The Sociability of New Urbanism: a Comparative Study of Two Communities in
Montreal, Angus Park and Bois-Franc

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Abstract

The Sociability of New Urbanism : a Comparative Study of Two Communities in
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Lesley Pretula

This study focusses on the neighbourhood square and explores the perceived levels of

sociability and satisfaction that residents experience within two newly constructed New

Urbanist communities in Montreal, Bois-Franc and Angus Park. From an early age, we

are socialized to live within a community. One can envision communities consisting of a

series of concentric circles beginning in the centre with the family unit and widening out

to include schools, neighbourhoods and entire geographical regions. The community in

which we live shapes our characters, influences job and education decisions and prepares

us for interactions with broader segments of society. Most people seek and are comforted

by the sense of belonging and connection to those they physically live close to. New

Urbanism recognizes this human need and attempts to address it through physical design.

The study concludes with a discussion of interview and questionnaire results from a

sample of residents in each community, regarding the relationship between the physical

design and presence of the neighbourhood square and levels of social interaction

experienced.

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Preface

This study arose out of a personal interest in new models of urban development, specifically New Urbanism, to provide an alternative to what I feel to be, negative social, economic and environmental issues generated by the sprawling post World War II suburban tract developments. As a child in British Columbia during the late 1960s and 1970s I spent the majority of my youth residing in these suburban enclaves. I must attest that daily life on the meandering suburban cul-de-sac was not in any way traumatic or unbearable; there were occasional disputes with neighbours concerning wayward children or pets encroaching upon another's fiercely protected private property, but those can occur in any form of neighbourhood design. Many people are currently very happy living the « American Dream » in a single family home located on a large lot complete with privacy and seclusion and many more will buy into this « exclusive » lifestyle in the future. Conventional suburban development is certainly not going to disappear with the introduction of new planning alternatives because the fact is, there is a market demand for it. The suburbs generally provide a safe place in which to raise a family and often are more affordable than homes in some traditional older neighbourhoods located close to the central city.

Our family lived in a modest home of average building quality with a fenced backyard, set well back off the street and with a driveway and carport dominating the front façade. A few school friends lived in close proximity and we made the maze of wide sidewalkless streets our playground since the large parks were located quite a distance from home. But, it was on a summer trip to Montreal with my father when I

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was twelve that I first experienced the rich heterogenious urban fabric of the open air street markets and densely populated, architecturally stimulating older neighbourhoods. These images of the city left their mark upon my impressionable mind and were what ultimately led me later to seek opportunities to flee the suburban residential homogeneity as a young adult and take up residence in Montreal's traditional older neighbourhoods of the city. Now, years later, with a family of my own, I am still happy living here in a traditional older neighbourhood where my children can walk to school, play safely on the sidewalks and back lanes and where they can nuture their own sense of independence and responsibility by walking to the corner store or taking public transit to a destination.

For me, the experience is satisfying as well; I know my neighbours by name, I can call upon several people if I need to borrow a cup of sugar or to care for my children when the need arises. We are able to walk to the centre of the city, to all levels of schooling, to parks and shops and an excellent public transit system is just steps away. On the contrary, I distinctly remember the feeling as a teenager of being trapped in the rather sterile environment of the conventional suburban development. Bus stops were few and far between and there was no way one could walk to shop for a few groceries. All retail activity was situated in strip malls zoned exclusively for that purpose. Reaching school involved a drive by parents or a long bicycle ride on roads designed solely for the automobile. Despite the dangers of riding on the busy thoroughfares, the bicycle became my principal mode of transportation carrying me to and from school and into the more vibrant sectors of the central city.

However, there is no denying that the automobile is of paramount importance in this type of suburban development and as soon as I reached legal driving age I was

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immediately presented with a car from my parents. I was grateful, it was an older British convertible that was a joyous experience to drive, but I see now that it was a necessary expense and a rite of passage for a suburban youth; I was officially free and so were my parents from their chauffeur duties. Amongst the youth in my current urban neighbourhood, I do not sense the same sense of urgency to own a car at sixteen years of age since public transit is well provided at all hours of the day and there is always the possibility of walking to a particular destination. In my opinion, living in the traditional older neighbourhood is worth the smaller lot and house size because it offers a more sustainable and healthy existence for people at all life stages, from young mothers with infants to the elderly unable to walk long distances or drive an automobile.

Thus this thesis emerged from my research into the planning movement known as the New Urbanism. New Urbanism, with its emphasis on architectural form, proposes a different way of restructuring our conventional suburbs, reinvigorating city centres, directing in-fill growth and building new multi-use communities. Its goals are ambitious and noble; I can identify with the New Urbanism principles of the importance of bringing back a sense of place and neigbourliness to our communities that many believe has been sorely lacking these past fifty years. New Urbanism may not be the ideal solution to human settlement issues but it is certainly an exciting and promising movement in the right direction for many people. Physical urban design is certainly not the only factor in creating community; but it can, however, provide a framework for greater opportunities for social interaction and a greater identity of place. Sadly, I do not have a strong connection or identity towards my childhood neighbours or the street that I grew up on in the bedroom community. Of course, not everyone wants to be sociable with their

neighbours; personalities and life stages are strong factors that influence neighbourly interaction. However, upon embarking on this study, I could not help but remember the words from the opening song of a favourite childhood television show, "Mister Rogers' Neighborhood"[1]:

It's a beautiful day in this neighborhood,
A beautiful day for a neighbor.
Would you be mine?
Could you be mine?...

It's a neighborly day in this beauty wood,
A neighborly day for a beauty.
Would you be mine?
Could you be mine?...

I've always wanted to have a neighbor just like you.
I've always wanted to live in a neighborhood with you.

So, let's make the most of this beautiful day.
Since we're together we might as well say:
Would you be mine?
Could you be mine?
Won't you be my neighbor?
Won't you please,
Won't you please?
Please won't you be my neighbor?

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[1] Lyrics are from the song entitled, « Won't you be my neighbor? » by Mr. Fred M. Rogers from the PBS television show, « Mister Rogers' Neighborhood ».

Chapter 1

1.1 Introduction

> To seek the timeless way we must first know the quality without a name. There is a central quality which is the root criterion of life and spirit in a man, a town, a building, or a wilderness. This quality is objective and precise, but it cannot be named.
> - Christopher Alexander, architect, *A Timeless Way of Building* (1979).

Currently, there are several built examples of New Urbanist communities in the Canadian urban regions of Calgary, Toronto, Ottawa, Vancouver and Montreal. These new communities have generated a lot of publicity as they are heralded as socially integrated, more sustainable, compact and diverse forms of human scale urban development, conceived as alternatives to conventional suburbia's sprawling social, economic and environmental ills. What is interesting about these new communities is that they physically implement New Urbanist planning principles in their quest to build the kind of vibrant neighbourhoods that Jane Jacobs (1961), William Whyte (1968), Kevin Lynch (1960) and Christopher Alexander (1979) write of, neighbourhoods with a sense of place. The principles used, draw upon, and are inspired by past urban forms, specifically, the organization of traditional older towns and villages. These includes features such as homes set near the narrower streets, back alleys, front porches, a vibrant street life, networks of public open space and a diverse mix of housing and land usage all within a walkable, human scaled environment.

Within the fields of geography, sociology, urban planning and design, architecture and public policy, there has been much attention paid to the New Urbanism planning movement and its remedies for combating excessive land consumption, social

alienation and the domination of automobile usage in our communities. The literature on

the subject is extensive. It ranges from Jane Jacobs (1961), Christopher Alexander (1977,

1979) and William H. Whyte's (1964, 1968) warnings about the dangers of an

automobile dominated society to the current works of Andres Duany and Elizabeth

Plater-Zyberk (1991, 2000), Peter Calthorpe (1991, 1993, 2001), and Douglas Kelbaugh

(1997), to name just a few. This thesis seeks to contribute to the literature on New

Urbanism by focusing on the physical presence and design of the neighbourhood square

and its relationship to levels of social interaction and satisfaction experienced by a

sample of residents in two comparative New Urbanist Montreal developments, Bois-

Franc and Angus Park.

My decision to focus on this particular subject arose from a curiosity about the

quality of life and social interaction experienced within New Urbanist communities.

Does urban design really make a difference to the perceived quality of life and social

interaction satisfaction amongst residents? This is the key question that I first formulated

upon reading about the famed Seaside project in Florida, conceived by the "founders" of

the American New Urbanism, the architects and town planners, husband and wife team of

Andres Duany and Elizabeth Plater-Zyberk.[1] Duany began his architectural career

designing skyscrapers, but after attending a lecture by the Luxembourg architect and

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[1] Seaside, built in 1981by developer Robert S. Davis and located on eighty acres of Florida's panhandle coast, is considered by Philip Langdon, Peter Calthrope, Katz, Jane Jacobs, Duany, Plater-Zyberk and others, to be the prototype for neotraditional or New Urbanism community development. These two terms are used interchangeably in this thesis. In the tradition of old towns, Seaside has a mixture of stores, public buildings, public open space and houses of many sizes, all linked together by a network of narrow eighteen foot human scale streets that force motorists to reduce speed. As well, the houses all have low setbacks off the street and a big front porch sixteen feet from the sidewalk so that people can comfortably converse with those passing by. Picket fences alongside the street, traditional vernacular architecture and mid-block sandy footpaths are all components seen in traditional old towns. Duany and Plater-Zyberk believe that streets should be public rooms where people feel comfortable and that faciliate human interchange.
Philip Langdon. A Better Place to Live. Amherst : The University of Massachusetts Press, 1994, 108.

urban planner, Leon Krier, the intellectual godfather of New Urbanism, who designed the

English New Urbanist town of Poundbury for the Prince of Wales, he embraced the

social benefits provided by neotraditional design. Krier introduced Duany to the idea of

looking at people first and to the power of physical design to change the social life of a

community. Duany and Plater-Zyberk (1991) recognize that design affects behaviour,

that the structure and function of a community are interdependent and that "design

structures functional relationships, quantitatively and qualitatively; for them, "design is a

sophisticated tool whose power exceeds its cosmetic attributes".[2] They identified the

fundamental physical elements in old towns with strong community bonds, such as a

walkable pattern of streets, parks and squares, and houses situated close to the street; in

essence, they sought to resurrect a sense of place, the building of places and the public

realm.[3] Sim van der Ryn and Stuart Cowan in their 1996 book, Ecological Design, state

that design transforms awareness and that design that "grows out of and celebrates place,

grounds us in place"; they stress the importance of the symbiotic relationship between

design, culture and nature.[4] Several years ago, after visiting Disney's New Urbanist

Celebration project in Florida, I was captivated by the notion that there could be a viable

planning alternative to the "placeless", conventional post World War II suburban

development morphology, of which I was a product. In the words of van der Ryn and

Cowan (1996) conventional suburban sprawl, tangled highways, strip malls, and endless

paved parking lots are examples of wasteful and polluting "dumb design". This design

does not consider the health of human communities or ecosystems, or the foundations of

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[2] William Lennertz. « Town-making fundamentals ». In Andres Duany. Towns and Town –Making
Principles. New York : Rizzoli, 1991, 21.
[3] Leon Krier. « Afterword ». In Duany, 1991, 117.
[4] Sim van der Ryn & Stuart Cowan. Ecological Design. Washington, D.C. : Island Press, 1996, 162.

creating an actual place.[5] Obviously, creating a sense of community and identity of place

is an enormously elusive, but noble, challenge to designers, a challenge that realistically,

only time may tell of success or failure. Thus, this thesis emerged out of a desire to learn

more about the New Urbanist movement and, more precisely, its ability to effect social

change through the implementation of physical design. This thesis does not prejudge the

success of New Urbanism, but rather seeks to delve a little bit deeper under the skin of

the concept and to offer criticism. This chapter first examines guidelines for New

Urbanist community development as the basis for design; second, presents a description

of the two case studies; third, some comparisons are made between the two communities,

fourth, the policy context is outlined with a discussion of urban growth boundaries,

Canadian and American trends in urban public policy and zoning regulations; fifth, the

thesis objectives are stated; sixth, the research process is revealed; and seventh, the thesis

structure is provided.

1.2 New Urbanism Design Guidelines

Within the City of Montreal, the two communities selected for this thesis research

and comparison, Bois-Franc, located in the borough of Saint-Laurent and Angus Park,

located in the Rosemont sector of the metropolitan area, exhibit many of the New

Urbanism planning principles. These ambitious and comprehensive principles are

outlined in the Charter of the Congress for the New Urbanism (2000) and are as follows:

> The Congress for the New Urbanism views disinvestment in central cities, the
> spread of placeless sprawl, increasing separation by race and income,
> environmental deterioration, loss of agricultural lands and wilderness, and the
> erosion of society's built heritage as one interrelated community-building
> challenge.

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[5] van der Ryn & Cowan, 10.

We stand for the restoration of existing urban centers and towns within coherent metropolitan regions, the reconfiguration of sprawling suburbs into communities of real neighborhoods and diverse districts, the conservation of natural environments, and the preservation of our built legacy.

We recognize that physical solutions by themselves will not solve social and economic problems, but neither can economic vitality, community stability and environmental health be sustained without a coherent and supportive physical framework.

We advocate the restructuring of public policy and development practices to support the following principles: neighborhoods should be diverse in use and population; communities should be designed for the pedestrian and transit as well as the car; cities and towns should be shaped by physically defined and universally accessible public spaces and community institutions; urban places should be framed by architecture and landscape design that celebrate local history, climate, ecology and building practice.

We represent a broad-based citizenry composed of public and private sector leaders, community activists, and multidisciplinary professionals. We are committed to reestablishing the relationship between the art of building and the making of community, through citizen-based participatory planning and design. We dedicate ourselves to reclaiming our homes, blocks, streets, parks, neighborhoods, districts, towns, cities, regions, and environment.[6]

These principles are intriguing and the agenda set by the New Urbanists is certainly impressive. However, because it is difficult to imagine somebody vehemently opposing any of these comprehensive goals, there is a danger that criticism and new thought on the nature of urbanism may be stunted. Simply by using the nomenclature, "smart growth" to describe New Urbanist principles implies that anything opposing it may be considered "dumb growth". For a real estate developer to actually embrace and implement some of the above-mentioned principles is an interesting and complex endeavour. The two

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[6] Michael Leccese and Kathleen McCormick, eds. and Congress of the New Urbanism. Charter of the New Urbanism. New York : McGraw-Hill, 2000. For the purpose of this research, the principles outlined in the « Charter » are used as the basis for defining whether or not a development can be classified as New Urbanist and as a benchmark to evaluate the success or failure of the community to implement and enact these stated goals.

property developers of the Montreal case studies chose to implement, to varying degrees, many of these New Urbanist criteria in their projects.

1.3 Case Descriptions

There are several well known New Urbanist developments in the United States, such as Kentlands, near Washington, D.C., Reston, Virginia, Seaside, Florida, Peter Calthorpe's Laguna West in California, Seattle Commons in Washington State and Civano, in Tucson, Arizona. Canada has its own share of projects such as Cornell, in Markham, Ontario, Niagara -on-the-Lake, McKenzie Towne in Calgary and Kanata's Village Green. The two Montreal projects examined in this thesis were selected for two reasons. First, they both met many of the New Urbanist design guidelines as set out in the Charter of the New Urbanism (2000) and second, the geographical proximity to my home, permitted a lot of opportunity for direct observation and study. Since the time of this study, at least two other New Urbanist projects in the Montreal region have been announced, a transit oriented development centred on a rail line in Mont Ste-Hilaire and a mixed -use project on Nun's Island. As will be noted in the individual case presentations, it is interesting to observe that both Bois-Franc and Angus Park are being developed by major Canadian transportation companies on large sites formerly used by the transportation industry, namely an airport and a locomotive factory. Sites of these dimensions, controlled by one single owner with the required financial means and will to develop them, are very rare in the Montreal region and have produced results worthy of study. [7]

1.3.1   Bois-Franc[8]

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[7] Refer to Appendix A for Map of Montreal Island.
[8] Refer to Appendix B for Map of Bois-Franc development.

Bois-Franc was initially developed in the summer of 1991 by the real estate arm of the Montreal based international transportation giant, Bombardier Incorporated. It was at this time, that Bombardier Real Estate selected the New Urbanist development approach conceived by Daniel Arbour & Associates (1992) for this large site. Arbour and Associates were given the mandate to formulate a master plan for the site.[9] The master plan states that 8000 homes covering 20 million square feet will be built over a period of several years, accommodating 25 000 inhabitants.[10] Bombardier, maker of planes, trains, and recreational vehicles, no longer had need for the Cartierville airport site that they owned as part of the Canadair industrial complex. The site comprises 200 hectares or 494 acres of flat land, of which, Bombardier owns 467 acres; the City of Montreal and various private investors own the remaining acreage. Since the site is a former airstrip, there are no major physical constraints on development, however, the topography of the site is a development constraint because there is no vegetation and relief and this creates problems of water drainage.[11] Due to municipal regulation, lakes and basins had to be excavated on the site to accommodate storm drainage. This actually worked to provide a development potential, as the presence of lakes and basins has enhanced the site. Another problem with the site is the poor visual and environmental quality provided by the major roads on the north and east edges and the Canadair plant on the eastside. Buffer zones may have to be implemented to deal with these constraints. The proximity of Dorval

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[9] Daniel Arbour & Associates. « Development Master Plan – Bois-Franc ». Final Version, Montreal, June 1992, 1. Details and numbers describing the project are extracted from « The Bois-Franc Master Plan » prepared by Daniel Arbour and Associates for Bombardier Real Estate. Objectives, maps, market study information and urban design concepts are also taken from this document and it is used within the thesis extensively as a reference.
[10] Due to changing market demands, these numbers may be modified.
[11] In an interview with Fred Corriveau, Head Planner at Bombardier Real Estate, he revealed that he and his team travelled to a housing development site in Sweden also built upon a former airstrip, in order to gather information for the Bois-Franc project.

Airport and the site being situated on a flight path is a major development constraint for two reasons, first, building heights cannot exceed twelve stories and second, noise pollution from large low flying jets is a major problem.

The project is located in the borough of Saint-Laurent on the northern side of Montreal Island, approximately ten kilometres from the central business district and is directly accessible from Marcel -Laurin, Cavendish, Thimens, Alexis-Nihon and Poirier Boulevards and near to Highways 13 and 40. The location can be considered as in a buffer zone between downtown Montreal and the suburban areas. The site is served by City public bus service and there is a commuter rail station, although not within walking distance, close by. Montreal's underground metro line number four, is projected to extend north and connect the site with two new metro stations, one to be named "Bois-Franc".

The site is bounded by Henri-Bourassa Boulevard to the north, Marcel-Laurin Boulevard to the east, and Thimens Boulevard to the south. On the west side, the site abuts the proposed Nouveau Saint-Laurent housing development and Cavendish Boulevard, which is to be extended north through the site. The adjacent land uses are generally residential and commercial to the south, north and east of the site and industrial to the west. The Canadair plant on the east side is adjacent to the site and employs approximately 4000 people. As well, there are plans to develop an industrial park on the northern border along Henri-Bourassa Boulevard. There are three shopping centres near the site and there is new commercial activity proposed for an area south of Thimens Boulevard that is expected to employ 10,000 people. Immediately adjacent to the site, on the southwest side, is Marcel-Laurin Park, which contains an elementary and high school,

a police and fire station, a public works area, and extensive recreational facilities. There is a public 18-hole golf course, "The Challenger", located on the northern side of the site between the residential areas and the industrial park on Henri-Bourassa. The large area occupied by the golf course was originally zoned for residential use, but due to a slower market demand for residential housing at the time, the City agreed to change the zoning in exchange for a public golf course to be constructed.[12]

According to the Bois-Franc master plan, market surveys indicate a growth in demand for more affordable condominiums, multi-plexes and row houses, as compared to higher priced single family detached dwellings in the City of Montreal.[13] Thus, Bois-Franc contains a variety of owner and rental housing types and a wide range of prices to appeal to a broad range of clients, in keeping with the New Urbanism principles. Also in accordance with New Urbanist directives, the project contains a diversity of land uses, it is not strictly segregated as to residential density, industrial, commercial or institutional activity.[14]. The master plan states that the image for the project, "is created by the integration of differentiated and individualized neighbourhoods, which provide for a broad residential typology and an extensive parks and open-space system". In Bois-Franc, the goal is to create a more traditional urban environment by balancing the relationship between built form, streets and natural environment. The project contains civic buildings such as a meeting hall, a children's daycare centre, a senior citizen's

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[12] The original target of building 3500 residential units at Bois-Franc between 1993 and 2000 was not met due to an unforeseen slowdown in the economy and slumping housing sales during this period. In fact, about 1000 housing units of different types were consrtucted during this period. Currently, there are many more units being built on the site. Thus, in order to maintain the residential atmosphere of the site and the value of the vacant land, a golf course was built on 85 hectares of land that would have otherwise remained vacant for a long period. The public course provides recreational facilities that are much in demand and the possibility for future residential use remains when the market is ready to bear it.
[13] Fred Corriveau stated that the master plan included some high rise apartment buildings for the site but, again due to market studies and the state of the economy, this building form was abandoned.

home, as well as the Grand Place commercial centre to serve the needs of residents.[15]

This centre is accessible by foot from anywhere in the neighbourhood and contains some essential services, such as a café, convenience store, hairdresser, dry cleaner, a clothing retailer, restaurant, the golf course entrance and some professional office space in two story buildings centred around a main square with a fountain. Direct observation revealed that the central square of the Grand Place is a vibrant, well used public space and many come here to meet over coffee and pastries at the many exterior tables located here. It appears that the Grand Place functions as what Ray Oldenburg (1989) calls the "great good place", an informal gathering spot where people create and celebrate community.[16]

New Urbanism is about creating and fostering connections between streets, neighbourhoods, the central city, a variety of land uses, different socio-economic groups, and people. Both Bois-Franc and Angus place great emphasis on the park and open-space network system to define and connect neighbourhoods. Green spaces account for over twelve percent of the total area in Bois-Franc and over 20 000 grown trees have been planted along streets and in the parks. There are residential squares, green medians, playgrounds, athletic fields and a community park with a pavilion, a gazebo and a bridge over a man-made lake in the development. Public recreational open space covers 82 acres and is linked to the City's existing regional park. In Bois-Franc, the street network and "interlinked open spaces are envisaged as the elements that will contribute to the development's character and identity as well as create a sense of functional and spatial

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[14] Canadair occupies a large parcel of land as does the industrial park on the northern border of the site
[15] The original scale of the Grand Place had to be modified to reflect the downturn of the economy in the 1990s according to Head Planner Fred Corriveau. There is space to accommodate future growth however.
[16] Thomas J. Comitta. In The Charter of the New Urbanism. New York : McGraw-Hill, 2000, 117.

continuity within the community".[17] When strung together with places for living,

working, shopping, and civic activities, parks can provide, in the words of Frederick Law

Olmstead (1911)"an emerald necklace for the neighbourhood".[18] Small-scale residential

squares play an important role at the neighbourhood level by providing central focal

points for social interaction and activity nodes.

The inspiration for the street pattern and the network of residential squares in

Bois-Franc was drawn from the example of Savannah, Georgia. The grid pattern of the

urban block permits the creation of small,interconnected neighbourhoods of varying

densities and housing types containing approximately 400 –600 residents in a safe and

aesthetically pleasing environment. The general intent is to limit traffic in the interior of

the block and to give each neighbourhood its own landmark, that being, the square with a

fountain. Jane Jacobs (1961) Christopher Alexander (1977, 1979), William Whyte

(1964, 1968, 1980), Kevin Lynch (1960, 1971, 1981), Donald Appleyard (1981, 1982)

and the members of the Congress for the New Urbanism would agree with the words of

John Ruskin: "The measure of any great civilization is its cities and a measure of a city's

greatness is to be found in the quality of its public spaces, its parks and squares."[19]. Both

projects attempt to live up to the words of the architect, Louis I. Kahn (1962): "In a city

the street must be supreme. It is the first institution of the city. The street is a room by

agreement, a community room, the walls of which belong to the donors, dedicated to the

city for common use. Its ceiling is the sky". In both projects, the streetwall or enclosure,

formed by the placement of medium density two and three storey townhouses set close to

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[17] Arbour & Associates, 14.
[18] Comitta, 119.
[19] Ibid., 150.

the sidewalk and surrounding residential squares strengthens the quality of the square as the neighbourhood's outdoor room (Figures 1, 2).

In Bois-Franc, the fifteen typical rectangular neighbourhood squares measure 38 metres by 76 metres and provide the residents with a central public park and special sense of place associated with the neighbourhood. The squares make the urban block neighbourhood distinguishable from the other residential areas within the development. The residential buildings surrounding the neighbourhood squares play an important role in defining the spatial quality of these open spaces. The relationship between the dimensions of the open space and the height of the surrounding built form is important in that sun and shade conditions are determined and a satisfactory balance between enclosure and openness is achieved.[20] In both projects, the residential square is intended to provide space for passive adult and active children's recreation within a five minute walk from the street entrance of all homes and there are narrower one-way local streets on all sides. Both projects have tree-lined squares, and well-defined edges with either paved or pea gravel paths responding to various pedestrian circulation patterns across the park. The tree plantings, benches and edges ensure that the public square can be perceived as belonging to the neighbourhood. There may be playground equipment to reflect the demographic reality of young families, as in the Everest Square of Bois-Franc. Generally, however, in the two projects, the landscaping is classical as found in the squares of Paris or Montreal's Carré Saint-Louis, so as to accommodate the needs of a varied and ever changing population. The residential squares of Angus Park share many of the same spatial characteristics, such as the balance between the streetwall enclosure and the open space, the tree-lined edges and the social principles designed for Bois-

Franc. A difference is that in Angus, they are less formal in their landscape architecture and are devoid of the classical fountains that characterize the residential square centres in Bois-Franc.

<u>1.3.2 Angus Park</u> [21]

Angus Park is located on a brownfield site covering 1240 acres, of which 309 acres were severely contaminated with heavy metals as a result of the Angus Shops locomotive factory which occupied the site between 1904 and 1992.[22] In 1881, Richard Angus and some other individuals founded the Canadian Pacific Railway. In fact, at the turn of the century, the area where the Angus Shops were located would be considered urban sprawl by today's standards. Local businessmen, such as Dandurand, made a lot of money speculating on the construction of worker housing in the Rosemont area, near the shops and he became the first person to own an automobile in Montreal.[23] The Angus Shops employed 12,000 people at its peak, supplying railway equipment that the Canadian Pacific Railway Company needed for its operations. There were thirty-one main buildings and thirty-five ancillary buildings on site.[24] During both World Wars, the

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[20] Arbour & Associates, 28.

[21] Refer to Appendix C for Map of Angus Park.

[22] According to the US Environmental Protection Agency, brownfields are defined as « abandoned, idled or underused industrial or commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination – although the term is more commonly associated with land that has immediate potential for economic redevelopment ». The land is desirable for the same reasons that industry originally favoured central city locations, close to transportation routes, customers and a workforce. In Niall Kirkwood, ed. <u>Manufactured Sites.</u>London : Spon Press, 2001, 4.

[23] These facts are ironic now that Angus Park is upheld as an example to counteract contemporary urban sprawl developments. This underlines the reality that cities and landscapes are constantly evolving.

[24] Today, three buildings from the original factory site remain, one is occupied by a Loblaws grocery store, another is used for some CP offices and the former fire station now contains a liquor store. A long portion of the façade of the original factory has been retained and supported as a rather striking visual reminder of the site's historical importance to the region. Most of the information in this section of the thesis concerning Angus Park, is taken from a brochure produced by the the developer of the site, Canadian Pacific Railway (CPR) and from interviews with Pierre St-Cyr, urbanist for CPR.

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factory produced armaments and armoured tank vehicles as well as maintaining, repairing and building locomotives.

The factory site was virtually a self-contained city with its own hospital, fire station, offices and 80 kilometres of railway tracks. For many years, the shops were the largest industrial complex in Canada and the Rosemont district of the City of Montreal grew up around it. The site is centrally located on the Island of Montreal, in the Rosemont-Petite Patrie borough, approximately six kilometres from Montreal's central business district. From the site one can see the cross atop Mount Royal to the west, the office towers of the CBD to the southwest and to the east, rises the tower of the Olympic Stadium. The site is bounded by Rachel Street to the south, Boulevard Saint-Michel to the east, Mont Royal Avenue to the north and railway tracks to the west. There is easy access to both the Metropolitan Expressway and the Ville Marie Expressway from the site. Public transit services the site, there is a bicycle path network nearby and there is a metro station, Joliette, within walking distance of the project. In addition to the commercial facilities on the site, there are shopping centres within walking distance both north and south of Angus Park.[25] The commercial facilities at Angus are centred around the large Loblaws grocery store at the south edge of the project. This was a result of the City of Montreal adopting a policy in 1995 to protect the established Masson Street merchants just to the north of the site; thereby prohibiting small interspersed cafes and corner shops on the residential streets of Angus.[26]

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[25] Within walking distance, the shopping facilities at Angus are currently much more extensive and diversified than those at Bois-Franc.

[26] Like Angus, Bois-Franc does not contain small cafes or shops interspersed on residential streets, but rather concentrates commercial activity at the Grand Place, albeit within walking distance of the homes in the project.

