THE IDEAL NEIGHBOURHOOD? UNDERSTANDING THE GROWTH OF NEW URBANIST COMMUNITIES IN TORONTO: A MARKHAM CASE STUDY

By

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To my parents, family and friends that have supported me through my academic endeavors.

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EXECUTIVE SUMMARY

Previous studies in planning have explored many aspects of New Urbanism.

However, there is little research on why people would choose to live in a new urbanist community over a traditional neighbourhood development. Classical literature on this topic has focused on the size and scale of neighbourhoods as an influential factor to residents' housing choice (Brower, 1996). Recently, theorists have also considered neighbourhood land-use preferences as a determinant to housing choices (Ewing, 1997). The purpose of this project is to understand what informs the housing choices of residents in the new urbanist community of Cornell, Markham. This study evaluates neighbourhood choice by surveying residents of Cornell and a traditional neighbourhood called Boxgrove to determine why residents chose to live in the new urbanist community of Cornell rather than a traditional neighbourhood in the area.

The methods include a stratified sample of the most recent phase of of Cornell, Markham, and a traditional neighbourhood development called Boxgrove. Respondents were surveyed in a door-to-door questionnaire format from an equal geographical and housing type distribution throughout the neighbourhoods in order to ensure a well-represented sample.

The findings of the survey suggested that respondents were generally aware of Cornell's status as a new urbanist community, but it did not have a significant bearing on their neighbourhood choice. In fact, respondents of both Cornell and the traditional neighbourhood development of Boxgrove were informed by the same characteristics in their decision to move. Housing attributes such as size of lot, floor plan, and safety were

the most influential characteristics informing choice when compared to the desire of living in a new urbanist community.

One of the noticeable differences between the neighbourhoods was the demographic and family profile data collected through the survey. Respondents of Cornell were mostly born in Canada or have lived in Canada for a longer period of time than respondents of Boxgrove. Most of the respondents of Cornell identified themselves as Canadian, Chinese or Indian. Boxgrove respondents were a much more diverse community, as the survey included Guyanese, Tamils, Pakistanis, and Black West Indies residents.

My project was able to answer the research question by revealing that New Urbanism was not an influential factor into the housing decisions of residents surveyed in Cornell. Respondents of Cornell and the traditional neighbourhood of Boxgrove valued similar neighbourhood characteristics when making their housing choices. According to the findings of this project, it is evident that new urbanist communities should strive for a better inclusion of affordable housing options and social diversity. New Urbanism will have to further distance itself from private market influences in order to create the socioeconomically diverse communities it intended, as new urbanist communities are often associated with higher housing prices. New Urbanism also has to develop a wealthier mix of theoretical, social and political foundations beyond its attention to physical design. This will help New Urbanism develop its goals and have more of an influence on itself from the public's decision of housing.

CHAPTER 1: INTRODUCTION

New Urbanism has been debated among urban planners, architects, geographers and sociologists as an alternative to traditional suburban design. Much of the literature regarding New Urbanism has typically focused on its influence to physical design.

Proponents believe that New Urbanism can alleviate the problems of urban sprawl and improve the quality of life in suburban communities through the re-design of streets, homes and neighbourhoods.

Talen (2001) attempted to evaluate the likelihood that residents of traditional neighbourhoods would approve the ideals and design guidelines of New Urbanism.

However, there has been no investigation into the reasons people would choose to live in a new urbanist community.

In an effort to understand the important characteristics that led people to move to a new urbanist community or not over a traditional neighbourhood, the formulated research question for this study is: what informs the residents' housing choices of Cornell, a new urbanist community in Markham, Ontario? The Town of Markham offers an optimal case study, as it consists of new urbanist and traditional neighbourhood developments that are physical close to one another and constructed during the same time period. With the aim to answer the research question above, the project focuses on the two following objectives:

 To identify the characteristics of the neighbourhoods that informs residents to move to Cornell, and compare them to a traditional neighbourhood development of Markham. 2) To understand who is buying into Cornell, and for what reason(s).

