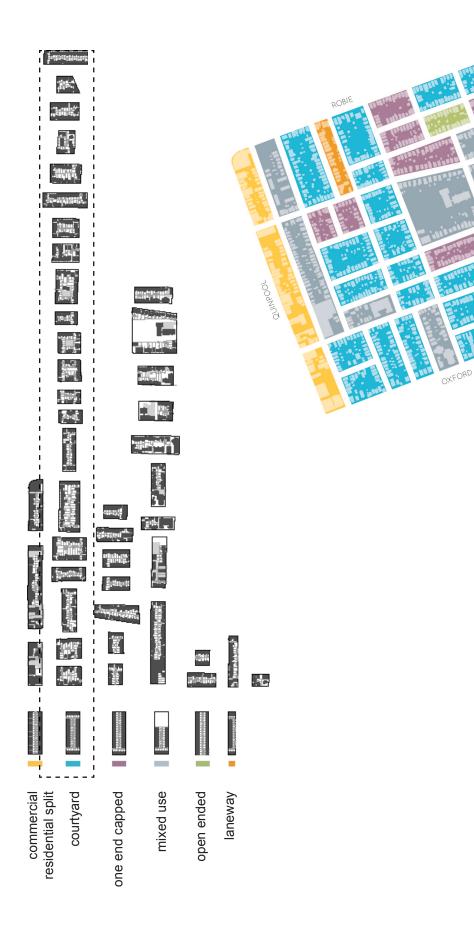


Westgreens neighbourhood

buildings were planned and built within a short period of time, and the patterns of the blocks are identical as a result. This fact is part of why the neighbourhood has a strong identity as a place within the context of the city.

The dominant block pattern of the Westgreens neighbourhood is a ring of single family detached homes protecting the inner, courtyard-like space. In this neighbourhood, the green space is not shared, but is private, parcelled land. The benefit of private outdoor space is that each property owner is free to appropriate it how they like, but the drawback is that there is no shared space between households, and the individual owners often erect fences to keep their neighbours' gaze from penetrating their private space.

The typical block organization suggests that the residents of the Westgreens neighbourhood value their privacy in their backyards, which is further demonstrated in the fences that mark property boundaries. These values must be respected in the development of new public spaces, and the separation of private spaces deepens the need for shared neighbourhood space.



The comparison between block organizational types in the Westgreens reveals that the majority of the blocks have courtyard-like configurations, similar to the blocks of the Beacon Hill neighbourhood. These blocks are less dense than Beacon Hill, and they allow more porosity. The interior blocks of Westgreens are protected from the public street, and they are also segregated into separate, semi-private back yards. This organization communicates the desire for privacy and for private access to green space.

#### 4.1.3 Elevation and Rhythm

As a person walks along a sidewalk, the consistent pattern of solid and void space constitute a rhythm that unconsciously defines the perception of the place. The rhythm of the procession becomes synonymous with the neighbourhood.

Lynch described the importance of path identity to wayfinding and the structure of the city (1960). This is particularly important for pedestrians following the sidewalk path. The pedestrian most often travels at a consistent speed, which allows rhythms to become part of the experience of the place. The undulations of set backs and protrusions in buildings of similar size and spacing form mentally percussive compositions.

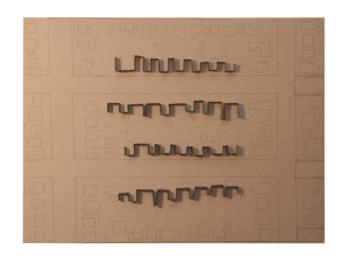
When the pattern varies and the rhythm is disturbed, it is an indication that something irregular is occurring in that space.

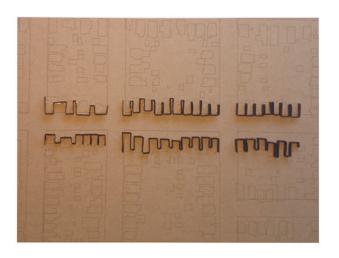
As a person walks along Quinpool Road, the north boundary of the Westgreens neighbourhood, one finds it is difficult to have a true sense of the place. Building sizes and spacing are inconsistent, and some areas of the road, such as the intersection with Robie Street, are unfriendly to the pedestrian. As a street centered around shopping, this area should encourage pedestrian activity and have a stronger sense of unified identity that encompasses the entire road. Using a consistent structure and similar character elements as design principles will give Quinpool road a sense of scale and identity. The placement of

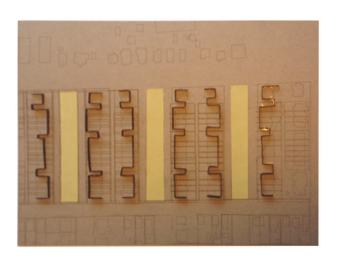
public use spaces along the street will also make the area pedestrian friendly, and consequently attract more shoppers to the street.



This Robie street elevation demonstrates a very consistent pattern of building types, sizes and spaces.







neighbourhood (left), the test neighbourhood (center), and a South End neighbourhood (right). Each pattern is distinctly different. [Réplace with better photographs] Neighbourhood building pattern comparison: Abstractions of the patterns of blocks in Halifax neighbourhoods. They represent the Hydrostone

### 4.1.4 Public Spaces

Public spaces in a neighbourhood can serve as landmarks. These places give the neighbourhood its 'flavour', and they are places where anyone can pass through and enjoy that character and sense of community. Public community spaces should be a reflection of the community that gathers there. Neighbourhoods need public spaces so that interaction may occur across the entire neighbourhood community population. Spaces with general and necessary uses bring people of all ages to the same place.

[The city] should enable us to build and strengthen the bonds between friends, families, and strangers that give life meaning, bonds that represent the city's greatest achievement and opportunity. (Montgomery 2013, 43)

Most Haligonians recognize the Hydrostone Market because they have visited that place and experienced the pleasant, small town character. They also associate the entire neighbourhood with this one place, and perhaps with Needham Park. It is a reference point from which to relate other places in the city. The market solidifies the Hydrostone neighbourhood's place in the context of the city because it is a "place", in the sense that it is memorable for it's activity and character.