With a decline in demand for locomotive production, the eastern section of the

site closed in the mid-1970s with the entire factory complex closing in 1992. In 1980 the

Government of Quebec announced the purchase of land in the eastern section of the site,

creating a society of mixed development between the City of Montreal and the provincial

government. The community demanded that at least 2200 apartments be constructed

with many of them being allocated for subsidized housing. The people were victorious as

approximately 3000 units of housing were built, almost half of them being government

subsidized. This housing project, the largest in Canada at the time, was constructed

between 1983 and 1996 and was a joint effort between the federal and provincial

governments.[27] The western portion of the site became available in January 1992 when

the shops closed permanently. It was at this time that the City of Montreal, the Société de

développement Angus (SDA), representing local interests and Canadian Pacific entered

discussions to construct a mixed-use project incorporating residential, light industry,

commercial and green open spaces following New Urbanist guidelines and principles.[28]

Before any construction began, however, in 1998, the cooperation of the City

government to rezone the land for mixed-use had to be secured, architectural heritage

issues were to be addressed, and contaminated land had to be cleaned up at a cost of

approximately twelve million dollars. It is expected that the residential development

investment will reach $204 million, the commercial development $20 million and the

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[27] This information was obtained from a telephone interview with Allen Koury, past President of the Société des Terrains Angus (SOTAN) between 1983 and 1996. The reason why this residential section of the site did not include the construction of commercial space was due to the opposition of the Masson Street business owners who wanted to protect their street as a nearby shopping district. The urban planners and project managers involved in the SOTAN project were Pierre Morisset of the Université de Montréal, SNC Lavallin and Daniel Arbour & Associates, the same planners who created the master plan for Bombardier's Bois-Franc project in 1991.

industrial development, $250 million. Thus CP became involved as the principal

developer because the scope of the project demanded it, just as in the case of Bois-Franc

and Bombardier.[29] The finished project is expected to contain approximately 1200

housing units of which just over 500 are currently built. The Loblaws grocery store,

complete with services, such as a pharmacy, photo shop and hairdresser, has been built in

a section of the former locomotive shop, an industrial mall has been created in the

remainder of the large brick structure and a liquor store exists in the former fire station.

In keeping with New Urbanism principles, the historical context has been respected with

the recycling of these industrial buildings and they have been retained as landmarks

creating a strong sense of place and community identity.[30] The residential architecture in

Angus is supposed to be reminiscent of worker housing but with all the modern

conveniences and designed to allow for maximum light, ventilation and green space.

SDA wishes to create 2000 new jobs in the Angus development in a variety of activities

that create positive social, economic and environmental impacts.[31] The Angus project

currently occupies over five million square feet and is gradually being reintegrated into

the Rosemont neighbourhood using the pre-existing grid pattern of residential streets

currently surrounding the site. In Angus Park, there are seven residential square parks

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[28] The economic recession severely affected the construction industy in the mid 1990s. The recession, the policy changes demanded of the city and the environmental issues resulted in the construction delay until 1998.

[29] According to Pierre St-Cyr, it was costing CP over $1 million per year to maintain Angus Shops as a derelict site. Not many developers would financially be able to take on projects of the large scale represented by Bois-Franc and Angus.

[30] There is an overhead crane and recorded sounds of the locomotive factory in the Loblaws store. As well, there is a gigantic iron vice placed as a sculpture in the Parc des Ferblantiers that was uncovered during the soil remediation of the site in 1998.

[31] Pierre St-Cyr questions the amount of land set aside for industrial use in the project, due to a reduction in grants under the current Liberal government and the current demand for housing, perhaps more land could have been allocated for residential development.

(Figures 3, 4) and two other larger parks, Parc des Locomotives, next to Loblaws to the south of the site and Parc Jean-Duceppe to the west, serving as a buffer between the residential and industrial areas.[32] The four residential squares selected for this study are described in Chapter 3- Methodology.

Angus is a fine example of a brownfield infill project, investing in and revitalizing the central city, fairly compact, mixed-use, walkable, preserving the built heritage and providing a variety of vernacular housing types, such as traditional row housing and triplexes, both rented and owned, for a range of socio-economic groups[33] (Figures 5, 6). Thus, Angus, despite reporting disappointments from a planning perspective, regarding its lack of underground services, absence of project specific fencing design guidelines and some streets that could have been narrower in width, appears to fulfill many of the New Urbanist design elements outlined in section 1.2.

1.4   Comparison of Angus Park and Bois-Franc

Both Bois-Franc and Angus share common New Urbanist design characteristics. Both communities have sidewalks, homes that are set close to the street, garages hidden on the side or rear of the homes, narrower streets, a mixed land use of commercial, industrial and transportation services that can be reached on foot, a combination of owned

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[32] At the time of writing, the City of Montreal Parks Department was holding public consultation meetings to determine what kind of recreational facilities the residents wanted in the large park, Jean –Duceppe, which is soon to be developed. Final plans have not yet been revealed for the park, but they include soccer fields, tennis courts, benches and water elements such as ponds, wading pools and fountains.

[33] Using a scale map, density per acre was calculated at Angus to range from a high of 37 units per acre to a low of 13 units per acre for row housing on the residential squares. Prices have risen considerably over the past three years due to increased demand for this location in the central city and what was once affordable is no longer an option for many households.

and rental units in a variety of sizes and forms, a large proportion of green space, plans to

construct housing for senior citizens and the residential square. The fundamental

difference between the two Montreal projects according to the Canadian Pacific (CP)

urban planner, Pierre St-Cyr is that although both developments were initiated by large

transportation companies, CP took the bottom-up approach with Angus, whereas

Bombardier adopted a top-down approach to the larger development project. This

statement reveals the importance of the role of politics, urban policies and city

government in the planning process.

Bombardier is a crucial presence in the borough of Saint-Laurent because its

factories provide thousands of jobs and a large tax base for the city. Thus the planner at

Bombardier was able to meet directly with the former mayor of Saint-Laurent and

because of the financial strength and the solid reputation of the corporation, the state of

the art master plan was approved rather rapidly and efficiently.[34] Whereas in the case of

Angus, although CP is an important component to the Montreal economy, planning

decisions and approvals were not granted as quickly or easily due to the complex

bureaucratic machinery evident in the much larger City of Montreal. For instance, there

are no underground hydro services at Angus because Hydro Quebec had a policy that this

older section of Montreal would not contain underground services even though CP

offered to pay for this feature. While at Bois-Franc, there was not a lot of historical

context to respect around the site in the newer industrial suburb of Saint-Laurent, so the

developer had much freer reign to implement whatever architectural styles, services, and

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[34] Formerly, before the merger of the City of Montreal in 2002, the borough of Saint-Laurent was the City of Saint-Laurent with its own mayor and city government. The Bois-Franc master plan is an impressive document, with references, designs and examples taken from projects in Germany, Sweden, Holland and the United States and adapted to the site in Montreal.

design guidelines that they wanted (Figures 7,8,9,10). Although there was a master plan

for Angus, there was no continuity between the players involved such as with the

example of the City of Montreal and Hydro Quebec. There was a lot of consultation with

citizens in the initial planning stages of Angus, while in Bois-Franc, citizen participation

in the planning process was evident, but not as well represented. In Bois-Franc, however,

Bombardier as developer, was able to implement strict architectural guidelines for the

project as opposed to Angus, where CP decided that no architectural covenants would

exist except for the City bylaws and the design of the housing facades determined by the

two builders.

In contrast to Bois-Franc, CP is gradually removing itself from the project and

handing it over to the people of Angus.[35] The population of Angus is predominantly

French Canadian, with according to St-Cyr, 50 % coming from the central city and the

other 50% coming from the suburbs. He finds this an interesting mix with suburban

residents desiring more features like parking and speed bumps in the project. He feels

that the residents in Angus have a strong cultural desire to fence in their land and claim it

as their own. Hence, the recreation, as Lynch (1971) would observe, of the older

Rosemont neighbourhood fencing patterns at Angus (Figure 11). Fred Corriveau

expressed disappointment that many cars park on the street in Bois-Franc, that people

don't use their garages as much as he had envisioned for the overall design of the project,

but this is an example of cultural realities expressing themselves despite the best

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[35] The architectural covenants at Bois-Franc are rather extensive and rigidly enforced with respect to door
colour, fencing, exterior alterations, and landscaping. One resident interviewed at Bois-Franc felt that
though he had bought a home in the project, he felt that Bombardier owned the property because of the
strict architectural controls they exert. Saint-Laurent planners had approved the addition of an enclosed sun
deck at the rear of his property, but the planners at Bois-Franc forced him to remove the work he had begun
on it or face a hefty fine because it did not meet their design guidelines. Pierre St-Cyr would have liked to

intentions of physical design. The reality is that many people like to see their cars on the street in front of their homes for security reasons and for ease of access. Cars do dominate the lives of many in our culture and their presence must be planned for in our streets and communities.

The residential squares in both projects contain street furniture, classical landscaping, trees and pathways; there are no fountains in the squares of Angus (Figure 12), but they are an aesthetically pleasing focal point of those in Bois-Franc. The squares in Bois-Franc are more enclosed in an urban four block form, the effect of the street wall is more pronounced and there is a pinwheel type vehicle circulation pattern with one-way streets and a clear entrance and exit. There is a strong sense of pride amongst the residents interviewed in both communities. The sense of pride in place was communicated more strongly at Angus because one gets the sense that especially for many young families, the home is one's prime investment and focus of life. Whereas in Bois-Franc, several residents explained that they have country homes or they travel a lot for work and therefore, do not feel as strongly attached to their neighbourhood as those at Angus generally appear to. There is extensive literature regarding sense of community and identification with place and some of it is identified in the next chapter. In order to create identities of place and human scale walkable, mixed-use communities with networks of public open space such as the residential square, the evolution and cooperation of federal, provincial and municipal urban policies must be ensured.

1.5 Policy Context

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see some stricter fencing design guidelines at Angus because there are numerous varied fencing situations in the project.

No discussion of New Urbanism could overlook the importance that planning policy, or lack thereof, city politics and zoning regulations play in the implementation of these traditional mixed-use compact neighbourhood elements within new developments in North America. Although many architects and planners may embrace the New Urbanist or smart growth principles, the reality is that currently there are many obstacles provided by conventional, single use, low density urban land use prescriptions and development standards that have prevailed over the past fifty years. A fundamental issue currently facing political leaders and policy makers is the extent to which governments should or should not be involved in the legislation of New Urbanist community planning policies. Free market economists, libertarians and laissez-faire adherents, argue that the market must determine community development and that if consumers want low density, single family housing than that is what must be supplied. New Urbanists and smart growth proponents, on the other hand, assert that growth boundaries and other sustainable policies are essential to contain encroaching sprawl and the preservation of open space and agricultural lands. In Canada, although city issues are constitutionally under provincial domain, a central theme of federal leadership candidate Paul Martin's platform is his "New Deal for Cities" (2003). This dominant feature of Martin's campaign underlines the importance of urban design and development for the health of Canadian society. Thus, this section will begin by briefly discussing urban growth boundaries, second, Canadian urban policy, third, American urban policy trends, and fourth, the concept of zoning, transects and New Urbanist codes.

1.5.1 Urban Growth Boundaries

The implementation of urban growth boundaries has received both support and criticism regarding their role to restrict urban growth and force it to become more compact. Peter Calthorpe and William Fulton (2001) describe the urban growth boundary as "setting a limit based on the land capacity at some given growth rate and density".[36] Calthorpe and Fulton (2001) explain that regional boundaries are necessary for the control of growth. They involve "greenlines", such as in San Jose, California, that set an edge based on environmental and agrarian factors, urban growth boundaries, and urban service boundaries, such as in Sacramento and Maryland, that delineate the logical extension of infrastructure or the land areas most efficiently served. All three of these components are necessary for a regional boundary to be effective, but rarely are they all combined and coordinated together. Calthorpe and Fulton (2001) believe that a multifaceted regional policy can steer development towards more compact communities, "support efficient infrastructure investments, preserve open space, and encourage the revitalization of many declining areas."[37] They illustrate the example of Portland, Oregon as being progressive in establishing an urban growth boundary approximately twenty years ago. The urban boundaries in Portland, they assert, created new patterns of development that reinvigorated urban neighbourhoods formerly threatened by continued sprawl. In addition, homes located in neighbourhoods in central Portland appreciated in value at a much higher rate than those in conventional suburbia in the 1990s.[38]

Some, such as Samuel Staley of the Reason Public Policy Institute and Wendell Cox (2001), a free market economist, criticize urban growth boundaries as illegitimate and ineffective public policies. In Portland, they argue, despite the urban growth boundary,

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[36] Peter Calthorpe & William Fulton. The Regional City. London : Island Press, 2001.
[37] Ibid.

the population density is less than that of sprawling Los Angeles and Seattle and there is a lot of sprawl because the boundary was drawn so far out from the central city. As well, Cox and Staley (2001) believe that traffic congestion, travel times and air pollution are only magnified in compact, dense developments and that restricting land use drives up house prices on much smaller lots than consumers would prefer or can afford.[39] Thus, they would argue that fewer people are able to purchase a home and that the loss of construction related jobs due to the restriction on building, negatively affects the local economy. Another criticism Cox and Staley (2001) would provide is that higher product prices would result within an urban growth boundary because of the banishment of "big box" retailers to the hinterlands; smaller, independent retailers simply cannot compete with the economies of scale possessed by Walmart and Home Depot. Wendell Cox (2001) highlights the example of London, England where a Green Belt was implemented in the 1930s. Cox (2001) asserts that the Green Belt did not contain urban development or increase densities, but rather that people settled just outside the Green Belt and that they tend to use the automobile very frequently for trips into the much congested city of London.

Even Andres Duany (2003) the founder of the American New Urbanism planning movement, states that urban boundaries can encourage, rather than discourage the construction of poor quality developments and that municipally set development borders to contain sprawl "have a poor track record".[40] The article quotes Duany stating that "the urban boundary distracts you from the urban pattern because people stop contesting

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[38] Ibid.
[39] Ibid.
[40] Andres Duany as quoted in an article by David Rider, « 'Burbs can be bad for city development, planner says- consultation seen as two-edged sword ». The Gazette, Montreal, Wednesday, May 7, 2003, A15.

development inside the border and developers are doing essentially criminal behaviour inside".[41] Duany (2003) emphasizes that if it is important to have an urban boundary, it is important to "have an equally draconic urban pattern code, to ensure responsible building".[42] The article ends with some interesting criticism concerning the role of intense public consultation in project development. Duany (2003) believes that a standstill often develops between development and anti-development forces and that while public consultation may produce a successful project, it has great capacity to create negative situations and to thwart the redevelopment of cities.

Melanie Hare (2003) of Urban Strategies, Inc. writes that despite years of growth management policy in Canada, our urban regions are sprawling. She states that between 1976 and 1996 Greater Toronto lost 150,000 acres of prime agricultural land to urban development and that expansion, not compact growth has been the popular pattern.[43] Hare (2003) explains that growth management is not a new idea and that it entails many traditional planning principles such as " strong and vibrant downtown cores, open space networks, balanced movement systems, a mixture of uses, and livable communities".[44]Although urban growth boundaries exist in most official plans, growth management efforts "have not kept up to the changing nature of our communities, nor do our tools address the scale or level of complexity of our urban centres. Hare (2003) calls for a more integrated approach to managing the growth of our cities. She refers to a 2001 paper entitled *Exploring Growth Management Roles in Ontario: Learning from "Who does What"*, that reveals that most Ontario municipalities have official plans that contain

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[41] Ibid., A15.
[42] Ibid., A15.

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New Urbanist design principles and policies in keeping with urban growth management. However, with the continuation of sprawl, policy is not enough, there must be greater intergovernmental cooperation, new thoughts and plans for both the immediate future and long-range goals, public investment of funds, and education of the population. Hare (2003) offers three reasons why policy has been rather ineffective. First, urban regions are now much larger than in the past, making growth management more problematic: second, the 1990s have seen a market driven approach replace the big government approach of the postwar period, hence the dilution of policy directives; and third, senior levels of government, due to cutbacks, have reduced their efforts to support growth management in urban areas.[45] Calthorpe, Fulton (2001) and Hare (2003) cite the examples of the states of Maryland and Oregon possessing sound urban growth management policies that appear to be successful because of the coordinated approach of all levels of government and the private sector, moving from the top down to voluntary local level implementation. In Ontario, the founding of the Smart Growth Secretariat reveals the desire of the province to become more directly involved in growth management. Ontario's Smart Growth strategy involves a $645 million investment in public transit and transportation infrastructure in response to the $20 billion SuperBuild Growth Fund which helps pay infrastructure costs such as highways and sewers, which encourages sprawl. [46]

In response to these criticisms, Calthorpe and Fulton (2001) assert that there is little hard evidence to back the claim that the urban growth boundary led to higher home prices

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[43] Information taken from a paper by Melanie Hare of Urban Strategies Inc., entitled, « Urban growth management : a policy-implementation disconnect » and appearing in Policy Research Initiative, Volume 5, No. 1, Government of Canada, 2003.

[44] Ibid.

in Portland. In fact, they argue that home prices rise during an economic boom due to the rate of housing production and increased buying power, not because there is an urban growth boundary in place.[47] Growth boundaries, they believe, encourage the revitalization of central city neighbourhoods that were once at risk of abandonment and decay. According to a study by Robert Burchell of Rutgers University, an expert on the financial effects of urban development, compact development patterns reduce housing costs generally by eight percent and that governments would save billions of dollars in infrastructure costs if compact development principles were implemented in urban regions. Compact, New Urbanist developments must be based on regional designs that are integrated with a wide range of policies, including land use, housing, tax equity, education, the environment and transportation. According to Calthorpe and Fulton (2001), for New Urbanism to succeed in shaping our communities, governments at all levels must cooperate and deal with urban growth, land use and development on a regional scale rather than in a fragmented piecemeal approach that is all too common at present.[48]

1.5.2   Canadian Trends in Urban Public Policy

Local municipal governments manage Canadian urban areas under the jurisdiction of the provincial governments. The provincial governments have jurisdiction over highway construction, land use, municipal boundaries, political structures, and fiscal spending, thereby having a large impact on the quality of life in cities.[49] Lately, however, the

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[45] Ibid.
[46] Ibid.
[47] Calthorpe & Fulton, 2001.
[48] Ibid.
[49] Provincial governments vary in their approach to urban issues. For example, the Quebec provincial government will not permit a municipality to enter into a direct agreement with the federal government

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federal agenda has been placing great importance upon urban issues.[50] Federal leaders are

recognizing that policies concerning the environment, the economy, transportation,

competitiveness, poverty, crime and social inclusion are inextricably linked to urban

issues. There are three main reasons for this, one is that Canada is an urbanized nation

with, according to 2001 census data, 64 percent of the population living in the nation's 27

census metropolitan areas consisting of 100,000 or more population.[51] Secondly, many

cities across Canada are facing fiscal difficulties within their municipal governments and

complain of their restricted access to tax bases and hope that the federal government can

offer them assistance and perhaps greater autonomy to manage resources. Thirdly,

Canada's urban centres must remain competitive within a free trading North America and

many American cities have benefited from recent federal urban programmes.

In 2002, a Liberal Caucus Task Force on Urban Issues was appointed by Prime

Minister Chrétien and chaired by Judy Sgro. This task force aims to improve quality of

life in urban centres by addressing a multitude of issues, such as transit, cultural impacts,

immigration, urban native people, environment and housing. The Big City Mayors

Caucus, under the Federation of Canadian Municipalities, represents the nation's eighteen

largest cities and has recently advocated a national urban strategy on poverty and growth.

The Federation of Canadian Municipalities 2001 pre-budget submission to the Minister

of Finance had five major topics: environmental and core infrastructure, clean

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without permission from the province, whereas in British Columbia, the new government is proposing to give municipalities greater autonomy over their own affairs.

[50] Much information and referrals on Canadian federal urban policy were gained from a personal interview with Peter White, a former aide to Mulroney and former chair of the Canadian Alliance. Mr. White attempted to build some New Urbanist type communities in London, Ontario in the 1990s but was unsuccessful due to market demand for conventional suburban low densities and single family homes. He personally believes in allowing the market to dictate building form but with some role for government to intervene in social and environmental issues.

transportation, affordable housing, brownfields, clean-up and connectivity.[52] These

concerns appear to coordinate well with those of the New Urbanist agenda.

What role should the federal government play in urban affairs is a complicated

question, open to much debate and beyond the scope of this present study. Stéphane

Dion, the Minister of Intergovernmental Affairs spoke in 2001 of respecting the

constitution and was wary of initiating a debate on the constitutional status of cities.

According to the speech by George Anderson, Deputy Minister, Intergovernmental

Affairs, the federal government does play an important role in urban affairs with its 1993

national infrastructure program. Approximately 75 percent of the investments to date

have been allocated to urban infrastructure and direct federal investment has totaled more

than three billion dollars since then. As well, the Canada Strategic Infrastructure Fund

was recently created to aid major urban projects. Other federal government programmes

impacting cities include: the $680 million agreement on affordable rental housing signed

with the provinces in November 2001, the $753 million National Homeless Initiative, the

$2.4 billion funding for the National Child Benefit, major investments in urban research

institutes such as the CD Howe Institute, the Canadian Urban Institute, the Canadian

Policy Research Network, the Canadian Institute for Environmental Law and Policy and

Canada Mortgage and Housing Corporation, support for immigrant integration and $500

million in support for cultural programmes.[53]

Federal leadership candidate, Paul Martin (2003), has made his "New Deal for Cities"

a major component of his campaign platform. Martin (2003) wants to "deepen

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[51] Information is taken from a speech by George Anderson, Federal Deputy Minister, Intergovernmental Affairs, Privy Council Office and contained in the Policy Research Initiative, Volume 5, No. 1, 2003.
[52] Ibid.
[53] Ibid.

partnerships between federal and municipal governments, in coordination with provinces, to make municipal funding more reliable and predictable in order to address the infrastructure, affordable housing and transportation needs of Canada's cities."[54] Martin (2003) believes that our cities are the "engines of economic growth", that they are our best representatives on a global scale and that their infrastructure needs to be supported politically and financially.[55] He continues by stating that the government must improve methods of securing federal land for housing and for the green spaces that make a neighbourhood. As well, partnerships between governments must be developed to build more affordable housing and the money dispersed when it is needed, the processes of urban brownfield development must be streamlined and public transit systems must be improved so that people can spend more time with their families. With respect to New Urbanist principles, Martin's ideas generally integrate well.

Other Canadian municipal political figures, such as David Crombie, former mayor of Toronto, and Toronto mayoral candidates, Barbara Hall, John Nunziata and John Tory have put forward strong ideas on urban issues in their 2003 campaign platforms. Montreal municipal leaders have not been as outspoken in their support for New Urbanism as those in Toronto, but the city is open to this type of development. Barbara Hall as mayor of Toronto from 1994 until 1997, encouraged a more New Urbanist approach to mixed use zoning and recycling buildings so as to promote diversity and vibrancy in the city; she changed zoning bylaws to permit this to occur. She believes that

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[54] This information was taken from a speech given by Paul Martin on May 29, 2003 at the Creative Cities Conference in Winnipeg and appearing on the web site http://www.paulmartintimes.ca.
[55] Ibid. It is interesting to note that Martin has proposed dedicating some federal gasoline tax to municipalities' coffers to provide them with more revenue to support infrastructure. New Urbanists desire to reduce vehicle use through compact mixed use walkable design, but with a gas tax incentive, perhaps municipalities may not be so eager to plan communities emphasizing walkability and public transit because they may lose gas tax revenue.

all sectors of the community, including the private sector and all levels of government, must work together to resurrect our cities.[56] Hall points to the situation in American cities. Many central cities are in decline due to weak federal poverty programmes and heavy investment in highway projects though there are success stories, such as Bill Clinton's federal programmes of the 1990s to support public transit, community development and housing in central cities, such as Baltimore and Philadelphia.

1.5.3 American Urban Policy Trends

During the last American presidential election in 2000, both George W. Bush and Al Gore placed urban issues prominently on their platforms. Bush focussed on urban growth, expediting brownfield development, and increasing flexibility in state and local land and water conservation efforts. Gore had developed a comprehensive livability agenda and smart growth principles in his views regarding urban areas. It appears that Gore embraced the New Urbanist principles of town planning, just as Paul Martin does and Britain's Prince of Wales, who, besides commissioning Leon Krier to design the New Urbanist British town of Poundbury, speaks and writes extensively on the subject. Gore proposed spending billions of dollars on smart growth initiatives and the creation of parklands and open spaces, investing in mass transit, providing new planning tools for cooperative community building, bringing back schools to the local communities and attracting private investments to revitalize neglected central city areas. In keeping with New Urbanist ideology, Gore desired to build more livable communities. Communities in which families and people of all ages could walk wherever they needed to go, where

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[56] An example of private sector involvement in making our cities better places to live is Alan Broadbent's Maytree Foundation. This foundation was established for the purpose of research and development of ideas and actions that improve the livability, sustainable growth and health of Canadian cities. Tribute Homes is a large private developer of New Urbanist villages and communities in Ontario. Tribute's vision

historic older neighbourhoods would be protected, where there was an abundance of green and open space and where one could spend less time in the car and more time with family and friends. These views are promising in response to many US urban policies of the past fifty years that favoured single family home ownership, sprawl and the isolation of the urban poor into massive public housing projects of the 1950s and 1960s. Calthorpe and Fulton (2001) assert that the federal government can promote mixed-income multifamily projects, compact development and mixed-use projects through a variety of policy instruments. Environmental policies, such as the Clean Air Act, transportation policies, favouring public transit and high-speed inter-city rail links over highway construction, financing of mixed-use projects and encouraging a regional and holistic approach to urban revitalization, rather than the fragmented approach to sprawl, can all be directed by the federal government. A more holistic approach would concentrate on neighbourhoods and communities, particularly on the economic, social and human capital existing within these communities.[57] Education of the general public beginning at the primary level, according to Lang and others, is critical to effective local planning, responsible land use decisions and timeless, sustainable, urban design within our communities.[58]

Currently, the Bush government has implemented the first major round of US Department of Housing and Urban Development Hope VI grants, totaling almost $500 million and focussing on New Urbanist design principles. The Hope VI programme began in 1993 under Bill Clinton and has distributed $4 million to redevelop failed

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is to « build better places to live, where people, streetscapes, amenities and the environment combine to create the greater whole ».
[57] Calthorpe & Fulton, 128.
[58] Michael H. Lang. Designing Utopia. Montreal : Black Rose Books, 1999, 192.

modernist public housing projects into mixed-use, mixed-income communities. The

Congress for the New Urbanism played a major role in providing design guidelines and

training for the Department of Housing and Urban Development in initiating and

sustaining the programme.[59] The goal of the programme is to restore a human scaled

urban fabric to decaying, placeless massive blocks of public housing, incorporating

village squares, civic buildings, green space, mixed-use and diverse populations. The

public housing projects were based on isolating suburban concepts and contain serious

problems involving the loss of diversity in population, sense of community and respect

for historical context that all healthy communities require. Examples of current

revitalization projects are to be found in Atlanta, Chicago, Philadelphia, Portland and

Jersey City.

Samuel Staley (2003) President of the Buckeye Institute for Public Policy Solutions,

believes that the development of New Urbanist communities should be market driven

rather than dictated by changes in public policies. He believes that if people wish to live

in New Urbanist communities, the role of public policy is to facilitate this rather than

discourage it. According to Staley (2003), public policy on urban design should remain as

neutral as possible and a freer market in land use regulation would lead to a greater

number of New Urbanist developments. Many have criticized Staley's views and it

appears that the debate will continue between individuals, policymakers and planners.

Some, such as the Libertarians in the US believe that New Urbanism is an assault on the

American Dream, and a threat to freedom not grounded by any genuine common interest.

To some, the American Dream democratizes land use and mobility, whereas New

Urbanism does not allow for freedom of choice and expression. There is much literature

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[59] « Hope VI funds new urban neighborhoods ». New Urban News. January/February 2002, 1.

on American urban planning policy that is simply beyond the scope of this thesis. Next, the concepts of zoning, transects and New Urbanism codes will be briefly examined.

1.5.3   Zoning, Transects and New Urbanism Codes

According to Ley (1983) zoning is the most well known regulatory instrument of local government policy.[60] Often urban planning departments were reduced to zoning bylaws in North American urban areas.[61] Ley (1983) continues that the "major objective of municipal zoning has been the regulation of uncontrolled market forces at the local level and that the zoning map has added stability and security to landowners with the assurance that future incursions of nonconforming land uses will be checked, thereby safeguarding existing investments."[62] The separation of so-called incompatible land uses and the protection of homeowners' interests to create a particular, "exclusive" neighbhourhood image, are viewed by many to be positive outcomes of zoning. Zoning can be abused, however, by speculators and developers and can create grave social effects when used to legitimize exclusionary, racially and economically segregated, residential enclaves. Zoning has been a "major weapon of the suburbs in preserving their privileged status in relation to the central city".[63] There is no doubt that zoning is popular because as John Levy (1997) explains, "it has considerable power to achieve goals that the community favors, and it is almost free- no compensation need be paid to property owners for reductions in property values caused by limitations imposed by the zoning ordinance on the type or intensity of use permitted- the only costs to the municipality are

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[60] David Ley. A Social Geography of the City. New York : Harper & Row, 1983, 295.
[61] The City of Houston, Texas, contains virtually no zoning bylaws, but this is an exception amongst large North American cities. In Europe, zoning as a planning tool is not really necessary because the notion of pre-existing urban land use context, sense of place and historical context are used to determine location of commercial buildings, homes, parks, schools and services.
[62] Ibid., 296.
[63] Ibid., 297.

administrative and legal expenses."[64] For Levy (1997) zoning is a crude and rather rigid

instrument whose results are often less than optimal and that dictates what cannot be done

but cannot make anything happen.[65]

There are many strong and mixed views amongst policymakers, planners,

architects, sociologists and developers concerning the concept of zoning. In the words of

Leon Krier (1997) "Functional zoning is not an innocent instrument; it has been the most

effective means in destroying the infinitely complex social and physical fabric of pre-

industrial urban communities, of urban democracy and culture."[66] According to Kelbaugh

(1997) and Ley (1983) for generations, zoning has attempted to protect the health, safety

and welfare of city dwellers by segregating and isolating land uses.[67] It is this

segregation of land uses that has greatly contributed to the placeless, sterile environments

of suburban sprawl. Individuals must drive on large, wide collector streets from home to

giant shopping malls surrounded by barren asphalt parking lots and then to work in

another designated sector of the city. Thus, shopping, schools, parks and workplaces are

generally located far from the residential suburb, making vehicle use mandatory in areas

all too often underserved by public transit systems and making walking not a viable

option.

Zoning, according to Duany and Talen (2002) must be made more flexible and

negotiable for it to help shape more sustainable, compact, New Urbanist mixed-use

neighbourhoods. Some communities offer inclusionary or incentive zoning which will

permit developers to increase residential densities if they include a portion of the housing

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[64] John M. Levy. Contemporary Urban Planning. London : Prentice-Hall, 1997, 118.
[65] Ibid., 127.
[66] Leon Krier. In Douglas Kelbaugh. Common Place : Toward Neighborhood and Regional Design. Seattle : University of Washington Press, 1997, 118.

units for lower income residents. Other recent zoning trends involve planned unit developments, whereby a developer is subject to a different set of land use controls if he/she plans a mixed-use, higher density project. Cluster zoning allows developers to build homes on smaller lots, provided that the space saved, is used for the benefit of the community, such as an open space or park. Development agreements, performance zoning and exactions are other examples of a more flexible approach to conventional zoning regulations in our communities.