The next section describes the relevant literature on New Urbanism in order to provide a rationale for the pursuit of this study. It begins with the history of the movement, the schism it has produced in urban planning, and what previous investigations on this topic have concentrated on.

LITERATURE REVIEW

With the strength of the North American economy in the mid 20th Century, came the consumption of land in low density and private development. This contributed to the changes of the social structures of communities at the expense of the environment. Rapid paced development coupled with burgeoning municipalities outside of major urban centers is believed to have accelerated the process of urban sprawl. Urban sprawl is a key concept that New Urbanism seeks to alleviate, which refers to the low residential density, auto-dependent and inadequately serviced nature of development methods adopted from post WW11.

New Urbanism began on the fundamental principle that community planning and design must assert the importance of public over private values (Katz, 1994). It assumes that urban growth in post WW11 has been characterized by an absence or lack of community planning throughout North America. As a result, proponents of the movement are calling for a return to community planning and the enhancement of the public realm. The 'Lexicon' of New Urbanism has been created and is continually updated by its strongest supporters (Bressi, 2002). Numerous task forces in social equity, community, environment and transportation have emerged out of this rapid growing body of theory.

Although New Urbanism may seem to be a recent phenomenon in urban planning, it is simply the reinvestment into historical lessons that idealize beautiful and sustainable cities. From this perspective, New Urbanism has some parallels to the Garden City and the City Beautiful Movement, which were monumental urban planning movements that affirmed the appeal of self-sustainable, walkable, mixed-use and visually appealing cities.

The new urbanist movement embodies the restructuring of public policy and development practices in support of wider social, cultural, economic and environmental goals in planning (Congress for New Urbanism, 2000). There is a growing concern that the 1940's and 50's suburban neighbourhood cannot sustain another generation of growth (Katz et al., 1994). The movement began to form in the 1970's and 80's in the US, as a response to urban sprawl. New Urbanist ideals and requirements are compiled in the Charter for New Urbanism that explicitly states its objectives (CNU, 2000).

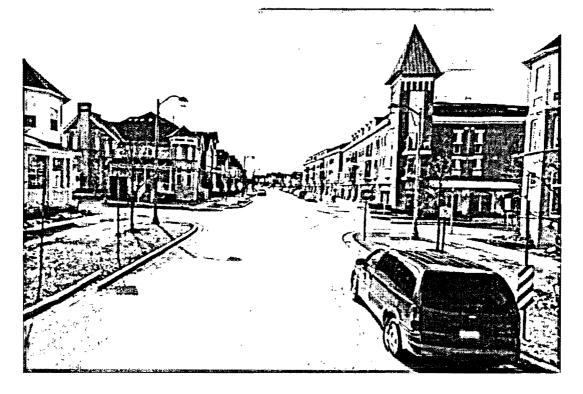
The Charter supports the reconfiguration of sprawling suburbs into communities of real neighborhoods and diverse districts, the conservation of natural environments, and the preservation of built legacy. The primary objective is to promote greater residential diversity, given the benefits that are believed to be associated with this design. For example, there has been considerable evidence that new urbanist communities offer many advantages for pedestrians and cyclists. Higher densities and mixed uses can produce significantly lower rates of vehicle travels based on the proximity to services (Holtzclaw, 1997). As New Urbanism involves multiple planning, architectural and legal dimensions, this discussion surrounds the literature on residential preference, residential proximity, and walkability that are themes of the survey research.

While there has been much support throughout the years of New Urbanism's growth, considerable amount of critique remains in the literature. According to Ellis (2002), the debate over New Urbanism can be organized into three interrelated groups. The discussion surrounding New Urbanism has regarded; the empirical performance, ideological and cultural issues.

Planning criticisms of New Urbanisms empirical performance argue that this mode of development is another more picturesque form of urban sprawl, creating privileged enclaves (Leung 1995). As evidenced by Day (2003), New Urbanism is usually associated with increased housing prices even though it has been introduced to lower income areas of the city. This factor is believed to have contributed to the exclusion of numerous social and ethnic groups, when New Urbanism was attempting to create neighbourhood inclusion. From the outset, Markham and its planners attempted to promote diversity but it has remained clear that planners have the challenging role of planning for less saleable aspects such as affordability, inclusivity and public safety (Perrott, 2007).