Most of us identify with a place in the city because we use it, and get to know it reasonably intimately. We take our two feet and move around in it and come to count on it. The only reason anyone does this much is that useful or interesting or convenient differences fairly near by exert an attraction. (Jacobs 1961, 129)

# **CHAPTER 5: NODES OF ACTIVITY**

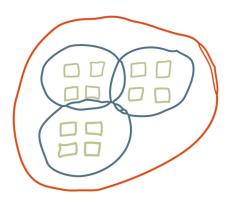
### 5.1 What is a Node?

There are many places in a city where people gather for one reason or another. Gathering places have few rules; they are formal or informal, large or small. They may occur naturally, where people tend to be, or they may be places that have been designed to draw people to them. It seems that all that is necessary for a gathering space to exist is activity (people) and space itself. One role of architecture is to facilitate social interactions by providing spaces conducive to comfortable, casual transactions.

Public places of activity occur at many scales for communities of different sizes. This thesis will consider places of activity at the city scale, at the neighbourhood scale, and at the block scale, and their relations to each other. These places are nodes, where pedestrian pathways meet or pass through, and which over time become integrated into the circulation patterns and fabric of the city. Together, the nodes form a network across the city, connecting small spaces to larger ones and to each other.

Centers of use grow up in lively, diverse districts, just as centers of use occur on a smaller scale in parks, and such centers count especially in district identification if they contain also a landmark that comes to stand for the place symbolically and, in a way, for the district. (Jacobs 1961, 130)

In Life Between Buildings (1987), Jan Gehl describes three types of activities that take place in public space. They are necessary activities, optional activities, and social activities. Gehl asserts that so-



Nested communities diagram. This diagram illustrates the relationships between block-scale communities (green), neighbourhood communities (blue), and city-scale communities (red). Each community is simply part of a larger community.

cial activity can only take place when both necessary and optional activities are present. The quality of the environment affects the types of activities that take place.

The character of social activities varies, depending on the context in which they occur. In the residential streets, near schools, near places of work, where there are a limited number of people with common interests or backgrounds, social activities in public places can be quite comprehensive: greetings, conversations, discussions, and play arising from common interests and because people 'know' each other, if for no other reason than that they often see each other. (Gehl 1987, 15)

Every activity node is a place for social activity to occur, but it must be designed to encourage socialization or allow passive interaction. Gehl's studies were conducted at the scale of the city, but the same type of activities might occur at the scale of the neighbourhood, or even the block.

#### 5.2 Node Elements

In Halifax there are many nodes of activity, primarily at the city scale. Each node has elements that make it a desirable place to spend time. Some elements are more important than others, such as resources and, therefore, necessary activities. Comparing these nodes and resources may give insight into the strengths and weaknesses of social spaces in the city. These elements constitute a language for public/social spaces, and different combinations of elements create very different spaces. An analysis of the elements of various gathering spaces (or nodes) across Halifax demonstrates the strengths and weaknesses of public space in the city.

Place	Resources	Shopping	Food/ Bev.	Plaza	Public Seating	Indoor/ outdoor	Trees	Lawn	Landscaping
Spring Garden Road									
Central Library									
Public Gardens									
Point Pleasant Park									
Seaport Market									
Boardwalk									
Grand Parade									
Scotia Square Mall									
Halifax Commons									
Halifax Shopping Center									
Quinpool Road									
Dalhousie Univer- sity Quad									
Saint Mary's Lawn									
Needham Mem. Park									
Coffee Shop (typ.)									
Bus Stop (typ.)									
Bench (typ.)			41 14	£ 1.1-12					

An analysis of activity node elements in the city of Halifax.

#### Resources

Resources draw people to use a space. Some examples are libraries, laundromats, or even just wireless internet use. These are necessary activities. Few spaces in Halifax offer resources, and many that do are closed communities such as universities.

### Shopping, food and beverages

Shopping is also an activity that draws people, however it is a primarily optional activity. Food and beverages are also draws that are optional, but these activities encourage people to linger, creating opportunity for socialization.

#### Plaza

Plazas offer pedestrian space, most often including seating. When they are most successful, plazas are located adjacent to many necessary and optional activities that draw people through them.

#### Indoor/ Outdoor choice

Few public spaces are used all year round. Those that are offer both indoor and outdoor spaces.

#### Trees and landscaping

Being close to nature is important to mental health, and even seeing elements of the natural world can have a calming effect. These elements can be a draw for public spaces.

#### Lawn

A lawn allows for large group activities. Lawns within the city are very popular spots in the summer; people can be seen playing catch, practicing yoga, reading, and sun bathing.

### **Overall Findings**

Spaces that have many elements are the most effective social spaces. The comparison chart shows that the Central Library, the Seaport Market and the boardwalk all have many elements, and these are places that are immensely popular. They are also places that people go to observe other people, even without any other intentions than to experience the activity that is happening there, the life of the city. What is particularly singular to these spaces is they offer the choice between being outdoors or indoors, and each choice is pleasant. This also means that they are open during winter months, as opposed to the Public Gardens which closes for the season.

## 5.3 Node Scales

### 5.3.1 City Nodes

City nodes are generally large, public spaces, such as the Seaport Market and the Halifax Commons. They are often located outside of residential neighbourhoods and near commercial areas where people shop and eat at their leisure. These spaces are available to the entire population, and it is in these spaces that people from smaller communities across the city interact and share interests, which

creates a community of the entire city. City nodes are most successful when they have some optional activity that draws people to them from all over the city. For example, the Seaport Market is a hive of activity during market hours. Not only do shoppers come to buy food and wares, they come to enjoy the bustle of people and the view of the harbour (when no cruise ships block it), sit and drink a coffee, and experience the lively energy of the market. With so many Haligonians in the same space at the same time, it is a concentration of the energy of the city.

City nodes typically have at least one strong element that makes them necessary and desirable places to be in the city. In the market it is the vending of fresh foods, but other nodes may have open spaces, such as plazas or green spaces, or they may incorporate some resources that are useful to many people, such as libraries.

## **5.3.2 Neighbourhood Nodes**

Neighbourhood nodes are centers for small communities. They are places such as neighbourhood parks, coffee shops, and playgrounds. In Halifax, there are many schools, churches, and other institutional buildings where communities may gather, but they only cater to a subset of the community population. Halifax does not have many community scale public plazas or buildings that are open to the community in its entirety.