New Urbanists prefer to use the term, "code", to describe zoning ordinances and bylaws. Codes are necessary for urban planning and are simply written, illustrated, physical, intentional and precise. It is believed that a sense of place and of community arise from an easily identifiable physical form that has been designed with respect to particular sets of vernacular architectural, street design and landscaping codes for public and private developments as witnessed in Angus Park and Bois-Franc. According to Elizabeth Moule and Stefanos Polyzoides (1994) architecture and urbanism should not be separated, "nor shall formal, social, economic and technical/functional issues be considered in isolation".[68] These authors believe that the application of codes results in a "diverse, beautiful and predictable fabric of buildings, open space, and landscape that can structure villages, towns, cities, and indeed, the metropolitan region". [69] A better quality of urban life will be realized if we learn to balance private and public interests and issues. Regulatory codes are crucial to Duany and Plater-Zyberk's New Urbanist designs. They wished to reform zoning and to achieve unification, and connection in their work, quite

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[67] Kelbaugh, 118.
[68] Elizabeth Moule & Stefanos Polyzoides. « The street, the block and the building ». In Peter Katz. The New Urbanism :Toward an Architecture of Community. New York : McGraw-Hill, 1994, xxiv.
[69] Ibid.

the opposite results of segregated conventional zoning. An example of this is the Traditional Neighborhood Development Ordinance, which is a comprehensive code for cities whose existing bylaws thwart the development of traditional mixed-use neighborhoods.[70]

Peter Katz (2002) proclaims, "rules must be replaced by other rules, if only to preserve the jobs of the administrators, without whom nothing would get done".[71] The transect concept has been codified by Duany into a document entitled the SmartCode. Andres Duany, Emily Talen (2002) and Katz (2002) discuss the concept of the "transect" to replace the various terms, such as Krier's "quartier", "urban village", town, hamlet, city, the "cell", and the neighbourhood unit, which all involve inclusive, mixed-use, walkable urban fabrics.[72] The transect is a normative theory based on universal ecological principles, such as explored by Van der Ryn and Cowan (1996) and Park and Burgess of the Chicago School of the 1920s and it is to be implemented on Calthorpe's (2001) regional scale. It is concerned with the creation of an immersive environment, either rural or urban and borrows its concepts from the late nineteenth century planner Patrick Geddes, Alexander's A Pattern Language (1977) and Kevin Lynch's (1981) quest to find the "sense of a region".[73] The transect is "a scale of rural to urban environments; within all these different community names and concepts, there is a range of urban intensity: a center, a general area, and an edge that correspond to the rural-urban

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[70] William Lennertz. « The codes ». In Andres Duany & Elizabeth Plater-Zyberk. Towns and Town-making Principles. New York : Rizzoli, 1991, 96.
[71] Peter Katz. In Todd W. Bressi, ed. The Seaside Debates : A Critique of the New Urbanism. New York : Rizzoli International, 2002, 31.
[72] Ibid., 29.
[73] Andres Duany & Emily Talen. « Transect planning ». Journal of the American Planning Association. Summer 2002, (68) 3, 245-266,

transect"[74]. These authors believe that the transect is akin to a natural law concept that can explain many things, that it provides real lifestyle choices and that it is capable of supporting real urbanism and of keeping suburbia in its place.[75] For Duany and Talen (2002) transect planning must find a desirable balance between the human built and natural environments. According to Katz (2002), what really differentiates the terms for neighbourhood or community is the range of their transect; the transect becomes the "common ordering device" and the basis for an operational common language emerges.[76] Katz (2002) outlines some of the variables organized by the transect: "less density/more density; primarily residential use/ primarily mixed use; smaller buildings/ larger buildings; most buildings detached/ most buildings attached; deep setbacks/ short setbacks; rotated frontages/ aligned frontages; articulated massing/ simple massing; wooden buildings/ masonry buildings; aligned trees/ clustered trees."[77] The transect thus becomes a tool for allocating possibilities and opportunities, not for rejecting them as does conventional zoning tend to do. Elements of this New Urbanist approach are observed within the Bois-Franc and Angus communities. The presence and physical placement of the urban neighbourhood squares and parks in relation to the setting of the homes creates an urban ecological immersive environment.

1.6 Thesis Objectives

The purpose of my research is to examine the relationship between the neighbourhood square and how it affects residents' perceived levels of interaction and satisfaction with quality of life within their communities. This research attempts to gain

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[74] Ibid.
[75] Ibid., 30.
[76] Ibid.
[77] Ibid..

insight into the nature of community identity and the creation of a sense of place using the square as a design element. The link between the physical implementation of New Urbanist design principles, in this case, the public square, and the fostering of greater social interaction and satisfaction is explored within the thesis.

The thesis corresponds to the central question: "Do residential squares provide greater opportunity for social interaction and a better quality of life for residents?" The focus of this thesis is on the neighbourhood square as a facilitator for social interaction, neighbourliness, and sense of community identity and place.

1.7 The Research

The research involved a comparative study between two New Urbanist developments in Montreal, Quebec, Angus Park and Bois-Franc. These communities were selected because they possess many of the New Urbanist design principles as previously outlined in the Charter of the New Urbanism, specifically the quest for a vibrant street life, resident interaction and common open space for public use. Both revitalized former industrial or brownfield sites, which is in keeping with the New Urbanist smart growth agenda. The research included a study of the process of implementation of the projects. An understanding of the rich historical backgrounds of the sites, urban policies involved, the role of municipal bureaucracies and the different planning approaches adopted by the corporate developers provides important insight into the present inhabited form of the two projects. Decisions and compromises made by corporate executives, policymakers, planners, architects and bureaucrats influenced the final outcome of the projects. No two projects are completely alike; the reasons why they differ directly relate to the present built form of the squares. Both communities began

construction in the mid-1990s and both are still undergoing construction to reach their target number of residential, institutional, commercial and industrial uses. The projects were initiated by the real estate arms of two large Canadian transportation companies who had the land and the vision, coupled with the financial resources and political power, to defy conventional zoning and development patterns in Montreal and build these New Urbanist communities. The research involved interviews with planners of both corporations, archival research for the historical progression of the sites, academic library research, the retrieval of documents from municipal planning departments and fieldwork. The fieldwork involved direct observation, face-to-face and telephone interviews with residents and the administration of a survey questionnaire. The research was designed to collect comparative qualitative data from a sample of residents in each community in order to elaborate on the relationship between residents living around the square.

1.8 Thesis Structure

This first chapter introduced New Urbanist design guidelines, provided case descriptions and comparisons of Bois-Franc and Angus Park and highlighted the importance of urban policy issues in the development of New Urbanism. Chapter Two provides an overview of the pertinent literature on the concepts of community and neighbourhood, precursors to New Urbanist design and principles and critiques of the New Urbanism planning movement. Chapter Three provides a description of the methodology used within the thesis, Chapter Four contains an analysis and discussion resulting from my research data while Chapter Five presents my conclusions and recommendations for possible future research.

Figure 1. Square Jean-Rostand at Bois-Franc.
Photo taken by author June 2003.

Figure 2. Square Lamartine at Bois-Franc.
Photo taken by author June 2003.
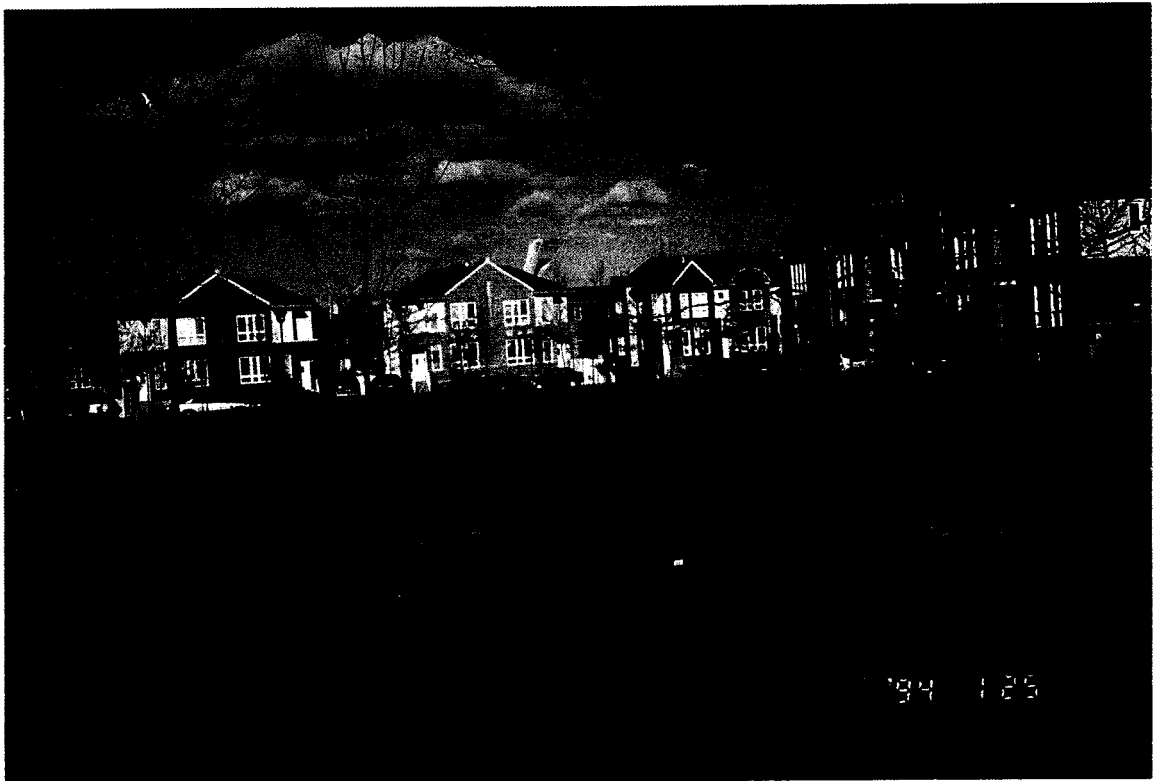
Figure 3. Parc des Ouvrières at Angus Park.
Photo taken by author October 2002.

Figure 4. Parc Micheline-Coulombe-Saint-Marcoux.
Photo taken by author October 2002.

Figure 5. Façade of former Angus Locomotive Shop.
Photo taken by author October 2002.

Figure 6. Loblaw's grocery store occupying a portion of the former locomotive shop.
Photo taken by author October 2002.
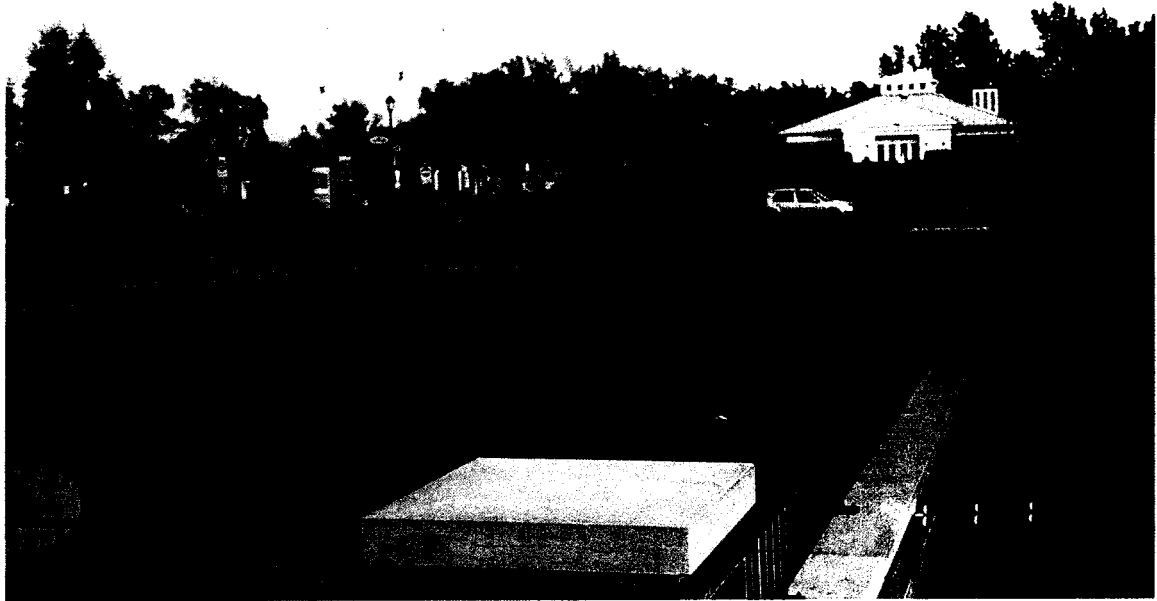
Figure 7. The Bois-Franc private daycare centre and green space.
Photo taken by author June 2003.

Figure 8. Pond at Bois-Franc with playing fields in background.
Photo taken by author June 2003.

Figure 9. People congregating at the Grand Place in Bois-Franc.
Photo taken by author June 2003.

Figure 10. Bois-Franc's Grand Place with central fountain and café.
Photo taken by author June 2003.

Figure 11. Backyard fencing at Angus Park with hydro poles.
Photo taken by author October 2002.

Figure 12. Parc Mia-Riddez-Morisset at Angus Park.
Photo taken by author October 2002.

Chapter 2

Literature Review

2.1 Introduction

This thesis is concerned with the relationship between levels of human social

interaction and the physical urban design forms advocated by the New Urbanism

planning movement in North America. New Urbanists believe that the implementation of

urban design based on traditional older city neighbourhoods, such as found in Savannah,

Georgia, cultivates and sustains greater social interaction amongst residents and a

stronger identification with place because the strength of the physical form facilitates it.

The literature reviewed here both confirms the New Urbanist perspectives and as shall be

revealed, refutes them to some degree, particularly within some of the sociological

research on communities and transportation studies involving automobile usage.

This study undertakes the position that New Urbanist physical design does indeed

foster greater social interaction, be it either negative or positive, amongst the residents of

these communities. The thesis does not purport to pass social value judgements per se,

but, as many authors, ranging from George Simmel (1890), Jane Jacobs (1961), Kevin

Lynch (1960, 1981), Peter Calthorpe (1991, 1993) and Andres Duany (1989, 1991, 2000)

agree, the creation and sustenance of human connections between those we share our

communities with is undeniably critical to the well being of society as a whole. Thus,

this review of the literature focusses on those debates surrounding the use of New

Urbanist physical design, particularly the neighbourhood square, as a means for

achieving a healthier, more sustainable neighbourly environment for our communities.

This chapter, first, provides a conceptual framework for understanding the sociological

nature of community, neighbourhood and sociability because these are the foundations

upon which our society and much of the New Urbanism rhetoric is based. Second, the

development in North America of earlier urban planning models, such as the Garden

City, New Town and post World War II conventional suburbia are explored as precursors

to New Urbanist designs. Third, the New Urbanism planning principles are addressed

along with its various incarnations, such as Pedestrian Pocket, Transit Oriented

Development, Urban Village and Traditional Neighbourhood Design. Fourth, critique of

the New Urbanist movement is brought forward and fifth, summary conclusions are

made.

2.2 Conceptual Framework

To better understand the debates and issues examined in this chapter, a framework

must first be established. The very nature of planning communities is highly complex

and fraught with conflicting theories as to what is « best » for the world's population

environmentally, socially and economically. Due to the grandiose nature of the task, it is

rather easy to understand how some planners and architects could assume a God-like role

and ego to match, when developing models for community living. Therefore, in order to

make informed choices or judgements, it is important to be aware of the dominant social

theories concerning communities and neighbourhoods; because they are so fundamental

to our existence, it is therefore imperative that some of the main theories be examined so

that we may better understand their links to the physical forms of planning models . The

three critical concepts addressed in this section are, 1) the concept of community, 2)) the

concept of neighbourhood and 3) the concepts of sociability and the building of social

capital.

2.2.1 Thoughts and Theories of Community

Theories and definitions of community are plentiful within the planning and sociological literature. George A. Hillery Jr., in 1955, compiled ninety-four definitions of community amongst writings on the subject, but it appears from a personal survey of definitions, that the only point that authors agree upon, is that communities are composed of people[1]. Earlier sociological thinkers such as Simmel, Wirth (1938) and Spengler emphasized the social-psycological factors of community. Maurice Yeates and Barry Garner in their 1971 book, *The North American City* and Max Weber's work of 1958, *The City*, conclude that a book also entitled, *The City* by Robert E. Park, Ernest W. Burgess and Roderick D. McKenzie (1925), marked the birth of a systematic ecological theory of the city by American sociologists[2]. The Chicago School of ecological theory included the above mentioned authors as well as Louis Wirth, who in 1938, stated that there was a need for more sociological research to be done in the realm of city theory[3]. Park (1925) formulated the general framework for the ecological theory of the city and regarded the city as a « natural habitat of civilized man »; Park believed that the city obeyed laws of its own and that there was a limit to any modifications to its physical structure and moral order and that neighbourhoods took on properties of the qualities of its residents, revealing their own historical continuity[4].

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[1] Howard W. Hallman. Neighbourhoods : Their Place in Urban Life. London : Sage Publications, 1984, 33. It appears that people are the only constant features in the various definitions of community that were read for this review.
[2] Robert E. Park, Ernest W. Burgess, Roderick D. McKenzie. The City. Chicago : The University of Chicago Press, 1925.
[3] Max Weber. The City. Translated and edited by Don Martindale and Gertrud Neuwirth. New York : The Free Press, 1958, 28.
[4] Ibid., 21.

Don Martindale and Louis Wirth (1958) state that a problem of the ecological theory of the city is that it concentrates too much on the geo-physical aspects of the city rather than to its social life; « social life is a structure of interaction, not a structure of stone, steel, cement, asphalt, etc. ».[5] The ecological approach is behavioristic and spatial and is interested in the « effect of position, in both time and space, upon human behavior and institutions ».[6] As spatial relationships are modified, human social relations are altered, thereby creating opportunities for political and social problems; one cannot help but think of the problems generated by the unplanned presence of urban sprawl. Thus, the New Urbanist belief that spatial form influences social behaviour or interaction, leads from this ecological approach to community and combines with the communitarian agenda promoted by the contemporary social philosopher, Amitai Etzioni. Etzioni (1995) advocates accepting greater moral responsibility for « self, family, neighbours and community ».[7] However, as Simmel (1890), Wirth (1938), Wilcox (1904) and Weber (1958) believe, it is critical not to overlook the social-psycological component of human interaction within communities.

Some of the critiques of New Urbanism as seen in works by Herbert Gans (1967) and Claude S. Fischer (1977), are that architecture in itself, does not create a community and that community arises from a dynamic between place and social interaction. This community dynamic can only be supported, but not actually created, by the use of architecture and design. Upon reading the literature, questions arose regarding the development of communities and the nature of the relationships between urban design and peoples' sense of community and place. Tuan's words (1974), « Place is a center of

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[5] Don Martindale's *prefatory remarks : the theory of the city* in Weber, 1958, 29.
[6] Maurice Yeates and Barry Garner. The North American City. New York : Harper & Row, 1971, 287.

meaning constructed by experience », prompted a desire to further investigate the social

relations that residents of the New Urbanist communities experience in their

neighbourhood squares. [8] There is much theoretical literature on community,

neighbourhood and urban design, but there appears to be little on the link between social

interaction and life on the neighbourhood square. This is why this thesis concentrates on

the sociability factors manifested amongst residents within the neighbourhood squares of

the two New Urbanist communities in Montreal, Bois-Franc and Angus Park.

For urban planning purposes, it is helpful to distinguish two main categories of

community : territorial and relational. A 1975 social science panel of the National

Research Council emphasized community as a « territorially bounded social group » and

provided this definition :

> A community consists of a population carrying on a collective life through a set of
> institutional arrangements. Common interests and norms of conduct are implied
> in this definition[9].

Following this defiintion the NRC realized that this concept involves both micro and

macro meanings. The micro definition is :

> One use of the word community then is to refer to a grouping of people who live
> close to one another and are united by common interests and mutual aid. In this
> sense, a community is small numerically, consisting of, at most, a few hundred
> people, and the connotation is one of solidarity[10]

In contrast, the macro community is described as :

> Any population that carries on its daily life through a common set of institutions.
> In this sense, it may apply to a population aggregate of any size, for example, one
> in which the members participate in the division of labor within a particular

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[7] Blair Badcock. Making Sense of Cities. New York : Oxford University Press, 2002, 235.
[8] David Ley. A Social Geography of the City. New York : Harper & Row, 1983, 143.
[9] Hallman, 33.
[10] Ibid., 33.
[11] Ibid., 34.

socioeconomic system. The emphasis, in this instance, is on the interdependence that stems from specialization and exchange.[11]

Roland Warren in 1978 linked the functional and territorial aspects of community by stating that a community is the organization of social activities to permit people daily local access to those broad areas of activity that are necessary for daily life.[12] For the purpose of this study, community will be considered a social entity consisting of people sharing a common geographic area interacting in terms of a relatively common culture and incorporating a range of social structures which function to meet a broad range of needs for everyone in the social unit.[13]

Neuman (1991) believes that the notion of community as measure, forum and means is being resurrected in our society. Communities are products of human interaction and according to Neuman, in our pluralistic society, communities should encompass different housing types and community forms to suit a broad range of people; people should decide whether their physical community will have growth or not, be dense or sparse and these decisions must be made locally. This approach to thinking locally as opposed to a globalized orientation is key to saving our communities.[14] Neuman (1991) believes that meaningful things happen in communities and that sprawl is an aberration of non-community these past fifty years that will wither with a return to a strong focus on

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[12] Ibid., 34.
[13] Yeates and Garner, 288.
[14] Marcia Nozick. No Place Like Home : Building Sustainable Communities. Ottawa : Canadian Council on Social Development, 1992, 6.

communities.[15] With these ideas in mind, a discussion concerning the concept of

neighbourhood naturally follows.

2.2.2   Neighbourhoods

Wireman (1984), Hallman (1984), Jane Jacobs (1961), William Whtye (1968,

1980), Kevin Lynch (1990), David Ley (1983), Bannerjee and Baer (1984), Clarence

Stein (1957), Clarence Perry (1929), Herbert Gans (1967) and the more recent Charter of

New Urbanism, represented by Andres Duany (2000), Peter Calthorpe (1991, 1993), Katz

(1994), Kelbaugh (1997) and Barnett (1982), to name a few, regard the neighbourhood

as the foundation of community. In contrast to literature on the concept of community,

the idea surrounding neighbourhood has always been spatial. Thus, a neighbourhood

community may be described as a group of people within a limited territory possessing

shared values, common interests and norms of conduct, engaging in social interaction and

mutual aid, and having their own groups, associations and institutions to help meet their

basic needs.[16] The values and cultural norms vary due to our pluralistic society, but the

social bonds within neighbourhoods should be sound enough to respect differences. In

ideal terms, neighbourhood provides a place to live, to raise children, and socio-economic

and political services; not all needs are met by the neighbourhood, however.[17] In these

respects, the New Urbanist neighbourhoods of Bois-Franc and Angus Park, satisfy these

ecological requirements. The fieldwork and questionnaire survey were conducted with

these neighbourhood concepts in mind.

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[15] Michael Neuman. « Utopia, Dystopia, Diaspora ». Journal of the American Planning Association 57 (3),
Summer 1991 : 346.
[16] Hallman, 34.
[17] Peggy Wireman. Urban Neighbourhoods, Networks and Families. Toronto : D.C. Heath and Company,
1984, 38.

Shevky and Bell (1955), in response to the shortcomings of ecological definitions, developed the concept of a social area that was « not bounded by the geographical frame of reference as is a natural area, nor by implications concerning the degree of interaction between residents of the local community, as is a sub-culture ».[18] In essence, census characteristics were utilized to define a social area, the advantage being that one can make a comparative study of social trends in space between cities and through time. Besides being practical, Ley (1983) believes that this approach is supported by a theory concerning the relationship between urban form and societal processes.[19]

Social network analysis of the neighbourhood by Claude S. Fischer (1977), reveals that ten percent of those named as part of respondents' network were neighbours. Both Fischer (1977) and research by Albert Hunter of the late 1960s revealed that attachment to neighbourhood was based on length of residence and strength of local ties and friendship. Individual's evaluations of their own local areas were positively correlated to local organizational membership and to having friends in the area. Hunter and Fischer (1977) agree that while a cause-and-effect conclusion cannot be drawn, each effect is mutually reinforcing.[20] Fischer (1977), in Networks and Places : Social Relations in the Urban Setting and Herbert Gans (1968) in « Urbanism and Suburbanism as Ways of Life : A Re-evaluation of Definitions » question the New Urbanist assumption that suburbs are social wastelands needing to be saved; they would reject the New Urbanist approach to improving social relations in a neighbourhood as being too

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[18] Ley, 75.
[19] Ibid., 76.
[20] Wireman, 44.

mechanical with respect to design and not concentrated enough on individual choices or personal characteristics as factors.[21]

Fischer's (1977) choice constraint theory concerning social relations regards human behaviour and the development of social ties as choices made by individuals within limited alternatives and limited resources. Thus, in order to comprehend the link between social networks and neighbourhood place, one must believe that the structure of space and place is a structure of opportunities for and limitations on the development of social relationships. Choice constraint theory believes that attachment to a place or neighbourhood depends much upon differences in individual personalities, the life stage of a person, amount of resources one has available, aesthetics of a neighbourhood and length of time lived there. Therefore, the level of neighbourhood involvement varies based on peoples' choices within a framework of economic and social constraints.[22]

Lewis Mumford (1954) believed that neighbourhoods are « facts of nature » and come into existence whenever a group of people share a space.[23] He advocated the idea that segregation by race, or income had no link to neighbourhood principles and that a neighbourhood « should be as far as possible, an adequate and representative sample of the whole…The mixture of social and economic classes within a neighbourhood should have its correlate in a mixture of housing types and densities of population[24]. The New Urbanist principles of mixed usage and densities and the provision of housing for all

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[21] Claude S Fischer. « Perspectives on Community and Personal Relations ». In Networks and Places : Social Relations in the Urban Setting. New York : The Free Press, 1977, 2.
Herbert J. Gans. « Urbanism and Suburbanism as Ways of Life : A Re-evaluation of Definitions. » : In Human Behavior and Social Processes : An Interactionist Approach, ed. Arnold M. Rose. Boston : Houghton Mifflin, 1962, 625-648.
[22] Fischer, 2.
[23] Tridib Banerjee and William C. Baer. Beyond the Neighborhood Unit : Residential Environments and Public Policy.New York : Plenum Press, 1984, 17.
[24] Hallman, 55.

socio-economic groups within the community develop from Mumford's ideas on neighbourhoods.

Gans (1961) on the other hand, states that an individual's way of life and level of social interaction within a neighbourhood is explained by the homogeneity of personal characteristics such as class, culture, income and life cycle as opposed to where one chooses to settle, be it in a city, suburb or rural area. According to Gans (1961), social interaction between residents of a neighbourhood are best analyzed in this way. For Gans (1961) neighbourhood social interactions are not explained by an analysis of land use, density, type of house or relation of a neighbourhood to the central city. [25] Therefore, sociologists cannot differentiate between an urban or suburban way of life if one's social behaviour is not influenced by ecological features of a suburb or city. Planners can to a degree, influence social relations within neighbourhoods. If a neighbourhood is designed to provide opportunities for both voluntary and involuntary contact between neighbours, the opportunity for developing social relationships occurs. Gans (1967) believes that propinquity is not a sufficient cause for determining the level of social interaction because it depends primarily on the degree of homogeneity of class, life cycle and race amongst residents. Therefore it is important for New Urbanists to recognize that design may facilitate social interaction and neighbourliness, but one cannot ignore the private and personal character traits and emotions of individuals in their perceived level of belonging to the neighbourhood[26].

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[25] Elizabeth Marighetto. « New Urbanism in the Greater Toronto Area : Suburban Solutions or Failing Facades? » Supervised Research Project. McGill University, School of Urban Planning, 1997, 54.

[26] Ibid., 54.

Peter Calthorpe and William Fulton, in their 2001 book <u>The Regional City,</u> explain that neighbourhoods provide society with community identity and that they are basic to our daily well-being. It is important to remember that neighbourhoods take time to develop and that as Jane Jacobs (1961)states, they must be diversified in terms of people, land usage and environment. It is helpful to think of neighbourhoods as a network of overlapping places and shared uses without necessarily having a clear boundary or dominant centre.[27] The words of Calthorpe and Fulton (2001), «neighbourhoods are hard to design but easy to design away » illuminate the central quest underlying this thesis research; can friendly, sociable neighbourhoods in fact, be physically designed and to what degree are they products of people's individual choices, unpredictable personalities and time? To what effect does an urban planner or architect influence the level of resident social interaction within a New Urbanist designed community? It appears that a combination of both are required for neighbourliness to flourish. Bound with neighbourhood identity and sense of belonging are the concepts of social capital and sociability which are intriguing factors in any research on New Urbanist communities because they are so elusive and complex and difficult to measure efficiently and reliably. The next section of the review of literature briefly outlines these concepts and frames them for the purpose of this research.

2.2.3   Social Capital and Sociability

Complementing the physical aspects of neighbourhood are the economic, social and cultural networks of daily life that sociologists label, « social capital ».[28] Harvard

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[27] Peter Calthorpe and William Fulton. <u>The Regional City.</u> London : Island Press, 2001, 33.
[28] Ibid., 33.

sociologist, Robert Putnam, wrote of the concept in the early 1990s and explains that it is composed of « civic engagement, healthy community institutions, norms of mutual reciprocity and trust. »[29] Social capital, as Etzioni (1995) would agree, encourages people to work together when faced with problems in the community and to focus more on the « we » than the « I » forms of sense of self. Based on research, Putnam (1995) states that community life, « depends for its strength and vibrancy on the kind of informal networks that can be created only by a dense web of community organizations and neighbourhood affiliations; without social capital, communities and neighbourhoods wither.[30]

Some sociologists and planners, such as Berkeley's Melvin Webber (1964), don't agree with Putnam's (1995) lament on the diminishing social capital in North America. They believe that internet chat rooms or communities of interest can be substituted for communities of place and that people just find new ways to interact with one another in the « non-place urban realm ».[31] New Urbanists, such as Calthorpe and Fulton (2001), Duany and Plater-Zyberk (2000), and Peter Katz (1994) vehemently reject this individualistic theory and in fact, are turning away from globalization and high technology trends to focus on the local neighbourhood and its human scale, more walkable design. On the other hand, some theorists, according to Jack Nasar (1995), worry that building strong local communities will create privileged pockets of people, creating problems by ignoring the larger regional political economy.[32]

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[29] Ibid., 33.
[30] Ibid., 33.
[31] Badcock, 175.
[32] Jack L. Nasar and David Julian. « The Psychological Sense of Community in the Neighborhood » Journal of the American Planning Association. 61, (2) Spring 1995.

