Montreal Electric Streetcar Suburbanization: A Study of a Canadian City's Morphological Transformation Before World War 1

By

Christine Elizabeth Karczmar

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of B.A. in Geography

Department of Geography
McGill University
Montréal (Québec) Canada

April 2013

ACKNOWLEDGMENTS

First and foremost, I would like to thank my supervisor Dr. Sherry Olson, my reader Dr. Nancy Ross, and my thesis coordinator Dr. Sarah Turner. Your unrivalled wisdom has guided me through this year's trials and tribulations.

I would also like to thank Gilles Lafontaine and Catherine Boily, whose expertise and dedication to archival research I am greatly indebted.

Last, I would like to thank my family and friends (you know who you are). Thank you for your support and for restoring my sanity when needed most.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF MAPS

LIST OF TABLES

ABSTRACT

Montreal's rich transportation history presents an interesting laboratory for geographical research. The aim of this paper was to investigate the ways in which the electric streetcar shaped Montreal's urban form during the late nineteenth and early twentieth century (1892-1913). Information was collected from historical newspaper articles, documents, and maps retrieved from a variety of local archives. By reviewing sources pertaining to the Montreal Street Railway Company's ventures, the initial expansion of the electric streetcar system was traced. The streetcar system's presence in the suburban context was also explored through the review of the Montreal Park and Island Railway Company's franchises. The term 'streetcar suburb' was frequently employed in the literature, but without explanation of its criteria. A streetcar suburb model was developed, which was then compared to Lachine – a suburban neighbourhood located at the southwest end of the island of Montreal. It is concluded that Lachine does not fit the streetcar suburb model. Though the neighbourhood exhibits some of the model's properties, they are not necessarily attributable to the streetcar. Lachine's urban development is more influenced by the presence of large industrial firms and institutions.

Key words: Streetcar suburb; Montreal; Lachine; tramway; suburbanization

CHAPTER 1: INTRODUCTION

Montreal's rich transportation history presents an interesting laboratory for geographical research. Throughout its long history, the City of Montreal – located in northern Quebec, Canada – has been serviced by a variety of transit systems, each having consequently shaped its urban form (Map 1.1). The scholarship of Montreal's urban morphology has mainly centred on heavy railway and the automobile, two technologies that have made, and continue to make, important contributions to the City's urban transformation. However, lacking from the literature are discussions of the impacts of Montreal's lost modes of transportation. These analyses would not only allow us to better understand the evolution of the metropolis' transportation system, but would also help to explain why the City looks the way it does today.

Map 1.1: Montreal, Canada.
Source: "Holiday Guides for North America – Canada." *UK Net Guide*. Accessed April 13, 2013. http://www.uknetguide.co.uk/Holiday-Guides/North-America/Canada/Montreal.html.

My research paper will fill part of this gap, as it will explore the pre-war phase (1892-1913) of Montreal's fifty-year long electric streetcar era and more specifically the ways in which the electric streetcar shaped the City's urban form. Like the heavy railway and automobile, the electric streetcar was a transportation system that enabled people to live farther away from the urban core, resulting in the suburbanization and physical expansion of cities. In general, academics have coined the term 'streetcar suburbs' to describe residential developments that

arose from the implementation of electric streetcar systems (Anas, Arnott, and Kenneth 1998). The concept has been applied to other North American cities, such as Boston (Warner 1978) and Ottawa (Newell 1995), but has not yet been associated with Montreal. Furthermore, none of the existing studies provide a definition of the streetcar suburb model that they employ. The main purpose of my literature review is to combine the results from the aforementioned studies to develop a streetcar suburb model applicable to the Montreal context. It is determined from my appraisal of secondary literature that streetcar suburbs are, generally, characterized by middle-income compositions and specific structural features, including narrowly fronted houses organized into rectilinear patterns and residential growth along the extent of their streetcar lines. The creation of this model is necessary for the completion of this paper's three objectives. The first is to trace the initial expansion of the electric streetcar system throughout the City of Montreal. I approach this objective by reviewing primary and secondary literature describing the areas serviced by the electric streetcars powered by the Montreal Street Railway Company. My second objective is to explore the presence and impact of the City's electric streetcar system in the suburban context, with the ultimate goal of establishing whether or not it can be attempted to apply the streetcar suburb model to Montreal's early twentieth century urban form. I realize this objective by studying the services of one subsidiary and suburban streetcar company, the Montreal Park and Island Railway Company. From this analysis, it is discerned that streetcar suburbs possibly grew around Montreal's urban core during the early twentieth century. The third and final objective of this research is to carry out a case study of a potential Montreal streetcar suburb. My selection of the Lachine area is justified in terms of:

1) Being a suburb located approximately 15 kilometres west of downtown Montreal (The Fact Book of Lachine 1909, 4),
2) Containing an electric streetcar line in 1896 (one of the earliest lines to extend beyond the City limits), and
3) Displaying rapid and intense growth during my chosen time period.

The scope of this paper has been narrowed to a twenty-year time span, from 1892 to 1913. The period's lower limit was an obvious choice, because 1892 was the first year in which electric mass transit appeared in Montreal; thus, marking the beginning of the City's fifty-year long electric streetcar era. While the electric streetcar remained an accessible mode of transportation

in Montreal until 1959, this paper will only examine the pre-war phase of Montreal's streetcar era. Before World War I, the automobile was a luxury that only the most affluent people could afford. By preventing my research from going beyond the year 1913, I will minimize the influence of the automobile and will therefore be able to, more confidently, attribute changes in urban form to the advent of the electric streetcar.

This paper contains five chapters. In Chapter 2, the existing literature on suburbanization and streetcar suburbs are reviewed. This chapter ends with a definition of the streetcar suburb model referred to later in the paper. Chapter 3 is a discussion of methodology, which specifically outlines my personal archival experiences and the sampling technique employed in the Lachine case study. The results and discussion of the paper's three phases of research comprise Chapter 4. Chapter 5 concludes the paper with a description of key findings, limitations and avenues for future research.

CHAPTER 2: LITERATURE REVIEW

Prior to the commencement of my archival research, I conducted a literature review to situate my topic within the context of previous studies. This process involved a series of research phases, each one subsequently more and more narrow in scope. I began the review by first investigating the literature about suburbanization and its connection to a city's urban form, with specific emphasis on the role of transportation systems in this relationship. After developing a broad understanding of the morphological component of suburbanization, I directed my focus to suburbs that developed directly because of streetcar systems running in nearby cities.

2.1 Suburbanization

Suburbanization refers to the exodus of middle and upper classes from the inner city to the urban fringe. This decentralization of residential development is typically accompanied by the relocation of economic activities, namely production facilities, research and development, warehousing and regional sales offices, to the periphery (Stanback Jr. and Knight 1976, 13). Reasons for economic decentralization have been cited as "lower taxes, opportunities to modernize and to expand […], adequate parking, […] lower property costs, greater access to suppliers and customers, improved exit from the metropolitan area, and easier recruiting of professionals and managers" (Stanback Jr. and Knight 1976, 26). Together, these two processes of decentralization constitute 'the suburban shift' (Stanback Jr. and Knight 1976, 14). The desire to move away from the city stems from the conception of the city as a place wrought with illness and filth. Since the Roman times, setting up residence in the rural countryside has been considered moralizing because of its proximity to nature (Warner 1978, 13). Moreover, it is generally believed that "the countryside [is] more conducive to moral behaviour than […] the crowded, evil, promiscuous city" (Newell 1996, 8). An evident consequence of suburbanization is the physical expansion of cities. Within a span of thirty years, the percentage of the Canadian population living in urban areas rose from 34.9 in 1901 to 52.5 in 1931 (Linteau, Durocher, and Robert 1983, 356). Montreal is no exception to this trend of urban expansion, with "an initial group of suburbs [that grew] up in a belt around [the City] towards the end of the nineteenth century, and [a second belt] in the early twentieth century" (Linteau, Durocher, and Robert 1983, 362). Morphologically, cities evolve as they annex surrounding suburban municipalities (Linteau, Durocher, and Robert 1983, 362). Between 1883 and 1910, the City of Montreal alone

appropriated twenty-three municipalities (Linteau, Durocher, and Robert 1983, 362). Certain physical factors enable cities to grow as fast as they do. In particular, transportation networks play important roles in the suburban endeavour.

Transportation systems enable suburbanization because they reduce the time it takes to move from one place to another (Stanback Jr. and Knight 1976, 25). People are, thus, able to live farther away from the urban core "with no increase, or even a reduction, in travel time" (Stanback Jr. and Knight 1976, 25). Most often, suburbanization is associated with the advent of the automobile, but other modes of transportation, such as the electric streetcar, are intrinsically connected to the process.

2.2 The Streetcar Suburb Model

The idea of the 'streetcar suburb' became applicable during the mid to late nineteenth century when horse-drawn then electric streetcar systems began to line the streets of North American cities (Anas, Arnott, and Small 1998, 1429). Generally, streetcar suburbs are defined as "residential enclaves organized around a station on a radial streetcar line" (Anas, Arnott, and Small 1998, 1429). The growth of these suburbs, which were largely populated by the middle and upper classes (Anas, Arnott, and Small 1998, 1429), was made possible by the electric streetcar system's ability to quickly transport commuters from the periphery to the urban centre (Gilliland 2001, 116-7). Workers were able to distance their residences from their places of employment by living in proximity to streetcar lines (Gilliland 2001, 117). These morphological features have been observed in the Montreal cityscape. According to Jason Gilliland, a former PhD student at McGill University and now Professor of Geography at Western University, by 1895 "all residents in the City of Montreal, and most suburban residents lived within a few minutes walk of a streetcar line" (Gilliland 2001, 117). Furthermore, Paul-André Linteau confirms in his book *Quebec: A History 1867-1929* that Montrealers were able to live farther away from the urban centre due to the advent of the City's electric streetcar system (Linteau, Durocher, and Robert 1983, 363). Despite these substantiating facts, there is an absence of literature that directly links the streetcar suburb model to the Montreal landscape. What areas of Montreal's periphery were able to expand during the early electric streetcar era? Can these areas be called streetcar suburbs? During my appraisal I discovered three case studies that addressed

these questions with respect to Boston, Ottawa and Leeds – three metropolises with notable similarities and differences to Montreal. The following and final section of my literature review will concentrate on these studies, which will, inevitably, serve as the primary examples guiding my research.

2.2.1 Leeds

David Ward's article describing the streetcar suburbs that developed around Leeds, England is the least relevant of the three case studies to my research, simply because of the striking differences in morphology between European and North American suburbs. Despite this contextual incongruity, some of the characteristics that define the Leeds streetcar suburbs may parallel those that I discover in the context of Montreal. As expected, the suburban houses built around the Leeds streetcar network were regarded as improvements to the residences of the inner city and were, therefore, inhabited by the middle class (Ward 2010, 477). These new residential developments consisted of "terrace dwellings arranged in […] rectilinear [patterns] in certain peripheral districts near to streetcar services" (Ward 2010, 477). In contrast to the compact terrace rows of the City, the organization of the suburban houses was more systematic and sprawling (Ward 2010, 487). The majority of this construction took place during the early twentieth century (Ward 2010, 481), since it was only in 1870 that Leeds established its own streetcar company (Ward 2010, 486-8). Streetcar suburbanization was relatively slow around Leeds because of its low demand, which can be partly attributed to the large amount of emigration that was occurring in England at this time (Ward 2010, 487). At first, streetcar line extensions were constructed for the purpose of making amenities located at the periphery, such as hospitals, parks and cemeteries, more accessible (Ward 2010, 486). It was later when select areas located two and a half miles away from the City ended up being developed to accommodate the larger lots of suburban residences (Ward 2010, 485).

2.2.2 Boston

The book *Streetcar Suburbs: The Process of Growth in Boston (1870-1900)* by Sam Bass Warner Jr. is the most extensive academic work profiling streetcar suburbanization in a specific locale. While, initially, Warner's aim is to provide an overview of Boston's urban history, the majority of his study is focused on the development of three of the metropolis' streetcar suburbs:

Roxbury, West Roxbury and Dorchester. From these individual case studies, Warner identifies the defining characteristics of a typical Bostonian streetcar suburb. These attributes contribute to my development of a general streetcar suburb model. From the mid-1880s to 1890s, Boston experienced a dramatic increase in suburban growth (Warner 1978, 43). Prior to the implementation of the City's electric streetcar system in 1889 (Warner 1978, 28), peripheral settlement was relatively slow (Warner 1978, 21). People that did choose to live away from the city centre were either commuters or local workers, and generally established residence close to harbours (Warner 1978, 18). In contrast to the mentality of modern suburbanites, the early Bostonian suburban settlers attempted to maintain the character of the city in their new rural environment (Warner 1978, 19). It was the electrification of the streetcar that initiated the City's heightened suburbanization at the end of the nineteenth-century; "[enabling middle and upper income] families to move out from the old city boundaries into an expanded area of vacant and lightly settled land" (Warner 1978, 14). In explaining the process of Bostonian streetcar suburb development, Warner makes a comparison to railway suburbanization. He describes that, rather than clustering around railway stops located approximately a half kilometre apart, streetcar suburbs grew along the entire length of radial streetcar lines (Warner 1978, 49). After this initial stage of development, more lines were constructed to accommodate the increasing demand for suburban residences (Warner 1978, 52). These new developments then resulted in the agglomeration of the new and old settled belts of land (Warner 1978, 52).

A large portion of Warner's book is dedicated to an assessment of the streetcar suburbs' social class compositions. Like the streetcar suburbs that developed around Leeds, the Bostonian residents that took advantage of the streetcar network to move away from the city centre to the periphery were members of the middle and upper classes (Warner 1978, 2). Warner further differentiates this group of people into the wealthy, the central middle class and the lower middle class; income categories that he then uses to map Boston's suburban residential development into concentric circles (Warner 1978, 53). Using Boston's City Hall as the centre of the circle, Warner identifies three surrounding bands: the innermost populated by the lower middle class at 3.2 to 5.5 kilometres out from the centre, the second by the central middle class at about 5.5 to 8 kilometres out from the centre (Warner 1978, 63), and the outermost by the wealthy at about 8 to 24 kilometres out from the centre (Warner 1978, 58). Warner's in-depth examination of social

status reveals a steady income gradient – as a person's income increases, their distance from the city centre is also likely to increase (Warner 1978, 58).