This lack of truly public space prevents socialization across age groups and other community subsets.

Without interaction, there is no way to build trust and respect. In the Westgreens neighbourhood the population is diverse; university students, young families, retirees, etc. It is critical that trust and respect exist between these groups to avoid conflict and uphold a sense of belonging. The neighbourhood needs a central space that is accessible to everyone. This central activity node will act as a hearth; a common center or anchor for every person in the community.

#### 5.3.3 Block Nodes

At the block scale, a node of activity can be very small. Block nodes are simply places for the small population of the block, where two or more people might have a brief encounter. It may be a bench from which a person might observe the life of the street, or a bus stop where neighbours chat while they wait.

In neighbourhoods, the street is often an informal gathering place for the residents of the block, where there is little other shared space and the traffic is minimal. The street supports interactions of short duration, the type of interaction that takes place when neighbours greet each other on their way to work.

An example of a block node is the little free libraries that have been put in place in neighbourhoods across North America. These small gestures rely on the honour system and a "take a book, leave a book" policy. This free, anonymous exchange point implies trust among neighbours, and a type of social interaction without a physical encounter. The simple



Book share box in the Plateau neighbourhood in Montreal (Solve My Space Blog 2013).

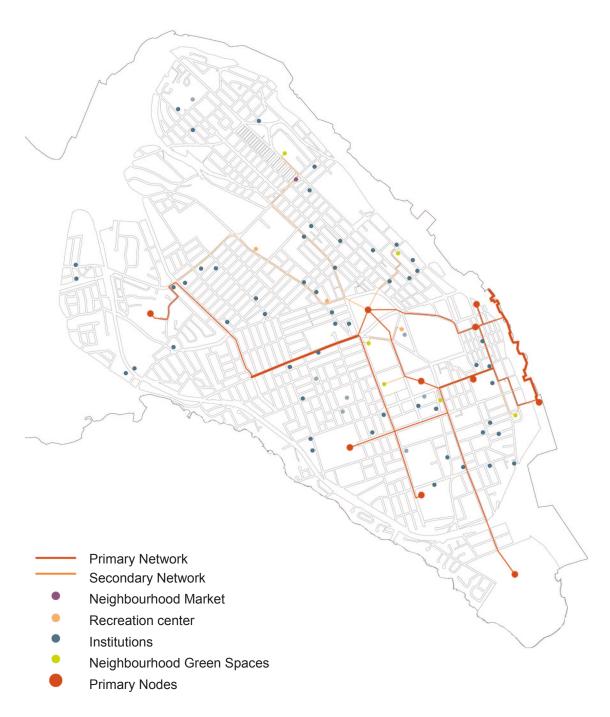
addition of seating would create an opportunity to linger and flip through a book, and to interact with a neighbour who is also exchanging a book. The little library sparks conversation between neighbours.

Another example of a block node is the common green spaces of the boulevards in the Hydrostone neighbourhood. The green spaces are shared among the block population, while the laneways remain semi-private, segregated spaces. As a result, relationships among neighbours are cultivated and the community is stronger.

The inner blocks of the Westgreens neighbourhood have the potential to be a shared space among the block residents, however in reality it is often segregated into semi-private spaces based on property ownership. This only increases the need for spaces in which the people of the block can interact without sacrificing their private spaces.

# 5.4 Node Network: Connecting to the City

Nodes create memorable landmarks across the landscape of the city. They are ideally connected by routes that favour, or at least encourage, pedestrian activity, and make the journey from one node to another pleasant and safe. They connect communities to one another, maintaining the boundaries of small communities while connecting them to the city as a whole. As Christopher Alexander stated in *A Pattern Language* (1977), "Community facilities scattered individually through the city do nothing for the life of the city." (164)



Halifax Node Network. Scale = 1: 40,000.



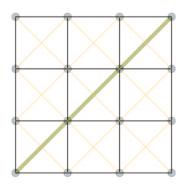
Without established connections between neighbourhood communities and the city as a whole, the city is at risk of becoming a collection of small, parcelled areas rather than a coherent fabric of communities at different scales.

Whatever city neighborhoods may be, or may not be, and whatever useful qualities they may have, or may be coaxed into having, their qualities cannot work at cross-purposes to thoroughgoing city mobility and fluidity of use, without economically weakening the city of which they are a part. (Jacobs 1961,117)

Nodes of activity should be spaced to be as effective as possible and useful to the greatest population. A map of the nodes of activity in Halifax shows that there are very few neighbourhood scale nodes, and that they are not evenly distributed.

Alexander prescribes rules for the ideal city using a language of elements and their spacing across the city landscape. Although the intentions of community spaces are similar and may be consistent from one city to another, the size and population of a city sich as Halifax cannot support the facilities Alexander proposes.

However, similar principles of elements and spacing might be applied to Halifax to reach the same goal, that is retrofitting areas of the city to promote social fabric and community identity. The changes must be small and integrated into the fabric of the city over time to avoid uprooting or destroying the existing sense of character, but even small changes in one community can have a rippling effect across the city and change the way the city considers community