Jane Jacobs (1961)in the <u>Death and Life of Great American Cities</u> writes of the notion of social capital more than thirty years before Putnam.[33] She recounts tales of the vibrant and rich life of crowded city neighbourhoods full of social capital, people helping people through daily life. This neighbourhood networking occurs daily with people meeting each other by chance at various locations and setting up dates to see each other socially or on business simply because they are in close physical contact with each other. Badcock (2002) also emphasizes the strength of social capital to bind communities together and that membership in school committees, Neighbourhood Watch, sports clubs and neighbourhood associations is vital to the mainenance of healthy communities.[34]

Sociability, for the purpose of this study, is simply the act of being social and it refers to indicators of social interaction and social networks in urban neighbourhoods, such as time spent talking to neighbours, psychological feelings of belonging to a community and satisfaction with degree of interaction. Social interaction can be divided into Ferdinand Tonnies' (1887) primary, « Gemeinschaft » and secondary, « Gesellschaft » relationships which, when combined, give a degree of cohesion to the sense of place found in neighbourhoods. Tuan (1974) believes that most people are satisfied with their neighbourhoods but that they are not necessarily strongly attached to them; he asserts that « neighbourhood satisfaction depends more on satisfaction with the the friendliness and respectability of neighbours rather than the physical characteristics of the residential area ».[35] According to Tuan (1974), social relations determine how people respond to the quality of their facilities and homes and whether they will stay within the

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[33] Jane Jacobs. <u>The Death and Life of Great American Cities.</u> New York : Vintage Books, 1961.
[34] Badcock, 235.

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area or move away.[36] It can be said that New Urbanism looks to the Arcadian vision of eighteenth century village life and to the communitarian social values of Etzioni (1995) as guiding principles to building healthy social communities.[37] Therefore, we must briefly examine earlier forms of community development as sources of inspiration for the New Urbanism paradigm.

2.3   Precursors to New Urbanist Design

New Urbanist design is strongly influenced by models of eighteenth century village life, where residents presumably knew each other, they walked to school or work and shopped close to home. The village was a smaller, quiet, cleaner, healthier place to live as opposed to the rapidly industrializing urban regions of Europe and North America at that time. This section of the literature review examines 1) the early development of the suburb as a residential alternative to industrial, urban environments, 2) utopian visions set forth by Ruskin, Le Corbusier and Frank Lloyd Wright and 3) a brief look at several earlier residential planning models such as Ebenezer Howard's Garden City, Commuter Suburbs, Clarence Perry's Neighbourhood Unit, Clarence Stein's American New Towns and conventional post World War II suburban morphology à la Levittown.

2.3.1   Development of the Suburb

. There is much literatue on the evolution of the suburb, most of which is beyond the scope of this review. Marighetto (1997), however, provides a clear synopsis of this evolution in her work, « New Urbanism in the Greater Toronto Area : Suburban Solutions or Failing Facades ». Contrary to widespread belief, suburbs are not a recent

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[35] Yi-Fu Tuan. Topophilia : A Study of Environmental Perception, Attitudes and Values.Englewood Cliffs : Prentice-Hall, 1974, 217. « Topophilia » is a term coined by Tuan which is defined as the « affective bond between people and place or setting ».
[36] Ibid., 218.

settlement phenomenon. Lewis Mumford, in his 1961 book, The City in History- Its

Origins, its Transformations and its Prospects, explains that suburbs have existed for

about ten thousand years and that there are references to them in works originating from

ancient Greece, Egypt and the Bible.[38] Cottages, villas and monasteries were located

outside medieval city walls in open space regions located on the periphery of the

urbanized area. Walls were no longer required for city security after the medieval times

due to advances in weapon technology and this caused the shape of the city to change.

Suburbs originally provided people with areas in which to farm, garden, engage in

recreational activity and seek physical and spiritual solace. Initially, pre-industrial cities

were not segregated residentially or economically and people of all classes participated in

cultural and economic activities; in fact, many worked and lived within the same

building.[39] This high density was practical as everyone walked everywhere. The same

features, but at a lowerr density, were found in the self-sustaining villages outside the

city, which had no socio-economic links to the central city.[40] This brings to mind, Gans'

(1962) « urban villagers », a study of a strong and self-sufficient network of Italian

immigrants who come together to live and work within Boston's North End section of the

city. The ideals embodied in New Urbanism literature by Duany (1989, 1991), Calthorpe

(1991, 1993) and others involving mixed land uses, walkability, urban village and human

scale of communities may be drawn from life in pre large-scale industrial towns.

With the rise of industrialization in the late eighteenth century, people began

moving out to the suburbs. The construction of large factories, often at the edge of cities,

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[37] Badcock, 176.
[38] Marighetto, 5.
[39] Ibid., 5.
[40] Ibid., 5.

necessitated mass building of worker housing and in the United States, there arose a

separation between production and consumption, between workplace and home and

between private and public spaces.[41] According to Haughton and Hunter (1994), the city

became more divided, physically, socially and economically, and more « purely

residential suburbs emerged, physically separated from increasingly distinctive industrial

zones. »[42] Land uses, formerly mixed, were increasingly becoming segregated due to

large scale industry, the development of mass transit and the private automobile which

revolutionized personal mobility. This led to a car-based suburbia accessible not only to

the rich but to the middle class searching for a healthier, more romantic, natural and

green living environment. The literature concerning the quest for utopian settlements is

broad, ranging from early Greek philosophers to Thomas More (1515). For the purpose

of this research on sociability in New Urbanism design, works by John Ruskin, Raymond

Unwin, Ebenezer Howard and Frank Lloyd Wright are examined.

2.3.2   Utopian Visions

Michael Lang (1998) writes of the progressive, utopian ideas expressed by the

nineteenth century English art critic and social reformer, John Ruskin.[43] Ruskin (1860)

and William Morris (1878), to some degree, influenced the writings of Howard (1945),

Unwin (1909) and Frank Lloyd Wright (1958), Christopher Alexander (1977), Patrick

Geddes (1920) and Lewis Mumford (1959), who each in turn, contributed their ideas to

the current New Urbanist paradigm of urban design. Ruskin's ideas (1853), like those of

the New Urbanists, attempted to address broad societal problems facing our communities.

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[41] Graham Haughton and Colin Hunter. <u>Sustainable Cities.</u> London : Cromwell Press, 1994, 93.
[42] Ibid., 93.
[43] Michael H. Lang. <u>Designing Utopia : John Ruskin's Urban Vision for Britain and America.</u> Montreal :
Black Rose Books, 1999.

To be more specific, Ruskin (1871) believed that in the « built environment, the public

realm should take precedence over that of the private and that it was in the expression of

the urban public realm that the quality of society could be discerned ».[44]Ruskin (1871)

and his followers placed great importance on the central fountain in the town square; for

him, it is « the image of life sustaining water freely available to the community in a

beautiful and protective setting that marks the sacred urban town center ».[45]His ideas on

beautiful streetscapes, town squares, vernacular architecture and landscaping are echoed

in New Urbanist design. As seen in Bois-Franc, Ruskin (1853) appreciated high-pitched

gable roofs, a variety of building materials, squares with fountains and design and set

backs achieved within « a unifying local design context and a regard for human

scale ».[46]Ruskin's (1853, 1871) ideas coincide with this study's focus on the public

neighbourhood square as a critical focal point facilitating greater social interaction

amongst neighbours and consequently, a better quality of life.

Frank Lloyd Wright (1958) can be considered a utopian visionary with his ideas

for the « living city », Broadacre City,complete with Ruskian views on the spiritual

quality of architectural design and the use of nature as design inspiration. Wright (1958)

believed that all buildings wherever possible, would be organic features of the ground

and that « all fine architectureal values are human values, else not valuable- human

architectural values are life-giving always, never life-taking ».[47] Wright's (1958) ideas

for his « Usonia » involve natural architecture seeking « spaciousness, grace, openness,

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[44] Ibid., 26.
[45] Ibid., 26.
[46] Ibid., 34.
[47] Frank Lloyd Wright. The Living City. New York : Horizon Press, 1958, 116.

lightness and strength to counteract urban overgrowth ».[48] His thoughts correspond to the

New Urbanist concerns of overcentralization, the waning of local and individual control

within our communities and diminishing human values in society as a whole. He believed

that society could be improved through the implementation of good architectural design.

Looking back, the views of Raymond Unwin, in his 1911 book, Town Planning in

Practice : An Introduction to the Art of Designing Cities and Suburbs and Ebenezer

Howard's 1902 book, Garden Cities of To-Morrow are considered influential to New

Urbanist philosophy in that they attempted to ameliorate large scale social problems

through the use of community design. Howard's (1945) utopian ideals were practically

implemented in Garden Cities that were built in Britain and in North America. The

Garden City contains many of the features that New Urbanism draws upon.

2.3.3   Ebenezer Howard's Garden City

Lang (1998), Frederic Osborn (1969) and Ward (1992), write that Howard and

Ruskin should jointly be credited for the creation of the Garden City concept, but for the

current purpose, a brief look at Howard's work will be undertaken because of the imprint

it has left on community form to this day.[49] Howard (1945) believed that his Garden City

would combine the best of country and city life. He did not believe that the suburbs

would cure the city's problems because the suburb « depleted social and economic

facilities »; his utopian concept was comprised of two principle parts : « a decentralized

urban-like physical form and a democratic political structure ».[50] For Howard (1945),

both the physical planning and the political structure of the city must come together to

create a socially harmonious city. Of value to New Urbanist thought is his idea that

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[48] Ibid., 110.
[49] Lang, 57.

neighbourhoods are the foundations of a healthy community and that they must be multi-use. Howard (1945) asserted that citizen participation in local civic government was crucial to the development of community pride and a strong public identity.[51]

According to Marighetto (1997), Howard's « Garden City provides the prerequisites for a self-sufficient metropolis without the seclusion and isolation of the suburb and without the congestion of the central city ».[52] Howard (1945) envisioned that the city's food supplies would be grown by farmers on land located in the greenbelt that encircled each Garden City. The greenbelt served to be aesthetically pleasing and functional in providing resources to residents and limiting sprawling growth. Factories and rail transportation were located within walking distance at the edge of the city for three reasons : 1) « work does not unify society and therefore should not be located at the centre of the city but should be within walking distance, 2) it is better for the air quality to have factories located at the edge of the city and 3) having rail lines within walking distance facilitates transportation of goods and people between cities ».[53] The centre of the Garden City was reserved for leisure and civic activities; there was to be a residential centre with homes accomodating people of all socio-economic groups and a civic centre where churches, schools and parks would be situated. In the centre of the city were the public buildings, such as the museum, hospital, and town hall all built around a circular green space ».[54]

Howard's first Garden City emerged in Britain at Letchworth in 1904 and the second in 1920 at Welwyn. There were two interesting alterations to Howard's (1902)

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[50] Marighetto, 13.
[51] Ibid., 13.
[52] Ibid., 14.
[53] Ibid., 14.

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original plan for Letchworth that Unwin and Parker, the architects for the project,

undertook. Instead of straight streets radiating out from the centre of town, Unwin (1909)

chose to follow the natural topography and create curvilinear streets which are abundant

in the modern suburb today. Secondly, Unwin (1909), instead of placing the industrial

park at the periphery of the city, he built it next to the power plant and close to the rail

line. Overall, Howard's (1945) plan was successful in attracting industry and residents :

> Letchworth has a wide range of prosperous industries, it is a town of homes and
> gardens with ample open spaces and a spirited community life, virtually all its
> people find their employment locally, it is girdled by an inviolate agricultural belt
> and the principles of single ownership, limited profit and the earmarking of any
> surplus revenue for the benefit of the town have been fully maintained.[55]

Thus, Howard's (1945) concern for unchecked urban growth and increasing centralizaion

of urban areas and a desire to create healthy, socially strong communities through

physical design, is valuable to the New Urbanist objectives. Although Kunstler (2001)

criticizes his elaborate public land ownership scheme and his crude diagrams, he admires

Howard's concepts nonetheless. Next, literature covering other alternative suburban

design is discussed along with its relevance to New Urbanism.

2.3.4 Alternative Suburban Designs

There is much literature on alternative suburban design, citing both British and

North American manifestations. The Commuter Suburb, the Planned Residential

Community, Perry's 1929 Neighbourhood Unit and Stein's 1957 New Town model

contain influential components evident in the New Urbanist design credo. The

commuter rail line, before the advent of the automobile and the highway system, initially

spawned residential suburban development outside the central city's limits at the

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[54] Ibid., 14.
[55] Ebenezer Howard. Garden Cities of To-Morrow. London : Faber & Faber, 1945, 13.

beginning of the twentieth century. The separation of work and home created the segregated land uses of the suburban form. These developments, such as Town of Mount Royal, in Montreal, centred around the commuter rail station with streets radiating outwards from the station. It was generally those of greater wealth who could afford to travel by train and streetcar from home to the central city. The suburb was a separate green, more natural environment than the city but it depended on the city for survival., as do the two communities in this study.[56]

The Planned Residential Community and New Towns, such as Stein and Wright's 1929 Radburn, New Jersey, and Reston, Virginia (1963) were planned environments that emphasized « beauty of ordered buildings, measured to the human scale, of trees and flowering plants, and of open greens surrounded by buildings of low density, so that children may scamper over them, to add to both their use and aesthetic loveliness ».[57] Forest Hills, New York, designed by Frederick Law Olmsted (1911) is an example of a planned residential community. According to Marighetto (1997), these communities were based on three important planning principles. The main streets must be direct and convenient, the secondary roads should be narrow and attractive and thirdly, the focus of the community should be the parks and other public open space, such as plazas and squares.[58] Although Radburn and Forest Hills had their problems with high automobile usage and homes unattainable to the lower classes, these guidelines and these same

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[56] Marighetto, 19.
[57] Clarence S. Stein. Toward New Towns for America. London : The M.I.T. Press, 1957, 16.
[58] Marighetto, 20.

problems are in keeping with the literature by Calthorpe (2001), Duany (1991), Kelbaugh (1997), Katz (1994), Alexander (1979) and other New Urbanist proponents and critics.[59]

According to Mumford (1961) and Bannerjee and Baer (1984), Stein (1957) wove « comeliness and neighborliness » into his designs and along with Perry's Neighborhood Unit, they attempted to address the importance of a vibrant social life and sense of place in their suburban developments that they felt was being diminished by domination of the automobile and construction of wide, impersonal roads; they designed community meeting rooms, informal outdoor meeting locales, recreation facilities, schools and shops to facilitate a healthier social environment.[60] Thus, the neighborhood unit, the garden city and the new town designs were examples of the physical determinism and ecological approach to city planning that Park (1925) advocated in his writings; they were attempts at « translating ideas into action- in using architectural design to accomplish a setting that provided a sense of community, security, recreation and social interaction for the individual resident.»[61] Unfortunately, Perry's 1929 neighborhood unit ideals have often been translated into the formation of homogeneous middle class suburbs.

Conventional post World War II suburban development, characterized by Gans' 1967 study of Levittown, did not support the neighborhood unit concept; many of the residents did not like these features and wanted retail activity and schools situated at the periphery of their residential area, not mixed with residential usage, as is the New Urbanism ideal.[62] These suburban bedroom communities are homogenous in terms of

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[59] Ivonne Audirac and Ann H. Shermyn. « An Evaluation of Neotraditional Design's Social Prescription : Postmodern Placebo or Remedy for Suburban Malaise? Journal of Planning Education and Research 13 (1994).
[60] Stein, 17.
   Bannerjee and Baer, 22.
[61] Ibid., 23.
[62] Ibid., 29

segregated land use and social class and are designed for automobile dependency. Gans (1967) concluded that « the traditional neighbourhood scheme that influenced the design of the residential areas did not affect people's lives or social relations ».[63] He blamed this failure on the size of the neighbourhood, that it was too large for social interaction; that the neighbourhoods lacked distinction, a sense of identity was impossible to develop because they were so similar to each other architecturally and socially and that there was no neighbourhood spirit and no political or social activities.[64] A 1965 study by Werthman, Mandell and Dienstfrey revealed that planned characteristics were sought after by the upper middle class home buyers and that respondents in these planned communities were « quite skeptical of the social goal of interaction among the residents as idealized in the neighborhood concept ».[65] Thus, there is a need to evaluate new planning forms; is the New Urbanism able to physically design a socially healthy and more vibrant community of people to counteract the supposed social alienation and isolation of conventional suburbia? Does it take the best qualities of the earlier models and re-adapt them efficiently and effectively to contemporary society in a truly better way? These questions are met in some of the literature which will be examined in the following section.

2.4 New Urbanist Principles

New Urbanism first developed within the architecture field in reaction to the perceived social anomie, detachment and environmental ills generated by conventional urban sprawl and described by Katz (1994) and Southworth (1990) amongst others. New Urbanism arose from post –modernism and the ideas of Leon Krier (1998) who felt that

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[63] Ibid., 29.
[64] Ibid., 29.

the modern city was being destroyed by capitalistic greed and that the loss of traditional

public open spaces, such as squares, and diminishment of social capital was due to zoning

regulations, modern architecture and greedy developers. In 1994, the Congress for the

New Urbanism was established to replace sprawl with a « neighborhood based

alternative ». [66] It finds its inspiration in some of the traditional urban design and town

planning concepts discussed earlier in this review. The movement, embraced by

architects, planners, public officials, designers and developers seeks to radically shift

thoughts on the planning and design of our physical environment.[67] The first major

project of this type was Seaside, Florida established in 1983 and conceived by Andres

Duany; since then there have been many more developments built to date.

There is much literature, both scholarly and popular, by authors such as Peter

Katz (1994), Peter Calthorpe (1991, 1993, 2001), Andres Duany and Elizabeth Plater-

Zyberk (1989, 1991, 1992, 2000) and Prince Charles (1989) on the subject. « Time »

magazine (1995) has featured the New Urbanist Disney owned community of Celebration

on its cover and there is currently much interest within Canadian urban regional

governments towards this design paradigm. The writers, Duany (1991), Calthorpe

(1993), Kelbaugh (1997), Talen (2001), Lynch (1990), Whyte (1980), Katz (1994) and

Alexander (1979), to name only a few, generally agree that the goal of New Urbanism is

to create human scale environments, « responsive to contemporary transportation ,

developmental, legal and sustainability issues ».[68] New Urbanism aims to take the best

from the past and modify it to meet the requirements of modern society. It is obviously

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[65] Ibid., 29.
[66] Andres Duany, Elizabeth Plater-Zyberk and Jeff Speck. Suburban Nation : The Rise of Sprawl and the Decline of the American Dream. New York : North Point Press, 2000, 253.
[67] Lang, 170.

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an amalgamation of the earlier planning models seen in the literature; it was not invented

but was selected and adapted from existing models of urban planning and according to

Duany et al (2000) it will also undergo revision over time.[69] New Urbanism recognizes

that « design and planning concepts cannot be separated from their implementation

mechanism and that their new concepts require improved public policies and new real-

estate investment practices ».[70] Within this study, the terms, neotraditional development,

urban village, compact communities, pedestrian pockets, transit-oriented developments,

smart growth and New Urbanism will be used interchangeably although there is literature

associated with each. In general the following three principles, taken from the 2000

Charter of the New Urbanism, the region : the metropolis, the city and the town; the

neighborhood, the district and the corridor; and, the block, the street and the building are

used to guide public policy, development, urban planning, practice and design and will be

described below.[71]

2.4.1 The Region : The Metropolis, The City and The Town

The nine principles of Metropolitan regions are :

1) finite places with geographic boundaries and the metropolis is made of
multiple centers that are cities, towns and villages, each with its own identifiable
center and edges; 2) The metropolitan region is an important economic
component of the modern world and governments, public policies, planners and
economic plans must reflect this. The metropolis has an evironmental, economic
and cultural relationship to its farmland and nature; 3) Development patterns
should not obscure the edge of the metropolis and infill development in existing
urban areas should be encouraged over periphery expansion in order to conserve
resources, and the social structure; 4) marginal and brownfield sites can be
redeveloped as Niall Kirkwood (2001)advocates in his book, Manufactured Sites :
Rethinking the Post-Industrial Landscape and as evidenced at both Bois-Franc

[68] Alexander Christoforidis. « CPL Bibliography- Neotraditional Developments/The New Urbanism ».
Council of Planning Librarians, 322 (1995), 1.
[69] Duany, Plater-Zyberk and Speck, 256.
[70] Jonathan Barnett. « What's New About the New Urbanism? ». In Charter of the New Urbanism . Edited
by Michael Leccese and Kathleen McCormick. New York : McGraw Hill, 2000, 9.
[71] Duany, Plater-Zyberk and Speck, 257.

and Angus Park; 5) Historical patterns and precedents should be respected when developing or redeveloping towns and cities; 6) The physical organization of the region should be supported by a framework of transportation alternatives- transit, pedestrian, and bicycle systems should maximize access and mobility throughout the region while reducing automobile dependence; 7) Revenues and resources can be shared more cooperatively among the municipalities and centers within regions to avoid negative competition for tax base and to promote rational coordination of transportation, recreation, public services, housing and community institutions; 8) The regional economy must be supported to benefit people at all income levels and affordable housing should be distributed throughout the region to match job opportunities and to avoid concentrations of poverty; and 9) Finally, new development, where possible, should be organized as neighbourhoods and districts and integrated into the existing urban form; « noncontiguous development should be organized as towns and villages with their own urban edges and planned for a jobs/housing balance, not as bedroom suburbs.[72]

2.4.2 The Neighborhood, The District and The Corridor

Duany et al. (2000) list the following nine principles :

1) the neighbourhood, the district and the corridor are the essential elements of development and redevelopment in the metropolis. They form identifiable areas that encourage citizens to take responsibility for their care and evolution; 2) neighbourhoods should be compact, pedestrian friendly and mixed use.Districts usually focus on a single use and should follow neighborhood design principles where possible. Corridors are regional connectors of neighbourhoods and districts; they could be boulevards, rivers, parkways or rail lines; 3) people should be able to walk to daily activities, especially for the independence of the young and old. Interconnected networks of streets should be designed to encourage walking, reduce the number and length of car trips and conserve energy; 4) within neighborhoods, a broad range of housing types and prices to bring different people into daily contact, strengthening the personal and civic bonds essential to an authentic community; 5) transit corridors can help organize metropolitan structure and revitalize urban centers; 6) appropriate building densities and land uses should be within walking distance to transit stops, allowing public transit to be a viable alternative to the car; 7) concentrations of civic, institutional and commercial activity should be embedded in neighborhoods and districts, not isolated in remote, single-use complexes. Children should be able to ride or walk to school; 8) graphic urban design codes can improve the economic health and harmonious evolution of neighborhoods; and 9) a range of parks, from tot-lots and village greens to ballfields and community gardens, should

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[72] Ibid., 258.

be distributed within neighbourhoods. Conservation areas and open lands can be used to define and connect different neighborhoods and districts.[73]

2.4.3 The Block, The Street and the Building

Again, nine principles have been identified as follows :

1) the physical definition of streets and public spaces are places of shared use; 2) individual architectural projects should be seamlessly linked to their surroundings; 3) the revitalization of urban places depends on safety and security. The design of streets and buildings should reinforce safe environments, but not at the expense of accessiblity and openness; 4) in the contemporary metropolis, development must adequately accommodate cars, but in ways that respect the pedestrian and the form of public space; 5) streets and squares should be safe, comfortable and interesting to the pedestrian. Properly configured, they encourage walking and enable neighbours to know each other and protect their communities; 6) architecture and landscape design should grow from local climate, topography, history and building practice; 7) civic buildings and public meeting places need important sites to reinforce community identity and democratic culture; 8) all buildings should provide their residents with a clear sense of location, weather and time. Wherever possible, natural methods of heating and cooling should be used and 9) preservation and renewal of historic buildings, districts and landscapes affim the continuity and evolution of the urban society.[74]

Many authors such as Alexander Christoforidis (1994), Lloyd Bookout (1992), S.S. Fainstein (2000), Emily Talen (1999, 2001) Furuseth (1999), Crane (1996) and Ford (1999) address some of the above principles in their articles on New Urbanism. Within these works are naturally found criticism of the paradigm.

2.5 Critique of New Urbanism

Some of the literature contains criticism levelled at the New Urbanism movement involving 1) physical determinism and creation of community 2) transportation and pedestrian orientation claims and 3) marketing and social differentiation in communities.

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[73] Duany, Plater-Zyberk, and Speck, 259.
[74] Ibid., 260-261.

2.5.1 Physical Determinism/ Ecological Theory

New Urbanism has been criticized by Melvin Webber (1964), Herbert Gans (1967), Tuan (1974), Claude S. Fischer (1977) and Max Weber (1958) amongst others, for its belief that physical design alone can create a strong sense of community amongst residents of a neighbourhood. It appears, upon reading the relevant literature, that architecture alone cannont create but can support a strong sense of place and community spirit by facilitating increased opportunities for random social encounters within neighbourhoods, such as observed in the squares of Bois-Franc and Angus Park. As Emily Talen (1999) says, there are various contradictions between the « social claims of new urbanists and the results of research by social scientists and that new urbanists need to clarify the meaning of sense of community as it pertains to physical design ».[75] Talen (1999) raises the point that there is usually an intermediate variable, besides physical environment, that aids in resident interaction and that therefore, other design concepts could achieve the same results using a different philosophy.[76] Susan Fainstein (2000) also brings up this point, that difficulties with modernism arose from an emphasis on spatial forms rather than societal processes; she also notes that a reliance on physical determinism could make New Urbanism just another form of suburbia rather than a means to counteract metropolitan social segregation.[77] Christoforidis (1994) discusses studies that found that higher residential densities do not necessarily lead to increased friendships or a stronger sense of community, but on the other hand, there are studies that

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[75] Emily Talen. « Sense of Community and Neighbourhood Form : An Assessment of the Social Doctrine of New Urbanism ». Urban Studies. 36, 8 (1999).
[76] Ibid.
[77] S.S. Fainstein. « New Directions in Planning Theory ». Urban Affairs Review. 35 (4) March 2000.

show that they do fulfill this role in New Urbanist communities.[78] David Thorns (2002) and Audirac (1994) raise the concern of New Urbanism being able to engineer the development of community through spatial forms; a problem is that spatial forms that planners choose do not always coincide with actual family and individual life patterns.[79] The issue of shifting work patterns and the impact of the information technology on the concept of community also raises some doubts concerning the validity of the spatial emphasis of the New Urbanism.

2.5.2 Transportation Claims

New Urbanism seeks to reduce the dependence on the automobile that has caused so many social, economic and environmental problems in the low density, segregated suburban sprawl. Randall Crane (1996), Farhad Atash (1994, 1997)), Susan Handy (1992), Michael McNully and Sherry Ryan (1993) are some of the contributors to the literature on New Urbanism and transportation issues. A study by McNally and Ryan (1993) suggests that there is a decrease in total vehicle miles traveled due to the grid-like street pattern and close proximity of services within New Urbanist communities.[80] But the problem is that the study assumes that the frequency of automobile trips remains unchanged; thus, people may be driving fewer miles per day in New Urbanist settings but they may be taking more trips than they would have in the conventional suburb because distances between services are shorter in the mixed land use development. Susan Handy's (1992) study revealed that because of the grid-like street pattern, the number of

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[78] Alex Christoforidis. « New Alternatives to the Suburb : Neo-traditional Developments ». Journal of Planning Literature. 8, (4), May 1994, 12.
[79] Thorns, 223.
[80] Michael G. McNully and Sherry Ryan. « Comparative Assessment of Travel Characteristics for Neotraditional Designs. » Transportation Research Record 140 (1993) : 67-77.

vehicle trips increases rather than decreases in these developments.[81] She also noted however, that the conventional suburb had a sixty percent higher average vehicle trip rate for all types of trips than the traditional neighbourhood.[82]

Holtzclaw (1994) found that when density is doubled there is a twenty five percent reduction in car usage and that doubling transit accessibility causes an eight percent reduction; according to this study, there was no effect on vehicle miles traveled per household or on the number of vehicles owned due to pedestrian access and neighbourhood shopping.[83]

Crane and Bressi (1996) assert that New Urbanism may create an aesthetically pleasing environment that is more pedestrian friendly; on the other hand, however, improved access and street pattern may contribute to increased ease of automobile use as well. Thus, shorter trips may result, but their frequency may increase in the New Urbanist development. Crane (1996) believes that more study is required because although narrower streets and design may work to reduce or slow traffic, increased accessibility may cancel out these positive factors and create an increase in overall vehicle travel.[84]

2.5.3   Marketing and Typology of Residents

Criticism of New Urbanist ideology involves the notion that these communities are creating havens for « frightened middle-class Americans fleeing old industrial cities »

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[81] Susan Handy. « Regional Versus Local Accessibility : Neo-traditional Development and its Implications for Non-Work Travel. » Built Environment 18 (1992) : 253-67.
[82] Marighetto, 44.
[83] Ibid., 44.
[84] Randall Crane. « Cars and Drivers in the New Suburbs : Linking Access to Travel in Neotraditional Planning" ». APA Journal 62.1 (Winter 1996).

and that instead of the stated goals of social heterogeneity and affordable housing , many

of these communities may be out of reach for people with limited resources or incomes.[85]

Badcock (2002) warns against the creation of gated communities and common interest

developments where segregation based on race and socio-economic status is clearly

evident.[86] He continues by stating that developments privately owned or run by

community associations strictly enforce by-laws in order to « defend property values and

preserve the pre-ordained « character » of the community ».[87] This can bring out the

darker side of Etzioni's (1995) communitarian values, where a community of seclusion is

fostered and there is little concern for the wider socio-political region. Badcock (2002) is

concerned that « in the process of building their own version of community, these

citizens are self-consciously eroding the foundations of civil society ».[88]

Studies have indicated that planned communities are perceived to be more

expensive than unplanned developments and this is a belief that New Urbanists have to

counter by providing mixed housing types, medium densities and affordable housing for

people of all life stages. According to Bookout (1992), building higher residential

densities, translates into lower construction costs and this savings should be passed on to

the consumer.[89] As well, the ecological footprint is softened with the higher density

development and the conservation of agricultural land and green space is favoured.