In addition to analyzing wealth, Warner also investigates the architecture characteristic of Boston's streetcar suburbs. Different from the tenements and row housing of the City, which "became for the middle class [symbols] of financial failure and bad neighbourhoods" (Warner 1978, 144), the streetcar suburban developments were composed of detached and narrowly fronted wooden houses (Warner 1978, 47 and 136) on 900 by 1800 square meter lots (Warner 1978, 64). Moreover, all three of the analyzed streetcar suburbs were organized into similar grid-like patterns (Warner 1978, 136). Interestingly, as a way of further differentiating the suburbs from the inner city, architects incorporated aspects from houses only afforded by the wealthy class into their designs (Warner 1978, 148). Although this practice may have helped to reinforce the rural ideal, the mentality sought by urban residents moving outwards that was based on the alleged moralizing quality of rural environments (Warner 1978, 12), Warner stresses on several occasions that few suburbanites actually lived close to the countryside (Warner 1978, 58-60).

2.2.3 Ottawa

In 1996, the Historical Society of Ottawa published an excerpt of a paper by Christina Newell entitled "Hintonburgh: A Working Class Streetcar Suburb at the Turn of the Century" in the Bytown Pamphlet Series. The short dissertation recounts the history of Hintonburgh's transformation into one of Ottawa's suburban neighbourhoods and the catalytic role the electric streetcar played in the process. Hintonburgh was already a growing community by the time Ottawa implemented an electric streetcar system in 1891 (Newell 1996, 1). The village's initial formation occurred years earlier, in 1874, when Hinton farm was divided into 263 lots (Newell 1996, 1). After the streetcar system had been running in Ottawa for about two years, Hintonburgh officially became incorporated as a village – a calculated manoeuvre undertaken by the residents of Hintonburgh to be able to qualify for a streetcar service (Newell 1996, 1). It is evident, from Hintonburgh's incorporation, that the village's residents were supportive of the expansion of Ottawa's streetcar lines into the suburbs (Newell 1996, 4). The City of Ottawa, too, was considering the option because of the growing concern of overcrowding (Newell 1996, 2). By 1896, the extension into Hintonburgh was complete and in full use (Newell 1996, 5). The

benefits of the suburban line did, indeed, go both ways. On the one hand, people living in Hintonburgh were provided with rapid transportation that eased travel to the city centre for work and shopping (Newell 1996, 10). This was particularly advantageous for suburban residents because of the greater variety and lower prices of merchandise sold in the city centre (Newell 1996, 10). The City of Ottawa was equally successful in reaming the benefits of the streetcar line extension to Hintonburgh. First, the City profited economically from the upsurge of shoppers frequenting local businesses (Newell 1996, 10). Specifically, department stores saw a rise in popularity during this time (Newell 1996, 10). To city residents, the streetcar extensions likely evoked a sense of adventure, as they offered access to recreational activities located in new suburban neighbourhoods (Newell 1996, 6). Overall, Ottawa's electric streetcar system "[provided] a communication and transportation link between the centre and the periphery" (Newell 1996, 12).

The most relevant outcome of the streetcar extension to Hintonburgh to my research is the rapid growth that it provoked. Unlike the traditional middle class suburb, Hintonburgh was mostly populated by the working and lower classes (Newell 1996, 12). It was only later, during the early twentieth century, when people from the middle class started taking up residence in Hintonburgh (Newell 1996, 19). The area was desirable to the lower classes because, despite its connection to the city via streetcar, it maintained low land prices and taxes (Newell 1996, 8). Though an improvement from the overcrowded inner city tenements, suburban living in Hintonburgh was not necessarily ideal (Newell 1996, 8). Residents lived in "closely-built houses, usually of wood, on narrow lots with little street frontage" (Newell 1996, 21). The Hintonburgh neighbourhoods were organized rectilinearly (Newell 1996, 14) and were comprised of lots often lacking backyards – a hallmark of the suburban home (Newell 1996, 9).

In response to her findings, Newell posits several explanations for Hintonburgh's unusual suburban characteristics. She first suggests that they may be attributed to Ottawa's small size or minor overcrowding relative to other American cities that have undergone suburbanization (Newell 1996, 22). Another idea that Newell proposes is that physical barriers directed Ottawa's suburban growth, and therefore may have contributed to Hintonburgh's unorthodox development (Newell 1996, 22). She cites Upper Town as an example, which was bounded by the Ottawa

River in the North, the Canal and Lower Town in the East, and Lebreton Flats in the West (Newell 1996, 22). Regardless of the differences between Hintonburgh and other streetcar suburbs, it can be agreed upon that the "most significant long-term influence of the street railway was the way in which it helped to expand [city boundaries]" (Newell 1996, 11).

2.2.4 Lessons Learned

From my preceding appraisals of the three pertinent streetcar suburb case studies, I have developed a definitive, albeit amenable, streetcar suburb model. The purpose of setting a norm is to enable easier comparison and contrast when conducting my own research. The first feature that streetcar suburbs are generally distinguished by is their middle-class population. In both Leeds and Boston, the only urban residents that could afford moving away from the city centre were those that had sizable disposable incomes. Though, as evidenced by the Hintonburgh case study, there are anomalies to this tendency. As previously mentioned, when Ottawa electrified its streetcar network, Hintonburgh – an already lower and working class suburb – maintained its social fabric as it developed into a streetcar suburb. This finding illustrates how models do not always hold true in every situation and also how the demographic makeup of a growing suburb can be influenced by its history. In addition to income composition, the Boston and Ottawa case studies elucidate another prevailing characteristic of streetcar suburbs: they are typically pre-existing developments that expand into streetcar suburbs as a consequence of the electric streetcar. Suburban neighbourhoods are commonly conceived as emerging in the middle of nowhere when, in fact, streetcar suburbs frequently develop out of smaller communities.

Several other more structural features can be identified from my review. First, from the case studies it can be surmised that streetcar suburbs are usually comprised of detached and narrowly fronted houses organized into rectilinear patterns. An aspect that helps to discriminate streetcar suburbs from other types of transportation settlements is the unique way in which they develop around streetcar lines, as described by Warner in *Streetcar Suburbs*. He explains that streetcar suburb growth is different from that of railway suburbs because it occurs along the whole extent of streetcar lines, instead of just around each individual station. Warner also contrasts the streetcar to the automobile, which he describes as "[allowing] a less rigid class arrangement and less dense housing than was possible under streetcar transportation" (Warner 1978, 165).

Altogether, these common features help to define the streetcar suburb model so that it can be applied to the Montreal cityscape. While the aforementioned irregularities may seem irrelevant to my research, they are still useful because they exemplify characteristics that do not fit the streetcar suburb model.

CHAPTER 3: METHODOLOGY

In colloquial terms, my project can be described as a treasure hunt – a designation that my friend excitedly deemed appropriate whilst she accompanied me during one of my research trips. I cannot think of a better way to summarize my thesis because, being a historical project, my research consisted of many trips to a variety of local archives where I collected information from newspaper articles, documents, and maps. Depending on the type of source and when it was published, I worked with either digitized microfilm formats or printed versions of the material. Every time I went to the archives and became more knowledgeable about my subject, my research direction would change and I would be led to another avenue of investigation or even to a different archive centre. Furthermore, as my research progressed, its focus became much more specific. The proceeding section will be a chronological account of my experiences at the four archives I consulted: the Montreal City Hall Archives, the STM Archives, the McGill Library, and la Grande Bibliothèque. Following this review will be a description of the methodology employed in the housing structure component of the Lachine case study (Section 4.2.1).

3.1 The Montreal City Hall Archives

The Montreal City Hall Archives are located on Notre-Dame Street in Old Montreal. I chose to start my research at this archive centre because I expected it to have the most general information, and also because it was the place with which I was the most familiar (I had previously received a tour of the building for my urban field studies class). At this point, my goal was to collect broad information concerning the construction and operation of electric streetcars in Montreal from 1892 to 1913. During my visits at the Montreal City Hall Archives, I learned how to use a microfilm reader so that I could look at municipal newspaper articles, such as the Montreal Gazette, that were published during the end of nineteenth century and the beginning of the twentieth century. The microfilm readers at the Montreal City Hall Archives were accommodating of my summer school time constraints because they allowed me to extract pertinent articles from the reel and transfer them to my own computer for later analysis. Since all of the articles were related to electric streetcar transport in some way or another – i.e. legal matters, community unrest, etc. – few of the documents were relevant to my investigation of urban form. Despite this disappointment, reading through the articles helped me figure out that I

needed to further refine my research to the geography of streetcar transportation; a realization that eventually led me to the STM Archives.

At the same time as I was introduced to microfilm, I was also provided with a folder of digitized historical maps of Montreal and its surroundings, which were accompanied by a catalogue listing their details. Though I was allowed to transfer all of the maps to my own computer, I first read through the catalogue so that I only selected maps I considered important to my study. These maps ended up being vital components of my project, particularly the ones that explicitly illustrated the City's streetcar lines.

There is one moment during my experiences at the Montreal City Hall Archives that I consider the turning point in my research. It was when Gilles Lafontaine, the centre's main archivist, showed me the book titled *Montreal's Electric Streetcars (An Illustrated History of the Tramway Era: 1892-1959)* by Richard M. Binns. I was ecstatic that the archives owned the book, because I had previously wanted to consult it for my literature review but was unable to because of its unavailability at the McGill library. This book was a crucial source for the completion of my first objective as it contained the most in-depth overview of Montreal's electric system that I could find. Unlike any of the secondary sources I had already read, Binns' book mentioned the suburban endeavours of Montreal's Street Railway Company; projects I was not even aware existed. Learning about the Montreal Park and Island Railway Company and the Montreal Island Belt Line Railway – the main Company's subsidiary enterprises – was almost a relief, because for some time I had been worrying about how I would move forward with my research. At that point, I had gathered enough information about Montreal's cityscape and its connection to the streetcar so, with the approval of my supervisor Dr. Sherry Olson, I decided to shift the focus of the rest of my research to the franchises of the Montreal Park and Island Railway Company.

Though the majority of my research at the Montreal City Archives was during the initial phase of my investigation, I returned, briefly, near the end of the process. I had already been to the STM Archives and was working on my third and last objective. Having chosen Lachine to be my streetcar suburb case study, I was not on the pursuit of any information about the Town that could link its growth to its operation of the streetcar. My return to the Montreal City Archives

was not as successful as my previous visits, since there were few sources available that even made reference to Lachine. Gilles set me up with another microfilm reel containing more newspaper articles. Unfortunately, most of the articles were too recently published to be applicable. I did, however, come across two articles from the Montreal Gazette, which eventually became primary sources for my discussion of Lachine's similarities and differences to the streetcar suburb model.

In an effort to help me with my project, Gilles told me that the Lachine City Hall was responsible for all of their Town's archival documents. Upon informing me of this, he advised me to contact Lachine's City Hall, Museum, and Historical Society. To my frustration, none of the people with which I talked when I called the three organizations could offer me any information about how I could access the archives Gilles claimed to exist.

3.2 The STM Archives

I first contacted the STM (Société de Transport de Montreal) Archives correspondent, Catherine Boily, by email. To use material from the STM Archives, I was required to schedule appointments with Ms. Boily, which I did on a regular basis for approximately a month. After briefly explaining my research project to Ms. Boily, she sent me a catalogue of the pertaining material stored at the archives. Before my first visit, I notified her of my interest in the Fonds of the Montreal Park and Island Railway so that she could prepare the documents for my arrival. The STM Archives are much less glamorous than the other archives centres, being located in a small office at Place Bonaventure. Needless to say, my first experience was very underwhelming. First, I had to call Ms. Boily to let me into the office, since it was locked to visitors, then I was seated at a small cubicle. During every visit I made to the STM Archives, it seemed as though I was the only person in the office that did not work there. In spite of the unconventional milieu, the STM Archives were a surprisingly peaceful environment for research.

The Fonds of the Montreal Park and Island Railway was a large collection of hand-written minutes books, charters, and maps. Since none of the material was digitized, I was required to wear white gloves while handling the documents. I spent my time at the STM Archives reading through the collection and taking notes on my computer. As I learned more about the Montreal

Park and Island Railway's suburban franchises, I became interested in the Town of Lachine. Not recalling much mention of the suburb from my literature review, I thought that the Town would be an ideal choice for a case study. Moreover, the area was serviced by one of the earliest streetcar lines to extend beyond the City limits and displayed rapid and intense growth during my chosen time span. After making this decision, I dug further into the Fonds of the Montreal Park and Island Railway to collect as much information as possible about the operation of electric streetcars in Lachine.

3.3 The McGill Archives

Having attended McGill University for four years, I was surprised to find out that the library carried historical microfiches. My discovery happened accidentally, when I was searching for books in the matter of Lachine on the library's online database. The majority of the most relevant search hits were labelled as microfiches. Without knowing exactly what a microfiche was, I figured that I was knowledgeable enough in the microfilm department that I would be able to use the reader without assistance. The microfiche I was looking for had a call number, just like any other book stored at the library, so the process of finding the sources was simple. As it turned out, microfiches are much easier to work with than microfilm because small flat sheets are used instead of reels. Instructions explaining how to use the reader were clearly written on the desk (ex. adjust contrast, move the sheet, etc.). Unlike at the Montreal City Hall Archives, the McGill microfiche reader was not capable of digitally extracting information from the sheets, so I took notes on my computer.

The only microfiche that I read at the McGill Archives was of a document called *The Fact Book of Lachine*. It was a short text and was only useful in providing a figure for Lachine's physical distance from Montreal's downtown.