Christopher Alexander's rules for the pattern language included

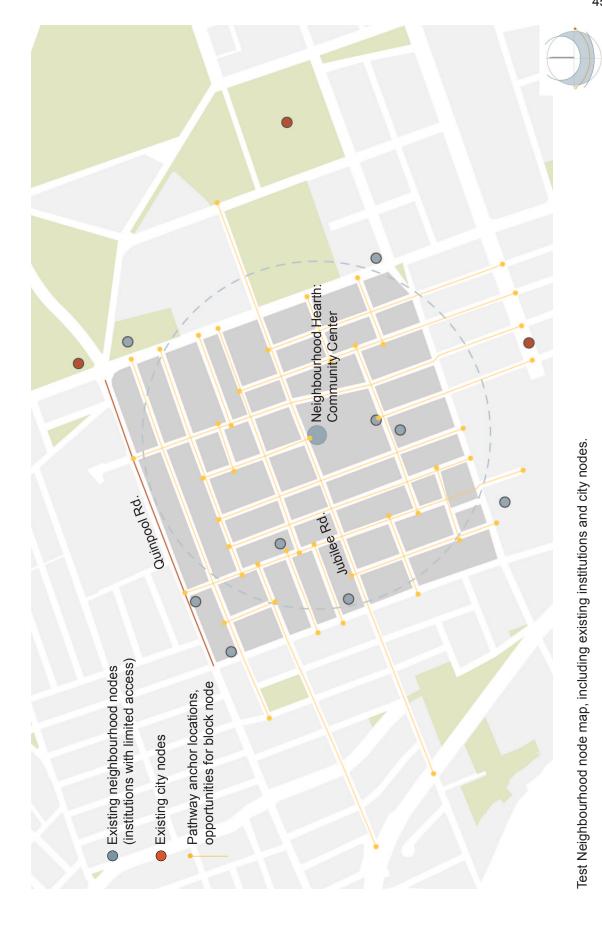
space.

Rather than distances, nodes should be developed based on population sizes and need. Ideally, each neighbourhood community must have a central node, and each block must have a block scale node located so as to punctuate a pathway, Block nodes could be varied and include anything from a simple bench to a small community garden.

The pathways connecting the nodes of activity must be conducive to pedestrian activity, and pass through as many nodes as possible to make the experience as interesting and social as possible.

Realistically, the implementation of several nodes in an established neighbourhood like the Westgreens would require changes to the width of the sidewalk to make space, and could disrupt the identity of the neighbourhood, which is counterproductive to the goals of the project. Additionally, the sizes of the Westgreens blocks vary, and one block node could be sufficient for several small blocks.

The placement of block nodes in an established neighbourhood should consider the space available, and nodes could be added to the neighbourhood over time as an integral change. As neighbourhoods age and develop, community spaces will become part of the typical neighbourhood fabric.



## **CHAPTER 6: DESIGN**

# 6.1 Design Principles

Westgreens is a neighbourhood with strong boundaries and many grid patterns. It is distinct from adjacent areas but is, in itself, a collection of various grid patterns, block forms, and building forms. Addressing areas in the neighbourhood where the patterns are weak using design principles distilled from the research will unify the neighbourhood and create a more coherent identity. The principles are intended to guide new developments that maintain and enhance the character of the neighbourhood, and create opportunities for socialization within buildings, blocks, and the neighbourhood as a whole.

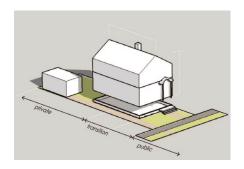
1. A new design must respect the morphology of the neighbourhood.

The morphology is the built manifestation of the social values of a community, and new buildings must comply with the existing forms to respect those values.

Each street in the Westgreens neighbourhood has a slightly different morphology in terms of how the buildings meet the street, their general sizes, and the directions they face, but the neighbourhood has a typical house form that demonstrates attitudes about privacy and public space. The typical form of a home in the Westgreens neighbourhood is a detached single-family home, two- to three-storeys high. Most homes have a front yard, a driveway, a back yard,



Patching the gaps in the neighbourhood fabric will create a more consistent identity across the community.



Three-dimensional typical typology.

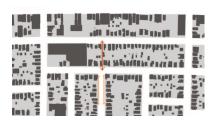
and a shed. They typically have a concrete foundation connecting the building to the ground, and the roofs are flat or gabled. Most homes also have a front porch, often with a pair of chairs placed there, from which to observe the street and the activity of the block, or to speak to passers by. The front porch and lawn are the public face of the home, while the back yard is a more private area, and often residents use a secondary entrance that is around the back of the building. The purpose of the shed is primarily to protect equipment from the elements, but it is also a place for activities that are not suitable for the interior of the home because they create noise or fumes.



This diagram is a typical street section in the Westgreens neighbourhood. It illustrates the relationship between public and private spaces in the neighbourhood. These are the relationships that should be respected in any new developments in order to maintain the values and identity of the community.

2. New developments must create pedestrian connections linking the neighbourhood to major city pathways.

The Westgreens neighbourhood must be connected to the city by pathways to be an integral part of the whole, much like a patch in a quilt. Pedestrian connections dividing long blocks or linking to commercial streets contribute to the walkability of the neighbourhood and the city.



This block between Pepperell and Shirley Streets should be divided by a pedestrian path to increase the fluidity of pedestrian traffic.



This rendering demonstrates the implementation of new pedestrian connections across a long block in the Westgreens neighbourhood. Added connections increase the walkability of the neighbourhood and encourage pedestrian activity.

Main arteries within the neighbourhood must encourage pedestrian connections across the community.

Main streets are those most likely to be traveled by people visiting the community because they are direct routes and more convenient. It is beneficial to the neighbourhood that people are able to travel through and visit shops, restaurants, and public buildings without needing to pass through many residential streets.

4. Nodes of activity must be integrated into the fabric of the neighbourhood at various scales to promote community activities and interactions.

These spaces will be symbols and landmarks for the community. In order to be effective in drawing people and activity, nodes must include activities that are useful as well as activities that are optional.

The activities can be used to mediate between public and neighbourhood spaces. The uses of buildings must be a reflection of its location in relation to residential areas and public use areas. They must consider the external forces acting on the neighbourhood, such as the high concentration of students in and around the neighbourhood caused by its proximity to schools, or the added traffic that filters down through the Quinpool Road area.

The site of the Le Marchant St. Thomas Elementary School is central to the neighbourhood and an ideal location for a central neighbourhood node. The



The primary streets of the Westgreens are already pleasant and visually stimulation. The addition of areas for rest and conversation and the widening of sidewalks where possible will further enhance the pedestrian experience.



The boundary conditions of the neighbourhood intensify its need for a central community space where the neighbourhood can gather.

large, empty green space behind the school is well used by neighbours, but it is unstructured. With the addition of elements that draw activity and allow it to take place there, the site will become the hearth of the neighbourhood community.

# **6.2 Neighbourhood Conditions**

Within the Westgreens neighbourhood there are conditions that weaken the fabric and identity of the neighbourhood, and must be addressed using the design principles in order to repair the fabric, or add new types of spaces that express the community values.

