The mixed use features of New Urbanism are wonderful in theory, but in reality,

many do not want to live next to a commercial centre due to noise, traffic and a belief

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[85] Badcock, 176.
[86] Ibid., 176.
[87] Ibid., 176 The head planner at Bois-Franc and several residents interviewed revealed the same problems.
The developer was spending a lot of time policing architectural by-law adherence in the community
because people wanted to alter their residences to suit their individual needs. Any alteration of the
residential design was severely frowned upon by the administrators of the community.
[88] Ibid., 176.

that property values will be lowered. As well, according to Marighetto (1997), there may

be problems attracting retailers to a local neighbourhood because of the smaller numbers

of people involved in the initial stages of a development may not warrant retail

investment.[90] The lack of easy parking and more expensive prices offered by small

independent retailers may pose a problem to some New Urbanist consumers who may

appreciate the economies of scale offered by the big box establishments.

2.6 Conclusions

A large hurdle for New Urbanism is the « American Dream » of owning a single

family home on a large lot within a single use area. Many embrace this dream and this

concept will not disappear in the near future. Suburbanites generally do not want a mix

of residential housing types, they like their low density neighborhoods and according to

Audirac, Shermyn and Smith (1994), they are willing to commute daily to work in order

to live in the suburbs.[91] These are powerful market forces that drive our consumer based

society for housing and automobiles and they show little sign of abating with the

implementation of New Urbanism in our communities. Although many may agree with

the negative environmental,economic and social costs created by sprawl, viable planning

alternatives must be implemented and their proven successes underscored for the

population to shift its thinking. Thus, the literature reviewed is valuable to the

understanding of why and how New Urbanist principles developed in response to

particular real problems generated by suburban sprawl. The literature on community and

neighbhourhoods is essential to understanding the basis of New Urbanist ideology. The

work by Jane Jacobs (1961) and Donald Appleyard (1981) on the importance of the street

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[89] Marighetto, 49.
[90] Ibid., 50.

and the public neighbourhood square to the development of a healthy community social life and sense of place inspired this study's focus on the neighbourhood square as a facilitator for greater social interaction. Based on the available literature, it was felt that more research on the qualitative aspects of resident sociability focussed on the neighbourhood square in New Urbanist developments, was warranted. The next chapter further explores the methodology used to gauge the level of resident social interaction and satisfaction centred around the small neighbourhood square.

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[91] Audirac et al., 1994.

Chapter 3

Methodology

3.1 Introduction

This chapter describes the methods utilized to gather information from a sample of residents living in two Montreal New Urbanist developments, Bois-Franc and Angus Park. The primary objective of this thesis is to explore the relationship between New Urbanist squares and the sense of community and resident interaction perceived amongst the residents of a neighbourhood. Do the presence of neighbourhood squares create greater opportunities for neighbourliness and social satisfaction between those people living around the square? This is the fundamental question that provided the direction for this study. The approach taken in this work is that the physical presence of neighbourhood squares and the New Urbanist network of open green spaces in a neighbourhood, do indeed foster greater social interaction and the opportunity to build, in Jane Jacobs' (1961) words, "greater social capital amongst residents".

3.2 Neighbourhood Selection

The neighbourhoods selected for this study were chosen because they both represent recent examples of New Urbanist development in Montreal. Both represent many of the New Urbanist design qualities outlined by the Charter of the New Urbanism, specifically the presence of a public square. Angus Park and Bois-Franc represent investment in the central city of Montreal and the revitalization of brownfields. They both have higher than typical suburban densities and both intend to integrate different socio-economic groups by offering rental and ownership housing tenure as well as provisions for senior

citizen housing. Canadian Pacific, especially attempted to preserve Montreal's industrial built heritage at Angus Park by conserving a large portion of the original 400 metre long brick façade of the locomotive factory and the old brick former fire station, now recycled for commercial purposes. Bois-Franc did not have such a strong historical or architectural context to respect as the site was formerly an airport and there were few homes or historical landmarks immediately surrounding the site. The present architecture at Bois-Franc contains elements borrowed from Savannah, Georgia, Kentlands, Maryland, Bath, England and traditional architectural forms such as steep pitched roofs, gables, turrets, paned windows, shutters, and red brick exteriors. The architecture at Angus Park, according to the planner, evokes the vernacular working class row housing found in the older surrounding neighbourhoods.

Both contain mixed land use in their development plans so that one can walk between residences, commercial areas, such as the Loblaws at Angus and the Grand Place at Bois-Franc and employment centres, such as the industrial mall at Angus and the Grand Place or nearby Bombardier plant at Bois-Franc. The two developments have attempted to make their communities more walkable by providing tree-lined streets, sidewalks, squares, pleasant street lighting and shallow setbacks of homes from the street edge to create a more enclosed safer space and vibrant street life. The streets in both examples are narrower than typical suburban streets and offer parking on the street as well as various techniques encouraged by Donald Appleyard in his 1981 book, Livable Streets to slow traffic, such as speed bumps in Bois-Franc and no long uninterrupted straight stretches of road. The streets in both communities allow a variety of path options for cars and pedestrians and are based on a grid system rather than the curvilinear cul-de-

sacs encouraged by the landscape architect, Frederick Law Olmstead and Clarence Stein at Radburn, New Jersey. In keeping with New Urbanist principles, both communities can access public transit stations on foot. Angus Park has access to a metro station, Bois-Franc does not, though there are plans to extend the metro system northwards and connect to the development in the future. Both have extensive public spaces and green space such as the Grand Place, the network of residential squares, the lagoon, the plazas, the bridge and the gazebo at Bois-Franc. At Angus Park, besides the residential squares, two other large parks, Parc des Locomotives, respecting the natural vegetation that bloomed after the industrial site was vacated and Parc Jean Duceppe, complete with plans for recreational facilities and water elements, are currently being developed.

Following New Urbanist design principles regarding the prominence of civic buildings and the need for a neighbourhood centre, Bois-Franc contains the Grand Place, a daycare centre, and the civic plaza. The planner at Angus desired to create a civic centre adjacent to the Loblaws commercial complex. He wanted the Rosemont Petite-Patrie borough office and a gym to be located in a former factory building at Angus Park, but expensive modifications to the old building discouraged this plan and he had difficulty attracting tenants. Both new developments promote the creation of community and the positive benefits of suburbia within a central city location. Features such as natural light, large windows, higher ceilings than typical new construction, squares, parks, green spaces, and low noise levels, are marketed as positive factors in a new way of central city living. Thus Bois-Franc and Angus Park were selected based on their abilities to fulfill New Urbanist design criteria, particularly in this case, the presence of public squares. Squares are virtually non-existant in conventional suburbia. The fact

that both communities contain squares provides an opportunity to compare social interaction satisfaction levels through the following techniques. Methods included: personal interviews, telephone interviews, direct observation, photography, archival and library research for the historical progression of the sites, and the administration of a questionnaire survey to gather qualitative information regarding levels of interaction from a sample of residents living around the squares common to both projects.

3.3 Research Limitations

At the outset, research limitations must be stated. The most obvious is the rather narrow socio-demographic focus of this study. Primarily, white, middle-class, largely professional, New Urbanist homeowners that live on a residential square were interviewed and surveyed. Thus, this study does not represent those who rent, or very high or very low-income residents or visible minorities. The principles of New Urbanism involve a mix of housing typologies and socio-economic groups within a community, but for the purpose of this study, a sample of residents owning row houses bordering a residential square were questioned and interviewed. The residential square was selected as the focal point for sociability studies because it is a successful traditional urban design feature found in older cities such as Montreal, Paris, London, Savannah and Boston, but not commonly seen in conventional suburban developments or construction of the past sixty years. Its presence undeniably arises from a New Urbanist design approach concerned not only with the building of homes, but with the creation of a community of place and neighbourhood identity at the small scale of the block level rather than the larger scale of the entire community.[1]

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[1] Jack L. Nasar & David Julian. « The psychological sense of community in the neighborhood ». Journal of the American Planning Association. 61 (2), Spring 1995, 180. Banerjee and Baer, 1978; William Whyte,

Another limitation of this research is the prior psychological background knowledge and social behaviour of the respondents interviewed. Perhaps, those more socially and community inclined select to live in a New Urbanist neighbourhood built around a public square, while those seeking more privacy and less social interaction choose to live in a conventional suburban lower density, large lot, single-family home development. These factors simply cannot be extracted for this current study. Defining a beneficial level of social interaction, quality of life, a healthy living environment, levels of noise or visual pollution and good urban spatial form will never be an exact science. Time and budget limitations must be included as factors influencing the relatively small number of case studies and residents sampled for this research. Due to the small sample size, the emphasis of the research is on the rich qualitative data gleaned from in-depth personal interviews with residents regarding social interaction. The frequencies generated from the questionnaire survey are purely descriptive and indicative of resident's attitudes and perceptions concerning neighbour interaction. Due to the small sample size, this data is presented most effectively as qualitative material.

3.4 Preliminary Examination and Demographic Data

Basic demographic information for the two census tracts of Montreal containing the Bois-Franc and Angus Park developments were obtained from the completed 1996 Statistics Canada census material. These numbers are not indicative of the current situation since the majority of the new construction at Bois-Franc and Angus occurred after 1996. This preliminary examination of the two neighbourhoods was used to acquire an initial impression of the two sectors of Montreal where the projects were inserted.

1956; and Appleyard, 1981 write about residents experiencing a sense of community of place at the smaller scale of the neighbourhood or block on shared paths, yards and parking areas.

This examination consisted of informal conversations with community residents, urban planning professors and planners involved in each project. These conversations were unstructured and casual, permitting a broad range of observations and opinions concerning the perceived successes and failures and the sociability factors of the two projects. It was observed that the present physical form of each of the two developments, deviated to certain degrees due to different planning approaches and policy issues, from the original Master Plan designs of both Bois-Franc and Angus Park.[2] It was apparent that a comparison between these two developments built using relatively similar New Urbanist planning principles was in order and that more qualitative information needed to be gathered before a relationship between sociability and the presence of the neighbourhood square could be ascertained.

The 1996 census figures reveal that the Angus neighbourhood was primarily an area of lower family income than that reported in the Montreal Census Metropolitan Area (CMA) as a whole ($57,778) and was much lower than Bois-Franc's average family income ($41,366 at Angus compared to $75,663 at Bois-Franc). 80% of Angus residents recorded French to be their mother tongue, whereas 63% of Bois-Franc census tract residents claimed French as their mother tongue. 3.1% claimed English as the mother tongue at Angus, compared to 11.6% at Bois-Franc. In terms of other languages being recorded as mother tongues, the figures are 14.9 % at Angus and 25.3 % at Bois-Franc,

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[2] Fred Corriveau, Head Planner at Bombardier Real Estate Inc. suggested that an interesting research topic would involve an examination between the deviations from the original architect's Master Plan and the present alterations made in the development process at Bois-Franc. For instance, there was originally intended to be a lot more water, a canal type system, lakes, etc., high rise residential buildings and a greater site density in the project, but due to economic circumstances, geophysical concerns and consumer market demands, the form of the project has evolved differently than first envisioned by the architect. At Angus Park, the Head Planner for CP Real Estate expressed similar results, although not to such a sharp degree because Angus was designed with much public consultation and input and the original Master Plan reflects this reality.

reflecting, in turn, a greater proportion of immigrant population in the Bois-Franc area, 22.3 %, compared to Angus' immigrant population of 16.1 % and Montreal's 17.6%.

With regard to education levels, 13.4 % of the Montreal CMA population, 9.0 % of Bois-Franc and 11.7 % of the Angus population completed high school. 18 % of the Montreal CMA population, 9.4 % at Bois-Franc and 12 % at Angus obtained a trade diploma whereas 15.1 % in the Montreal CMA, 20.6 % at Bois-Franc and 15.6 % of the Angus population reported achieving a university degree. Thus, it appears that the population in 1996 at Bois-Franc was slightly better educated than that at Angus or the CMA as a whole and this in turn may explain the higher incomes reported in the Bois-Franc tract.

The percentages of home ownership indicate that 48.5 % of the Montreal CMA population own their dwelling, 85.7 % at Bois-Franc own and only 20 % at Angus reported owning their home. The percentages for rented dwellings are 51.5 % for the Montreal CMA, 14.3 % for Bois-Franc and 80 % for Angus. Thus, home ownership in 1996 is markedly higher in the Bois-Franc area than in either Angus Park or the Montreal CMA. The 380 new homes that were built between 1991 and 1996 at Bois-Franc were sold to purchasers. Since there was an insignificant number of housing units in the Bois-Franc census tract before 1991, the unusually high percentage of home ownership reflects this fact. Reasons for the high number of rented dwellings at Angus could be explained by the fact that between 1981 and 1996, 2845 housing units were constructed of which at least 1500 were subsidized housing units built in a large joint venture between the federal and provincial governments. Housing ownership has increased since 1996 with the new construction at Angus Park. These numbers reflect the fact that Montreal on the whole,

has a higher proportion of renters to owners, which is rather unique to many North American cities. Thus, the figures reflecting income, education, home tenure, immigration, and mother tongue provided initial descriptive information on the social demographics of the settings in which the two communities were inserted.

This information is important to an examination of sociability levels within the two New Urbanist communities for several reasons. According to the Chicago School ecological theorists, Robert E. Park, Ernest Burgess and Roderick McKenzie (1925), a sense of community and place is largely determined by neighbourhoods taking on properties of the qualities of their residents and revealing their own historical continuity. George Simmel (1890), Louis Wirth (1938) and Max Weber (1958) assert that the social psychological component of human interaction within communities must not be ignored. Herbert Gans (1967) and Claude S. Fischer (1977) believe that a sense of community arises not so much from architecture or physical design but from a dynamic between place and social interaction. Tuan (1974), in turn, believes that a sense of place is largely created by human experience in any given location.

3.5 Perceptions of Social Interaction within Bois-Franc and Angus Park

In a vibrant and healthy community there is an interdependent, reciprocal relationship between the community and an individual.[3] "Community has to do with a bonding which occurs among people, there has to be continuing, meaningful human interaction in order to create the social bonding which is a prerequisite to building community culture".[4] According to Nozick (1992), many of our geographical neighbourhoods are not communities "because people do not rub shoulders with each

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[3] Nozick, 196
[4] Ibid.

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other or share experiences together and to build neighbourhood communities means creating human interaction where we live".[5] These ideas correspond to New Urbanist planning principles, such as the square as meeting place, that are evident in Bois-Franc and Angus Park. Nozick (1992) and the New Urbanist proponents note, however, that the spatial or physical built environment provides only a framework within which to facilitate healthy social interaction and the creation of community. Though good physical design is vital, vibrant, healthy communities require people and activities and shared goals or objectives for coming together, such as establishing a community newspaper, as evidenced in Angus Park or developing a community gathering place around the fountain in the residential squares and the Grand Place at Bois-Franc. There is evidence of neighbourhood groups forming together at Angus Park to maintain the cleanliness, security and landscaping of the residential squares. At Angus Park, one resident, René Laflamme, initiated care of the residential square that his home fronts on, by mowing the grass when required, picking up litter and dog excrement and pruning some of the plantings.[6] At the outset, during the first year, he felt that this was a lot of work for one person to take on, but he persevered and the following year, another two households joined him in his efforts to maintain the square. Currently, there are seven or eight households looking after the square, following the pride of place and sense of community set by Mr. Laflamme several years ago. Residents at one of the Angus residential squares drafted and distributed their own community policing guidelines throughout the neighbourhood, concerning the presence of dogs in the square. The

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[5] Ibid, 197.
[6] Mr. Laflamme was interviewd by telephone concerning the stewardship of the neighbhourhood square. He felt that the maintenance provided by the City workers was not adequate and that additional work

importance of picking up after the dogs and not allowing them to run freely off leash in order to protect the interests of children and those who use the square, were highlighted. It was observed that there is much room for potential conflict between dog owners and non-dog-owners in any sort of community space and that this can create a polarizing effect between the two groups, especially within compact, medium or higher density settlements with smaller lot sizes and shallow setbacks. People united in a battle against an issue often come together to create community, despite the physical design of the neighbourhood. At Angus, the residents recognized the importance of the dog issue and some of them have petitioned the City of Montreal to establish a fenced dog run within walking distance of the development.

It can be argued that the residential square in both projects is a community hub on a small urban block scale. It can be considered the "living room" for the neighbourhood block and a place where residents feel comfortable and welcome to congregate and interact with each other outside of their homes. To determine the effect of the presence of the residential square on residents' perceived levels of neighbourliness, sociability and quality of life, a questionnaire survey and interview questions were designed to ascertain the feelings and perceptions of a small sample of residents in both projects. Thus, the research is concerned primarily with the collection of qualitative data, obtained from respondents through direct observation, personal and telephone interviews and the administration of a questionnaire survey to gauge resident's satisfaction levels concerning social interaction.[7] The questionnaire survey and interview process explored the

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needed to be done on the square to reflect the pride and strong sense of place that he carries for his community.

[7] The project, « Vivre Montréal en Santé », according to Gilles Senecal in his article, « Urban spaces and quality of life : moving beyond normative approaches », Vol. 5 (1), Policy Research Initiative, attempted

following five themes: 1) the availability and quality of existing community services and infrastructure, 2) perceptions of safety and security, 3) the perception of social interaction within the community, 4) the effect of the residential square on quality of life and social interaction and 5) the concerns of the residents regarding their respective communities. A comparison of responses between the two developments may be undertaken to attempt to determine the extent and influence of similar public square design on levels of resident social interaction. This section describes 1) the questionnaire survey, 2) the sampling frame, 3) the methodology used in the administration of the questionnaire survey and 4) the methodology used in the interview technique.

3.5.1   The Questionnaire Survey[8]

The questionnaire survey was directed at a small sample of Bois-Franc and Angus Park residents residing in row housing around the perimeter of selected residential squares. It intended to obtain information regarding: sense of community, levels of social interaction, automobile usage, children's play patterns, walkability, sense of safety, a ranking of neighbourhood characteristics, and basic demographics of the respondents. The first part of the questionnaire was designed to obtain a general understanding of the respondent's gender, age, size of household, ethnic background, number of children, pets and vehicles, occupation and socio-economic status as they relate to levels of interaction.

Following Patricia Labaw's (1980) belief that a questionnaire is an instrument of communication, "a two-way conversation between the respondent and the survey researcher", the survey attempts to permit the meaning of "words, behaviour and

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to « reconcile quantitative and qualitative approaches using standard indicators, but expanded the measurements of perception through consultation processes in various Montreal neighbourhoods ». Although the project suffered from lack of funding, neighbourhood discussions resulted and analysis and action plans for social and urban revitalization were undertaken.

perceptions to come through from respondents to researcher and vice versa".[9] The

researcher attempted to maintain objective and to not project personal values or

perceptions upon the respondents' replies. As much as possible, the questionnaire was

designed with the following two rules in mind: "1) Allow the respondent to tell you what

he/she means, what her/his life and values mean and 2) Design the questionnaire to

prevent its becoming simply an instrument of the writer's perceptions, values, and

language, which is then inflicted upon the respondent."[10]

In order to better examine a sense of community of place in the neighbourhood, a

scale developed and implemented by Nasar and Julian in 1994 was consulted as well as

Skjaeveland, Garling and Maeland's 1996 article, "A multidimensional measure of

neighboring".[11] In addition, Glynn's (1981) 60- item questionnaire measure, developed to

assess sense of community of place focussing on actual community conditions influenced

the questionnaire design.[12] Many other researchers such as William Whyte (1980) and

Donald Appleyard (1981) have concluded that people generally "define their

neighbourhood territory at the block level" and that important informal social interaction

occurs in small-scale features such as the residential square and the shared sidewalks in

the front of homes.[13] These daily small-scale interactions have been proven consistently

through the use of survey questionnaires by the above-mentioned researchers and others,

that they enhance people's sense of community of place.

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[8] Refer to Appendix D.
[9] Patricia J. Labaw. Advanced Questionnaire Design. Cambridge, MA : Abt Books, 1980, 11.
[10] Ibid.
[11] Oddvar Skjaeveland, Tommy Garling & John Gunnar Maeland. « A multidimensional measure of neighboring ». American Journal of Community Psychology. 24 (3), 1996 : 413-435.
Jack L. Nasar & D. Julian. « The psychological sense of community in the neighborhood ». Journal of the American Planning Association. 61 (2), Spring 1995 : 178-184.
[12] Nasar & Julian, 179.
[13] Ibid., 180.

The questionnaire survey consists of fifty questions written in Canada's two official languages, French and English, in order to reflect the needs of the resident population. Questions were formulated over several months and were influenced by a review of past and current literature and research on the New Urbanism and sense of community of place. At the outset, the survey clearly identifies the researcher, outlines stated objectives and makes a request for cooperation in the completion of the questionnaire. It is emphasized that all information collected would remain anonymous, unless requested otherwise, and that it would appear only within this body of research. Also included is a statement that participants are free to end their involvement at any time that they may wish and are under no obligation whatsoever, to participate in the survey. There are 40 forced-choice questions of which eight of these are based on the Likert (1932) measurement that is a rating scale measuring people's attitudes on a negative and positive continuum.[14] Respondents indicate their degree of satisfaction or dissatisfaction with a set of statements concerning: traffic, the safety of children playing in the street or square, neighbourhood density, privacy and noise levels, community infrastructure and services, neighbourliness, quality of housing, landscaping, parks and squares, and sense of community perceived. Five-point ratings were used ranging from the negative, "very unsatisfied" to "unsatisfied", through to the positive "satisfied" and "very satisfied" and finally, there is an option of "no answer". The remaining ten questions are open-ended with a section reserved for additional comments on the last page of the survey.

3.5.2 The Sampling Frame

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[14] Raymond Kent. <u>Data Construction and Data Analysis for Survey Research.</u> New York : Palgrave, 2001, 32.

The sampling frame was designed to target those residents of Bois-Franc and Angus Park living in homes located on streets bordering the residential squares. Four residential squares were randomly selected from a map of Angus Park and three from the Bois-Franc project. Due to limitations of time and resources, a truly representative sample could not be achieved, however, the resulting qualitative data does provide an indication of resident perceptions regarding the relationship between sociability and the square at the two sites.

Opportunistic, convenience and snowball sampling were used to target residents fulfilling the criteria of living around a residential square. Households were selected on the basis of walking around the neighbourhoods of Bois-Franc and Angus Park, specifically those streets that bordered a residential square. It was pre-determined that twenty-two households in each development would be surveyed, bringing the total number of survey responses to forty-four. Sampling occurred over a period of four weeks in the month of May when the weather in Montreal was relatively warm and pleasant and people tend to spend more time outdoors after the long winter months. Doorbells were rang and individuals were approached and spoken to on the street, gardens or sidewalks outside their homes as the opportunities arose. Snowball sampling techniques were utilized in a lesser capacity when engaging in discussion with residents who suggested a particular household that may be interested in participating in the questionnaire survey. If nobody answered the door, another home bordering the square was selected as the opportunity presented itself. There were only three instances in Bois-Franc where a resident who was reached at home, declined to participate in the questionnaire survey. At Angus Park, only one individual reached at home declined participation in the research survey. Thus, the response rate for sampling the populations

in both neighbourhoods was unexpectedly high and much more expedient than expected. Random sampling techniques were not required because the homes in each neighbourhood sampled were architecturally very similar to each other. The only distinguishing exterior factor was the presence of children's bicycles and toys stored beside the front door on the stoop. Homes displaying the obvious presence of children were treated in the same opportunistic sampling fashion as the others located on the residential square, thus, virtually eliminating opportunity for personal bias in selecting households to survey.

3.5.3   Administration of the Questionnaire

The questionnaire surveys were administered over a period of four weeks in May 2003 at Bois-Franc and Angus Park. It was determined that Saturday and Sunday and supper hours during the weekdays would be the best time to reach people at home and this is when the questionnaires were administered. This time of the year was chosen because accessibility is easier by foot once the winter has passed. There was no chance to slip on ice at the front steps of homes and people generally did not mind holding their front doors open to a researcher for longer periods of time when the weather was mild. It is assumed that administering the questionnaire in the spring permitted greater social interaction and subsequent response rates than in the winter when temperatures may be extremely cold and people are reluctant to speak to anyone at an open front door for more than a few seconds at a time.

As much as possible the questionnaire was formatted to present questions in a manner that would "facilitate interviewer and respondent progress from question to

question".[15] The introduction and all questions were written in clear, non-academic jargon in order to pique the interest of the greatest number of respondents and to avoid scaring them from participating in something they think they may not understand. Opening questions on the first page were basic, non-threatening ones involving gender, age groupings, occupation, and ethnic origins. According to Labaw (1980), the first goal of routing the respondent is to avoid refusals and this was accomplished very effectively by the written introduction of the questionnaire.[16] The brief introduction was designed to capture the residents' curiosity about the nature of the survey, while at the same time reassuring them that the questions would be easy to answer because they involved personal opinions about their life experiences in the new community. Questions were designed to get respondents to think about their daily interactions within the neighbourhood and to extract their personal attitudes regarding the quality of life and social interaction experienced within their community. Ranked responses, open-ended attitudinal questions and satisfaction scales assisted in this effort.

Researcher attire was neat and conservative in order to reflect the population's middle-class socio-demographics and the seriousness of the study's intent. As the potential respondent answered the door, direct eye contact was made, initial greetings were made in French to respect the dominance of that language in these sectors, and information contained in the brief questionnaire introduction was verbally transmitted. An attempt was made not to lead the respondent or educate him/her to agree with the research approach so that unbiased, valued opinions could be extracted from the survey. At the same time, a hard copy of the survey was held by hand in a file folder. If the

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[15] Labaw, 115.
[16] Ibid., 116.

resident agreed to participate, which most of the time was the case, a request for a phone number was made and a copy of the questionnaire was presented to them with the instructions printed on the first page as to when the completed survey would be collected. In Bois-Franc, there are no individual mailboxes, only community ones located in the squares. This made the collection of completed surveys more problematic as there was nowhere to leave the survey, except under a doormat in some instances. As a result, many polite and non-coercive telephone calls and repeated visits to the site were necessary to collect all distributed surveys. At Angus Park, residents are free to attach any sort of exterior mailbox by the front door. The exterior mailbox allowed for easy collection of completed questionnaires. Respondents were instructed to leave the survey in their mailboxes on certain evenings when they were to be collected. This proved to be an extremely efficient method of collecting completed surveys as most people were otherwise occupied when spontaneous contact was made, during the supper hours or on weekends. It was verbally emphasized at the outset, that immediate completion of the questionnaire was not expected. However, on several occasions in both Angus Park and Bois-Franc, respondents requested that they complete the questionnaire and interview on the spot in their living rooms while the researcher waited inside by the front door. One individual at Angus Park, requested that the researcher sit across from him on the living room sofa and read each question aloud with all the possible answer choices included.

People approached generally felt very strongly about their communities and homes and the sense of pride and enthusiastic participation encountered in the survey reflected this fact. Questions involving: home tenure, number of adults and children in household, pets, vehicle parking and usage, commuting patterns, walking patterns, street safety,

children's play patterns, the square, levels of social interaction, satisfaction with quality of life, density, noise levels, community services, green spaces, concerns with the neighbourhood, reasons for moving to the development, and a ranking of selected neighbourhood characteristics were sequenced in order to maintain the respondent's interest and participation in the survey. The high response rate may have been influenced by the fact that a majority of the respondents were university educated professionals who were able to identify with the value of social science research and the importance of home, social interactions and community to overall quality of life.

3.5.4 Interview Techniques [17]

The resident interviews were designed to be casual and informal with respondents living on the residential squares in order to obtain anecdotal information and qualitative data regarding attitudes towards the square and its effect on levels of social interaction between neighbours. According to Kevin Dunn (2000), interviews are used to "investigate complex behaviours and motivations and to collect a diversity of opinion and experiences within a group".[18] On several occasions, in both Bois-Franc and Angus Park, impromptu conversations occurred on the sidewalk when residents were gardening in the front yard or playing with their children in the square or on the sidewalk. Residents were interviewed based on their agreement when they were presented with the questionnaire at their door. Eight personal, face-to-face, in-depth interviews were conducted in respondents' homes during May 2003 at Angus Park. These ranged from forty-five minutes to sixty minutes in duration. Some of the primary questions from the completed survey were initially posed to stimulate further open discussion concerning quality of life

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[17] Refer to Appendix E for list of oral interview questions.

and perceptions of sociability within the new community. Again, echoing the concerns of Labaw (1980) and Houtkoop-Steenstra (2000), attempts were made to avoid unduly influencing the respondent's attitudes or position regarding the community, although education and increased consciousness of the issues being examined are inevitable and positive consequences of the interviewing process.[19] One thirty-minute telephone interview with an Angus Park resident, Mr. Laflamme, was conducted June 1, 2003 concerning the stewardship of the square and will be detailed in Chapter 4.[20]

Many of the residents interviewed at Angus Park indicated that they were very satisfied with the quality of life in the community. The central location, with easy access by public transit or automobile to downtown Montreal was seen as an advantage, as was the walkability to the Botanical Gardens, the Olympic Stadium and commercial services. The amount of green space was much appreciated and the residential square was generally viewed as a paradise for children living around it. The square, especially Parc des ferblantiers, with its giant iron industrial vice grip sculpture, unearthed during the soil remediation project, was viewed by many interviewed, as a neighbourhood landmark and social gathering place. The large amounts of natural light, the open green space, the numerous trees and the feeling of being "in the country in the middle of the city" was echoed by many respondents living around the square.[21] One couple conducted a tour of their residence to permit direct observation of the wonderful natural light patterns and open views enjoyed by them from every room of their home.