3.4 La Grande Bibliothèque

When I called the Lachine Historical Society, the woman whom I was talking with suggested that I pursue my research at the Centre d'Archives de Montréal on Viger Road. I took the woman's advice and visited the Centre hoping to find the information about Lachine that I had expected to find at its local organizations. Unfortunately, when I went to the Centre, the

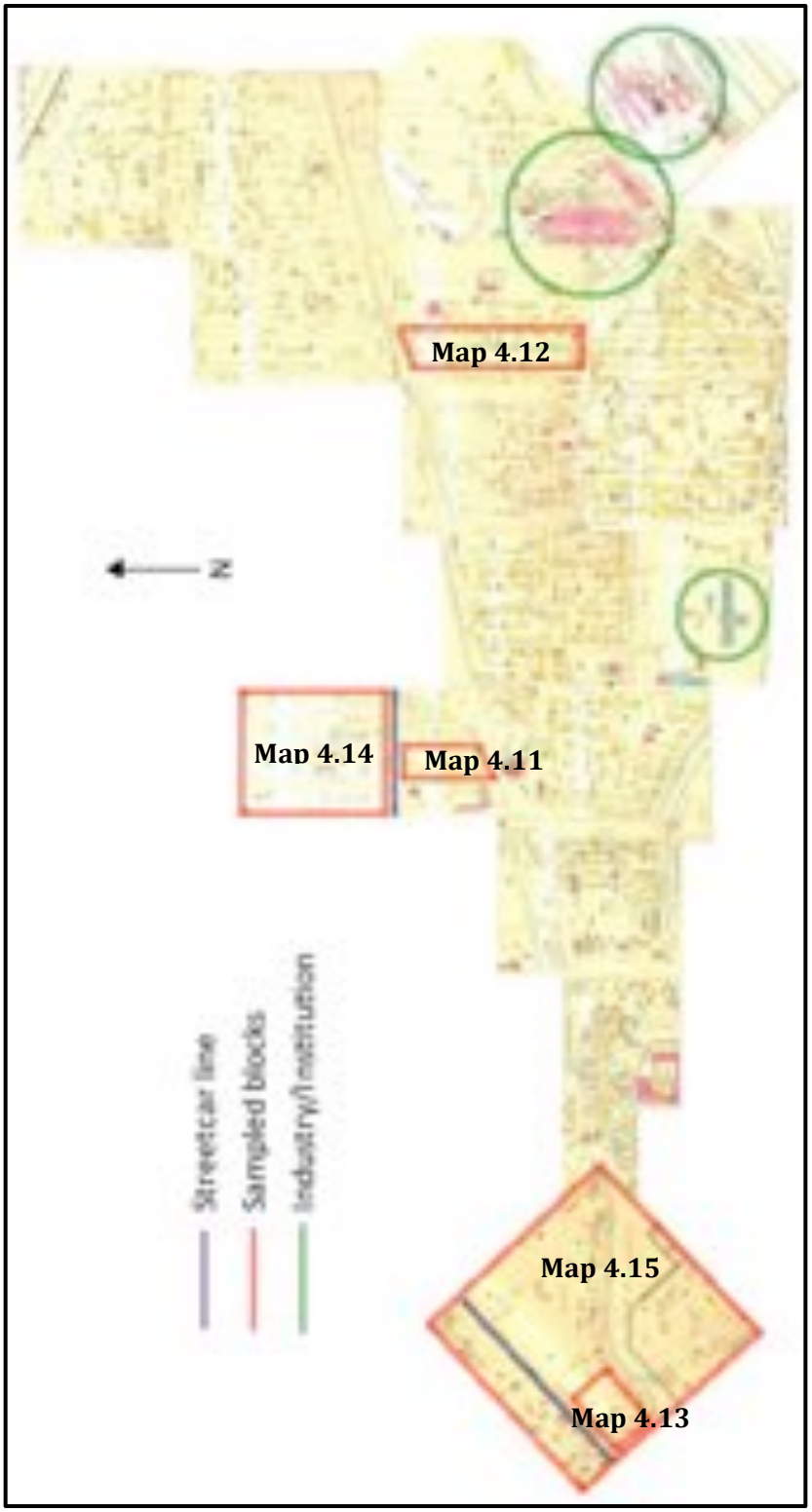
archivists were unable to supply me with any pertinent sources. Once again, I was referred to another archive centre, la Grande Bibliothèque, a sister centre to the Centre d'Archives de Montréal and located just up the street on Berri Road. La Grande Bibliothèque is a massive building because it serves as a regular library as well as an archive for historical documents. In contrast to my experience at the STM Archives, I was overwhelmed upon entering La Grande Bibliothèque. Thankfully, only a small area of the second floor was designed to local archival material.

The Bibliothèque's online search database works like the system of a regular library, which eased the process of finding the documents. Some of the books that I consulted were too fragile to be placed on the public shelves, so I had to ask the librarians to remove them from the reserves. In addition to historical books, the Bibliothèque also stores a vast collection of microfilm. One of the main reasons why I visited the Bibliothèque was to retrieve information about Lachine's demographics. After discussing my project with the microfilm librarians, I was guided to a microfilm of the 1981 Canadian Census. Since the microfilm readers were similar to those used at the Montreal City Hall Archives, I had no trouble operating the reel. The one issue with the microfilm reader was that it did not conveniently allow me to extract parts of the census that I wanted to analyze at a later date. Moreover, due to the calligraphic style in which the census was written, there were parts of the document that were illegible.

Overall, my experience at la Grande Bibliothèque was not as accomplishing as I had anticipated it to me. Though the archive was able to provide me with more sources on the subject of Lachine than the Montreal City Hall Archives and the Centre d'Archives de Montréal, I was unimpressed with the minimal amount of material offered.

3.5 Lachine Housing Structure Methodology

In Section 4.2.3, I conducted a cartographic analysis of the Chas. E. Goad Co.'s maps of Lachine from 1912. The evaluation centred on the layouts of lots and houses. Since the collection is comprised of twenty-one individual plates, I first connected the pieces so that I could get a sense of the entire municipality's housing structure (Map 3.1). From Map 3.1 I selected a sample of three street blocks from three different atlas plates, which are marked by Maps 4.11-4.13. To



Map 3.1: Pieced Together Map of Lachine, 1912.
Source: Chas. E. Goad Co. Lachine, Que, 1912 [Cartographic record]. Plans de villes et villages du Québec Collection, #0000225139, Bibliothèque et Archives nationales du Québec, Montreal, Quebec, Canada. Accessed March 31, 2013. http://services.banq.qc.ca/sdx/cep/document.xsp?id=0000225139

make my samples as representative of Lachine's housing structure as possible, I selected the three blocks from completely different geographic areas of Town: one is from central Lachine, another is from the east end, and the third is from the west end. Furthermore, I tried to select blocks that contained different lot and house shapes for the purpose of capturing potential variations in Lachine's housing structure. The aim of the second part of my cartographic analysis was to determine if Lachine's housing settlements developed along the length of the streetcar line, as suggested by the streetcar suburb model. This required the selection of two map plates, rather than street blocks, that represented houses in proximity to Broadway Street – one of the main streetcar arteries. I chose the only two suitable plates from the 1912 Goad collection (2 and 16), which are marked by Maps 4.14 and 4.15 on Map 3.1.

CHAPTER 4: RESULTS AND ANALYSIS

As described by my listed objectives, the first task of my research project was to trace the initial expansion of the electric streetcar system throughout the City of Montreal. I approached this objective by reviewing primary and secondary literature describing the areas serviced by the electric streetcars powered by the Montreal Street Railway Company. In order to establish whether or not I could attempt to apply the streetcar suburb model to Montreal's early twentieth century urban form, I had to explore the presence and impact of the City's streetcar system in the suburban context. Thus, to accomplish my second objective, I narrowed my research to one subsidiary and suburban streetcar company, the Montreal Park and Island Railway Company. From my appraisal of this company's services, I was able to discern the possibility of streetcar suburb growth around Montreal's urban core during the early twentieth century. I, then, conducted a case study of Lachine; a suburb that contained one of the City's earliest streetcar lines. It is concluded that Lachine does not fit the streetcar suburb model. Though the neighbourhood exhibits some of the model's properties, they are not necessarily attributable to the streetcar. Lachine's urban development is more influenced by the presence of large industrial firms and institutions.

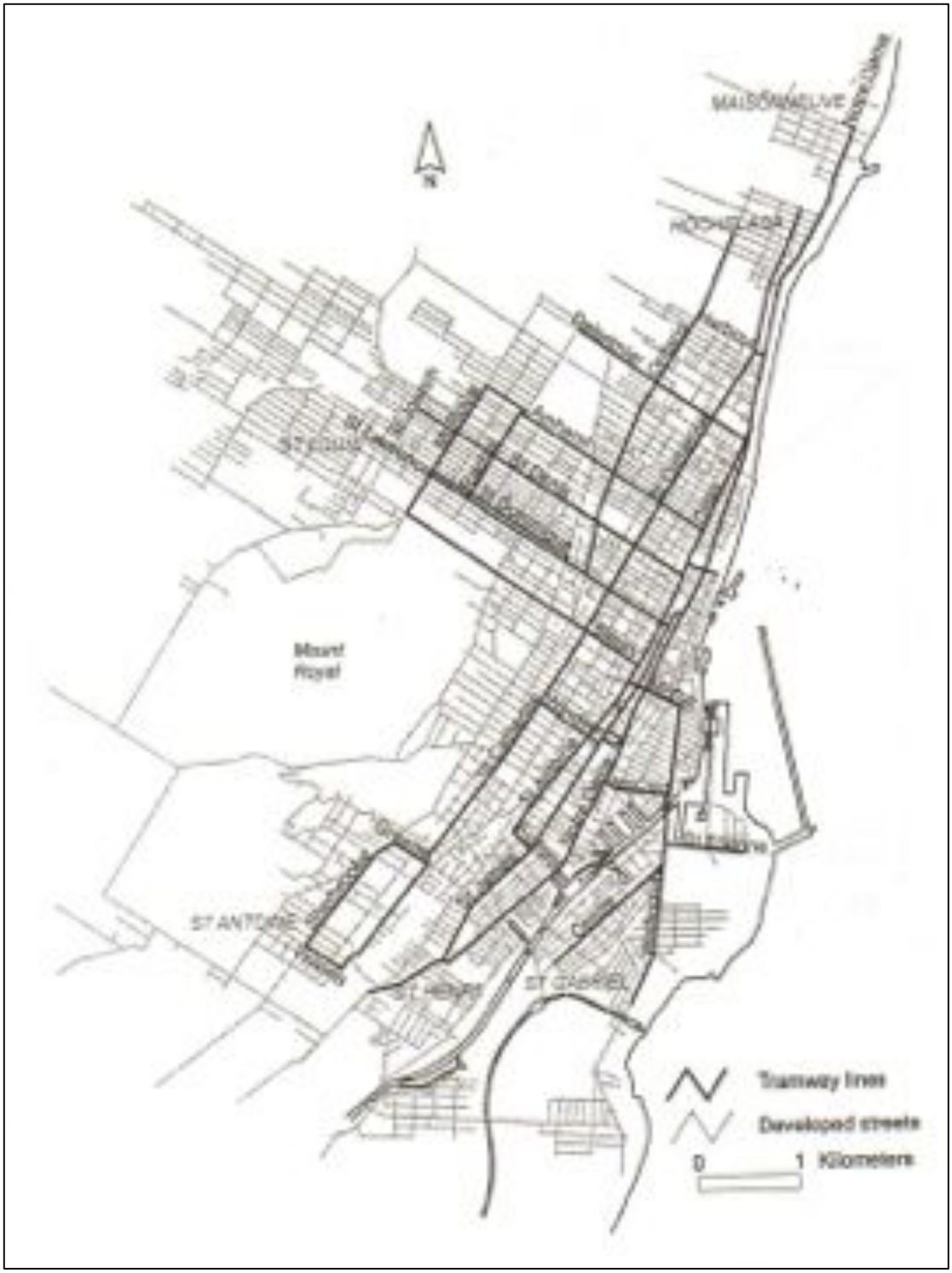
4.1 Montreal's Electric Streetcar System

Construction of Montreal's first horse-powered streetcar service began September 18, 1861 under the direction of the Montreal City Passenger Railway Company, the City's public transit company (STM). In 1886, this Company was retitled the Montreal Street Railway Company (MSRC) (STM), which was the name under which the Company eventually oversaw the electrification of the system (Binns 1973, 12). Dialogue regarding the potential electrification of Montreal's streetcar system commenced in early 1892 (Binns 1973, 10). On May 17, the Municipal Council of Montreal selected the Ross and Mackenzie firm from several other tenders to contract the large endeavour (Binns 1973, 10). Construction began the summer of 1892 and "[by] mid-September, a one-way loop line of about five miles was ready for operation: Bleury, Park Ave., Mount Royal Ave., St. Lawrence, Rachel, Amherst and Craig St." (Binns 1973, 11) (See Map 5.1). The first electric streetcar – "The Rocket" – was put into motion along the Belt Line Route on September 21 (Binns 1973, 11). According to the Montreal Gazette, J. Ross and W. Mackenzie; L.J. Forget, a director of the MSRC; H.A. Everett, the Managing Director of the

Map 4.1: First Montreal electric streetcar Belt Line route.
Source: *Montreal Street Railway – 1895* [map]. In: Richard M. Binns. *Montreal's Electric Streetcars (An Illustrated History of the Tramway Era: 1892-1959)*. Montreal: Railfare Enterprises Limited, 1973, p. 11.