Photographs of the Westgreens neighbourhood.



#### 6.2.1 Condition 1: Central Main Street

As we plan our future neighbourhoods and fix existing ones, we may want to take a hard look at our streets and reclaim them. After all, it is we who pay for their costly construction and never-ending upkeep. Doing so will also help foster a sense of safety and bring neighbourhoods together as stronger communities. (Friedman 2005,103)

The first change to be implemented based on the design principles is the establishment of a main street. Jubilee Road runs through the center of the Westgreens neighbourhood, and as such is a primary route of circulation.

The road is already spotted with two neighbourhood convenience stores and a large, empty green space (to be discussed in condition 2), and its entrance from Oxford Street is marked by the St. Thomas Aguinas church.

Subtle additions to the street such as places for resting and observing the street life, and a widening of the sidewalk in strategic areas would improve the pedestrian experience. Jubilee Road could become a major pedestrian pathway linking the areas west of Oxford Street to the city center, and begin to attract small businesses to the street, further increasing the walkability of the neighbourhood.

By establishing a main road as the hub of the neighbourhood as well as the main connection to the city, the neighbourhood asserts a presence in the city. It is imperative that Jubilee Road is expressive of the neighbourhood and community identity.



Jubilee Main Street Plan Scale = 1:4000 200m

100

0



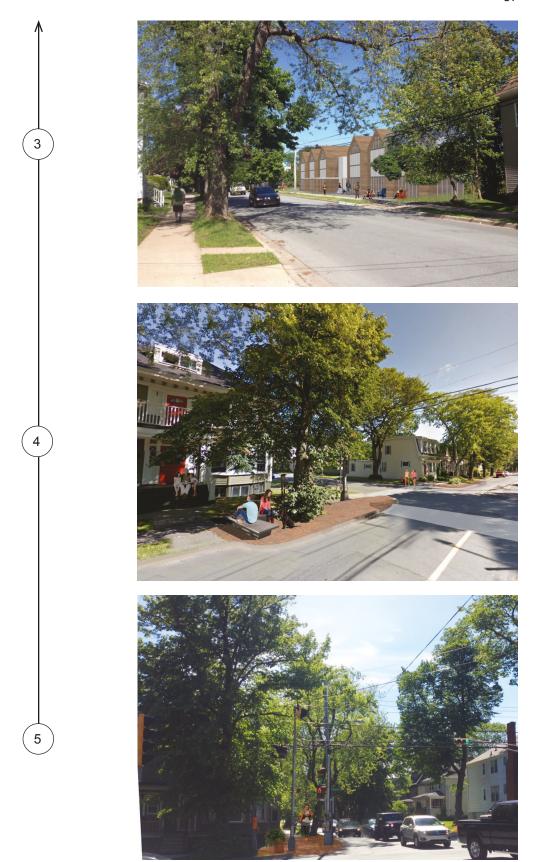
The widening of the sidewalk in front of shops improves the pedestrian space of the street and encourages socialization.



Jubilee Road views key map.



Procession of views on Jubilee Rd.



Procession of views on Jubilee Rd.

# 6.2.2 Condition 2: Gaps in the Pattern

There are three sites in the Westgreens that are lacking any buildings and are consequently holes in the fabric of the neighbourhood.

At these places the building patterns of the street are broken, and the block does not comply with the typical protected-inner-space organization. These gaps compromise the perception of the neighbourhood boundaries, and the privacy of adjacent residential spaces. In accordance with the design principles, these blocks should be redeveloped to patch the gaps in the pattern, or they should become the sites of different building types, so the difference in typology signifies the difference in use.



Condition 2: Large gaps in the neighbourhhood pattern, excusing differences in the pattern caused by institutional buildings and apartment buildings on the boundary.

One of these sites is centrally located on Jubilee Road, and is currently an open green space. Although the space is well-used by the neighbourhood residents, the space is unstructured and does not meet its potential as a center of the neighbourhood.. This site faces Jubilee Road, which will be the new main street and hub of the neighbourhood.

The space designed on this site will become the hearth of the community, where the neighbourhood population gathers for meetings or events. It will be accessible to every person, and does not require a purchase or fee to spend time there. The proposed center will draw activity through its uses as a public lawn, community center and garden, restaurant or cafe, and shop space. The combination of activities will draw people into the space and invite them to linger and interact with neighbours. The plaza space will be open, but sheltered from the street, and it will become the back patio for the neighbourhood.

The site is surrounded by detached homes two- to three-storeys in height, and the building on this site should stay within those parameters. The new development will share a field with the LeMarchant School, and be used as a open lawn when the school is closed. The form of the new building will mimic the solid and void space of the neighbourhood typology using abstracted wood forms in the main spaces and transparent corridors that render the building permeable.



Site location within the Westgreens neighbourhood.

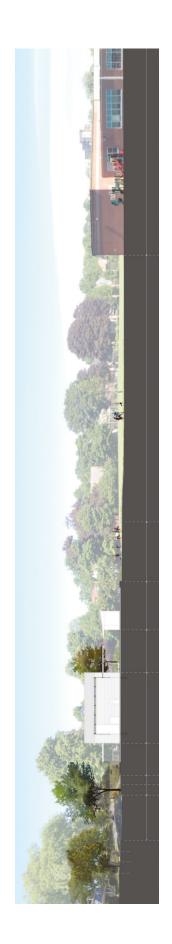


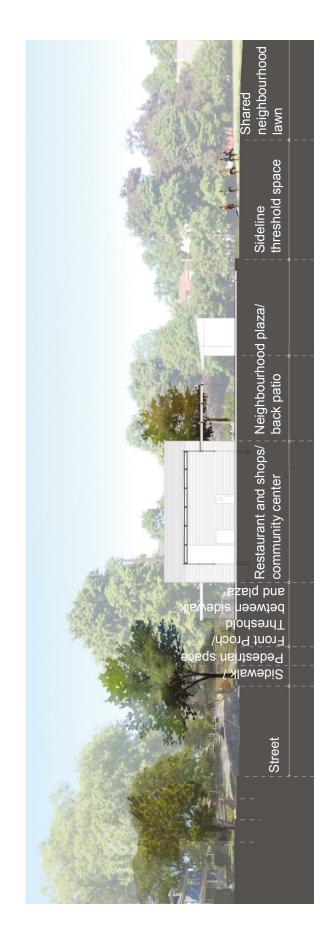
Application of principles to central site.