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[18] Kevin Dunn. « Interviewing ». In Iain Hay, (ed.). Qualitative Research Methods in Human Geography. New York : Oxford University Press, 2000, 52.
[19] Houtkoop-Steenstra, Hanneke. Interaction and the Standardized Survey Interview : The Living Questionnaire. Cambridge : Cambridge University Press, 2000.
Labaw, 122.
[20] Refer to Appendix E for list of interview questions.

Pierre St. Cyr, planner for CP Rail's real estate division, was interviewed at the CP Rail offices in Montreal in September 2002 and in May 2003. As well a telephone interview with him took place in October 2002. A telephone interview was conducted with Mr. Allan Koury of SOTAN regarding the earlier eastern development of the Angus site containing a large percentage of government subsidized housing. A public meeting held by the City of Montreal, concerning the design of the large Parc Jean Duceppe, was attended in order to witness the public consultation process and the bottom-up approach to urban planning advocated by Christopher Alexander (1979) and others.

At Bois-Franc, eight personal in-depth interviews were conducted in respondent's homes over the same time period in May 2003. The same interview methods used at Angus were employed at Bois-Franc. Many of the respondents interviewed in Bois-Franc were also very satisfied with life in the development. Several respondents loved the fact that children could play safely on the streets, sidewalks and squares. The square was seen to be a community hub where neighbours could interact and children could safely play. On Chamonix Street, the British classical architecture was admired by those living in that section of the community, as was the formal landscaping of the squares with fountains, ordered tree plantings and wrought iron benches. Criticisms, particularly by one woman, involved the noise pollution generated by overhead flights coming in to land at Dorval International Airport. The Bois-Franc site is located under a well-used international flight path and during supper hours it can be difficult to enjoy the outdoors due to the noise levels. The lack of a primary school in close proximity was noted, as was the lack of specialty shops at the Grand Place. As well, one respondent remarked

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[21] Pierre St-Cyr wrote a speech in 2001 entitled, « Angus Park- An Urban-Suburban Way of Life », reflecting the positive attributes of suburbia embodied in the more compact urban setting of Angus.

that he felt that Bombardier was acting as an Orwellian "Big Brother" by forcing him to take down a rear deck shelter that contravened Bombardier's strict architectural guidelines. He felt that he did not fully own his property as Bombardier could dictate what he could or could not do to his property.

Fred Corriveau, Head Planner for Bombardier Real Estate and his assistant were interviewed at their offices in the Grand Place, as was the real-estate sales coordinator for the project. These interviews occurred in October 2002. Informal personal interviews with Pierre Beaudoin, one of the principals of Bombardier, took place in June 2003. As well, a personal interview with the architect/planner Stephen B. Jacobs of the New York firm that bears his name was conducted in July 2003 in Montreal. Jacobs provided interesting insight into the New Urbanist projects because he was a designer and planner for several large-scale projects including the new town of Reston, Virginia that was used as a model for the planning of Bois-Franc.

3.6 Methods of Analysis for the Questionnaire Survey and Interviews

The data collected from the questionnaire survey and the interviews with residents was treated qualitatively. Emphasis was on the qualitative aspects and the oral testimony of those participating in the study. In a general sense, qualitative research is concerned with "elucidating human environments and human experiences within a variety of conceptual frameworks.[22] Thus, interview methods, the questionnaire survey and literature concerning the concepts of community, neighbourhood and New Urbanist town planning principles, were used together in the study to form a "picture of social interaction within the square". In terms of sample size in qualitative research, the sample does not attempt to achieve true representation because the emphasis is on "an analysis of

meanings in specific contexts".[23] Ward (1972) describes this approach when he writes, "the point is that counting and model building and statistical estimation are not the primary methods of scientific research in dealing with human interaction: they are rather crude second-best substitutes for the primary technique, storytelling".[24]

The descriptive data from the questionnaire survey was coded and entered into an Excel spread sheet. Items were grouped and ranked response questions were averaged to compare the two groups to see if there were attitudinal differences expressed. For evaluative questions, averages were calculated to note if the responses differed between the two communities. Narrative answers, such as comments and interview material were grouped by sub-headings. Latent content analysis of interview data involved a type of coding of the "underlying meanings and themes of what was said ".[25] The intent of the research is to examine levels of resident interaction through human experience and storytelling. The following chapter presents a discussion of the questionnaire and interview results.

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[22] Hilary P.M. Winchester. « Qualitative Research and its Place in Human Geography ». In Hay, (ed.), 3.
[23] Matt Bradshaw and Elaine Stratford. « Qualitative Research Design and Rigour ». In Hay, (ed.), 45.
[24] B. Ward, 1972. In Hay, (ed.), 45.
[25] Kevin Dunn, 76. In Hay, (ed.).

Chapter 4

Questionnaire and Interview Results and Discussion

4.1 Introduction

This chapter examines the responses to the questionnaire survey and personal interviews conducted at Bois-Franc and Angus Park. It provides an indication of sampled resident satisfaction levels concerning the community and the relationship of the square to social interaction experienced within the developments. This chapter identifies perceptions of levels of neighbourhood interaction amongst those interviewed and surveyed. Data tables presents frequencies of results concerning social demographics, walkability patterns, the impact of the square on resident interaction and quality of life, and levels and opportunities for neighbourly interaction. Finally, interview results and anecdotal evidence from residents and planners are presented as oral testimony to the research on sociability and the New Urbanist square.

4.2 Demographic Data

The following survey data provides some social demographic information on the twenty-two respondents sampled in each community (Table 1). Interesting information that may influence social interaction in the neighbourhood square is that no homemakers are recorded at either location and that the majority of respondents are professional men and women of 31 to 40 years of age working full time and owning their homes. Most of the respondents at both sites are Canadian by birth with all but one at Angus Park listing French as the mother tongue. The population sampled at Bois-Franc appears slightly more heterogeneous with five listing English as the mother tongue and two listing another language. A high proportion of those sampled at Angus Park previously lived in

the central city near the site whereas at Bois-Franc, many respondents reported

originating from the suburbs either on or off the Island of Montreal. Jane Jacobs (1961)

and other New Urbanists would argue that central city inhabitants are more socially

interactive than suburbanites due to higher densities, greater social capital and diversity.

Table 1. Social Demographic Data for Sampled Populations

Frequency Table	BOIS-FRANC (n=22)	ANGUS PARK (n=22)
Gender	Female (12) Male (10)	Female (11) Male (11)
Age	20-30 (3) 51-60 (3) 31-40 (10) 61 + (1) 41-50 (5)	20-30 (2) 51-60(3) 31-40 (13) 61 + (0) 41-50 (4)
Work	Yes (20) No (1) Retired (1)	Yes (17) No (2) Retired (3)
Full time/ Part time/ Contract Work	Full time (21) Part time (1)	Full time(20) Contract (2)
Occupation	Professionals (22)	Professionals(16) Trades(6)
Mother Tongue	French (15) Other (2) English (5)	French (21) Other (1) English (0)
Country of Origin	Canada (19) Other(3)	Canada (19) Other (3)
Housing Tenure	Own (21) Rent (1)	Own (22)
Prior Residential Location	Montreal Suburbs(8) Off Island (6) Central City (8)	Montreal Suburbs(2) Off Island (3) Central City (17)
Average No. of Adults per Household	1.95	2.27
Average No. of Children per Household	.90	.82
Average No. of Pets per Household	.73	.64
Average No. of Vehicles per Household	2.04	1.23

Differences regarding the number of vehicles per household at the two sites

reflects the fact that Angus Park is located in a much denser central area of Montreal,

directly serviced by metro lines and public transit that have served the needs of residents in the area for many years. At Bois-Franc, there was no residential community immediately surrounding the large site because it was a former airport and is home to industrial enterprises, therefore the transit system is still not yet well developed and therefore, two cars per household is the average for those sampled.

4.2   Automobile Usage

Most of the respondents in both communities park their vehicles in their own underground garages accessed via a common driveway located on the side of the last house in a row. Some respondents remarked that their garages were too small to contain a car and personal items, so they parked on the street. As well, those garages that were intended for two cars were often not big enough to comfortably contain them and so one car parked on the street. Depending on the circumstances, respondents parked on both the street and the garage in both communities. In response to Question #14 of the survey, regarding opinions on being able to manage living in the community without a car, the majority of Angus respondents answered "Yes", they are able to live in their community without a car. At Bois-Franc, most respondents answered "No" to the same question. Written comments from Bois-Franc respondents are that it is impossible to walk to a better variety of stores, that the public transit system is infrequent and non-existent on weekends, the car is required for work and for transporting children and babies to school and daycare that are unreachable by foot or by public transport. Those few responding "Yes" at Bois-Franc reported that life is possible without a car because public transit and shopping centres are located in close proximity.

At Angus Park, a large majority sampled believed that a car was not essential for life in the community. Comments supporting this idea are that shopping, such as the giant Loblaws is within walking distance, the metro station is a short walk away, and the public transit system serves the area very adequately. Comments representing the negative response are that it is very difficult to transport children and babies to school and to various activities, a car is often required for work purposes and the bus service is infrequent. Reducing car dependency is a noble but complex task in most environments.

4.4 Travel Patterns

Vehicle and pedestrian travel patterns of respondents sampled in both cases are discussed because they influence social interaction within the community. Walking provides interaction opportunities. The majority of the respondents sampled in each community drive a car to work. The average distance in both cases, for the responses received, is 11-20 kilometres travelled to work. Nobody sampled at either community reports travelling more than 50 kilometres to work. At Bois-Franc, three people responded that they travel 0-5 kilometres from home to work with four spouses reporting the same distance. At Angus Park, four respondents travel 0-5 kilometres with two spouses listing this same figure. There is little difference between the two communities in this regard. New Urbanist planning principles prominently feature walkability, the ability to walk to commercial establishments, friends' homes, schools, public transit stations and workplaces and to allow people more opportunity to interact. Neither of the case studies includes respondents who walk to work. The incidence of public transit use for work travel in Angus Park is an indicator that Angus Park is better served by public

transit and the metro system in terms of proximity, scheduling and ease of use. The more

suburban location of Bois-Franc reinforces the dependence on the automobile.

4.4.1   Walking Patterns

Table 2 reveals the frequency of respondents walking to various locations from

home and the average number of minutes it takes for them to walk there. Because Angus

Park was inserted into the pre-existing urban fabric of the district, a greater number of

Table 2. Walkability Patterns

	Bois-Franc	**n=22**	**Angus Park**	**n=22**
	Frequency of Response	Average No. of Minutes	Frequency of Response	Average No. of Minutes
Friends	6	4.3	4	14
School	1	20	3	6.6
Relatives	4	10.5	4	37.5
Bus Stop	6	6.4	13	4
Store	13	6.1	16	6.5
Café	11	5.8	4	5
Work	1	45	2	45
Bank	3	15.6	9	7.8
Park	17	2.9	14	2.3
Church	1	30	4	5.8
Recreation	6	6.7	4	7.5

respondents reported walking to school with far shorter walking times, walking to a bus

stop, a bank and a church. This indicates that these respondents are able to access on foot

in much shorter time, both the new and pre-existing services of the neighbourhood. At

Bois-Franc, a greater number of people reported being able to walk to friends' homes in

far shorter times than at Angus. During interviews at Bois-Franc, unlike Angus Park, it

was noted that some respondents moved to the development because friends had bought a

home there. This may be indicative of a more homogeneous socio-economic class at

Bois-Franc or of people of similar interests and incomes coming together to live in close

proximity to one another. The lower numbers walking to the bus stop at Bois-Franc are in keeping with the opinions concerning the ability to live within the community without a car. It is interesting that while both communities report similar walking patterns to a store (6 minutes approximately), at Bois-Franc, a significantly greater number of people walk to the café, although both report the walk to be only five minutes. Perhaps the attractive architecture of the Grand Place café appeals to the residents and the availability of both indoor and outdoor seating near the central fountain in the main square is attractive. Walking times and frequencies to recreational facilities and the park were very similar between the two samples. In both cases, a high number sampled walk to the park with a time of about two or three minutes. Similar numbers in both cases walk to recreational facilities with a time of approximately seven minutes. As well, the numbers walking to a store are similar in both projects with an average walking time of six minutes. Thus, the New Urbanist principles of walkability are met to some degree in both Bois-Franc and Angus Park. Considerations concerning the low walking numbers to school, a bus stop, the workplace and services such as a bank must be made, especially at Bois-Franc, which does not have a pre-existing, dense, urban context to integrate with. Walking patterns are influenced by aesthetics, infrastructure, proximity of services to home, climate, and perceptions of safety and security in one's environment. The next section discusses safety issues in the two communities, as they affect social interaction.

4.4 Safety Issues

Responses relating to Question #19 of the survey regarding attitudes on speeding and illegal parking on the street, are virtually identical between the two developments. The majority of those sampled believe that speeding and parking are not perceived as

problems. Parking regulations are clearly marked and these rules are generally respected. Those that do believe that these issues are problems, revealed in interviews that they would like to see speed bumps, more stop signs and 30 kilometre maximum signs installed at Angus to control speed and improve safety for children playing on the street and in the square. A few respondents in each case, remarked that their street lacks exterior parking spaces and that the street could be wider to accommodate parking on both sides. Slightly more respondents at Angus Park than Bois-Franc, reported a lower degree of satisfaction concerning the safety of children playing in the street or square.

Amongst those sampled there is a high degree of satisfaction with safety perceived in both communities. Additional measures could be taken, particularly in Angus Park to slow down traffic speeds and enhance pedestrian safety through the implementation of speed bumps, stop signs, and reduced speed limits. The New Urbanist design principles of narrower streets, the existence of sidewalks, the network of green spaces and higher, more compact residential densities are manifest in both projects and they appear to work together to create a feeling of safety and security for residents and their children to interact. The safety of children is of paramount importance in any community. As Margaret Mead says, "any community without sidewalks, does not love its children."

4.5 Children's Play Patterns

Ten choices were presented to respondents concerning the location of child's play. Respondents were asked to list the places where children are observed to play most frequently. The most frequently occurring response in both cases, were the park and the square. High responses at both projects were received for the yard, inside the home and at a friend's house as places to play. None at Angus Park and only four at Bois-Franc,

reported playing at school in part because the schools are not located in close walking proximity, particularly at Bois-Franc. The proximity of the green open spaces, the parks and the squares to the resident's homes, generally creates a safe, well-used location for children's interactive play. New Urbanist theory promotes the concept of neighbourhood open green space as a community gathering place where children and adults may interact in a safe manner within a close walking distance to home. Both communities, according to the information gathered, provide this important function with the residential squares.

4.6 The Residential Square

Ten questions in the survey are targeted directly at the residential square. Eight are forced-choice and two are open-ended. Question #26, "Do you consider the square to be a space that is, private, semi-private, or public?" was asked to determine the level of comfort in using the square and the personal attachment placed upon the square. Echoing the views of William H. Whyte (1968, 1980), the square and the street should be celebrated as public spaces that contain variety in landscape and surface textures, an appropriate scale, a mix of people and uses, adequate seating, sunlight, and opportunities for interaction, engagement and connection.[1] Jane Jacobs'(1961) thoughts regarding neighbourhood parks are similar to Whyte's (1968, 1980) and the New Urbanists, such as Krier (1998), Duany (1989), Calthorpe (1991, 1993) and Katz (1994). For neighbourhood parks to be successful, Jacobs (1961) believes that there must be sufficient diversity and excitement in the immediate surroundings and little competition from other open green spaces that are too similar to each other.[2] Jacobs (1961) cites the example of Washington Square in New York City as being a successful example of a

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[1] Albert LaFarge (ed.). The Essential William H. Whyte. New York : Fordham University Press, 2000.
[2] Jane Jacobs. The Death and Life of Great American Cities. New York : Random House, 1961, 103.

neighbourhood park. She emphasizes that neighbourhood parks are, "creatures of their surroundings and of the way its surroundings generate mutual support from diverse uses, or fail to generate such support".[3] Parks that are well used and frequented by people contain four design elements that Jacobs (1961) calls, centering, intricacy, sun and enclosure.[4] The squares observed at Bois-Franc and Angus both contain adequate sunlight. The centering aspect involves a focal point of the square. The squares at Bois-Franc contain a central fountain or playground equipment as focal points, whereas at Angus Park, there is no defined focal point at the centre of the square. In terms of intricacy, there are more people living in higher densities immediately surrounding Angus Park and a greater number of divergent uses because Angus is located within the urban fabric of the central city of Montreal. Bois-Franc, on the other hand, is located in a suburban industrial environment that does not relate or integrate as well with the residential development. Therefore, the development is more localized and insular in its relation to its immediate surroundings. Enclosure is more evident in the Bois-Franc square design as the surrounding buildings create a more definite street wall on all four sides of the square, as opposed to the three sides at Angus Park. The buildings give the space a definite shape that gives the square an importance in the overall design of the neighbourhood. The true test of a square's success, however, is its level of usage, its ability to attract a diverse range of people at different times of the day and its ability to accommodate various needs. Ray Oldenburg's (1989)"great good place" describes the need for an informal gathering spot where people "create and celebrate community".[5]

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[3] Ibid., 98.
[4] Ibid., 103.
[5] Thomas J. Comitta. In Charter of the New Urbanism. Edited by Michael Leccese and Kathleen McCormick. New York : McGraw-Hill, 2000, 117.

Thus, the following survey questions attempt to reveal usage patterns, attitudes concerning the impact of the square on quality of life and levels of social interaction occurring in the residential square.

4.7.1 Forced-Choice Question Results

A large majority of respondents at Angus Park consider the square to be a semi-private space. This is not surprising in that a set of row houses are clustered around a residential square creating a rather intimate sense of enclosure. The narrower streets are one-way, they are not main thoroughfares and are generally used by residents and guests only. Perhaps, cultural differences in attitudes towards land ownership are at work here as well. Pierre St-Cyr of CP Rail suggested that those of English origin historically embraced the concept of shared common public green space more readily than those of French background.[6] In the words of Kevin Lynch (1971), "the openness of open space is not so much a matter of how few buildings stand upon it but rather of how open it is to the freely chosen actions of its users".[7] Lynch (1971) continues to write that "openness is a product of physical character but also of access, ownership, management and of the rules and expectations that govern activity".[8] The behavioural definition of open space is as follows: "a space is open if it allows people to act freely within it".[9] The squares studied at Bois-Franc and Angus Park are utilized by the residents but within certain parameters established by the residents, such as keeping dogs on leash, picking up after them and not destroying the grass by riding on paved surfaces only. All residents surveyed felt that they have access to the squares. Particularly at Angus Park, in the case

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[6] The concept of the common, a shared open space, is found throughout English planning literature, whereas the French pattern of land tenure has historically been directed at private land tenure, such as the seigneurial system in New France.

[7] Kevin Lynch. Site Planning. London : The M.I.T. Press, 1971, 352.

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of Mr. Laflamme, there is a strong sense of pride associated with the square, and residents have come together to care for it and to enforce certain rules on usage. Although most of those sampled in both developments do not consider the square as an extension of their front yard, some did feel that it was. One written comment at Angus Park remarked that the presence of the square compensated for the small backyard lots and higher residential densities.

In the words of Lynch (1971), "the sensuous experience of a place is spatial, a perception of the volume of air that surrounds the observer, read through the eyes, the ears, the skin- outdoor space is made palpable by light and sound and defined by enclosure, overhead, underfoot and alongside".[10] The sense of enclosure is generally more pronounced at Bois-Franc because the squares examined there are bounded on all four sides as opposed to three sides at some in Angus Park. The New Urbanist principles of shallow set-backs, smaller lot sizes and orientation towards a common green space create a gathering of people within the square. This is so, because the square is larger than the backyards and better facilitates dog walking, child play and outdoor interaction, particularly around the fountains in the Bois-Franc squares which serve as gathering places for people at all ages at the block level.

Regarding the users of the residential squares, the most frequently cited users in the sample at Bois-Franc are children with parents, young children and dogs, in that order. At Angus Park, the same order applies. Thus, parents of younger children or dog owners have great potential to interact with other residents in the square. Children and dogs are known to be very effective social facilitators and many people have met their

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[8] Ibid.
[9] Ibid., 353.

best friends through their children or pets. "Petworking" is a phenomenon that occurs throughout urban and suburban communities. It is believed that dog walkers assist in the protection and maintenance of neighbourhoods because they are regularly out on the streets, in the parks and on the sidewalks at all hours of the day, able to spot any trouble or deviation in activity.

At Angus Park, the data indicates that fewer people from adjacent streets use the square than at Bois-Franc. Although, the squares are frequented by others in the community, the sample indicates that they are primarily used by the residents living around the particular square. Some of the respondents at Bois-Franc mentioned that others from nearby streets come to their square because it is the only one with playground equipment in it and that the development requires more playgrounds because their square is often crowded with others coming to play from nearby streets. Therefore, it appears that the presence of the residential square facilitates interaction between residents living on and near the square in both projects.

Question #30 involves the stewardship of the square. Respondents replied to the question, "Who looks after the square?". Results indicate who assumes responsibility for the square, who cleans it up, who enforces regulations and who has pride of place and community identity concerning it. At both communities, nineteen times the response was "the city" takes care of the square. High numbers, particularly at Angus Park, were recorded for those listing themselves as caretakers of the square (frequency of seven) and in nine instances, "other residents" were listed as caretakers. At Bois-Franc, nobody listed "other residents" as caretakers, and only three times did people report themselves as involved in the care of the square. Dog owners were consistently well represented as

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[10] Ibid., 190.

custodians of the square (a frequency of six at Bois-Franc and seven at Angus Park).

These numbers indicate that the square serves to act as a community hub according to

Jane Jacobs (1961) and Marcia Nozick (1992), which permits people to interact and work

toward common goals or interests. The sense of community and identification with place

are manifest when residents care for the square by mowing the grass, picking up litter and

dog excrement, weeding and watering the vegetation and policing unwritten codes of

conduct. At Angus Park, two people interviewed, mentioned the beautiful colours of the

deciduous trees in the square during the autumn season and at both projects, people

mentioned that they give fertilizers to the trees planted outside their homes to make them

grow more rapidly and vigourously.

Concerning resident consultation on the design of the square, a large majority of

the sample at both communities, responded "No", the developer did not consult them on

the square's design.[11]. Only two people in each community answered "Yes" to the

question. One interviewee at Angus Park, reflected that CP consulted residents on the

placement of street lighting and on type of tree to be planted in front of homes. Six at

Angus Park and two at Bois-Franc were "Not Sure" if they were consulted or not.

Planners at both corporations indicated that residents were consulted as to the design of

the squares. This may indicate that the planners must be more direct and facilitate better

interaction and communication between residents and themselves. A large majority

sampled in both projects are satisfied with the fencing and landscaping by-laws in the

neighbourhood, except that some would have liked to have stricter architectural

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[11] In a conversation with Pierre St-Cyr, it was revealed that a public consultation took place in February 1999 regarding the design of the squares. The residents clearly voted against the presence of playground equipment in the square, but in the long run, CP realized the population demographics changed, with a

guidelines for fencing styles and materials at Angus Park. The resulting rear fences are a mixture of styles and materials, which in fact, replicate the vernacular patterns found in the surrounding urban fabric (Figure 11). Thus, the New Urbanist respect for vernacular architecture and integration into the surrounding historical context of the area are upheld in this example. At Bois-Franc, in contrast, there are strict architectural covenants, in keeping with New Urbanist design codes, concerning fencing, placement of satellite dishes, exterior house colours, and any exterior modifications. Many people appreciate the architectural code and the harmony it creates, but one must be careful of staged authenticity and kitsch. There are those, however, who do not appreciate strict guidelines, such as the respondent who attempted to enclose part of his rear deck with plans approved by the City and was promptly directed by Bombardier to remove it immediately or face high fines. The landscaping in the squares of Angus Park and Bois-Franc is classical in order to appeal to the broadest range of people living there.

The last forced-choice question on the square is in two parts and along with the two open-ended questions, together they form the most important section of the survey concerning the relationship between social interaction and the square. The first part of Question #34 asks, "Do you feel that having homes built around a square increases social interaction with neighbours?" The second part asks, "Does the square increase your quality of life?"(Tables 10, 11).

Table 3. Does Living on the Square Increase Interaction Amongst Neighbours?

Frequency of Responses	Bois-Franc (n=22)	Angus Park (n=22)
Yes	14	19
No	5	2
Not Sure	3	1

large influx of young families moving in and there is consequently a demand for playground equipment in the parks.

As Table 3 indicates, a large number of respondents sampled in both communities believe that living on the square does facilitate and provide greater opportunities for social interaction. Angus Park reports a greater frequency of positive replies than Bois-Franc. This could be explained by many diverse factors such as personality, life cycle stage, socio-economic status, education, income and occupation. Design plays a strong role in facilitating interaction but it can only influence to a certain degree the individual personalities, character traits and life situations of people living in a neighbourhood. At Bois-Franc, one resident suggested that many in his development have second homes that they go to on the weekends and holidays, thereby reducing leisure time spent in the neighbourhood and opportunities for interaction.

Table 4 reveals that the presence of the residential square does increase the quality of life perceived by the majority of people sampled in both communities. With such a small population sample, qualitative data becomes very important when attempting to measure people's attitudes and perceptions on satisfaction with quality of life. The next section will provide written and oral comments made by some residents.

Table 4. Does the Square Increase Your Quality of Life?

Frequency of Responses	Bois-Franc (n=22)	Angus Park (n=22)
Yes	14	19
No	5	2
Not Sure	3	1

4.7.2   Open-Ended Questions and Comments

Question #31, "How does the design of the square and street affect your life and activities?" provided insightful responses in both developments. At Angus Park, many surveyed wrote that the square facilitates interaction amongst neighbours and increases

the sense of community cohesion and sense of place. Comments indicate that many experience a high degree of friendliness and neighbourliness because of the square and that it is "an oasis of tranquility in the city". It appears that the square serves to act as a neighbourhood meeting place, it is quiet, not a lot of traffic circulates on the one-way streets and it is a paradise for young children and their parents who can safely let them play in the square or on the sidewalks. Many remarked that they can see the sky because of the open space and that there is a lot of natural light in their homes. The trees provide beautiful colour during the fall and ensure privacy and a certain intimacy during the summer because they hide the homes facing across the square from each other. As well, the small backyards are more bearable because the square provides opportunities to play and interact outdoors. Several people surveyed at Angus made the comment that 6th Avenue should not bisect the two parks and that they should be one unit, reducing the dangers for children crossing and playing between the two parks. One respondent drew a lovely sketch outlining his design for the unification of the two squares, including the replacement of grass with shrubbery. His suggestion was to close 6th Avenue and make a stone terrace with a fountain in the centre, uniting the two squares.

Question #32, "What changes would you make to the design of the square?" prompted concerns about lighting, playing surfaces, dogs and children, safety and parking, although many wrote that the square was perfect, that no changes were required. Several people wrote that the lighting in the square is too strong and that it must be reduced and directed away from the homes and into the square. Some wanted more parking spaces and the square to be made smaller so that cars could park on both sides of the street. This reflects the dependence on the automobile and its dominance in our lives,

even in New Urbanist developments. Some wrote that the surface should be flatter to accommodate children's games, there should be playground equipment and that there should be separate parks for dogs and children. Others wished to see more stop signs installed for safety of children playing. In terms of street furniture, some respondents desired to have more benches, garbage cans, flower pots, sculptures and fountains.

In response to Question #31, at Bois-Franc, as in Angus Park, many people reported that the square facilitates social interaction between neighbours and that one can interact with neighbours and play with children in a safe, quiet environment since there is not a lot of traffic. The fountain in the centre of the square and the seating provide a community meeting place for children and adults to socialize and interact. Some reported that the presence of the square increases the desire to walk and be outdoors. Although a small number complained of a lack of exterior parking spaces as at Angus Park, reflecting the reality that people need and want their cars no matter where they live. Unlike Angus, several respondents at Bois-Franc remarked that the square has no impact on their lives, that it is a nice feature, but they are rarely home to use or enjoy it. As at Angus Park, the central open space and the trees provide a level of privacy due to the distance between homes facing across from each other. One woman remarked that living on the square was pleasant for the entire family. The parents, children and dog picnic there, ride bicycles, walk the dog and fly kites in the square. These comments appear to indicate that many sampled feel the quality of life is high in the two developments.

Basically the responses to Question #32 at Bois-Franc involved the addition of more playground equipment in the squares. This demand reflects the demographics of young families and perhaps the fact that many of the residents come from other suburban

areas where this is provided. One woman interviewed said that the formal classical landscaping of the squares was aesthetically pleasing but that there needs to be more playgrounds for children living at the block level. Young children must play where their parents can see them from the house, they cannot travel far to a playground. In terms of landscaping, respondents appeared to be satisfied, although two people would like to see more landscaping and one person remarked that time will heal many of the problems, such as larger trees and a greater feeling of enclosure.

4.8 Privacy, Noise and Density

Question #36 deals with density satisfaction. Data indicates that most respondents in both communities are satisfied with density levels. The three respondents at Angus Park who reported high dissatisfaction with density may have come from a low-density rural or suburban environment or may have conflicts with a neighbour as expressed by one respondent. Thus, the sample figures indicate that the higher densities and compact development associated with New Urbanism may generally be accepted by those coming from different lower density environments and in more suburban locations such as Bois-Franc.

Question #37 deals with satisfaction levels concerning privacy and noise issues. Generally, the level of satisfaction amongst those sampled involving privacy and noise is greater at Angus Park than at Bois-Franc. Based on direct observation, the survey results and interviews, a reason for the dissatisfaction at Bois-Franc is the airplane noise generated by the flights coming in to land at nearby Dorval International Airport. This is perceived to be a major problem at Bois-Franc, which is difficult to remedy. As well, the strict fencing by-laws at Bois-Franc stipulating hedges and frost fencing, do not provide

as much backyard privacy as the higher wooden fences permitted at Angus Park. One woman interviewed at Bois-Franc has difficulties enjoying being outdoors during the supper hours when the international flights start arriving. During the winter, it is better because windows are shut and people stay indoors more, but when the weather warms, she feels uncomfortable opening her windows due to noise and pollution levels and relies on air conditioning instead.