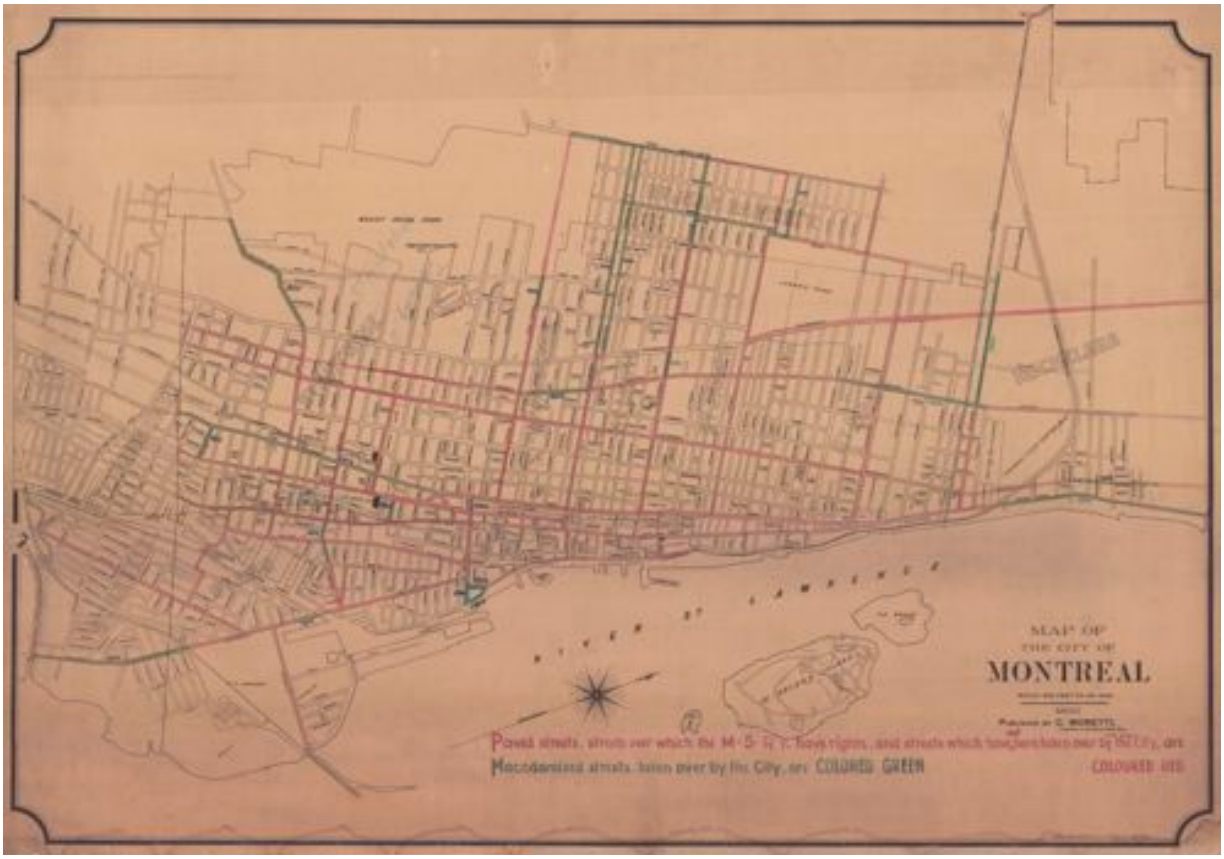
MSRC; E. Lusher, the Manger and Secretary of the MSRC and A. Villeneuve, the President of the Toronto Railway Company were all onboard The Rocket during this first trip (The Montreal Gazette 1892). Over the course of two years, Montreal's streetcar system became completely electrified (Binns 1973, 12). After the initial construction in 1892, 12.62 of the system's total 44.17 miles of track were converted to electrification (Binns 1973, 11). By the end of 1893, 64.43 miles of track were powered by electricity (Binns 1973, 12). And by October 1894, the City's entire 75.15-mile streetcar system was officially electrified (Binns 1973, 12). From 1892 to 1894, Montreal's electric streetcar system physically expanded (Communauté urbaine de Montréal 1970). A visual comparison between the Belt Line route (Map 5.1) and a map of the system from 1895 (Map 5.2) illustrates the extent of the growth that occurred during these two years. One of the main observations is the expansion of the streetcar network to neighbourhoods such St. Etienne to the south, "Saint-Henri […St. Antoine and St. Gabriel] to the west [and] Hochelaga-Maisonneuve to the east" (Timbers 2002, 14). Most of the physical expansion is attributed to the construction of electric tracks on streets running from east to west, namely St. Catherine and Notre Dame.

After this initial exponential growth, the electric streetcar system continued to expand over the next twenty years, though at a much slower pace. In 1897, the network looked virtually the same



Map 4.2: Montreal's electric streetcar system, 1895.
Source: *Electric streetcar lines in Montreal, 1895.* [Cartographic record]. In: Jason Gilliland. *Redimensioning Montreal: Circulation and Urban Form, 1846-1918*. McGill University, 2001, p. 118.

as it did two years prior (Map 5.3). The most notable changes that occurred were westerly extensions of Sherbrooke and Ontario Street into the Hochelaga and Maisonneuve neighbourhoods, respectively. In 1901, double-truck cars were introduced to accommodate the increasing number of passengers using the service, which had reached 43,862,262 in 1900 (Communauté urbaine de Montréal 1970). In addition to the MSRC, two subsidiary companies called the Montreal Park and Island Railway Company and the Montreal Island Belt Line Railway contributed to the growth of Montreal's electric streetcar system, especially into the City's suburban neighbourhoods (Binns 1973, 12). By 1910, the number of track miles comprising the network had nearly doubled to 140 (Communauté urbaine de Montréal 1970). The Montreal Park and Railway Company first began constructing electric streetcar tracks shortly after the MSRC initiated its electrification project in 1892 (Binns 1973, 12). It was four



Map 4.3: Plan of routes referred to in a contract for the establishment and operation of an electric passenger railway, 1897.
Source: Plan of routes referred to in a contract for the establishment and operation of an electric passenger railway, passed between the City of Montreal and the Montreal Street Railway Company before O. Marin the undersigned notary, under date hereof, 1897 [Cartographic record]. VM66 Collection of the City of Montreal's Maps and Plans, S5, P058, Montreal City Hall Archives, Montreal, Quebec, Canada.

years later, after the MSRC had completely electrified the central and pre-existing network, when the Montreal Island Belt Line Railway – a name "implying eventual encirclement of the Island – commenced building a suburban line to serve the flat farmlands and villages at the eastern end of Montreal Island" (Binns 1872, 12). In 1911, the three companies were consolidated into one large company called the Montreal Tramways Company (Binns 1973, 59). Together, the combined tracks of the merged companies totalled 232 miles (Binns 1973, 59) (See Map 5.4). Despite the Montreal Park and Island Railway and Montreal Island Belt Line Railway's shared responsibility for the development of suburban lines, I decided to limit my research (for the sake of my scope and time constraints) to the suburban areas only serviced by the Montreal Park and Island Railway Company. In the following section, I will further discuss this Company's suburban services so that I may conclude whether or not it is probable that streetcar suburbs grew around Montreal's urban core during the early twentieth century.

Map 4.4: The Montreal Street Railway Company's local and suburban lines, 1915.
Source: Montreal street railway Co's local and suburban lines, 1915 [Cartographic record]. VM66 Collection of the City of Montreal's Maps and Plans, S5, P128, Montreal City Hall Archives, Montreal, Quebec, Canada.

4.2 Montreal Park and Island Railway Company

The Montreal Park and Island Railway Company (MPIR) was incorporated May 9, 1885 (Charters, By-Laws, Franchises and Agreements 1908, 3). In the MP&IR's original charter, the two main goals of the Company are identified as:

1) "To establish cheap and easy means of communication between the City of Montreal and the various parts of the land" (Charters, By-Laws, Franchises and Agreements 1908, 3) and
2) "[To allow] families to spend the summer season in the country, while enabling heads of families to attend to their business in the city" (Charters, By-Laws, Franchises and Agreements 1908, 3-4)

According to an agreement made between the MSRC and the MPIR, the MPIR was to serve neighbourhoods beyond the boundaries of Maisonneuve, St. Antoine, Ste. Cunegonde and St. Henry (Charters, By-Laws, Franchises and Agreements 1908, 187). In other words, the purpose of the MPIR was "to create a network of suburban lines outside of the City of Montreal limits" (Binns 1973, 12).

Over the course of its independence, the MPIR was granted a total of ten suburban franchises: the Parish of Lachine, the Parish of Des Saints Anges de Lachine, Outremont, the Parish of Sault-Au-Recollet, the Parish of St. Laurent, the Parish of St. Genevieve, the Parish of St. Leonard de Port Maurice, the Village of St. Louis du Mile-End, Notre-Dame-de Grace, and Rosemont (Charters, By-Laws, Franchises and Agreements 1908). Its first major project was the construction of "a line through several [north end] suburbs to Ahuntsic and east along Rivière-des-Prairies to Sault-au-Recollet" (Binns 1973, 12). The contract between Mr. A. J. Corriveau, the primary promoter of the MPIR (American Street Railway Association, 1895), and the Municipality of the Parish of Sault-au-Recollet was written November 4, 1892 (Charters, By-Laws, Franchises and Agreements 1908, 79). Sault-au Recollect, located at the north end of the Island and adjacent to the Rivière-des-Prairies, was the terminus of the MPIR's Back River Line. Figure 4.1 is a photograph of a streetcar station in Sault-au-Recollect. From the outset, the MPIR had planned to extend the Back River Line across the Rivière-des-Prairies to the small town of St. Vincent-de-Paul in Laval (American Street Railway Association 1895). This extension was put on hold until late 1908, when the MPIR's Directors reported during a meeting that they had

> completed the purchase of all the right-of-way required in connection with the extension of the Company's System to St. Vincent de Paul [and that the] work of construction [had] commenced [and was] hoped that the line [would] be completed and ready for operation early in the Summer [of 1909]" (Montreal Park and Island Railway Minute Book 2 1908, 30)

In 1895, the Back River Line consisted of 7.5 track miles (American Street Railway Association 1895). The second endeavour of the MPIR was to construct a line that would encircle the City's mountains (MPIR 1897, 261-262), which the Company would eventually name the Mountain Belt Line (Binns 1973, 12). This Line "[ran] up Bleury Street and Park Avenue, through […] Outremont, Cote-des-Neiges, [and] Notre-Dame-de-Graces to Westmount," where it linked to

Figure 4.1: Station Peloquin in Sault-au-Recollet, 1896.
Source: February 22, 1896. Le Monde Illustré, VM6_D2023. Reel 327, Microfilm Collection, Montreal City Hall Archives, Montreal.

the Montreal Street Railway (American Street Railway Association 1895). Due to the expanse of the Mountain Belt Line, the MPIR was required to prepare franchise contracts with both Outremont and Notre-Dame-de-Grace – the two boroughs through which the streetcar tracks would pass. In 1895, the Mountain Belt Line consisted of 6 track miles (American Street Railway Association 1895).

At first, the MPIR's streetcar network was only comprised of the Back River and Mountain Belt Lines (MPIR Livres des minutes 1897, 261-262); but by 1897, it had expanded to include the Park Avenue, Cartierville and Lachine Lines (MPIR Livre des Minutes 1897, 262) (Table 4.1). The Cartierville Line extended north from the Mountain Belt Line in Cote-des-Neiges through the Parish of St. Laurent to its terminus in Cartierville, at the north end of the Island (See Map 5.4). Although the MPIR received permission from the municipality of the Parish of St. Laurent to construct streetcar tracks on the 18th of October 1893 (Charters, By-Laws, Franchises and Agreements 1908, 93), it was nearly three years later – September 16, 1896 – when the Cartierville Line was finally ready for use (MPIR Livres des Minutes 1896, 204). At this time, the Line only reached College Street in St Laurent; however, by 1897, construction of the whole route was complete (Binns 1973, 12). The Park Avenue Line, essentially a northerly extension of the existing tracks on Park Avenue, was a small addition amounting to the construction of a mere 1.6 miles (MPIR Livre des minutes 1897, 262). The last streetcar line to be discussed is the Lachine Line. While I was researching the physical expansion of the MPIR streetcar network, I became interested in the Lachine neighbourhood and the potential impacts the streetcar system may have had on its suburban growth. My decision to study Lachine and its connection to my streetcar suburb model was justified in terms of:

Line	**Track Miles**
Back River	8.25
Park Avenue	1.6
Mountain Belt	12
Cartierville	6.03
Lachine	13
Total	40.88

Table 4.1: MPIR Lines and respective track miles, 1897.
Source: Montreal Park and Island Railway Company. Livre des minutes (1888-1906). S2 The Montreal Park and Island Railway Fonds. Box S2/2,2. STM Archives, Montreal, Quebec, Canada, p. 262.

1) Being a suburb located approximately 15 kilometres west of downtown Montreal (The Fact Book of Lachine 1909, 4),
2) Containing an electric streetcar line in 1896 (therefore, one of the earliest lines to extend beyond the City limits), and
3) Displaying rapid and intense growth during my chosen time period.

The following case study will be divided into three sections. I will first present a general overview of the Lachine area, with an emphasis on the municipality's state before the introduction of the electric streetcar. This includes analyses of how major industrial firms and institutions may have affected the region's urban- and transportation-related developments. Then, I will address the geography of the MPIR Lachine Line, much like I did for the other streetcar lines. Third, I will attempt to apply my derived streetcar suburb model to Lachine according to demographic and structural criteria.

4.3 Case Study: Lachine

Before endeavouring to determine whether or not Lachine can be regarded as a streetcar suburb, it is essential to think about the types of questions that should be asked of the MPIR. What markets did the Company envision? Were some of the parties involved in the streetcar project interested in job and/or residential development? Did they own any property in Lachine? With respect to Lachine's fit with the model, the most important question to consider is: would Lachine's growth have occurred without the advent of the electric streetcar? This query provokes reflection on the causality problem.

4.3.1 Before the Electric Streetcar

Lachine is one of Montreal's boroughs; located at the southwest end of the island (Map 4.5). First established as a stopping post for explorers in 1667, Lachine is one of Montreal's oldest regions (Lamarche 2011). Prior to its incorporation as an independent municipality in 1872 ("Neighbourhood Old Lachine" n.d.), Lachine was a primarily rural area reliant on "agriculture, transportation and storage of goods and fur" for prosperity (Lamarche 2011). From the mid-nineteenth to the early twentieth century, the district underwent a process of industrialization ("Neighbourhood Old Lachine" n.d.). This period is marked by the creation of a multitude of

Map 4.5: Lachine situated on island of Montreal.
Source: "Lachine Montréal: L'Entrepôt." *Ville de Montréal*. Accessed April 2, 2013.
http://ville.montreal.qc.ca/portal/page?_pageid=8117,89115662&_dad=portal&_schema=PORTAL.

large industrial firms and institutions that played vital roles in the municipality's urban development.