Central Community Hearth Plan Scale = 1:2000

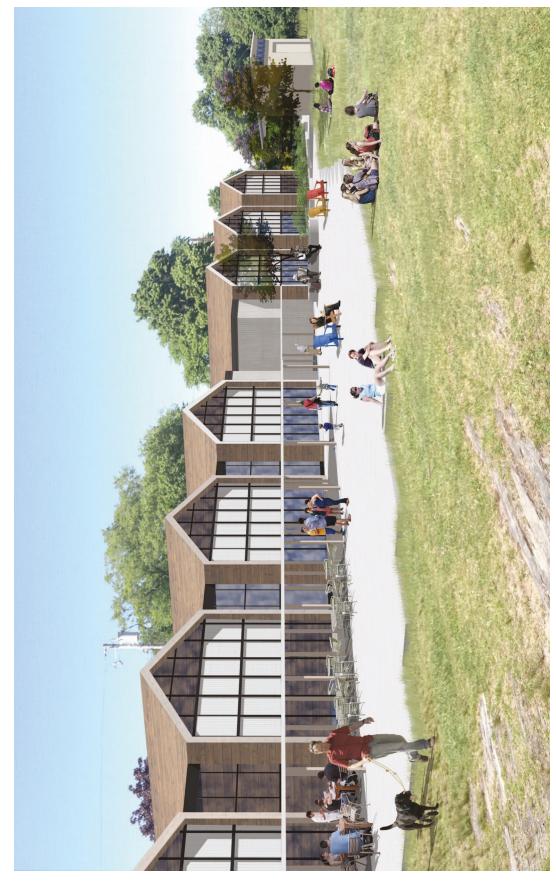
0 <u>50</u> 100m





Neighbourhood Hearth Section

Om 10 20



Neighbourhood hearth: The plaza space will become the gathering point, or node of activity, for the neighbourhood.



The site will support activity in the winter months as well as during the summer.



Community garden view.

Two other holes in the fabric are addressed in the master planning: one of the boundary of the neighbourhood and other just inside the Quinpool crust. These sites will become transitional spaces because of their locations and their proximity to commercial and public uses. They will become the front porches of the neighbourhood, and will be residential buildings with a public use component at street level.

The first site is on Shirley Street and Pepperell Street, and was previously the location of the Ben's bread factory and associated buildings. This location also includes part of Quinpool Road in its redevelopment.

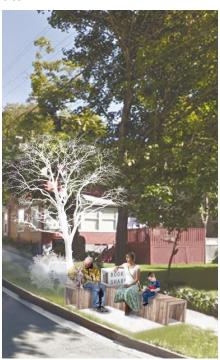
Part of the site punctuates Chestnut Street and is an ideal location for a block-scale activity node.



Site location within the Westgreens neighbourhood.



Application of principles to Preston site.



Example of a block-scale node: Little Public-share Library and benches.



Preston Street Site Plan.

0 <u>50</u> 100m



Preston Street site elevation.

The second transitional site is on the Robie Street boundary of the neighbourhood, and is currently a parking lot. In addition to the empty lot, the apartment buildings on the same block will be considered to patch the fabric of the neighbourhood.

The building on this site will face the busy Robie Street and will shelter the inner block. The height of the building will mediate between the tall Atlantica hotel that marks the entry to Quinpool Road, and the three- or two-storey buildings in the residential Westgreens neighbourhood. To do this, the building will be between four- and five-storeys, and the first two floors will be more prominent to relate to the residential elevation typology of Robie Street.



Site location within the Westgreens neighbourhood.



Application of design principles to Robie site.



Sketch of the building design on the Robie Street site.

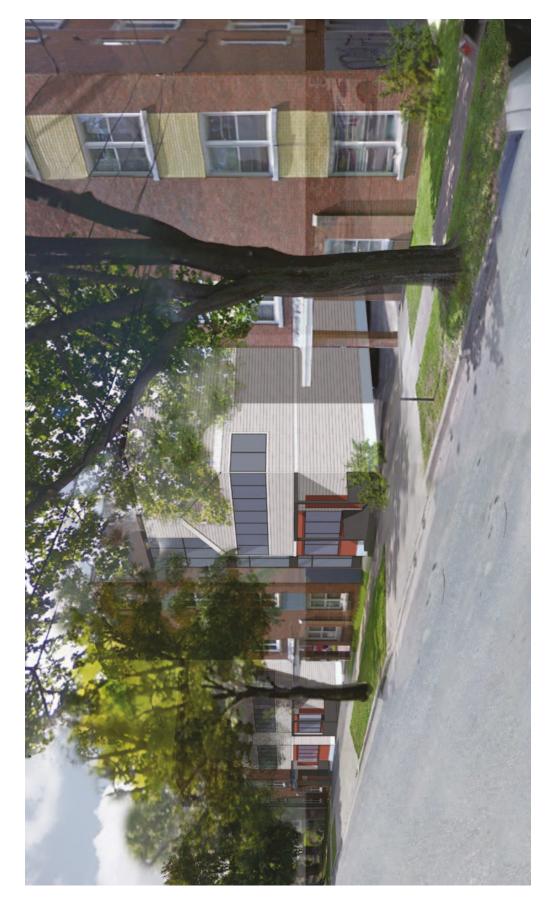


Robie Street Site Plan.

0 <u>5</u>0 100m



Robie Street Site Elevation



Sketch of the building extensions to the existing apartment buildings on Shirley St..

## **6.2.3 Condition 3: Pathway Extensions**

The third condition to be addressed is the interruption of pathways through the neighbourhood. This occurs at Preston Street, which is a secondary street, and would be a through-way for vehicular and pedestrian traffic if it continued through the Payzant Avenue and Lilac Street block directly to Coburg Road.

Pathways should also be extended north at Walnut and Garden Streets to cut through the long block directly to Pepperell Street. These pathway extensions may be for pedestrians and bicycles only because they do not occur on major pathways through the neighbourhood. The pathways may continue to extend through to Quinpool Road, which will be discussed as the third condition.