Another criticism has been New Urbanism's attention to design aesthetics. New Urbanism is often associated with exercising 'nostalgia' through traditional neighbourhood development (TND). It often values small-town life and the imagination of place (Ellis, 2002). For example, the facades of buildings in Cornell and other new urbanist communities are consistent with one another and reminiscent of older styles (see figure 1). Although, others point out that the affection of old urban forms may be a form of escapism from present routines (Caulfield, 1994). This has created intense debates

Cornell



.A Traditional Neighbourhood

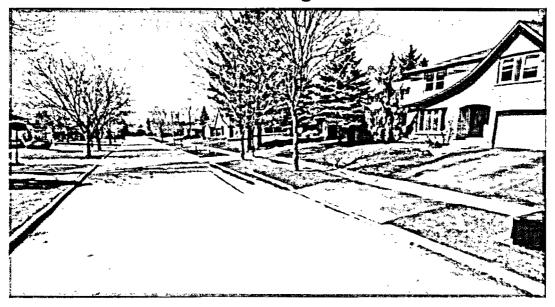


Figure 1) A comparison of different styles in Cornell and a traditional neighbourhood in Markham

about whether New Urbanism is simply a one-dimensional model, or if it can be applied at all scales of development.

It was not long after that new urbanist developments were incorporated into many North American cities, and even created entire communities. Seaside, Florida, was the first fully created new urbanist community and internationally renowned development that was built in 1981, occupying 80 acres of land (Katz, 1994). Like Markham, the community was planned and designed by the Duany and Plater-Zyberk Company based in the US. The municipality heavily favours the small town concept, as the residences extend a small distance from a centered public square and parks. Seaside is prescribed stringent zoning and planning laws, as it architectural standards follow conformity rather than allowing individual character.

Over the last decade the Town of Markham has continued to support New Urbanism, a body of planning design theory and policy that has shaped residential development. The movement is built upon neoclassical alternatives that seek to replace recent modes of residential development to foster such goals as more walkable neighbourhoods, friendly streetscapes, and more residential proximity to services and programs.

The Cornell phases in Markham was one of the largest New Urbanist projects which began in the early 1990's through Markham's urban planning initiative and would later be driven by the private market (Town of Markham, 1994). When considering the area of land, the Cornell development is significantly larger compared to the well-known Seaside and Kentlands new urbanist communities. The Ontario provincial government

and Canadian Mortgage and Housing Corporation (CMHC) especially grew keen of New Urbanism based on its support for transit oriented development (TOD) and sustainable development which were published in reports and design contests (Grant, 2006).

From the 1960's to the 1980's, Markham's secondary plans for the area that .

Cornell is now situated contained little urban design information. The 980 ha of Cornell was made possible through the expropriation in 1973 of a future airport (Gordon and Tamminga, 2002). The exercise proved to be successful with over 1000 attendees who appeared to be accepting of higher density mixed use planning objectives from the municipality's traditional practice of low density, single use subdivisions.

Walkability is a distinguishable feature that new urbanist communities have attempted to enhance from traditional development. A walkable community has a physical and social environment conducive to walking and less driving (Untermann, 1990). The physical environment is characterized by pedestrian-scaled development that is built upon the notion that if a streetscape is designed to human scale to create a high-quality street environment, it can help residents to feel comfortable in engaging streetside activities (Goldsteen and Elliott, 1994).

New Urbanism attempts to increase this pedestrian culture largely through the reintroduction of some mixed land-uses, increased residential density, and urban aesthetics
to enhance walkability in residential development. Kim and Kaplan (2004) found that
when comparing the new urbanist community of Kentlands with a traditional
neighbourhood development, the physical environment of new urbanist communities was
noted to be more conducive to walkability. The abundance of natural features, consistent

traditional architectural style, and open spaces were important details in the New Urbanist community able to achieve greater walkability.