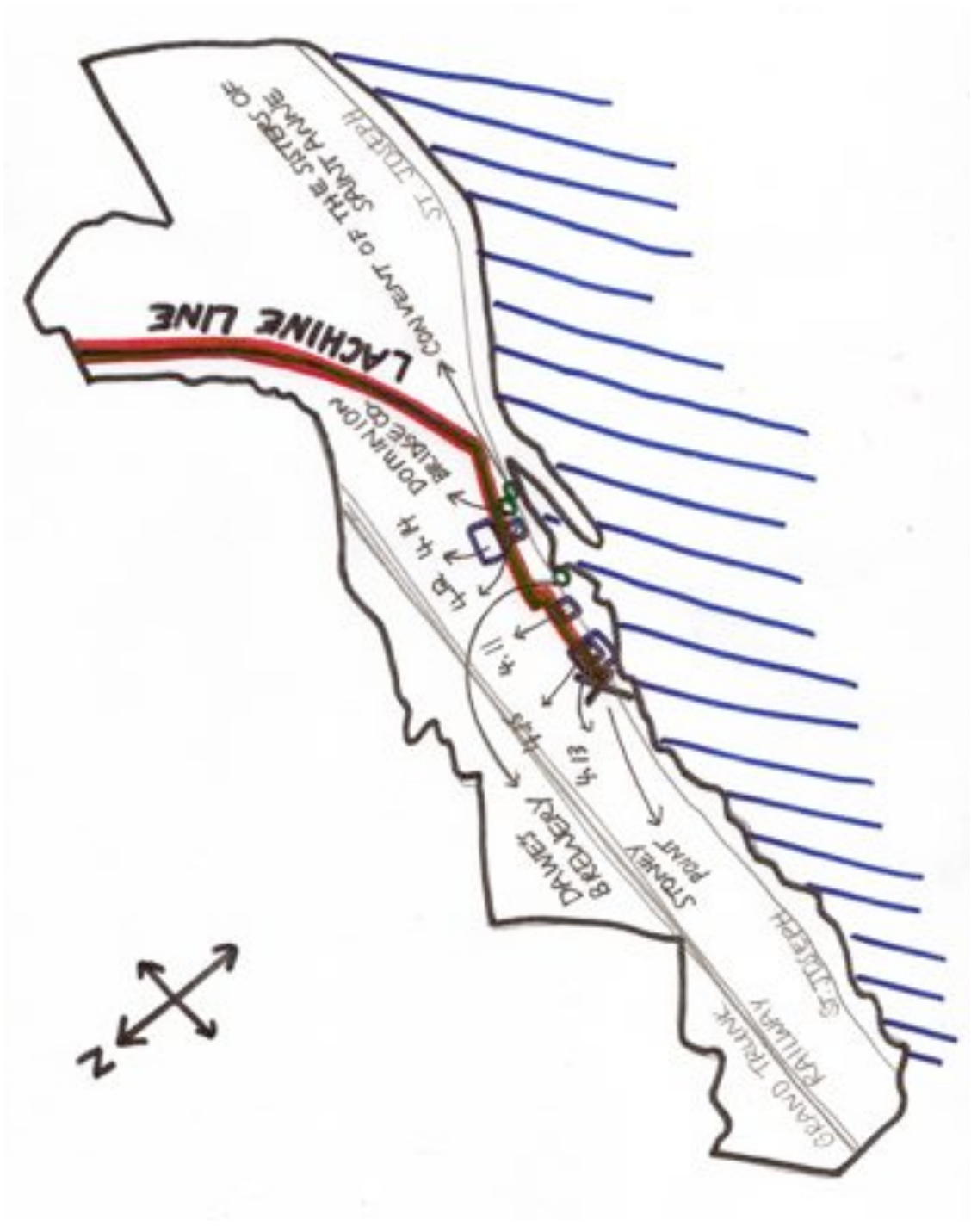
4.3.1.1 Industry

Since the Goad plates were difficult to read and showed an incomplete picture of the municipality when pieced together, I consulted another map of Lachine from 1879 (Map 4.6). Upon examination of both maps, I noticed several spacious industrial firms and institutions (Map 3.1). Interestingly, the majority of these sites are located near the waterfront of the Lachine Canal or the St. Lawrence River. Hélène Lamarche, President of Lachine's Historical Society, attributes this geographical pattern to the municipality's historical dependence on water transportation (2011). Like with the amalgamated map, I marked the municipality's most important industrial/institutional sites, sampled street blocks and streetcar line (Map 4.7). Even though the streetcar line was not yet constructed in 1879, the purpose of Map 4.7 is to merely show how the sampled blocks and industrial/institutional sites are situated in relation to the streetcar line. The fact that the streetcar line was not yet implemented has no effect on these geographical relationships. With Lachine's industrialization came the provision of employment opportunities. Prior to the implementation of the streetcar network, it was necessary for workers to live in proximity to their workplaces. The development of residential areas was, thus, influenced by the locations of industrial firms. In the following paragraphs, I will take a closer look at two of the major industrial companies that were founded in Lachine during the second

Map 4.6: Lachine, Montreal (1879).
Source: "Neighbourhood Old Lachine." *Héritage Montréal*. Accessed April 2, 2013. http://www.memorablemontreal.com/accessibleQA/en/histoire.php?quartier=15.

half of the 1800s: the Dawes brewery and the Dominion Bridge Company. Each review will focus, specifically, on the relationship between urban development and the industrial site under discussion.

Thomas Dawes founded the Dawes Brewery, Lachine's oldest industrial enterprise ("Neighbourhood Old Lachine" n.d.), in 1827 ("Dawes & Company" 1896). At first, the business' growth was slow ("Dawes & Company" 1896); however, over the course of the century, the Dawes Brewery eventually became one of Lachine's most lauded industrial firms



Map. 4.7: Lachine with streetcar line, sample blocks and industries/institutions (1879)
Source: "Neighbourhood Old Lachine." *Héritage Montréal*. Accessed April 2, 2013. http://www.memorablemontreal.com/accessibleQA/en/histoire.php?quartier=15.

(Sneath 2001, 31). One of the Brewery's major developments was during the 1860s, when it opened a massive branch house, measuring 40 by 160 feet and standing five stories high ("Dawes & Company" 1896), at 2901 Saint-Joseph Boulevard ("Lachine Montréal: L'Entrepôt" n.d.) (Maps 4.7 and 4.8). As expected, this building bordered the Saint-Lawrence River – a location that was accessible by both rail and water transport ("Dawes & Company" 1896). The Dawes Brewery not only specialized in brewing, but also manufactured malt and reared horses and cattle ("Dawes & Company" 1896). Lachine's rural countryside was an ideal location for the enterprise because its farms were available for the cultivation of hops and barley ("Neighbourhood Old Lachine" n.d.). Presently, the establishment is no longer used for these purposes, but instead functions as a theatre called l'Entrepôt ("Lachine Montréal: L'Entrepôt" n.d.). An important question to ask is: how were residential areas situated in relation to the Dawes brewery? In addition to the provision of goods, the Brewery supplied the residents of Lachine with jobs ("Neighbourhood Old Lachine" n.d.). Approximately thirty workers were required for bottling alone ("Dawes & Company" 1896). According to Héritage Montréal, a "working class area grew around the [industrial site]" after its establishment ("Neighbourhood Old Lachine" n.d.). Likely, the development of this residential zone was, in part, instigated by the need of Dawes' blue-collar workers to live in proximity to the Brewery.

Map 4.8: Dawes Brewery, Lachine.
Source: Google Maps.

The Dominion Bridge Company was another one of Lachine's important industrial firms that was founded during the second half of the nineteenth century. The Company started out in Toronto (named the Toronto Bridge Company) in 1879 and then eventually established a subsidiary branch in Lachine – the Dominion Bridge Company – in 1883 ("Dominion Bridge Co. Ltd., and Subsidiaries, Lachine, P.Q." 1916, 665). The large firm, which measured 512 by 120 feet ("Dominion Bridge Co. Ltd., and Subsidiaries, Lachine, P.Q." 1916, 666), was located at the east end of the municipality along the Lachine Canal (Map 4.7). At this time, the Dominion Bridge Company held the title of the largest bridge plant in North America (see Figure 4.2 for the ground floor plan). In 1888, the Toronto branch closed, leaving the Dominion Bridge Company as the enterprise's sole manufacturing firm ("Dominion Bridge Co. Ltd., and Subsidiaries, Lachine, P.Q." 1916, 666). Eventually, even the immense size of the Dominion Bridge Company became inadequate for this task; a problem that initiated the firm's physical expansion ("Dominion Bridge Co. Ltd., and Subsidiaries, Lachine, P.Q." 1916, 666). By the First World War, the manufacturing plant measured 458 by 600 feet ("Dominion Bridge Co. Ltd., and Subsidiaries, Lachine, P.Q." 1916, 666). Similar to the Dawes Brewery, the inception of the Dominion Bridge Company had an impact on Lachine's urban development. Héritage Montréal describes fin-de-siècle Lachine as "a small industrial city […] composed of streets in a grid

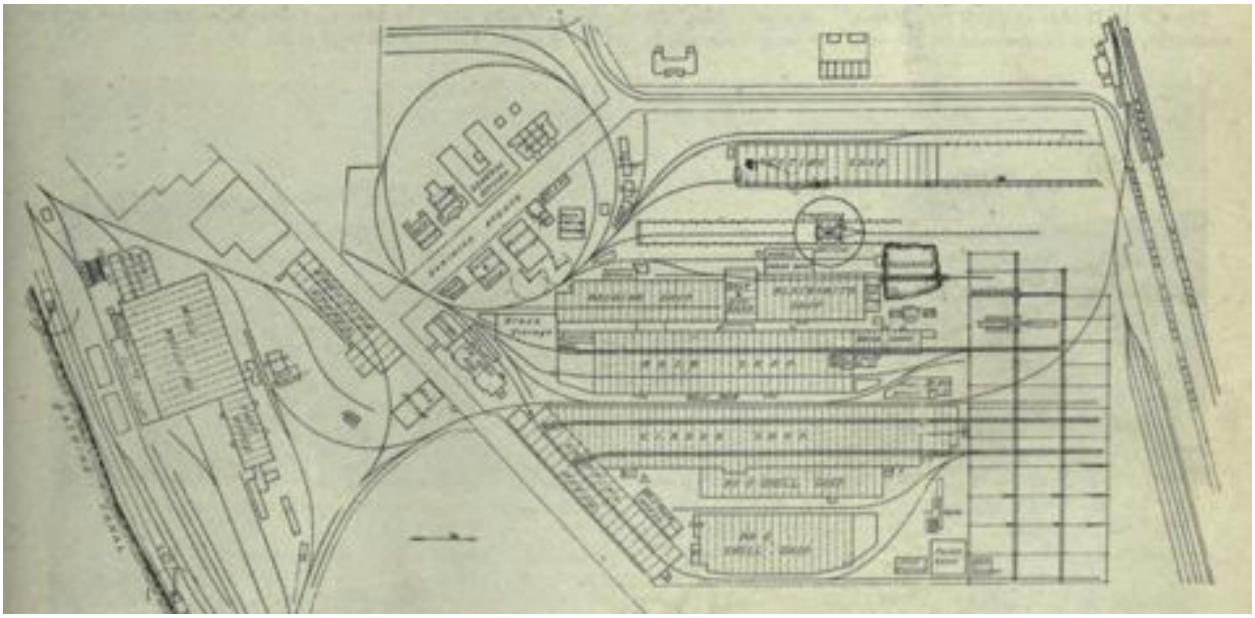


Figure 4.2: Ground floor plan of the Dominion Bridge Company, showing department layout of various plants. Source: "Dominion Bridge Co. Ltd., and Subsidiaries, Lachine, P.Q." *Canadian Machinery and Manufacturing News* 7 (1916): 665-686. http://www.archive.org/stream/canadianmachiner16torouoft#page/1109/mode/1up (accessed April 2, 2013).

pattern, back lanes, and small wood, brick, and stone multi-family residential buildings" ("Neighbourhood Old Lachine" n.d.). The newly constructed residential areas were centred on the municipality's industrial activity ("Neighbourhood Old Lachine" n.d.). Residences, especially for "merchants, worthies, professionals, and other officials," were still being built nearby industrial sites on Saint-Joseph Boulevard by the waterfront ("Neighbourhood Old Lachine" n.d.).

4.3.1.2 Institutions

In addition to industry, institutions had an important impact on Lachine's historical development. The largest institution founded during the nineteenth century was the Convent of the Sisters of Saint Anne, located at the old Simpson Manor near the waterfront of the Lachine Canal ("À la découverte " 2010, 7) (Maps 4.7 and 4.9). After opening in 1861, the Convent already had 68

Map 4.9: Convent of the Sisters of Saint Anne, Lachine. Source: "Location." *Sisters of Saint Anne Historic Center*. Accessed April 13, 2013. http://www.ssacong.org/musee/en/localisation.html.

students enrolled in their program ("À la découverte " 2010, 7). Twenty of these students resided in the attached Villa-Anna Boarding School ("À la découverte " 2010, 7). In 1864, a new boarding school wing was constructed to accommodate the growing number of students choosing to board ("À la découverte " 2010, 7). Though I found no explicit evidence of residential developments that grew around the Convent after its institution, it is likely that commuting

students had to live near the institution in order to attend. Proximate residency may no longer have been necessary after the implementation of the electric streetcar.

4.3.2 The Lachine Line

The Lachine Line started in St. Henri and ran parallel to the Lachine Canal and Grand Trunk Railway to Stoney Point, the track's terminus at the west end of the Island (Map 4.4). Discussion regarding the construction of the Lachine Line commenced, according to the official meeting entries in the MPIR Minute Book, September of 1895 (MPIR Livres des minutes 1895, 130). On the 23rd of the month, it was decided by L. Beaubien and J.R. Thibaudeau – the MPIR's original Director (Charters, By-Laws, Franchises and Agreements 1908, 3) and Vice-President (MPIR Livres des minutes 1895, 146) – that the Right of Way over Crown and Town property and streets be requested from the Government and the Town of Lachine, respectively (MPIR Livres des minutes 1895, 140-1). By October 28, J.R. Thibaudeau and H. Holgate, MPIR's Manager, it was decided that J.R. Thibaudeau and H. Holgate, MPIR's Manager (Charter Between the MPIR and the Town of Lachine, 35), would travel to Lachine to meet with the Town's Council (MPIR Livres des minutes 1895, 146). Since the proposed line was to overlap with several properties and tracks owned by the Grand Trunk Railway, it was also necessary for the MPIR to receive their approval for construction (MPIR Livres des minutes 1895, 167). During the MPIR's meeting on August 28, it was noted that the "Lachine franchise […] was […] approved by the [Town's] Council and would probably be passed [within the next] week or so" (MPIR Livres des Minutes 1896, 198-99). Construction ensued throughout the following year and "[it] was [finally] reported that the line to Lachine was opened for regular traffic on December 31, 1896 – from the South West limit of the Town of St. [Henri] to College St in the Town of Lachine, a distance of five miles" (MPIR Livres des Minutes 1896, 221) (see Map 4.6). The MPIR was also given permission to construct tracks from College Street to Dawes Avenue via Cherrier Street, from Dawes to the public highway, on Dufferin Street to Broadway Street via Lachine Ave, and lastly Broadway to Stoney Point (By-Law No. 70). During the construction of the Dawes extension, the Council of the Town of Lachine expressed their concerns in a requisition they made to the MPIR on May 20 1897 (Requisition 1897). Represented by Joseph A. Descaries, the Mayor of Lachine, it was demanded that the track to Dawes "be continued on a straight line" (Requisition 1897). He went on to say how he "[would] not accept tracks, and [would] oppose

[…] the circulation of cars" if the tracks' unnecessary winding was not fixed (Requisition 1897). In 1897, it was reported by the MPIR that the Line's construction to Stoney Point was complete and that, taking double tracks into account, it was comprised of a total 13 track miles (MPIR Livres des Minutes 1896, 262-63) (Table 4.1).