4.9 Green Space

The majority of respondents sampled in both cases, feel that there is an adequate amount of green space or parks in the neighbourhood. These high figures are expected and occur in part because the population sampled all live on the green residential square, which has been shown to increase quality of life and resident interaction levels.

The New Urbanist principles involving a network of public, open green spaces have been implemented to varying degrees, in both projects studied. New Urbanists promote the use of pathways and connections between the green spaces. Residents reported a lack of bicycle paths in each community and there are no mid-block pathways evident in either development.

4.10 Neighbourly Interaction

Questions #40 –44 deal with the important concepts of sociability and interaction between neighbours in these two New Urbanist communities. When asked how often during a week do you speak with your neighbours, the responses were similar between the two cases. It appears that both groups surveyed engage in a rather high level of neighborly interaction. The following question was used to determine where people talk to their neighbours most frequently. The most frequent response by far, in both

communities was the "street", followed by the "backyard" and then the "neighbourhood square". Thus, the New Urbanist design elements, such as low set-backs, narrower streets, higher densities, one-way streets, homes built around a square, garages in the rear and smaller lot sizes, appear to facilitate resident interaction on the square in both communities. As the architect, Louis Khan (1991) says, "a street is a living room by agreement".[12] In this case, the residents sampled in both communities have agreed to use the public space that their homes front on as an outdoor room with the ever-changing sky as the ceiling.

Almost identical results between the two developments were obtained from the question concerning satisfaction with current levels of neighbourly interaction (Table 5). The only respondent who answered negatively at Angus Park, wrote additional comments that personally he thought his neighbour was an "idiot" and that this was the biggest problem, in his opinion, with life in the neighbourhood.

Table 5. Are you Satisfied with Current Levels of Neighbour Interaction?

Frequency of Responses	Bois-Franc (n=22)	Angus Park (n=22)
Yes, would like increase	2	2
Yes, stay the same	19	19
No, decrease it	0	1

Results indicate that many residents surveyed in both developments are comfortable asking their neighbour to borrow a cup of sugar. There were fifteen positive responses and only four negative ones at Bois-Franc and thirteen positive and five negative ones at Angus Park. Those that answered negatively added that there was a formal relationship between themselves and the neighbour and that this would not be an appropriate course of action.

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[12] Leccese & McCormick, (eds.)., 116.

When asked, "Do you have a community newsletter or social events designed to meet neighbours?", the majority of respondents in both groups replied, "No" (thirteen at Bois-Franc and seventeen at Angus). At Angus Park, however, there is a community newsletter produced by CP Rail and there are regular public consultation meetings concerning the use of the industrial mall and the development of the large Parc Jean Duceppe. According to Nozick (1992), Jacobs (1961), and many others, events such as barbecues, picnics and clean up parties serve to contribute to a greater sense of community and identification with place. A common focus, such as a community newsletter is an effective way to increase social interaction and make connections between people.

4.11 Rating the Neighbourhood

Questions # 45, 47 and 50 ask respondents to rate what features they like best about their communities, why they moved into this particular community and how they rank the level of community cohesion, friendliness, quality of parks and squares, quality of landscaping and provision of community and recreational services. The greatest number of responses amongst those sampled in both projects was "the neighbourhood" as the number one best feature. Following a close second, are the "house" and then the "square". A higher number of responses were marked for the backyard at Angus Park than at Bois-Franc, perhaps because the backyards at Angus are utilized more frequently and the fencing is subject to far less strict codes than those at Bois-Franc. As well, many of those at Angus came from densely populated central city sectors and probably never had any kind of yard whatsoever and are therefore delighted with a small urban garden.

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Those at Bois-Franc report higher numbers originating from other suburbs where backyards were probably larger, therefore the less satisfaction with the small lot sizes.

At Bois-Franc it appears that the overall plan of the development was the most commonly expressed reason amongst respondents for choosing this project, followed in order by proximity to work, urban planning, range of homes and home models and styles. At Angus Park, the most frequent response was proximity to work, followed in order by overall plan, squares and range of homes available. It appears that those respondents who bought at Bois-Franc, valued the overall plan, the urban planning concepts, the quality of construction, the value of the investment and the architectural styles more often than those who bought at Angus Park. Respondents reported having confidence in the financial power and quality associated with Bombardier and they liked the classicism of the architectural style. Friends also played a bigger role in influencing a decision to move into Bois-Franc. Several people spoken to, bought here because a friend was already living here and was very pleased with life in the community. Obviously, the New Urbanism concept, the state-of-the-art design, attracted many to buy at Bois-Franc. These results indicate that the concept of facilitating greater social interaction between neighbours living around a square is viable.

At Angus Park, many people revealed that the homes were affordable, close to work and school, as many of the current residents previously lived in areas close by, the overall plan was appealing and the square design created a lovely suburban way of life in the central city. Not as many respondents in Angus Park reported friends, overall plan, quality of construction, value of investment, architectural styles, and urban planning as factors influencing decisions to move here. More practical day-to-day factors influenced

buyers at Angus Park, whereas the state-of-the-art planning and the overall image convinced more at Bois-Franc to settle there. Thus, the sampled population at Bois-Franc tends to be slightly more homogeneous in terms of socio-economic status and more concerned with purchasing a marketable product. Planners must be careful in designing New Urbanist developments so as not to create havens or gated communities for the economically advantaged, sharing common conservative values and family demographics. The premise of New Urbanism is to attract a diverse mix of people at all different socio-economic levels and life stages to come together in interactive, vibrant, exciting, mixed-use communities.

The final ranked response question is #50, "How do you rate your neighbourhood on the following?" The five most important characteristics for the purposes of this study are 1) community cohesion, 2) friendliness, 3) quality of parks and squares, 4) quality of landscaping and 5) recreational and community services. The results are very similar in the two cases. There is a slightly lower ranking of community cohesion in the Bois-Franc sample when compared to Angus Park which could be attributed to many different factors including demographics, ethnicity, cultural mores, socio-economic status, occupation, income, travel patterns and individual characters. Both groups record lower rankings concerning recreation and community services. This may change in Angus Park when the Parc Jean Duceppe is completed and the Parc des Locomotives. At Bois-Franc, the borough of St-Laurent has a large recreational facility with playing fields located immediately adjacent and within walking distance to the site. At Angus Park, the pre-existing recreational facilties at the Olympic Park are within walking distance as are the other city facilities of the surrounding areas.

4.12 Concerns and Additional Comments

Any misgivings and additional comments were received in the form of open-ended questions and within interviews. At Angus Park, respondents remarked that they were concerned with: 1) the quality of the construction, 2) the quality of the finishing of homes, 3) the look of the homes, 4) the frequency of service by the borough, 5) crime, 6) police surveillance, 7) demographics, 8) neighbours, 9) quality of schools, 10) being pioneers in the new neighbourhood, 11) losing money on their investment, and 12) the level of soil decontamination.

The biggest problems recorded at Angus Park are the speeding cars on 6th Avenue. Instead of 50 kilometres, residents surveyed felt that the limit should be 30 kilometres to ensure the safety of children playing in the squares. Problems with parking on the narrow streets and near congested construction sites are cited, as are problems with traffic circulation due to the street layout. Problems with children and dogs in the squares are reported in interviews due to owner's not picking up after their pets.

The higher densities and small backyards are seen as problems by some respondents who disliked the lack of privacy and intimacy associated with small neo-traditional lots. The poor quality of landscaping in the square is noted by some, as is the harsh street lighting being directed into the homes at night. The lack of underground wiring was noted by only one person at Angus Park. This is interesting because Pierre St-Cyr feels that this, coupled with the wide width of the main streets, is the biggest fault at Angus Park. As many of the respondents come from the central city, they are probably used to living with hydro poles in the backyards and are not bothered by them since the surrounding neighbourhoods all have them.

At Bois-Franc, concerns involved the newness of the project, distance from schools, density, being too close to neighbours, making mortgage payments, multiculturalism, the price of the house, unfinished construction details, and airplane noise. The biggest problems perceived by sampled respondents here were airplane noise, inadequate exterior parking, too few speed bumps, not enough playgrounds for children, the formal square landscaping, ease of access to a large supermarket, no quality grocery store on site, litter, lack of a dog park and lack of a bicycle path.

Additional comments made at Bois-Franc include the perceptions that "it feels like the suburbs in the city" and that the location is a good compromise between downtown Montreal and the more far reaching suburbs of Laval, the West Island or the South Shore. The ease of commuting downtown, primarily by private automobile, is appreciated by many surveyed in the project. The quality of the neighbourhood, the overall design and the quality of construction, were also cited as positive attributes of the Bois-Franc development.

Results from the respondents interviewed and surveyed at Bois-Franc and Angus Park indicate satisfaction with the quality of life on the square and the social interaction and sense of community that it serves to facilitate. New Urbanist design features cannot change people's behaviours, but can foster neighbour interaction to enhance a community's sense of place, identity and belonging. People are the most important components of the New Urbanist design features. It is people who create communities within the public spaces and within neighbourhoods and who relay their experiences.

4.13 Interview Results

The material gathered from interviews with residents, developers, architects and planners provides the rich human analysis of experience regarding social interaction in the squares and the ensuing quality of life. Interviews are an effective method by which to gain insight into complex human behaviours, opinions, perceptions and experiences within the two communities under study. Following are some anecdotal evidence and interview results from each of the two developments.

4.13.1 Bois-Franc

On Square Jean-Rostand, an interview with a single woman, a psychologist specializing in family mediation, revealed that she fertilized the tree planted outside her front window and that she is pleased that it has grown quite a bit larger than the others planted in front of each townhouse. She remarked that people take beautiful care of their own small front yards and that residents came together to share the costs of snow removal for the common driveway, which is the only common space. Other than this, there are no condominium fees as each home takes care of its private space. The woman liked the "European design of the project", but admitted that the higher density took getting used to after moving from an old house on a large property set far back from the street.

Regarding the square, she noted that the City maintains it, but pointed out that there were no flowers planted yet because of a blue-collar labour dispute. The square was felt to be "beautiful with a nice sound emanating from the fountain in the middle". She remarked that it was pleasant to sit around the fountain in the late evening in warmer weather, chatting to other residents and listening to the sound of the splashing water. In the summer she remarked that there are wedding photos staged daily at the bridge over the pond and that many residents "gather at the pond in the summer evenings to talk and

feed the fish". However, she made strong comments concerning the airplane noise at the site. For her, the noise of international flights all weekend from 5 p.m. until 7 p.m. is a real problem particularly when the weather warms up because it is difficult to enjoy the backyard deck or leave the windows open due to the noise and pollution from the jets. Air conditioning is a necessity for living comfortably in the project. In winter, the problem is "not so bad because everything is closed up". She noted that one must never bring potential buyers to the development during the peak airplane hours because it "would be a very difficult sell".

Reasons for moving to Bois-Franc were the urban design, the increasing real estate values and to be closer to her daughter, son-in-law and grandchildren who live on the only square in the project with playground equipment. Her daughter and husband moved here from the central city because the location is halfway between her work downtown and her husband's north of Montreal Island. She believes that the developer placed the only children's playground in the noisiest area of the flight path to attract buyers with young children. In her own words, "now that they're there, they aren't planning on building any more squares or playgrounds". Her daughter and many more like her are selling their homes for a profit and moving to a quieter location within the project, near the golf course. They feel that although there are no plans for a park in the quieter area, it is "worth it to be away from the airplane noise". The closing comment in this interview was that the project is a "fancy ghetto", where "we still have to get in our cars and drive to all the shopping and recreational facilities and work".

Another interview with a mother of young children living on Square Jean-Rostand revealed that "the square is beautiful, but look at it, it's formal, it's not a playground

designed for kids, but kids and parents do use it – they sit around the fountain and the kids draw on the pavement with chalk". She explained that the young children ride their bicycles on the paths in the square and not on the street because she felt it to be too dangerous, although cars are "pretty good about slowing down in the street". During the interview there were several children between the ages of eight and thirteen riding their bicycles on the street. According to her, the children interact a lot in the square and they use the paved paths for rollerblading and skateboarding. She would like to see the square fenced but the developer refused due to insurance reasons and by-law regulations.

An interview with a resident of Square Lamartine indicated that it was "too early to ask people about their perceptions of life and social interaction here because most people had been here only one year and that this was the first year that they could use the square". "The grass was planted only last fall and they couldn't use it because it had to establish itself". "People probably couldn't give an accurate picture of their life here – they suggested asking people at Square Jean-Rostand which was built three or four years ago and where residents were more established. At the time of this interview, there were a few children riding bicycles on the street and the respondent was tending his front garden and visiting with another neighbour also tending to his front garden. During the interview, the man suggested other possible interview candidates who had lived in the project a longer time or who look after the children in the square and on the street. This man said that he and some of his neighbours had received "a questionnaire in the mail in French, similar to this one, but from a university in Michigan". He was sympathetic to the interview and questionnaire process, he explained, because he did social science research. Two women also interviewed at Square Lamartine remarked that they were

very pleased with the English style architecture of their homes and that they were satisfied that children could play safely on the street and in the square and that "people look out for each other's kids here".

Interviews on the Everest Street square also yielded interesting information from respondents. One young man stated that "people gather to smoke joints at the pond and throw their butts into the pond where the fish eat them and act crazy". Another woman remarked that an example of poor planning is that the homes built around the only children's playground are small and are better suited for a couple or family with only one child as one of the upstairs bedrooms is too small to fit a bed into. A woman also living on the Everest Square explained that she "doesn't know if greater social interaction is facilitated through the New Urbanist design because it depends on the individual – some people don't want to be sociable or talk to their neighbours". She posed an important question, "Who says everyone wants to or needs to be sociable?" Her reasons for moving to the development were the location in relation to her work, the quality of the housing and the reasonable price of the real estate.

Speaking with another resident of Everest Square indicated dissatisfaction with the strict architectural covenants employed at Bois-Franc. The respondent regarded Bombardier as "Big Brother" in that they forced him to remove a back deck structure that was previously approved by the borough of Saint-Laurent's planning and architectural department. The man spent money and time building the shelter and was told to remove it completely within a short time frame or else face a hefty daily fine and a bill for the developer to remove it at the owner's expense. In the respondent's words, "you pay all of this money to buy a house, and in the end, you don't really own it, because Bombardier

has the last word on any exterior alterations". It was relayed during the interview that this particular issue was a priority for this individual as the described incident had only just recently occurred. In matters of social interaction and the square, the same respondent was enthusiastic and mentioned that he and his older children use the square to interact with others in the neighbourhood and that there is "always someone around to play with". The square provided a common space in which he could vent his frustrations with the developer over the construction issue by talking with and comparing notes with other homeowners on the square.

An interview with Mr. Fred Corriveau, planner for Bombardier Real Estate, revealed that the inspiration for Bois-Franc's design came from projects near Amsterdam, Berlin, Reston, Virginia, Savannah, Georgia, Celebration, Florida and a location in Sweden where a development was also built on the site of a former airport. He believes that "one must copy other design examples and make modifications to suit your project to your particular location". For example, there are several key differences between the reality of the built project, the ideas embodied in the planner's master plan and the architect's model. The master plan calls for highrise buildings and a greater density, but currently this form of housing does not exist, due to a slump in demand for this type of housing. Now there is a public golf course instead of homes at the northern edge of the site because the market could not support more new construction in the project at the time. Rather than leave the land vacant, a deal was made to operate a public golf course. There is less water in the project than was described in the master plan. There were plans for canals, ponds and lakes but due to the recession of the mid-1990s and a lower than predicted density, these plans were modified and scaled down to suit the economic

realities. The designs of the residential squares were altered from the original master plan concept to suit customer's demands for playground equipment and paved paths.

In accordance with the top-down approach to development favoured by Bombardier, Mr. Corriveau expressed a concern that it is "difficult to control 5000 people's fences, satellite dishes and parking habits", as was the case of the man with the "illegal" back deck structure. He was disappointed that people do not use their underground garages as much as he had planned that they would. He wanted people to interact on the narrower streets and use the street and the square as a place to meet and interact with other residents of the community and not to have large numbers of vehicles parked on the street in front of the homes. The reality he feels, differs from the master plan in that some people like to see their cars from their house for various reasons and that some use their garages as storage space and therefore have no choice but to park on the street.

4.13.2 Angus Park

A woman interviewed at Parc des ferblantiers in Angus Park remarked that living in the project is like "the country in the city". She loves the abundance of natural light and the open green space that the square design provides to each house and the large windows provided. She feels that the square brings vibrancy to the street because many children and adults use it to play in especially since the backyard lots are so small. Although her children are grown up, she appreciates the presence of young children outside her home in the square. Another man on the same street complained about the cheap building materials, but loves the area and the square for children. He had pre-existing social ties to the neighbourhood as he used to visit the site as a child when his

grandfather worked at the locomotive factory. Several people interviewed at Angus Park knew the area well as they had lived in the area previously or had some connection to the factory. A bonus is the ability to walk to the cinema and the nearby Botanical Gardens. He would like to see bicycle paths in the development connecting to the existing city network. He remarked that the residents carry out their own community policing in the square, such as picking up after dogs and removing litter from the square. In one example, they drafted and circulated information to neighbours and to people on adjacent streets telling them to clean up after their dogs and to educate those who do not. Based on this person's experience, this was very effective, people were cooperative and reasonable in their response and the square is a pleasant place to be in and talk with other residents. This interview revealed that Canadian Pacific consulted residents on the placement of street lighting and trees in front of their homes. He chose a smaller tree for his front lawn so that he would receive more natural light into his home. The developer also consulted residents on the use of the industrial buildings on the site. Residents rejected the idea that the space be used for artist studio space because it was felt that nearby on Ontario Street there are several buildings containing artist's lofts.

At the same square, another man interviewed lives with his girlfriend and no children. He explained that they "talk with their neighbours when they walk the dog in the square after work". He mentioned that residents on the street came together to form a petition to allow parking on the end of the square. They were successful in their request and the decision was communicated by an Angus Park newsletter produced by the developer, Canadian Pacific. He loves the area because of the affordable new

construction, the close proximity of public transit and because it is not required to own a car here as one can walk to the grocery store and essential services.

At Parc Micheline-Coulombe-Saint-Marcoux a man interviewed expressed satisfaction with the construction and did not hear his neighbours on the adjoining wall. He was pleased with the increasing real estate value of his home over the past three years and he felt very satisfied with the quality of life in the development. He had misgivings about coming to live in the area because he once lived in the neighbourhood as a child and it was "poor and working class with crime and violence problems". He moved back because he "could buy a new house with a yard for his dog that he could afford and he was already familiar with the neighbourhood." He indicated that he usually drives into his garage and goes right into his house after work, not speaking to anyone. However, later on in the evening, he walks his dog in the square and then engages in "petworking" conversations and connections with other residents.

At Parc Mia-Riddez-Morisset, a woman interviewed expressed her view that the square is a "paradise for kids" and that she feels secure having her children rollerblade on the street or play games in the square. She did not feel that the lack of playground equipment was a problem because the children made up their own games using balls and other items. She would have liked to see, however, more paved hard surface in the square to accommodate young children rollerblading and bicycling. The presence of the square and the level of interaction between neighbours had a strong influence on her decision to purchase a home at Angus Park.

An interesting telephone interview with Mr. Laflamme, a resident of Parc Mia-Riddez-Morisset in Angus Park, revealed that the squares make "a big difference in the

social atmosphere of the neighbourhood". Three years ago, when Mr. Laflamme moved into the project he was unhappy with the level of care that the City provided for the square. He began to water, mow, weed and tend the trees and plantings located just across the street from his home. It was a big job for one person, but he persisted in maintaining the square for the first year until other residents joined in the effort when they saw the difference that his care made to their environment. He believes that living around a square increases the amount of social interaction experienced because most people participate in its maintenance and care. When there is no citizen group such as his, there is "less social interaction in the other squares of the development". Now seven or eight couples cut the grass, water and weed because "the City workers cannot be relied upon". It took time to organize the square's maintenance routine, but Mr. Laflamme is very satisfied with the results and proud of his community and how they have come to work together to care for the square. He stated that "even kids respect the unwritten rules and enforce them, such as not riding bicycles on the grass". He believes that the biggest problem on the square is dog owners who do not clean up after their pets because "young kids and dogs sharing the same park doesn't work". Ideally, he would like to see a dog run established within walking distance of the neighbourhood. Due to the high number of children living at Angus Park, Mr. Laflamme stressed the importance of soccer fields, swimming pools, tennis courts, ice rinks, playing fields and playground equipment being installed at the new Parc Jean-Duceppe on the western edge of the development. Mr. Laflamme stated that he appreciates being able to walk to the grocery store and liquor store and meet neighbours there and on the route to the store.

Two personal interviews with Pierre St-Cyr, the planner for Canadian Pacific Real Estate, revealed that he perceives the project to be a compromise between an urban and suburban model of design, "an urban-suburban way of life" at Angus Park. An important difference from the conventional suburb is the ability to walk to a commercial centre housed in recycled factory buildings. Mr. St-Cyr explained that in terms of resident interaction, it is an interesting mix because about half the owners are from the suburbs and the other half are from the inner-city areas near the site. Because Angus Park is located in the central city, he finds it easier to deal with the people originating from the area. "These people understand the conditions of life in the city". Suburban people, on the other hand, "are more difficult to deal with because they tend to demand more speed bumps and lots of parking everywhere". As with Bois-Franc, compromises and modifications had to be made to the original master plan at Angus Park due to urban planning policies, city politics and bureaucracy. In Mr. St-Cyr's words, "Canadian Pacific has to act responsibly as a corporate citizen and the belief right from the very outset of the project was that Angus belongs to the people". It is the people who make the community, interact and take pride in their surroundings and adapt them to suit their needs as evidenced by the stories told by Mr. Laflamme and others at Angus Park.

Chapter 5

Summary and Conclusions

The primary objective of this thesis was to examine and compare perceived levels of resident interaction amongst those people living around neighbourhood squares in two New Urbanist based communities in Montreal. This thesis sought to gain insight into the relationships between the physical presence of the square and the fostering of a sense of community and identity of place experienced by those residents sampled and interviewed for the study. The research involved examining the attitudes concerning quality of life and levels of satisfaction that residents expressed in connection with the use of the square. Two newly constructed communities – Bois-Franc and Angus Park – were chosen for this comparative study on the basis that they both met a high proportion of the New Urbanist physical design principles, principally, the presence of neighbourhood squares.

The two built projects are inhabited by different populations and were built by the real estate arms of two major transportation corporations, Bombardier Inc. at Bois-Franc and Canadian Pacific at Angus Park. They were constructed on large brownfield sites in different locations in Montreal, a former airport in the case of Bois-Franc and a former locomotive shop at Angus Park. The 494 acre Bois-Franc site was a former airport closed due to concentration of air traffic at nearby Dorval International, when in 1991 the owner, Bombardier Real Estate, hired Daniel Arbour and Associates to produce a master plan for the site. Fred Corriveau, Head Planner at Bombardier Real Estate and his team traveled to several locations in North America and Europe to study New Urbanist based projects. The resulting state-of-the-art design at Bois-Franc follows from Bombardier's compilation and application of several American and European community design

examples drawn from places such as Reston, Virginia, Savannah, Georgia, Sweden and Berlin.

The lack of a contextual dense urban fabric immediately surrounding the Bois-Franc site permitted a greater freedom of urban design and development because there was nothing of the older traditional city to relate to in the newer industrial area of Saint-Laurent. Thus, it was not a problem to install underground services at Bois-Franc, whereas at Angus Park, the hydro wires are overhead with poles in the backyards because the older sector of Montreal in which it is located, this particular traditional urban context, was historically never slated for underground service.

The two developers differ markedly in their development approaches. Canadian Pacific, according to the urban planner, Pierre St-Cyr, adopted a bottom-up approach to the Angus Park development right from the beginning. There was a lot of citizen consultation in the early planning stages and a mandate to remove itself from the project and hand control over to the residents as soon as major construction was completed. Unlike Bois-Franc, there are no corporate imposed architectural guidelines at Angus Park. The planners at Angus Park were forced to work within the framework set by the city's planning department and within the constraints posed by the existing traditional neighbourhood surrounding the site. Unlike at Bois-Franc, pre-existing social capital and relationships at Angus Park are evident. Several of the residents interviewed here explained that they used to visit the site as a child because their relatives worked at the Angus Shops or they once lived in the surrounding older neighbourhood. The design of Angus Park, with its industrial iron sculptures in the square, the preservation of the factory façade and the re-use of the former fire station, grows out of and celebrates local

history. At its peak, 12,000 people worked at the Angus Shops and it was a self-contained community with more than sixty buildings, its own police force and hospital on site. The current development appears to enhance social ties at Angus Park as some residents do share a past with the site and did originate from the neighbourhood. Although the new generation interviewed were primarily university-educated professionals, some of the respondents were proud of their working class Angus Shop roots.

Bombardier was able to adopt a top down approach to development because its aeronautical factories provide thousands of jobs and it is a large tax contributor to the former city of Saint-Laurent. Due to its financial clout and worldwide reputation, Bombardier basically had "carte blanche" to develop its large site. Therefore, the state-of-the-art Bois-Franc Master Plan was approved by the municipal government of Saint-Laurent very efficiently compared to the slower bureaucratic process encountered by Canadian Pacific in the much larger machinery of the Montreal city government. Though Canadian Pacific has historically played an important role in Montreal's economy, the fact that the site was in Montreal meant that the development process was more complex than that at a smaller, more easily navigable municipality such as Saint-Laurent. At Angus Park, though there was a master plan, there was no continuity between the players involved in the development, as was the case between Hydro Quebec and the city, because of urban policies and politics. Although the chief planner at Canadian Pacific had once worked for the City of Montreal planning department and knew many of the players, he still had difficulty navigating the approval process for various aspects of the project and compromises had to be made. Examples of these are the lack of underground services at Angus Park, the wider than desired Midway Avenue, the lack of speed bumps,

the lack of small commercial venues interspersed in the residential blocks due to lobbying of nearby merchants and the landscaping of the squares. Canadian Pacific's planner claims that fountains and elaborate plantings were not furnished in the Angus Park squares because their functioning is problematic in Montreal's harsh winters and that the city blue-collar workers are apt to strike and are unable to reliably maintain fountains and plantings. The Bois-Franc master plan is a comprehensive document that was formulated by professionals and implemented with little input from ordinary citizens. At Angus Park, in contrast, there was a lot of citizen consultation in the initial planning stages of the development. For instance, most residents consulted in both communities did not want playground equipment in the squares at the time of construction, though faced now with a high population of young children, some would like to have more equipment for children installed. Perhaps this may happen at Angus Park where the developer chose not to impose its own architectural covenants, but to follow only the City's bylaws and the builder's housing facades. At Bois-Franc, however, there are strict architectural guidelines in place, regarding fencing, exterior alterations, colours, doors, satellite dishes and windows that owners are required to adhere to. One man interviewed was upset that his enclosed back sun deck had to be removed even though the plans had been approved by the municipality, because it did not meet Bombardier's strict architectural guidelines.

The research consisted of a questionnaire survey at both sites, aimed at a small sample of residents living in row houses directly across from a residential square and in-depth interviews with residents, planners, developers, and architects. Direct observation and on-site photography were integral components to this research. Qualitative interview

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techniques were employed in order to obtain first-hand responses and attitudes towards resident interaction in the square. Due to the small number of residents sampled, it was felt that the information obtained from quality, in-depth interviews was valuable and indicated perceptions of social interaction within the square. The humanistic approach was used to gather and analyze resident's perceptions, levels of satisfaction, and attitudes towards quality of life and social interaction within their New Urbanist communities.

The New Urbanist planning movement was conceived by those architects and planners such as Leon Krier (1998), Andres Duany and Elizabeth Plater-Zyberk (1989, 1991, 1992, 2000) in reaction to what many believe to be the rampant spread of socially isolated, placeless suburban sprawl on our landscapes. Suburban life was once considered by early planners, visionaries and theorists such as Raymond Unwin (1909), Ebenezer Howard (1945) and John Nolen (1912), to be a healthy, progressive form of settlement in response to dirty, overcrowded cities. Along the way, with the unanticipated dominance of the automobile, an unquenchable thirst for farmland and extreme segregation of land uses, the conventional suburb, at least in the minds of planners, architects, sociologists and environmentalists, lost much of its original appeal. The wide suburban streets, devoid of pedestrians and sidewalks, the dominance of the garage on the front façade of the home, the large exclusionary lots, the alienating low densities, and the necessity of having to drive everywhere are realities in the conventional suburban landscape. These realities, however, are still sought after by many consumers in our society and they will not disappear with the rise of New Urbanism. The acquisition of a single-family suburban home on a large lot epitomizes the American Dream for millions of people in our society. According to Audirac and Shermyn (1994),

it is wrong to assume that everyone wants to pay for and adopt New Urbanist lifestyles in compact, pedestrian oriented developments. It is only through education and by example that the environmental, social and economic ills created by conventional suburban sprawl can be brought into society's consciousness.

Based on the interview material, the two communities in this study are successful examples of New Urbanism social principles practically applied in that social interaction is fostered within the square. These two developments have attempted to adapt traditional neighbourhood design elements, particularly the square, to the realities of modern lifestyles and the metropolitan context in which they are located. Compromises, particularly concerning the demands and usage of cars and pedestrian accessibility must be made in order for New Urbanism to satisfy consumer preferences and to evolve as a viable planning concept. Based on the results and interviews presented in Chapter 4, many residents surveyed in both developments do feel a strong sense of community and do in fact, use and enjoy the residential square as a community gathering place to interact with neighbours and play with their children. Interviews indicate many feel an overall satisfaction with life in the community in Bois-Franc and Angus Park.

With respect to automobile domination, the reality is that most people drive to work and school no matter where they live. The well-known architect, Moshe Safdie (1998), believes that no development project will be successful if it limits or reduces personal mobility, primarily automotive mobility. At Bois-Franc, the majority surveyed felt that a car was critical for life in the community because there was no large grocery store within walking distance, public bus service was infrequent, and the car was required for work or for transporting children to school and activities. For most of those sampled

at Bois-Franc, public transit represents inconvenience and a limit on their activities and lifestyle. These patterns are not surprising at Bois-Franc because it is located in an isolated suburban location, not well integrated with the immediate industrial park surroundings. Despite this, many interviewed at Bois-Franc walk to the Grand Place store or café to enjoy a coffee outside on the plaza by the central fountain or walk to the large Parc Marcel-Laurin for sports activities.