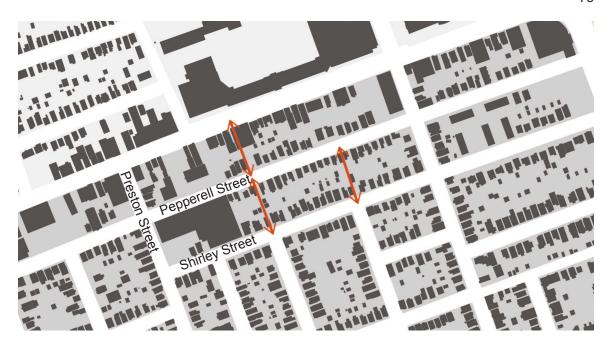
This extension of existing pathways through long blocks in the neighbourhood are part of the natural evolution of the grid pattern, which changes to improve the fluidity of movement through the neighbourhood.





Location of new road extension.







New pedestrian pathways cutting through to Pepperell Street and Quinpool Road separate the long blocks and increase the fluidity of pedestrian traffic.





New street completing through-way from Quinpool Road to Coburg Road.

## 6.2.4 Condition 4: Commercial Street

Quinpool Road presents another weakness in the fabric of the neighbourhood. It is a shopping street with an almost hostile pedestrian environment. The blocks on this edge of the neighbourhood shelter the interior blocks from the noise and traffic.

In the current conditions, the commercial and residential areas of the blocks between Quinpool road and Pepperell street are undefined. Parking lots for commercial buildings periodically span the width of the block, unceremoniously introducing pedestrian traffic from the commercial area into the residential area. While creating pedestrian connections is one of the goals of this project, the parking lots that bisect the blocks disrupt the residential pattern and compromise the privacy of adjacent residential space.

Additionally, the irregularity of the building types, scales, and spacing on Quinpool Road impairs a clear image of the street, or a sense of identity. Furthermore, the shopping street has few marked pedestrian connections across the lanes, nor are there any spaces that offer a place to sit and enjoy the atmosphere or purchases made. Overall, the street is unpleasant and unwelcoming to the pedestrian, who it strives to attract.

The application of the design principles to Quinpool Road first prescribes the development of new commercial buildings that regulate the typology of the street, in addition to residential buildings on Pepperell Street that align with the existing house forms.



Quinpool Road marks the North boundary of the Westgreens.

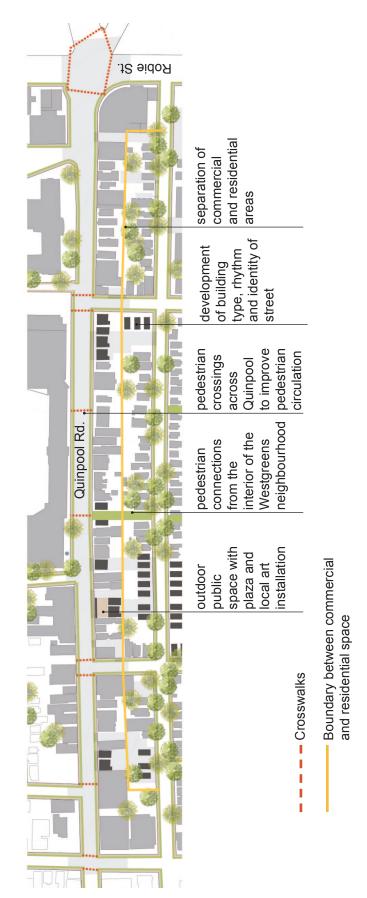
Secondly, the design principles dictate there must be more pedestrian connections across the street, and an improvement of the street-level building conditions in order to improve the pedestrian experience.

Finally, the principles dictate the development of exterior public spaces supporting the street life.



Rhythms and void spaces of Quinpool Road.

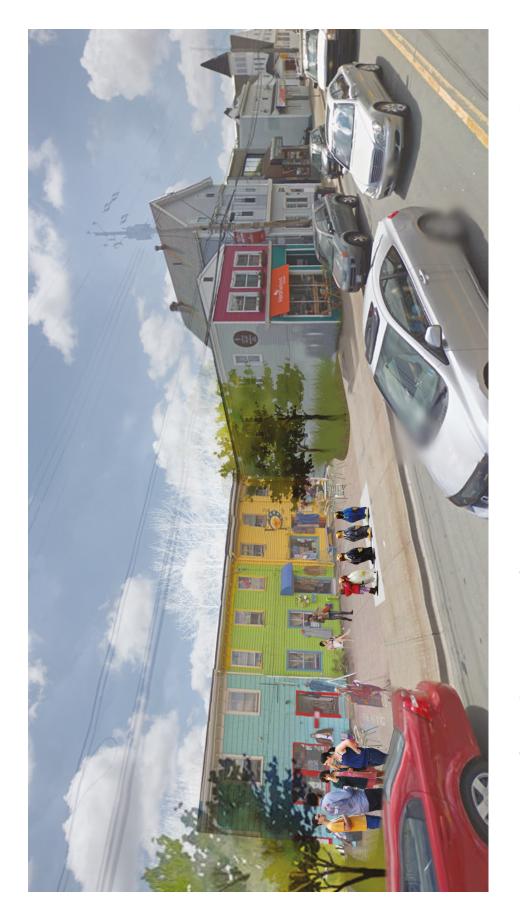
This site currently houses the "Life" sculpture, which is in disrepair and may soon be removed. This proposal suggests the installation of a new work of local art in the same location, and a public space adjacent from which to admire it, as well as provide a resting point for shoppers. This small area of city culture could improve the life of the entire street.



This plan of Quinpool Road maps the crosswalks across the street and shows new buildings in the void spaces, creating a more continuous wall



Crosswalks across Quinpool Road makes pedestrian circulation easier and safer.



A new plaza space on Quinpool Road provdes space for pedestrians to rest and eat, and enhances the pedestrian experience as well as the identity of the shopping street.