The Lachine Line remained unchanged until the construction of a major extension to Dorval was suggested in 1907 (MPIR Minute Book 2 1907, 23). On November 12, it was decided that the appropriate Rights of Way would begin to be purchased; a venture that was estimated to cost approximately $80,000 (MPIR Minute Book 2 1907, 23). This was a long process with many delays largely because of disagreements between the MPIR and farmers owning land in proposed area of construction (MPIR Minute Book 2 1907, 42). By September 16 1909, it was cited that "[the Right of Way] required from Lachine to Dorval [had] been purchased with the exception of a few [farms,] the proprietors of which are demanding exorbitant rates" (MPIR Minute Book 2 1907, 42). These complications continued throughout the following years (MPIR Minute Book 2 1907, 42); and, based on the Montreal Street Railway Company's local and suburban lines (Map 4.4), the Lachine Extension was not constructed prior to 1915.

4.3.3 A Streetcar Suburb?

Having now mapped out the physical growth of the Lachine Line from 1892 to 1915, the remainder of my paper will aim to discern what impacts the presence of the streetcar in Montreal had on the suburban growth of Lachine, and whether or not the neighbourhood may be considered a streetcar suburb. In the following sections, I will analyze Lachine's demographics and housing structure during the late nineteenth and early twentieth centuries to establish if the municipality fits my streetcar suburb model.

4.3.3.1 Demographics

An examination of Lachine's population prior to and after the implementation of development of its streetcar system will be the first part of my demographic analysis. Even though it was established in 1676, the Town of Lachine remained small, in terms of population, for several hundred years (Desjardins 2006, 55). Its population, in 1765, was only about 500 people (Desjardins 2006, 95) (Figure 4.3). The town experienced a three-fold increase in population

over the next fifty years; its populace was estimated as approximately 1500 people in 1825 (Desjardins 2006, 95) (Figure 4.3). A similar, yet not as drastic, increase occurred between 1825 and 1851, when the Town's population grew by about 650 people to a total of 2150 (Desjardins 2006, 95) (Figure 4.3). These two surges in population have been attributed to the simultaneous development of the Lachine Canal, since they correspond with "the Canal's phases of construction and enlargement"† (Desjardins 2006, 95). Throughout the next ten years, Lachine's population increased slightly to approximately 2,300 people, and then "remained relatively stable for the second half of the nineteenth century"† (Desjardins 2006, 95). The Town of Lachine's population did increase during the remaining decades of the nineteenth century, though not drastically. It is estimated from the Canadian Censuses that about 3,145 people populated Lachine in 1871 (Canada Department of Agriculture 1873, 37), 3248 in 1881 (Canada

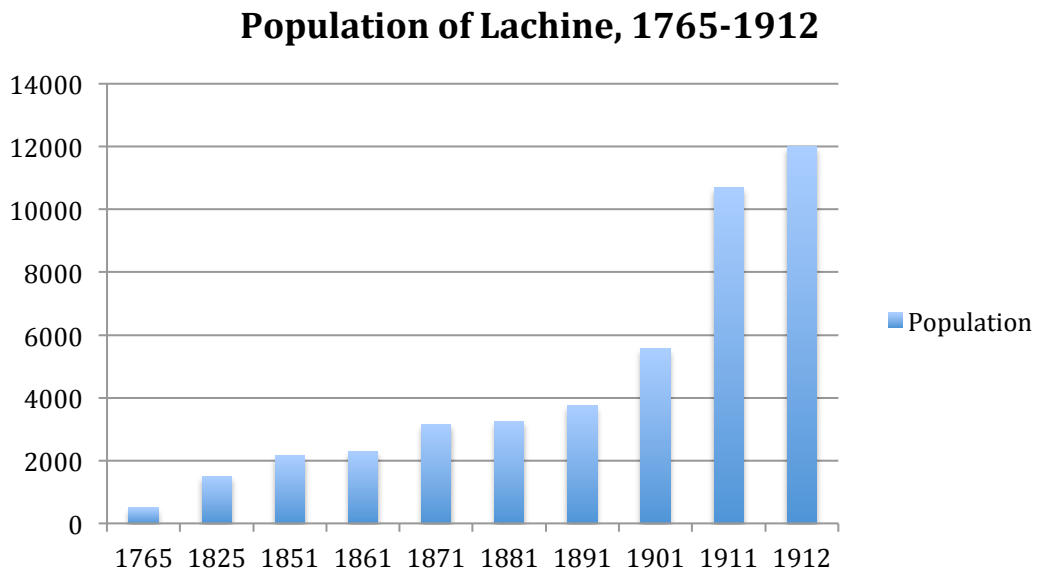
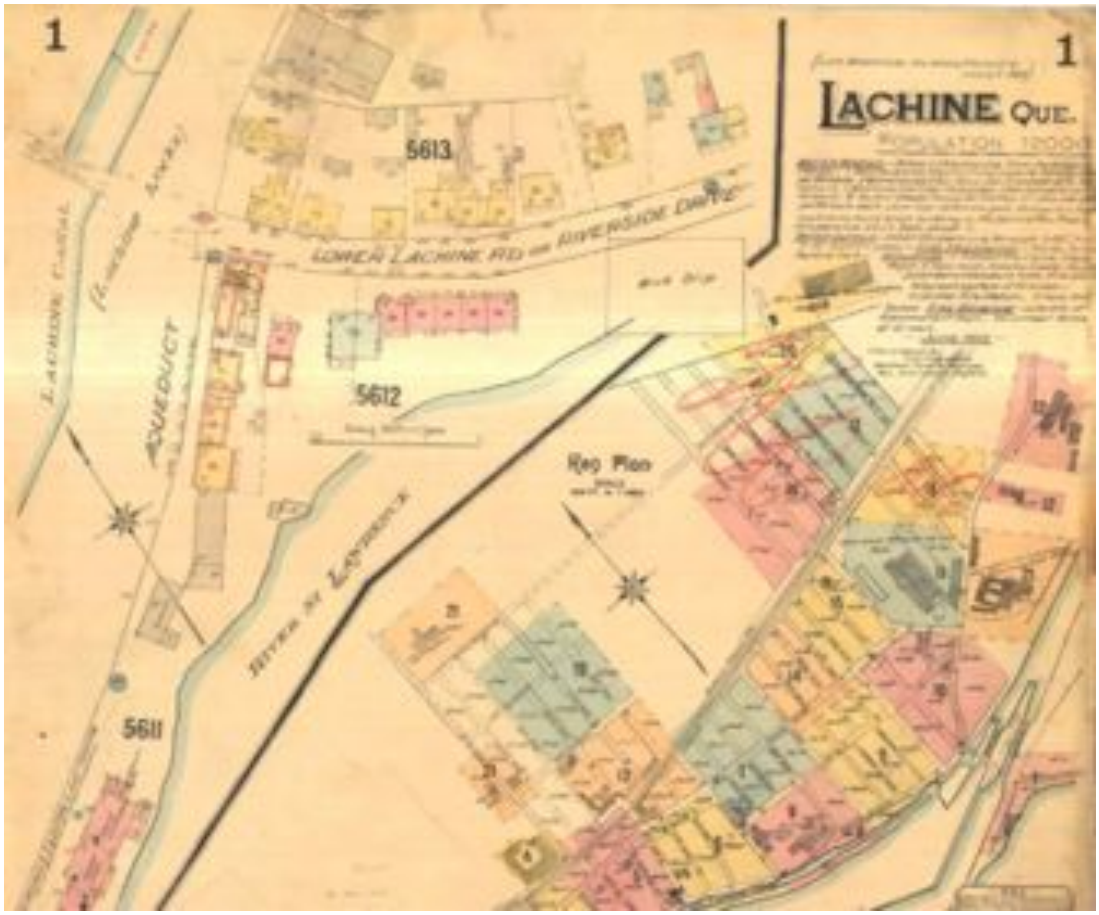


Figure 4.3: Population of Lachine, 1765-1912.
Sources: Desjardins, Pauline. *L'Organization Spatiale du Corridor du Canal de Lachine au XIX^e Siècle*. Québec: Association des archéologues du Québec, 2006; Ville de Lachine, Montreal, QC. (1891). Federal Census. Microfilm Collection, T-6398, La Grande Bibliothèque, Montreal; and Chas. E. Goad Co. Lachine, Que, 1912 [Cartographic record]. Plans de villes et villages du Québec Collection, #0000225139, Bibliothèque et Archives nationales du Québec, Montreal, Quebec, Canada. Accessed February 27, 2013. http://services.banq.qc.ca/sdx/cep/document.xsp?id=0000225139; Canada Dept. of Agriculture. *Census of Canada: 1870-71*. Ottawa: I.B. Taylor, 1873. http://archive.org/details/censuscanada07agrigoog.; Canada Dept. of Agriculture. *Census of Canada: 1880-81*. Maclean, Roger & Co., 1882. http://archive.org/details/1881981881FV11882engfra.;

† Translation from French to English by author.
† Ibid.

Department of Agriculture 1882, 53), and 3,750 in 1891 (Federal Census 1891) (Figure 4.2). However, it was during the following twenty years when the Town's population grew exponentially. In 1901, Lachine's population had increased to 5,561; and by 1911, the Town's population was reported as having risen to an outstanding 10,699 people (Canada Department of Agriculture 1913, 368) (Figure 4.2). Moreover, according to the Goad maps from 1912, the population of Lachine had grown even more to 12,000 (Chas. E. Goad Co 1912) (Figure 4.2 and Map 4.10). Coincidentally, this population increase corresponds with the MPIR's construction and operation of the Lachine streetcar Line. Although causation cannot be proven, this finding provides compelling evidence for the direct impact of the streetcar on the growth of Lachine as a Montreal suburb. Furthermore, in response to this unprecedented growth in population, an act was filed to consolidate and



Map 4.10: Map of Lachine, 1912.
Source: Chas. E. Goad Co. Lachine, Que, 1912 [Cartographic record]. Plans de villes et villages du Québec Collection, #0000225139, Bibliothèque et Archives nationales du Québec, Montreal, Quebec, Canada. Accessed February 27, 2013.
http://services.banq.qc.ca/sdx/cep/document.xsp?id=0000225139

amend the Charter of the Town of Lachine and to incorporate it as a City (Private Bill 1909). As of 1903, "[the] City of Lachine [became] governed by the Cities and Towns' Act" (Private Bill 1909).

The second demographic feature that I analyzed was income composition. Since I was intending to draw comparisons between Lachine and my streetcar suburb model, which I previously determined as being characterized by a middle class population, this part of my investigating was essential. Though I was unable to retrieve any information that explicitly revealed Lachine's income composition from the time period of study; I did, however, find some sources that made implications about the Town's economic characteristics. The 1881 and 1891 Canadian Censuses, from which I observed the recurrence of lower income-producing trades, confirmed this speculation. I reviewed the statistics for Jacques-Cartier – Lachine's census district – and noted the occupations with the highest frequencies: carpenters and joiners, commercial clerks, farmers, farmer's sons, labourers, nuns, and servants (Canada Department of Agriculture 1884, 268-79). The high incidence of nuns is most likely attributable to the Convent of the Sisters of Saint-Anne. Similarly, some of the most common professions listed under the names of Lachine's residents in 1891 were plumber, carpenter, navigator, merchant, baker, barber, and mason (Federal Census 1891). I studied the 1911 Census to look for information pertaining to Lachine's economic characteristics after the implementation of the electric streetcar. The two main manufactures of the Jacques-Cartier district were lumber products and electric light and power (Canada Department of Agriculture 1913, 298). I calculated the manufactures' average employee salaries by dividing the total salary by the total number of employees (two figures provided by the Census). The average salary of a person working in the electric light and power industry was $1,327.50 and in lumber product manufacturing it was $748.06 (Canada Department of Agriculture 1913, 298). From these figures, it appears as though Lachine's lower income composition was, for the most part, maintained alongside the implementation of the electric streetcar. To further substantiate this claim, I searched for less direct evidence of Lachine's income structure. When I was focusing my research on housing (which is addressed in the next section), I came across two newspaper articles from the Montreal Gazette that made allusions to the economic hardships of Lachine's residents. The first clipping described the development of a future housing project at Stoney Point and contained a quote explaining G. Renou's, the owner

of the property, desire "to build a house 'which the average family could afford and would like to own'" (The Montreal Gazette 1944). Implicit, in this citation, is the importance of affordability with respect to housing. There is a danger in depending on personal statements for corroboration; however, Renou's choice word 'average' suggests that it was common for homeowners to be concerned about the price of housing; an unlikely anxiety had Lachine been a middle-class suburb. The second Gazette article also supports the claim that Lachine continued to be mainly populated by lower-income residents during the early twentieth century. The article promotes the construction of new housing lots at Ironside Estate by explaining how "the new development [would] help ease the better-class housing problem in the city, being designed for people willing to spend between $7,000 and $12,000 or more on their home" (The Montreal Gazette, 1945). In this quote, the dominance of the lower class is insinuated in the explication of the unmet demand of more luxurious housing.