Angus Park, on the other hand, occupies a central city position that, despite a few problems, is integrating well with the older traditional neighbourhoods surrounding it. At Angus Park the majority of responses indicated that people felt that a car was not necessary in their community because there is a large supermarket within walking distance, the public transit network is good and everything they may need is within walking distance. These results reflect the fact that Angus Park is situated within the central city of Montreal and can be considered more in-fill brownfield development than Bois-Franc. Thus, residents of Angus Park may use the pre-existing facilities and rich, traditional urban patterns and context that immediately surround the site.

As presented in Chapter 2, there is much literature on the concepts of community, neighbourhood, sociability, and the link between physical design and the fostering of greater levels of social interaction and sense of community. New Urbanists recognize that physical design may not determine behaviour, but that it will aid in the cultivation of connections between people and between people and their environments. Architecture and urban design can foster greater social interaction by providing opportunities for gathering and connecting. The residential square is one spatial design that facilitates community building. What people do with the physical space determines the shape and form of the community

developed within. From this research, it appears that people living near the squares have used the space in the manner in which it was designed for. That is, the end result is to bring vibrancy, interaction, variety and sense of belonging to the residential streetscape.

Interviews with residents in both developments indicate that many feel there is a positive relationship between the square and resident social interaction. Responses from residents indicate that the square serves to enhance interaction in both communities. At Bois-Franc, several people interviewed appreciated the fact that either themselves or a neighbour were able to look out for their children playing in the street or square and that the close proximity of neighbours and the square contributed to a greater sense of security and friendliness in the neighbourhood. Not only children use the square as revealed by some respondents at Bois-Franc without children. A young man, a couple and an older single woman indicated that they liked to sit on the benches around the fountain and talk with other neighbours particularly during warm evenings. These people indicated that they met some new friends and were able to get to know their neighbours better by stopping to chat around the fountain in the square.

At Angus Park, an interview with a resident, Mr. Laflamme indicated that there is a strong association between the square and neighbourly interaction. Mr. Laflamme revealed that he was dissatisfied with the City's maintenance of the square and feeling a deep sense of pride and identity with his community, he therefore took it upon himself to assume stewardship of the square around which he lives. Admittedly, this was a large project and one that he realized after the first year, would be difficult to sustain on his own. However, he persevered, tending the grass, picking up litter, mowing and watering until he met other neighbours who joined his effort the second year, to beautify and care for the square.

Currently there are several households who actively minister to the square's needs and according to Mr. Laflamme, the system is working very well with good communication, relations and satisfaction amongst the residents.

Another example at Angus Park of the square acting as a social facilitator is the dog issue. A lengthy interview with one resident indicated that some of the residents were unhappy with the presence of dog excrement and unleashed dogs in the square, particularly because of the high number of young children playing there. People tend to band together in the face of a shared source of conflict. Thus, some of the residents took it upon themselves to self-police the space and formulate written guidelines regarding dogs in the square. These guidelines were distributed to households around the square and on neighbouring streets where dogs were thought to be originating. According to the interview, most people were very receptive and respectful towards the dog rules and the neighbours on the square agreed to look out for any infractions and to educate those coming to use the square with their dogs. A sign of healthy social interaction is that some of the residents are petitioning the City to establish a dog run within walking distance of the neighbourhood in order to satisfy that particular group's demands and avoid future conflicts.

Philip Langdon (1990, 1994,1997) and others believe in the ability of New Urbanism design to make community. The human scale of the developments at the block level, the fact that people are walking more and spending more time outside in the residential square, as is the case at Angus Park and Bois-Franc, combine to form a healthier social life and greater neighbourliness between residents. In order to create walkable, socially interactive communities however, there must be support for changes in urban public policy, zoning, public transportation and location of public buildings, green spaces and services. As Audirac

and Shermyn (1994), Langdon (1997) questions the demand for New Urbanist communities. Perhaps walkable, socially interactive communities are just a small market niche and that only people who desire to know their neighbours or embody wholesome family values akin to "Mister Roger's Neighbourhood" will choose to live in New Urbanist developments.

Whatever the case, New Urbanism is an exciting planning movement because it is attempting to implement sustainable growth patterns coupled with dynamic mixed land use patterns to form compact communities inhabited by a socially interactive diverse mix of people. It is providing an interesting alternative to conventional suburbia in Montreal and elsewhere that deserves to be further studied and evaluated. The concepts of sense of community, social interaction and sense of place are complex and spurious. Creating these concepts is an elusive and difficult challenge for urban designers, planners and architects. Perhaps time, a factor that even the most well thought out design cannot provide, will reveal the success or failures of the New Urbanist foundations laid in the spirit of true community building.

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APPENDIX A
Map of Montreal Island

Source: www.boisfranc.com, September 9, 2003

APPENDIX B

Map of Bois-Franc
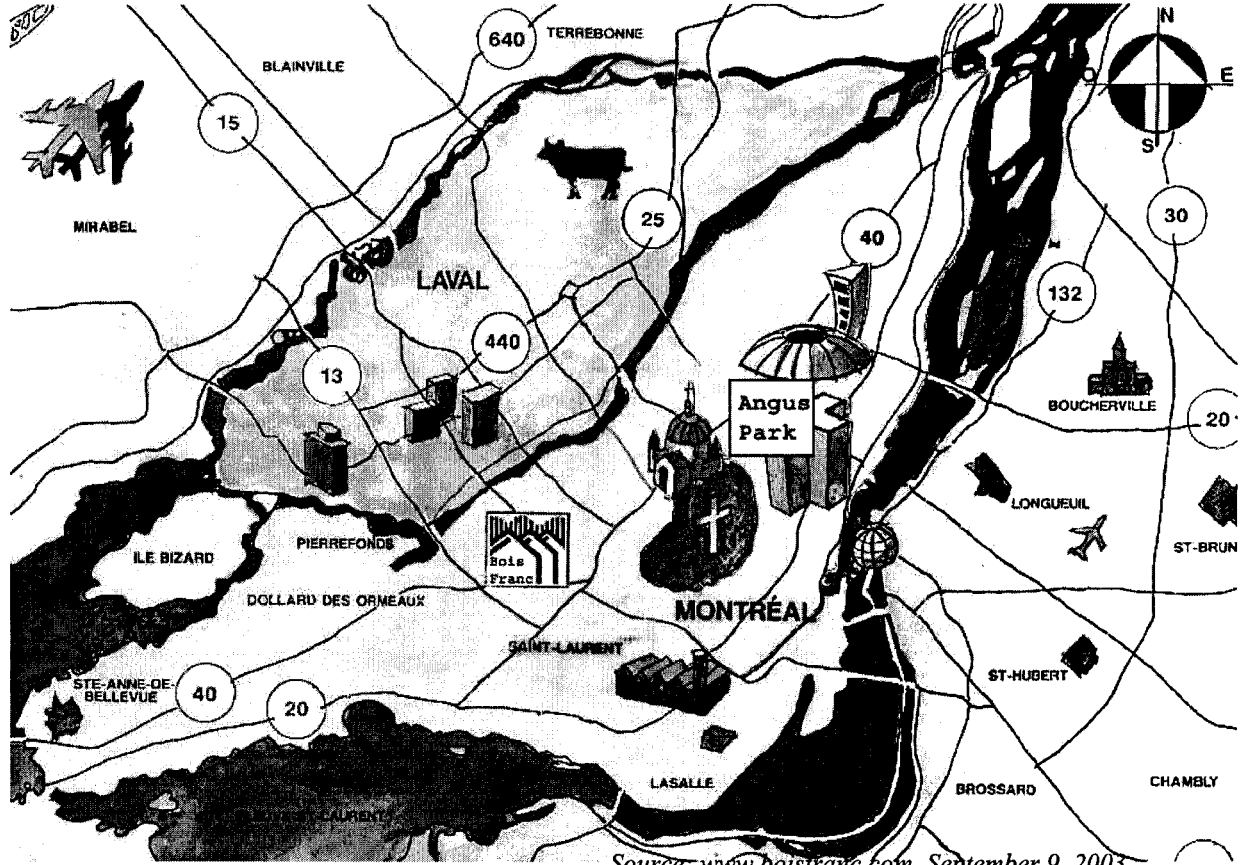
Maisons Témoins / Model Homes

Montclair
① 2291, rue Maryse-Bastié — 339-5362

GROUPE MALTAIS
② 2550, boul. Poirier — 335-3369

GROUPE SOTRAMONT
③ 2565, boul. Poirier — 856-6861

Centre de Location
④ 2525, de l'Acajou app # 108 *code 38* — 332-2842

Legend:
- Rues pavées
- Rues en construction
- Rues projetées
- Parcs, plans d'eau et placettes
- Position des maisons modèles

BOULEVARD CAVENDISH
GOLF "LE CHALLENGER"
LA GRAND-PLACE
PARC MARCEL-LAURIN
BASSIN DE LA BRUNANTE
BOULEVARD ALEXIS-NIHON
RUE DE L'ÉVEREST
RUE ROBERT-PEARY
RUE DU PIRÉE
RUE CHARLES-DARWIN
RUE HARRIET-QUIMBY
RUE DES NATIONS
RUE MARYSE-BASTIÉ
RUE DE COGNAC
RUE DE COLOGNE
RUE HENRI-MARCHAL
RUE D'ANNE-MONTGOLFIER
AVENUE FÉLIX-LECLERC
RUE AMELIA-CARHART
RUE DE LA BURDE
RUE DE CHAMONIX
RUE DES NATIONS
PLACE CHERRY
BOULEVARD THIMENS
PLACETTE DE L'HIMALAYA

APPENDIX C

Map of Angus Park
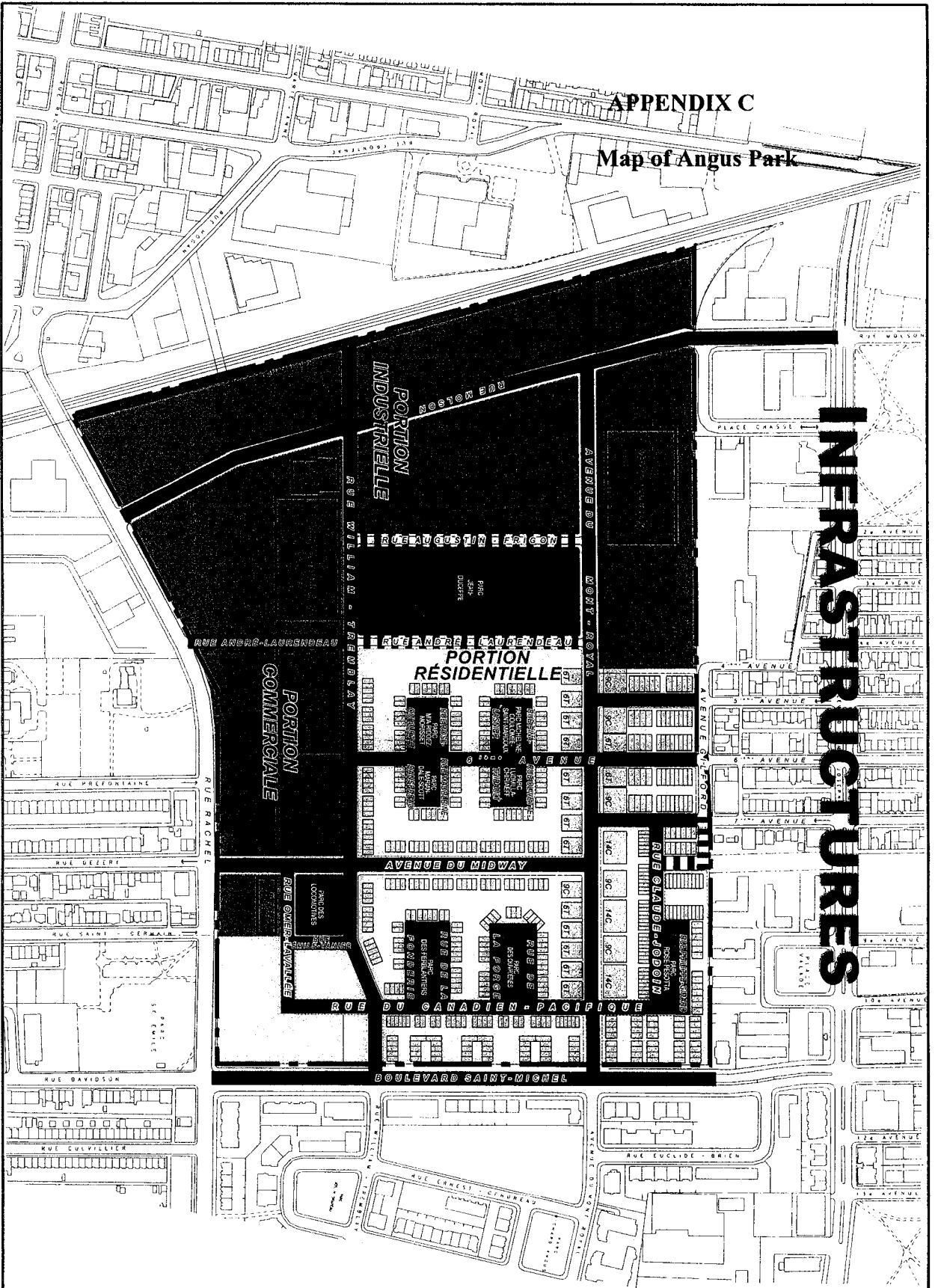
QUESTIONNAIRE
Université Concordia / *Concordia University, Montréal, Qc*
Département de la géographie/ *Department of Geography*

Bonjour, mon nom est Lesley Pretula et je conduis cette enquête de questionnaire en tant qu'élément des travaux avec des cas sociaux pour ma maîtrise. Cette étude est concernée par les niveaux de l'interaction sociale au sein des communautés Nouvelle Urbanist. Votre coopération dans ce questionnaire serait considérablement appréciée. **Toute l'information est confidentielle et apparaîtra seulement dans ma thèse. Vous êtes libre pour finir votre participation à tout moment si vous souhaitez.**

*Hello, my name is Lesley Pretula and I am conducting this questionnaire survey as part of the fieldwork for my Master's Thesis. This study is concerned with the levels of social interaction within New Urbanist communities. Your cooperation in this questionnaire would be greatly appreciated. **All information is confidential and will appear only in my thesis. You are free to end your involvement at any time if you wish.***

ENCERCLEZ VOS RÉPONSES / *PLEASE CIRCLE YOUR RESPONSE(S)*

1. Mâle / *Male*   Femelle / *Female*

2. Quel est votre groupe d'âge? / *What is your age group?*

15 – 19	41 - 50
20 – 30	51- 60
31 - 40	61 et plus / *& over*

3. Est-ce que vous travaillez maintenant? / *Do you currently work?*

Oui / *Yes*   Non / *No*   Retraité / *Retired*

4. Si vous avez répondu « OUI », est-ce que vous travaillez : / *If « YES », do you work :*

Plein temps / *Full-time*	Saisonnier / *Seasonal*
Temps partiel / *Part-time*	Sur contrat / *Contract work*

5. Quelle est votre occupation ou votre métier? / *What is your occupation or trade?*

_____

Quelle est l'occupation ou le métier de votre conjoint(e)? / *What is your spouse's trade?*

_____

6. Quelle est votre langue maternelle? / *What is your mother tongue?*

        Français / *French*   Autre / *Other* _____

        Anglais / *English*

7. Votre pays d'origine est ? / *What is your country of origin?*

        Canada / *Canada*

        Autre / *Other*_____

8. Est-ce que vous possédez ou louez votre maison? / *Do you own or rent your house?*

_____

9. Où avez-vous habité avant de se déplacer ici? / *Where did you live before moving here?*

_____

10. Veuillez énumérer le nombre de personnes vivant de manière permanente dans votre ménage / *Please list the number of people permanently living in your household* :

        Adultes/ *Adults*_____

        Enfants au-dessous de 18 ans/ *Children under the age of 18*_____

11. Avez-vous des animaux de compagnie? Si oui, combien et quelle sorte? / *Do you have any pets? If yes, how many and what kind?*

_____

12. Combien de véhicules possédez-vous?/ *How many vehicles do you own?*_____

13. Où stationnez-vous votre voiture?/ *Where do you park your car?*

        Dans la rue/ *The street*   Dans l'allée/ *Driveway*

        Le garage / *Garage*

14. À votre avis, pouvez-vous parvenir à vivre ici sans voiture? / *In your opinion, are you able to manage living here without a car?*

        Oui/ *Yes*   Non/ *No*   Pas sûr/ *Not sure*

Expliquez/*Explain*_____

_____

_____

15. Quelle est la distance entre votre maison et votre lieu de travail?/ *What is the distance between your home and your workplace?*

0 – 5 km   6 – 10 km   50 km et plus/ *or more*
11 – 20 km   21- 50 km

Je n'ai pas à me rendre au travail/ *I do not travel to work*

16. Quelle est la distance entre votre maison et le lieu de travail de votre conjoint(e)?/ *What is the distance between your home and your spouse's workplace?*

0 – 5 km   6 – 10 km   50 km et plus/ *or more*
11 – 20 km   21 – 50 km

Il (elle) n'a pas à se rendre au travail/ *He (she) does not travel to work.*

17. Comment voyagez-vous au travail?/ *How do you travel to work ?*

Transport en commun/ *Public transit*   Marche/ *Walking*
Voiture / *Car*   Taxi

18. Veuillez encircler si vous marchez au suivant et combien de minutes cela prend : /
Please circle if you walk to the following and how many minutes it takes :

Ami(e)s / *Friends*_____   École/*School*_____
Parents/ *Relatives*_____   Arrêt d'autobus/ *Bus stop*___
Magasin/ *Store*_____   Café_____
Travail/ *Work*_____   Banque/ *Bank*_____
Parc/ *Park*_____   Église/ *Church*_____
Équipements de récréation/ *Recreational facilities*_____

19. Est-ce que vous estimez que les voitures vont trop rapides sur votre rue ou qu'elles stationnent illégalement? / *Do you feel that speeding and illegal parking are problems on your street?*

Oui / *Yes*   Non / *No*   Pas sûr/ *Not sure*

20. Êtes-vous satisfaits du nombre de piétons à traversier et de bosses de vitesse dans ton quartier?/ *Are you satisfied with the number of crosswalks and speed bumps in your neighbourhood?*

1	2	3	4	5
Très insatisfait	Insatisfait	Satisfait	Très satisfait	Pas de réponse
Very unsatisfied	*Unsatisfied*	*Satisfied*	*Very satisfied*	*No answer*

21. Êtes-vous satisfaits de la largeur de la rue? / *Are you satisfied with the street width?*

1	2	3	4	5
Très insatisfait	Insatisfait	Satisfait	Très satisfait	Pas de réponse
Very unsatisfied	*Unsatisfied*	*Satisfied*	*Very satisfied*	*No answer*

22. Êtes-vous satisfaits du niveau de la sûreté sur votre rue? / *Are you satisfied with the level of safety on your street?*

1	2	3	4	5
Très insatisfait	Insatisfait	Satisfait	Très satisfait	Pas de réponse
Very unsatisfied	*Unsatisfied*	*Satisfied*	*Very satisfied*	*No answer*

23. Êtes-vous satisfaits des trottoirs? / Are you satisfied with the sidewalks?

1	2	3	4	5
Très insatisfait	Insatisfait	Satisfait	Très satisfait	Pas de réponse
Very unsatisfied	*Unsatisfied*	*Satisfied*	*Very satisfied*	*No answer*

24. Vous sentez-vous confortable quand vos enfants jouent dans la rue ou dans la place?/ *Do you feel comfortable having your children play in the street or in the square?*

1	2	3	4	5
Très insatisfait	Insatisfait	Satisfait	Très satisfait	Pas de réponse
Very unsatisfied	*Unsatisfied*	*Satisfied*	*Very satisfied*	*No answer*

25. Veuillez encirclez les endroits où les enfants jouent le plus fréquemment: / *Please circle the places where children play most frequently :*
(Vous pouvez encircler plus d'une, mais soulignez la plus importante/ *Circle all that apply, but underline the most important one.)*

La rue / *Street*　　　　　　　　　École / *School*
Parc / *Park*　　　　　　　　　　　Le quartier / *Neighbourhood*
Place/ *Square*　　　　　　　　　　Cour de jeu/ *Playground*
Dehors, mais sur ma propriété / *Outside, but on my property*
À l'intérieur de ma maison / *Inside my house*
La maison d'un(e) ami(e) / *A friend's house*
Autre / *Other*_____

26. Comment considérez-vous la place? / *How do you consider the square or place?*
　　　　Comme une éspace:/ *As a space that is :*

Privé/ *Private*   Demi-privé/ *Semi-private*   Public/*Public*

27. Considérez-vous la place comme une prolongation de votre cour?/ *Do you consider the square as an extension of your front yard?*

Oui/ *Yes*   Non/ *No*   Pas sûr/*Not sure*

28. Qui emploie la place le plus fréquemment?/ *Who uses the square most frequently?* (Vous pouvez encircler plus d'une, mais soulignez la plus importante/ *Circle all that apply, but underline the most important one.)*

Étudiant(e)s/ *Students*   Jeunes enfants/ *Young children*
Adolescent(e)s/ *Teenagers*   Enfants avec les parents/ *Children with parents*
Adultes/ *Adults*   Enfants avec un gardien/ *Children with caregiver*
Retraités/ *Seniors*   Les chiens/ *Dogs*

29. D'autres des rues adjacentes emploient-elles votre place?/ *Do others from adjacent streets use your square?*

Jamais/ *Never*   Fréquemment/*Frequently*   Très fréquemment/*Very frequently*

30. Qui s'occupe de la place (ramasser les ordures, excrément des chiens, le jardinage)?/ *Who looks after the square (picking up litter, dog excrement, gardening)?*

Moi-même/ *Myself*   La ville/ *The city*
D'autres résidant(e)s/ *Other residents*   Propriétaires de chien / *Dog owners*

31. Comment la conception de rue et la place affecte-t-elle la votre vie et activités? / *How does the design of the street and the square affect your life and activities?*

_____

_____

_____

_____

32. Quels changements feriez-vous à la conception de la place(l'aménagement, les bancs, équipement de cour de jeu, équipement des sports, la surface, l'éclairage, la sculpture, une fontaine)?/ *What changes would you make to the design of the square (landscaping, benches, playground equipment, sporting equipment, the surface, sculpture, fountain)?*

_____

_____

_____

33. Le promoteur de construction vous a-t-il consulté au sujet de la conception de la place? / *Did the developer consult you regarding the design of the square?*

Oui/ *Yes*   Non/ *No*   Pas sûr/ *Not sure*

34. Estimez-vous que la vie sur une place augmente votre contact social avec des voisins?/ *Do you feel that having homes built around a square increases social interaction with neighbours?*

Oui / *Yes*   Non/ *No*   Pas sûr/ *Not sure*

Augmente-t-il votre qualité de la vie?/ *Does it increase your quality of life?*

Oui/ *Yes*   Non/ *No*   Pas sûr/ *Not sure*

35. Êtes-vous satisfaits des arrêtés municipals de clôture et d'aménagement dans le quartier ?/ *Are you satisfied with the fencing and landscaping by-laws in your neighbourhood?*

Oui/ *Yes*   Non/ *No*   Pas sûr/ *Not sure*

Si NON,pourquoi pas?/ *If NO, why not?* _____

_____

_____

36. Êtes-vous satisfaits de la densité de votre voisinage?/ *Are you satisfied with the density of your neighbourhood?*

1	2	3	4	5
Très insatisfait	Insatisfait	Satisfait	Très satisfait	Pas de réponse
Very unsatisfied	*Unsatisfied*	*Satisfied*	*Very satisfied*	*No answer*

37. Êtes-vous satisfaits du niveau de l'intimité et de la quantité de bruit à votre maison?/ *Are you satisfied with the level of privacy and the amount of noise at your home?*

1	2	3	4	5
Très insatisfait	Insatisfait	Satisfait	Très satisfait	Pas de réponse
Very unsatisfied	*Unsatisfied*	*Satisfied*	*Very satisfied*	*No answer*

38. Estimez-vous qu'il y a assez d'espace verte ou des parcs dans le voisinage?/ Do you feel that there is adequate green space or parks in your neighbourhood?

Oui/ *Yes*   Non/ *No*   Pas sûr/ *Not sure*

39. Est-ce qu'il y a un centre de récréation ou social dans le projet? *Is there a community or recreational centre in the project?*

Oui/ *Yes*   Non/ *No*   Pas sûr/ *Not sure*

Si le NON, vous aiment un?/ *If NO, would you like one?*_____

40. Pendant une semaine, combien de fois parlez-vous à vos voisins?/ *During one week, how often do you speak with your neighbours?*

Jamais/ *Never*   1-3 fois/ *times*   4-6 fois/ *times*   Quotidien/ *Daily*

41. Où parlez-vous à vos voisins le plus fréquemment?/ *Where do you talk to your neighbours most frequently?* (Vous pouvez encircler plus d'une, mais soulignez la plus importante/ *Circle all that apply, but underline the most important one.*)

Dans la rue/ *Street*   L'allée/ *Driveway*   Arrière-cour/ *Backyard*
Park/ *Parc*   Place/ *Square*   Magasin/ *Store*

42. Êtes-vous satisfaits du niveau courant de l'interaction avec vos voisins?/ *Are you satisfied with the current level of interaction with your neighbours?*

Oui, je voudrais qu'il soit augmenté./ *Yes, I would like it to increase.*
Oui, je voudrais qu'il reste le même./ *Yes, I would like it to remain the same.*
Non, je voudrais qu'il soit diminué./ *No, I would like it to decrease.*

43. Vous sentez-vous confortable demandant à votre voisin d'emprunter une tasse de sucre?/ *Do you feel comfortable asking your neighbour to borrow a cup of sugar?*

Oui/ *Yes*   Non/ *No*   Pas sûr/ *Not sure*

Si NON, pourquoi pas?/ *If NO, why not?*

---

44. Avez-vous un bulletin communauté ou des événements sociaux pour rencontrer des voisins?/ *Do you have a community newsletter or social events designed to meet neighbours?*

Oui/ *Yes*   Non/ *No*   Pas sûr/ *Not sure*

45. Que aimez-vous mieux au sujet de votre communauté?/ *What do you like best about your community?* (Vous pouvez encircler plus d'une, mais soulignez la plus importante/ *Circle all that apply, but underline the most important one.*)

Votre maison/ *Your house*   Parc/ *Park*
Le quartier/ *The neighbourhood*   Magasins/ *Shops*
La rue/ *The street*   Votre arrière-cour/ *The backyard*
La place/ *The square*   Les citoyens/ *The citizens*

46. Que croyez-vous est le plus grand problème dans votre voisinage et comment le peut être résolu? /*What do you believe is the biggest problem in your neighbourhood and how can it be ameliorated?*

_____

_____

_____

47. Quelle(s) raison(s) vous a (ont) incité à démenager au ce projet résidentiel particulier? / *What prompted you to move into this particular residential project?*
(Vous pouvez encircler plus d'une, mais soulignez la plus importante/ *Circle all that apply, but underline the most important one.)*

- ❑ Amis dans le projet/ *Friends in the project*
- ❑ Démographiques/ *Demographics*
- ❑ Aménagement de tout le projet/ *The overall plan of the project*
- ❑ Éventail de prix / *Range of prices available*
- ❑ Choix d'habitations/ *Range of homes available* Localisation/ *Physical location*
- ❑ Prix / *Price*
- ❑ Proximité du travail/ *Close to workplace*
- ❑ Proximité des écoles/ *Close to schools*
- ❑ Qualité de construction / *Quality of construction*
- ❑ Qualité de l'investissement/ *Value of investment*
- ❑ Style des maisons / *Home models and styles*
- ❑ Urbanisme / *Urban planning*
- ❑ Aménagement / *Landscaping*
- ❑ Loisir / *Recreation*
- ❑ Places, squares/ *Squares*
- ❑ Parcs/ *Parks*

48. Si vous aviez des craintes avant d'acheter, quelles étaient-elles? *If you had any concerns prior to making your decision to move here, what were they?*

Je n'avais pas de crainte/ *I had no particular misgivings*
Je craignais/ *I was concerned by* :

_____

_____

49. Y a-t-il quelque chose que je n'ai pas demandé, cela que vous vous sentez devriez avoir été demandés? / *Do you feel that there is something that I did not ask, that should have been asked?*

_____

_____

_____

_____

_____

50. Pour finir, comment évaluez-vous votre voisinage?*How do you rate your neighborhood on the following?* :
(**Sur une échelle de 1 à 5 - 1 est le plus bas et 5 est les plus hauts points)/** (*On a scale of 1 – 5, 1 is the lowest score and 5 is the highest score*)

Cohésivité de la Communauté / *Community cohesiveness*   (   )
Amitié / *Friendliness*   (   )
Qualité des parcs et des places/ *Quality of parks and squares*   (   )
Qualité d'aménagement/ *Quality of landscaping*   (   )
Fourniture de la communauté et de services récréationnels /   (   )
Provision of recreational and community services
Problèmes sociaux / *Social problems*   (   )
Sûreté / *Safety*   (   )
Qualité du logement / *Quality of housing*   (   )
Autre/ *Other*_____   (   )

Commentaires Additionnels : *Additional Comments :*

_____
_____
_____
_____
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_____
_____
_____

MERCI BEAUCOUP POUR VOTRE TEMPS ET COLLABORATION
THANK YOU VERY MUCH FOR YOUR TIME

APPENDIX E
Oral Interview Questions

1. How long have you lived in this community?

2. Where did you live before coming here?

3. What attracted you to this development?

4. Do you have any young children?

5. Do you feel comfortable having them play in the street or the square?

6. Do you use the square? If so, how do you use it?

7. Is the square well maintained? Are there any problems associated with it?

8. Are there any problems associated with dogs and children using the square?

9. Do people respect the written and unwritten rules of the square?

10. Why was the square designed in this way? How would you change it?

11. Did the developer consult you concerning the square's design?

12. Do you know your neighbours? Do you speak with them in the square?

13. How do you interact with your neighbours?

14. Are you satisfied with privacy and noise levels at your home?

15. Are you satisfied with the quality of construction and the size of your home?

16. What prompted you to move into this community?

17. Are you satisfied with your decision to buy a home here?