Together, the changes proposed in this chapter will strengthen and express the identity of the West-greens neighbourhood. By establishing a main street and a community hearth, the neighbourhood creates a sense of center for itself. By expressing the identity of the neighbourhood in the architecture, the building becomes something that is of that place, and representational of the community. The neighbourhood hearth is a building and a place that belongs to the neighbourhood, and in turn gives the neighbourhood a sense of itself.

The name of the Westgreens neighbourhood will symbolize a strong residential community that is a true neighbourhood in the city.

## **CHAPTER 7: CONCLUSION**

The purpose of this thesis project has been to compose an architectural approach to expressing the shared sense of community identity, and improving the social fabric of a neighbourhood.

The findings of the research done show that the identity of the place is formed by the typologies and organizations of buildings, and memorable landmarks. It is a physical perception of the values and character of the people who are part of the community. The design principles distilled from the research can be applied broadly to any neighbourhood community to improve the social fabric, and to understand the composition of the community's identity as is manifest in its typologies.

The neighbourhoods studied in this report were healthy communities with positive identities as pleasant places to live, with quality housing and public spaces. Further research might include applying the design principles to a neighbourhood with a particularly weak social fabric to test how much these changes can improve the community.

This thesis is optimistic in its assumptions that interactions between neighbours are generally positive interactions, which lead to trust and respect, and therefore the fabric of a neighbourhood must support and encourage these transactions. Surely this is not always the case, however the intentions of architectural projects are often optimistic, and the strengthening of the neighbourhood fabric can only

benefit the social fabric, leading to healthier and happier communities.

The principles put forward in this report advocate for architecture that is driven by its context; physically, socially, and culturally. While the changes suggested can be very small, such as the block scale node, they can start a chain reaction in how communities are designed to include public spaces that are expressive of the place.

A community is simply a group of people who share an interest or element of their lives, but a strong community is one where there is trust and respect between community members. Architecture can facilitate social relationships by strengthening the shared identity of the place, and by creating spaces where the community can gather.

## REFERENCES

- Abrahamson, Mark. 1996. *Urban Enclaves: Identity and Place in America*. New York: St. Martin's Press, Inc.
- Adams, Thomas. 1911. "The British Point of View." *Proceedings of the Third National Conference on City Planning*, 27-37. http://urbanplanning.library.cornell.edu/DOCS/adams\_t.htm.
- Adams, Thomas. 1918. "The Planning of the New Halifax." *Contract Record and Engineering Review*. 32: 680-683.
- Adams, Thomas. 1918. "House Construction and Design." *Contract Record and Engineering Review*. 32: 677-680.
- Alexander, Christopher, Sara Ishikawa, Murray Silverstein, with Max Jacobson, Ingrid Fiksdahl-King, and Shlomo Angel. 1977. *A Pattern Language: Towns, Buildings, Construction*. New York: Oxford University Press.
- Atlantic Planners Institute. 2000. "Richmond District." Last modified March. www.atlantic-planners.org/whatsnew/reports/richmond/richmond-11.htm.
- Benjamin, Asher. 1827. American Builder's Companion. Boston: R.P.&C. Williams.
- Boston Neighbourhoods Network. 2010. "A Short History of Boston's Beacon Hill." http://www.beacon-hill-boston.com/.
- Boston Public Library. 1899."Boston." http://maps.bpl.org/id/11180.
- Boston Redevelopment Authority. 2013. "Beacon Hill Buildings." http://www.boston-redevelopmentauthority.org.
- Canada's Historic Places. 1990. "Hydrostone District National Historic Site of Canada". http://www.historicplaces.ca/en/rep-reg/image-image.aspx?id=7625#i2.
- Chalmers Bartlett, Cynthia. 1996. *Beacon Hill*. Charleston: Arcadia Publishing.
- Dalhousie University. 2015. "Dal at a Glance." http://www.dal.ca/about-dal/dal-at-a-glance. html.
- Friedman, Avi. 2005. Room for Thought: Rethinking Home and Community Design. Toronto: Penguin Canada.
- Gehl, Jan. 1987. *Life Between Buildings: Using Public Space*. Translated by Jo Kock. New York: Van Nostrand Reinhold Company.
- Google Maps. 2015. https://maps.google.ca/.

- Halifax Regional Municipality GIS Database. 2009. "HRM Data." https://libraries.dal.ca/locations\_services/gis\_centre/gis\_inhouse\_resources.html.
- Jacobs, Jane. 1961. The Death and Life of Great American Cities. Toronto: Random House.
- Library of Congress. 1814. "Map of Boston in the State of Massachusetts." http://www.loc.gov/item/2011589322/.
- Lynch, Kevin. 1960. *The Image of the City*. Cambridge: The Technology Press & Harvard University Press.
- Macalester University. 2015. "Halifax History." Accessed April. http://www.macalester.edu/courses/geog61/ahannert/halifaxhistory1.html.
- Montgomery, Charles. 2013. *Happy City: Transforming Our Lives Through Urban Design.* Vancouver: Doubleday Canada.
- Newswire. 2011. "Winners announced in the Great Places in Canada Contest." http://www.newswire.ca/en/story/816445/winners-announced-in-the-great-places-in-canada-contest.
- Nova Scotia Archives. 2010. "Halifax Explosion: A Vision of Regeneration." http://novascotia.ca/archives/virtual/explosion/.
- Saunders, Allison. 2013. "ShopTalk Visits the Hydrostone." *The Coast*, May 8 2014. http://www.thecoast.ca/Shoptalk/archives/2014/05/08/shoptalk-visits-the-hydrostone.
- Shape Your City Halifax. 2013. "Fort Needham Memorial Park." http://shapeyourcityhalifax.ca/fort-needham-memorial-park/photos/1463.
- Solve My Space Blog. 2013. "A Neighbourhood Book House .. In Montreal." http://blog.solvemyspace.com/2013/09/montreal-street-library/.
- Speck, Jeff. 2012. *Walkable City: How Downtown can Save America, One Step at a Time*. New York: Farrar, Straus and Giroux.
- Statistics Canada. 2012. "2011 Census Profiles Files." http://www12.statcan.gc.ca/census-recensement/2011/.
- Statistics Canada. 2007. "2006 Profile of Census Tracts." http://www12.statcan.gc.ca/census-recensement/2006/.