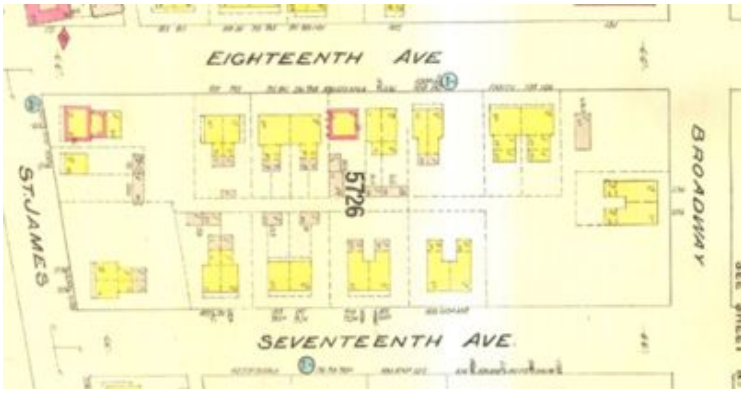
Recall from the literature review that Hintonburgh – a lower and working class neighbourhood located outside of Ottawa – also maintained its social fabric during its transformation into a streetcar suburb. The Town of Lachine is very similar to Hintonburgh. Not only did the neighbourhoods, situated at the periphery of two Canadian metropolises, have their start as lower-class communities; but they also stayed unchanged in terms of income composition during their welcoming of streetcar services. As the case of Hintonburgh demonstrated, models may not necessarily hold in every situation. Despite Lachine's apparent contradiction to the model, it should not be readily disregarded as a streetcar suburb because, like Hintonburgh, there may be other features that are indicative of the streetcar system's effect on its growth as a suburb. Furthermore, it was already established that the Town's exponential increase in population coincided with the construction of the streetcar network.

4.3.3.2 Housing Structure

Another way of assessing whether or not the Town of Lachine may be considered a streetcar suburb is by analyzing its housing structure in relation to the model. As previously established, there are two main structural features that differentiate streetcar suburbs from other types of developments: 1) they are typically comprised of detached and narrowly fronted houses organized into rectilinear patterns, and 2) they grow along the whole extent of streetcar lines,

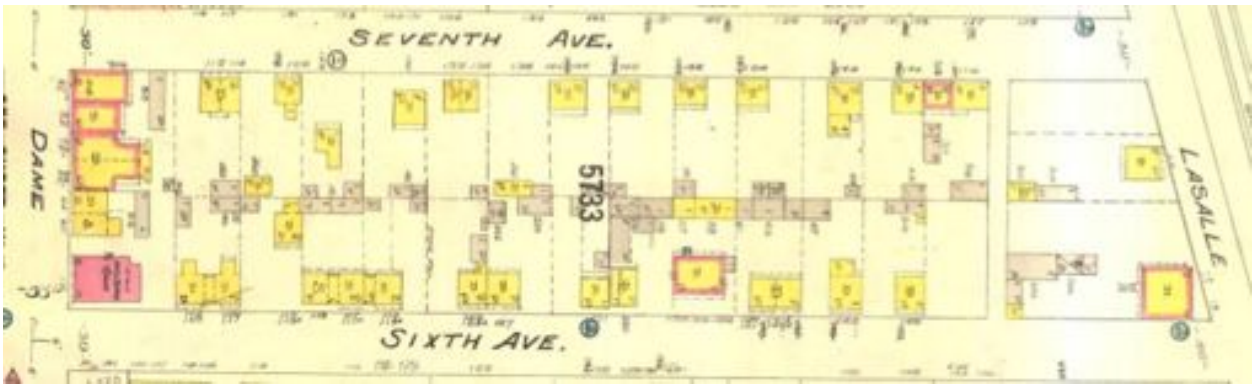
instead of around each individual station. In my analysis of these features within the context of Lachine, I referred to the Goad's maps of Lachine from 1912. In this endeavour it was important to use sources dated far past the initial introduction of streetcars to Lachine to accommodate the time required for changes in housing structure to occur.

An article published by the Montreal Gazette in 1944 regarding the development of a new housing project at Stoney Point offers insight into the types of houses that lined the streets of Lachine during the first half of the twentieth century. In the article, it is explained that the proposed lots were planned to be 50 by 120 feet (The Montreal Gazette 1944) – narrow frontage for a suburban residences. Since the article only remarks about one housing project, I decided to consult the Goad maps of Lachine from 1912 as confirmation. In total, there are twenty-one Goad maps of Lachine; therefore, I limited my analysis to three street blocks from three different plates from the collection to gain an overall understanding of the Town's housing structure (Map 4.7). The sampling method employed is outlined in Section 3.5. The first block that I analyzed was at the cross-section of Eighteenth Ave and Broadway Street (Map 4.11). This area is situated at the Lachine's north end – a newer part of the municipality (recall that Lachine's residential neighbourhoods initially grew around industrial sites near the waterfront). The map shows that the houses are built on rectangular blocks that are narrowly fronted, like the article mentioned. It is also important to note the houses' rectilinear organization within the block. In addition to all of these attributes, it was established, during my literature review, that streetcar suburbs tend to be comprised of detached houses. I discovered the opposite; the houses presented in the map were almost all semi-detached. To develop a general conception of Lachine's housing structure, I needed to choose my remaining maps from completely different areas of town. Thus, the next map that I analyzed was of the neighbourhood block at Seventh Ave. and Lasalle Ave., a more easterly location (Map 4.12). This area is also considered to be a more recently developed part of town. The sample presents a similar situation to the previous: the rectangular lots are narrowly fronted and the houses are organized in a rectilinear pattern. The primary difference between this block and the former is that the houses are much smaller in size and are detached instead of semi-detached, as expected from the literature review. The last block that I assessed was at the intersection of 42nd Avenue and Broadway Street, in the southwest area of Lachine (Map 4.13).



Map 4.11: Lachine – Broadway and Eighteenth Ave, 1912.
Source: Chas. E. Goad Co. Lachine, Que, 1912 [Cartographic record]. Plans de villes et villages du Québec Collection, #0000225139, Bibliothèque et Archives nationales du Québec, Montreal, Quebec, Canada. Accessed February 28, 2013. http://services.banq.qc.ca/sdx/cep/document.xsp?id=0000225139.

Quite different from the other two maps, this one is located near the waterfront, meaning that it is likely an older settlement. Furthermore, the sample shows a sparsely housed square-shaped block. The lots that are occupied by houses are not all rectilinear and narrowly fronted; some of them are squares with equal frontage to width. Adding to this variation is a combination of detached and semi-detached houses. Based on my analysis of the three maps, several conclusions can be made about Lachine's housing structure. First, the Town's houses are organized rectilinearly within their respective neighbourhoods. Though there are some exceptions to this observation, such as the block represented by Map 4.13, it can be said that Lachine's neighbourhood blocks conform, for the most part, to the streetcar suburb model. Second, since



Map 4.12: Lachine – Seventh Ave. and Lasalle, 1912.
Source: Chas. E. Goad Co. Lachine, Que, 1912 [Cartographic record]. Plans de villes et villages du Québec Collection, #0000225139, Bibliothèque et Archives nationales du Québec, Montreal, Quebec, Canada. Accessed February 28, 2013. http://services.banq.qc.ca/sdx/cep/document.xsp?id=0000225139

the majority of the lots from the analyzed subset of maps are rectangular with narrow street frontage, Lachine's fit with the streetcar suburb model is further substantiated. It should not, however, be hastily assumed that because Lachine exhibits characteristics of the streetcar suburb

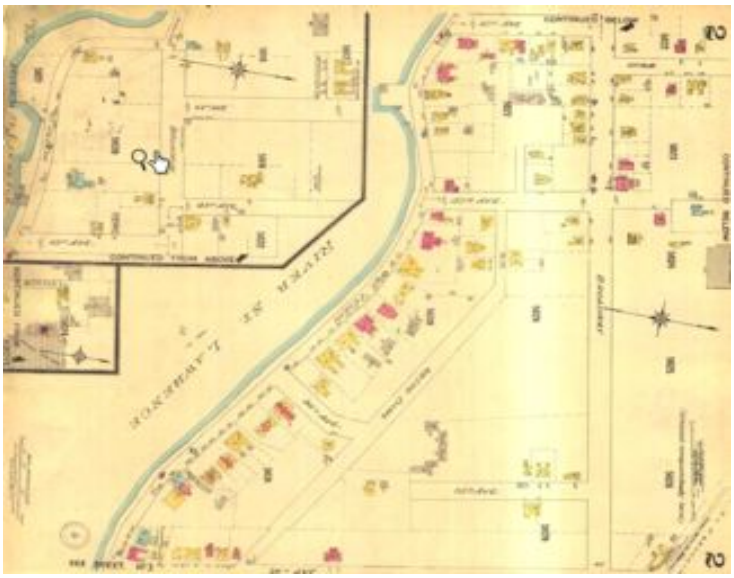
Map 4.13: Lachine – 42nd Avenue and Broadway, 1912.
Source: Chas. E. Goad Co. Lachine, Que, 1912 [Cartographic record]. Plans de villes et villages du Québec Collection, #0000225139, Bibliothèque et Archives nationales du Québec, Montreal, Quebec, Canada. Accessed February 28, 2013. http://services.banq.qc.ca/sdx/cep/document.xsp?id=0000225139.

model that the municipality was, in fact, a streetcar suburb. Recall from Section 4.2.1 that Lachine's residential neighbourhoods were already organized into grid-like patterns before electric streetcars were introduced. The inconsistencies in housing type also call Lachine's conformity to the streetcar suburb into question. While my analyses did confirm the presence of detached housing, the Town was not solely comprised of this housing type. The selected blocks contained semi-detached houses and some of the neighbourhoods from other plates were even characterized by row housing. Again, recall from Section 4.2.1 that many of the houses pre-dating the electric streetcar were built to accommodate more than one family.

The aim of the second part of my housing structure investigation was to determine if Lachine's housing settlements developed along the length of the streetcar line, as suggested by the streetcar suburb model. Recalling the Lachine Line route, I selected the maps representing houses in proximity to Broadway Street, one of the main streetcar arteries. There were two suitable maps from the Goad collection for analysis. Map 4.14 shows housing adjacent to Broadway Street between 16th and 18th Avenue. The surrounding vacant lots indicate that this area of Lachine is not yet full developed. As anticipated, the houses appear to have been built with respect to the streetcar line on Broadway Street; the settlement decreases in density the further the distance from the streetcar service. However, it is important to consider the possibility that this housing pattern may be coincidental. Instead of developing outwards from the streetcar line, perhaps the residences depicted in Map 4.14 were actually constructed as a result of the northerly expansion of Lachine's pre-existing residential areas. This is a plausible scenario, since Lachine's development started near the southern waterfront, and grew northwards over time. Thus, it may

Map 4.14: Lachine – Settlement near Broadway Street, 1912
Source: Chas. E. Goad Co. Lachine, Que, 1912 [Cartographic record]. Plans de villes et villages du Québec Collection, #0000225139, Bibliothèque et Archives nationales du Québec, Montreal, Quebec, Canada. Accessed February 28, 2013. http://services.banq.qc.ca/sdx/cep/document.xsp?id=0000225139

merely be a coincidence that housing density decreases just past the streetcar line. While the picture presented in Map 4.14 appears to affirm the idea that streetcar suburb growth occurs along the lines of the transportation system, the settlement pattern displayed in Map 4.15 does not match. Instead of being clustered near Broadway Street, the houses line the St. Lawrence River coast. In contrast to Map 4.14, the housing illustrated in Map 4.15 actually decreases in



Map 4.15: Lachine – Settlement near Broadway Street, 1912
Chas. E. Goad Co. Lachine, Que, 1912 [Cartographic record]. Plans de villes et villages du Québec Collection, #0000225139, Bibliothèque et Archives nationales du Québec, Montreal, Quebec, Canada. Accessed February 28, 2013. http://services.banq.qc.ca/sdx/cep/document.xsp?id=0000225139

density the greater the distance from the coast. This organization is reminiscent of Lachine's earlier industrial settlement pattern previously discussed in Section 4.2.1: development is shaped by the presence of industrial firms and institutions located near the St. Lawrence River and the Lachine Canal. Map 4.15 suggests that, in 1912, Lachine's housing patterns were still heavily structured by industry. This notion substantiates the coincidental pattern illustrated in Map 4.14.

Based on my analysis of settlement patterns, it is concluded that Lachine does not conform to the streetcar suburb model. Although housing density appears to decrease away from the streetcar line in Map 4.14, Map 4.15 shows a housing pattern more representative of Lachine's earlier industrial organization – one in which residences were built around industrial zones near the waterfront.

CHAPTER 5: CONCLUSION

I began my research with a review of the primary and secondary literature pertaining to the Montreal Street Railway Company's ventures during the late 1800s and early 1900s. The objective of this first phase was to trace the initial expansion of the electric streetcar system in Montreal. It was found that shortly after the construction of a downtown five-mile loop in 1892, the electric streetcar network physically expanded to service other neighbourhoods such as St. Etienne, Saint-Henri and Hochelaga-Maisonneuve. After this preliminary exponential growth, the electric streetcar system continued to expand over the next twenty years, though at a much slower pace. The most notable changes that occurred during this time were westerly extensions of Sherbrooke and Ontario Streets into the Hochelaga and Maisonneuve neighbourhoods, respectively. After developing an understanding of what Montreal's streetcar system looked like at the turn of the twentieth century, I then focused my research on the presence and impact of the streetcar in the suburban context. This topic was explored through the study of the Montreal Park and Island Railway Company's suburban franchises. It was learned that the Park and Island Railway Company was responsible for five streetcar lines: the Back River, the Mountain Belt, the Cartierville, the Park Avenue, and the Lachine. The Back River Line was the Park and Island Railway's first project – a 7.5-mile track terminating in Sault-au-Recollet. Their second endeavour was the construction a streetcar line that would encircle the Island's mountains, the Mountain Belt Line. By 1897, the last three Lines were complete: a line to Cartierville and a small northerly extension of the tracks on Park Ave.

From my appraisal of the Park and Island Railway's enterprises, I decided to narrow the rest of my research to the Lachine Line, which started in St. Henri and ran parallel to the Lachine Canal and Grand Trunk Railway to Stoney Point – the track's terminus at the west end of the Island. This phase of the research first involved an analysis of Lachine's development prior to the implementation of the electric streetcar, which elucidated the municipality's historical dependency on industry and institutions. It was determined from investigations of the Dawes Brewery, the Dominion Bridge Company, and the Convent of the Sisters of Saint Anne that Lachine's nineteenth century urban growth was largely structured by the presence of industrial sites and institutions near the waterfront of the St. Lawrence River and the Lachine Canal. Upon completing this historical analysis, the remaining objective of the paper was to compare Lachine

to the streetcar suburb model previously defined in the literature review. An examination of Lachine's demographic features revealed that the municipality's increase in population corresponded with the Park and Island Railway's construction and operation of the Lachine streetcar Line. Moreover, it was found that Lachine's lower income composition was, for the most part, maintained alongside the implementation of the electric streetcar. At this point in my research, Lachine did not appear to fit the streetcar suburb model. I conducted analyses of the neighbourhood's housing structure to confirm this speculation. Several features were discovered within the sampled street blocks that were actually evidence of Lachine's conformity to the model: 1) houses were organized rectilinearly within their respective neighbourhoods and 2) the majority of the lots were rectangular with narrow street frontage. However, it was not hastily assumed that Lachine was a streetcar suburb because it presented some of the model's properties. There were three reasons why Lachine's conformity to the model was questioned at this stage of my research: 1) the municipality's neighbourhoods were already organized into grid-like patterns before electric streetcars were introduced 2) there were inconsistencies in housing type, and 3) the Town was not solely comprised of semi-detached housing. The second part of my housing structure analysis provided the substantiation required for me to establish that Lachine was not, in fact, a streetcar suburb. Two map plates were assessed in terms of settlement patterns. In one map, housing density appeared to decrease away from the streetcar line; however the other illustrated a housing pattern more representative of Lachine's earlier industrial organization. Though the neighbourhood exhibited some of the model's properties, they were not consistent and were necessarily attributable to the streetcar. Thus, it is concluded that Lachine does not fit the model. In other words, the electric streetcar did not largely shape Lachine's urban form. It appears as though the municipality's urban development continued to be guided by the locations of large industrial firms and institutions; even after the streetcar line was constructed.

The most significant limitation to my research was my inability to establish a causal link between the presence of the electric streetcar and the growth of Lachine as a suburb of Montreal. There are many other factors that could have impacted Lachine's urban development that were not accounted for in this paper, such as the influence of powerful actors. Harvey Molotch best conceives this factor in his idea of the city as a growth machine (1976, 310). He defines the city as "the areal expression of the interests of some land-based elite" (Molotch 1976, 309). Since

land is a market commodity, Molotch explains how actors – usually businessmen (1976, 317) – try to further the development of their land for wealth and power (1976, 309). The concept of the growth machine can be applied to Lachine. It is, of course, firstly important to consider the objectives of the parties directly involved in the implementation of the electric streetcar in Lachine. Since the inception of the Lachine franchise, it was clearly indicated that the streetcar network was intended to be an asset to the region (Charter Between the MPIR and the Town of Lachine, 41). For example, it was explicitly stated in the Charter between the MPIR and Lachine that the suburban system would "employ as much as possible persons of the Town of Lachine in preference to others" (Charter Between the MPIR and the Town of Lachine, 41). This statement reveals how both the Park and Island Railway Company and the Town of Lachine interpreted the streetcar project as an opportunity for job development. Were there any businessmen who were also interested in job development, or even residential development? The Dawes family is a good place to start in answering this question. During the time in which they owned the Dawes brewery, they showed particular interest in the municipality's economic development (Burr 2000). In addition to owning a great deal of property in the area, Andrew Joseph – Thomas Dawes' grandson – was an important political figure, first as a municipal councillor, then as the mayor of Lachine (Burr 2000). The Dawes, therefore, maintained a large amount of authority over Lachine's decision-making processes. With respect to the growth machine, it is also necessary to consider how individual actors envision their competitors. Molotch explains how the successes of each individual actor are inextricably dependent on those of their adversaries (1976, 311). Thus, "otherwise competing land-interest groups collude to achieve a common land-enhancement scheme" (Molotch 1976, 311). These types of relationships are visible in Lachine's social fabric. For example, James Pawley – Thomas Dawes' other grandson – was a key shareholder of the Dominion Bridge Company (Burr 2000). He was involved in the Company's administration as a member of the Board of Directors for two years and as a vice-president for four (Burr 2000). I also found it interesting that for the construction of the Sanctuary of Saint Anne the Sisters employed the Dominion Bridge Company to complete the casting and steelwork ("À la découverte" 2010, 8-9). These are just two examples of mutually advantageous relationships fostered between Lachine's industrial and institutional 'elite'. With further research, it will likely be found that there existed an extensive network of relationships between the municipality's most important investors.

Another weakness of my research is that it underestimates the role of the railroad in Lachine's urban development. Prior to the construction of the Lachine Line, the railways that ran through the municipality were, in part, responsible for the structuring of its residential development. The Montreal and Lachine Railroad terminal was a major landmark around which "salaried employees and government officials" set up residence ("Neighbourhood Old Lachine" n.d.). As well, the addition of the Grand Trunk Railway Line in 1889 instigated "the development of the suburbs and the construction of opulent homes on the shores of Lake Saint-Louis" ("Neighbourhood Old Lachine" n.d.).

A large part of this paper was devoted to the preliminary research required for the application of the streetcar suburb model to Montreal. Though it has been established that Lachine does not conform to the model, there is still much to be learned about the relationship between the streetcar and the municipality's urban growth. As discussed, there are a multitude of other factors that may have shaped Lachine's urban form. Moreover, my research has shed light on the neighbourhood's peculiar and usually contradictory characteristics. In future research, these complexities will be worked through. The development of a new model opens up the possibility for application in other suburban contexts.

REFERENCES

"À la découverte de l'ensemble conventuel des Soeurs de Sainte-Anne à Lachine, un lieu de tradition educative." Narrated by Jocelyne Denault. Conseil du patrimoine religieux du Québec. November 2010. http://www.patrimoine-religieux.qc.ca/en/pdf/podcast/Podcast-CSSA.pdf.

American Street Railway Association, (1895). Souvenir and official programme: fourteenth annual convention of the American Street Railway Association held in Montreal, 15th, 16th, 17th, & 18th of October, 1895. Microfilm Collection, University of Alberta Libraries, Alberta, Canada. Accessed February 13, 2013. http://archive.org/stream/cihm_00795/cihm_00795_djvu.txt

Anas, Alex, Richard Arnott, and Kenneth A. Small. "Urban Spatial Structure." *Journal of Economic Literature* 36, no. 3 (1998): 1426-1464. Accessed March 5, 2012. http://www.jstor.org/stable/2564805.

Binns, Richard M. *Montreal's Electric Streetcars (An Illustrated History of the Tramway Era: 1892-1959)*. Montreal: Railfare Enterprises Limited, 1973.

Burr, Gordon. "Dawes, James Pawley." *Dictionary of Canadian Biography Online*. 2000. Accessed April 12, 2013. http://biographi.ca/009004-119.01-e.php?id_nbr=6666.

By-Law no. 70. S2 The Montreal Park and Island Railway Fonds. Box S2/1. STM Archives, Montreal, Quebec, Canada.

Canada Department of Agriculture. *Census of Canada, 1870-71*. Vol. 1. Ottawa: I.B. Taylor, 1873. http://archive.org/details/censuscanada07agrigoog.

Canada Department of Agriculture. *Census of Canada, 1880-81*. Vol. 1. Maclean, Roger & Co., 1882. http://archive.org/details/1881981881FV11882engfra.

Canada Department of Agriculture. *Census of Canada, 1880-81*. Vol. 2. Maclean, Roger & Co., 1884.

Canada Department of Agriculture. *Fifth Census of Canada 1911: Manufactures for 1910 as Enumerated in June 1911*. Vol. 3. Ottawa: C. H. Parmelee, 1913.

Charter Between the Montreal Park and Island Railway Company and the Corporation of the Town of Lachine. S2 The Montreal Park and Island Railway Fonds. Box S2/1. STM Archives, Montreal, Quebec, Canada.

Charter, By-Laws, Franchises and Agreements of the Montreal Park and Island Railway Company. S2 The Montreal Park and Island Railway Fonds. Box S2/1. STM Archives, Montreal, Quebec, Canada.

Chas. E. Goad Co. Lachine, Que, 1912 [Cartographic record]. Plans de villes et villages du Québec Collection, #0000225139, Bibliothèque et Archives nationales du Québec, Montreal, Quebec, Canada. Accessed February 27, 2013. http://services.banq.qc.ca/sdx/cep/document.xsp?id=0000225139

Communauté urbaine de Montréal (Québec). "Urban Transit in Montreal: 1861-1961." Montreal Transportation Commission, n.p., 1970.

"Company Timeline." STM. Accessed January 25, 2013. http://www.stm.info/english/en-bref/a-dates.htm.

Desjardins, Pauline. *L'Organization Spatiale du Corridor du Canal de Lachine au XIX^e Siècle*. Québec: Association des archéologues du Québec, 2006.

"Dominion Bridge Co. Ltd., and Subsidiaries, Lachine, P.Q." *Canadian Machinery and Manufacturing News* 7 (1916): 665-686. http://www.archive.org/stream/canadianmachiner16torouoft#page/1109/mode/1up (accessed April 2, 2013).

The Fact Book of Lachine. FC19 C36 no.83019, CIHM/ICMH Microfiche Collection, Humanities and Social Sciences McLennan Building, McGill University, Montreal.

(February 22, 1996). Le Monde Illustré, VM6_D2023, Microfilm Collection, Montreal City Hall Archives, Montreal.

Gilliland, Jason. "Redimensioning Montreal: Circulation and Urban Form, 1846-1918." PhD thesis, McGill University, 2001.

"Holiday Guides for North America – Canada." *UK Net Guide*. Accessed April 13, 2013. http://www.uknetguide.co.uk/Holiday-Guides/North-America/Canada/Montreal.html.

"Lachine Montréal: L'Entrepôt." *Ville de Montréal*. Accessed April 2, 2013. http://ville.montreal.qc.ca/portal/page?_pageid=8117,89115662&_dad=portal&_schema=PORTAL.

Lachine, Montreal, QC. (1891). Federal Census. Microfilm Collection, T-6398, La Grande Bibliothèque, Montreal.

Lamarche, Hélène. “Lachine Montréal: History.” *La Lucame* (2011). Accessed April 2, 2013. http://ville.montreal.qc.ca/portal/page?_pageid=8197,90911629&_dad=portal&_schema=PORTAL.

Linteau, Paul-André, René Durocher, and Jean-Claude Robert. *Quebec: A History 1867-1929*. Translated by Robert Chodos. Toronto: James Lorimer & Company, Publishers, 1983.

“Location.” *Sisters of Saint Anne Historic Center*. Accessed April 13, 2013. http://www.ssacong.org/musee/en/localisation.html.

Molotch, Harvey. “The City as Growth Machine: Toward a Political Economy of Place.” *American Journal of Sociology* 82, no. 2 (1976): 309-332. Accessed March 30, 2013. http://www.jstor.org/stable/2777096.

Montreal Park and Island Railway Company. Livre des minutes (1888-1906). S2 The Montreal Park and Island Railway Fonds. Box S2/2,2. STM Archives, Montreal, Quebec, Canada.

Montreal Park and Island Railway Company. M.P. & I.R. Co. Minute Book no 2 (1906-1936). S2 The Montreal Park and Island Railway Fonds. Box S2/2,3. STM Archives. Montreal, Quebec, Canada.

Montreal street railway Co’s local and suburban lines, 1915 [Cartographic record]. VM66 Collection of the City of Montreal’s Maps and Plans, S5, P128, Montreal City Hall Archives, Montreal, Quebec, Canada.

“Neighbourhood Old Lachine.” *Héritage Montréal*. Accessed April 2, 2013. http://www.memorablemontreal.com/accessibleQA/en/histoire.php?quartier=15.

Newell, Christina. *Hintonburgh: A Working Class Streetcar Suburb at the Turn of the Century*. Ottawa: The Historical Society of Ottawa, 1995.

(October 11, 1945). “Vets are Favored For Housing Lots.” The Montreal Gazette, VM6_D3050.15, Microfilm Collection, Montreal City Hall Archives, Montreal.

Plan of routes referred to in a contract for the establishment and operation of an electric passenger railway, passed between the City of Montreal and the Montreal Street Railway Company before O. Marin the undersigned notary, under date hereof, 1897 [Cartographic record]. VM66 Collection of the City of Montreal’s Maps and Plans, S5, P058, Montreal City Hall Archives, Montreal, Quebec, Canada.

Requisition of the Council of the Town of Lachine to the Montreal Park & Island Railway Company, S2 The Montreal Park and Island Railway Fonds. Box S2/1. STM Archives, Montreal, Quebec, Canada.

(September 23, 1882). The Montreal Gazette, VM6_D2023, Microfilm Collection, Montreal City Hall Archives, Montreal.

(September 23, 1892). "Fifty Years Ago." The Montreal Gazette, VM6_D2023, Microfilm Collection, Montreal City Hall Archives, Montreal.

(September 1944). "Housing Project at Stoney Point To Accommodate 50 to 60 Families." The Montreal Gazette, VM6_D3050.15, Microfilm Collection, Montreal City Hall Archives, Montreal.

Sneath, Allen Winn. *Brewed in Canada: The Untold Story of Canada's 350-Year-Old Brewing Industry.* Toronto: Dundurn Press, 2001.

Stanback Jr., Thomas M. and Richard Knight. *Suburbanization and the City*. New York: Allanheld, Osmun & Co. Publishers, 1976.

STM. "Company History." *STM*. Accessed February 20, 2013. http://www.stm.info/english/en-bref/a-dates.htm.

Timbers, Wayne. "The Development of Transportation in Montreal, 1820-1918." *McCord Museum of Canadian History*. March 13 2002. Accessed March 9, 2012. www.mccord-museum.qc.ca/pdf/eduweb/Ess.Transports.EN.pdf.

Ward, David. "A Comparative Historical Geography of Streetcar Suburbs in Boston, Massachusetts and Leeds, England: 1850-1920." *Annals of the Association of American Geographers* 54, no. 4 (1964): 477-489. Accessed March 23, 2012. doi: 10.1111/j.1467-8306.1964.tb01779.x.

Warner, Sam Bass Jr. *Streetcar Suburbs: The Process of Growth in Boston (1870-1900)*. 2nd ed. Cambridge: Harvard University Press, 1978.

1st Session, 12th Legislature, 9 Ed. VII, 1909 (readings in March) Private Bill (An Act to consolidate and amend the charter of the town of Lachine and to incorporate it as a city). S2 The Montreal Park and Island Railway Fonds. Box S2/1. STM Archives, Montreal, Quebec, Canada.

(1896). "Dawes & Company." Montreal Of To-Day, VM6_D3050.15, Microfilm Collection, Montreal City Hall Archives, Montreal.