The criticism of the traditional suburban neighbourhood has been the dependency on the automobile and the segregation of land uses that creates a social isolation between public and residential life. However, researchers have questioned whether creating walkable neighbourhoods as New Urbanism attempts can actually reduce auto dependencies (Gordon, 2002). Many of the pedestrian ways of North American cities are sterile and dangerous environments as streets often favour cars over other modes of transportation (Hall & Porterfield, 2001). Some of the other important reasons are that buildings are too far from the street.

In order to enhance walkability, New Urbanism has also transformed residential densities from the previous traditional neighbourhood model. Residential density refers to the unit area of land consumed by any number of homes. Proponents of New Urbanism and Smart Growth have criticized traditional neighbourhood development in North America, as the average amount of land consumed is believed to have exceeded a sustainable rate. Therefore, new urbanist development is defined by higher residential density including land consumed by commercial and transportation uses than the traditional suburban method.

Gordon and Vipond (2005) were able to show the significant difference between Cornell's residential densities compared to a neighbouring conventional community through the calculation of units per area and people per area in Cornell. On average, Cornell projects have a 76% higher gross residential density, and a 70% higher

population density. Such a change is believed to have numerous environmental and social benefits.

According to Skaburskis (2006), the contributing factor to the rise of New Urbanism is a noticeable change in residents' housing demands. The results suggested that suburban residents are becoming more accepting and content with higher residential density as supplied by New Urbanism. The survey research pointed out that residents are making the lot size trade-off in order to have residential proximity to services (Skaburskis, 2006:14). Residents and potential buyers are also willing to pay more for the characteristics that are not so easily attainable in the traditional form of neighbourhoods such as walkable streets and close proximity to services.

Few studies have yet to understand what informs new urbanist housing choices in a community like Cornell. Song and Knapp (2003) considered the role that neighbourhood characteristics in Portland, Oregon have on the residents' trends. While it cannot be assumed that the findings are applicable to any context, the results indicated that features such as pedestrian walkability, and TOD associated with Portland's new urbanist neighbourhood were significant variables that residents desired and were willing to pay premiums for (Song and Knaap, 2003). In such cases, it is clear that residents and potential buyers were interested in characteristics like walkability and proximity to services that were found in Portland's new urbanist community and could not otherwise be obtained in the local traditional neighbourhoods.

Talen (2001) attempted to gauge whether residents of suburban communities in the U.S. sided with the alternative forms of neighbourhood associated with New

Urbanism. The results indicated that respondents are attached to their neighbourhood and unlikely to accept criticisms about their suburban lifestyles. It was revealed that neighbourhood preference is not rigid and can sometimes be contradictory.

Given Markham's unique demographics, this case study will give planners information from diverse viewpoints. It will help planners determine what aspects of New Urbanism are attractive to the public, and also what has to be improved given the criticisms. Planners have little information available on this topic, which gives further authority to this investigation.

This study will contribute to the planning profession by expanding the theoretical and practical knowledge of the redevelopment practice of New Urbanism, and its relevance to the multicultural character of Canada's cities. New Urbanism has gathered significant attention throughout North America, and research in this field has pointed out that such initiatives have difficulties with creating socially and ethnically diverse communities (Day, 2003).

CHAPTER 2: METHODS

This chapter details the empirical methodology employed to understand what informs the residents' housing choices of Cornell, Markham. It will then provide the site descriptions of the neighbourhoods and explain the limitations and advantages of this methodology. The consistency of responses indicates that the true attitudes and expectations of participants were represented. However, it cannot be assumed that the responses raised in this study are reflective of all new urbanist communities.

Song and Knapp (2003) have determined a number of characteristics that are influential in informing choice where new urbanist communities have been introduced. In order to measure responses appropriately, it is necessary for price, housing attributes, location, amenities and disamenities to be similar in each neighbourhood. As a result, these factors have been taken into consideration for the purposes of this study.

The evidence that respondents bring forward will help begin to answer questions such as; who is buying into the new urbanist community of Cornell, and what are the reasons for it? What are the reasons for those who have not bought into Cornell? The research is not meant to promote or criticize the neighbourhood initiatives based on the choices that residents have made. It is rather meant to help planners understand if there are any patterns or alternatives that might be needed. Similarly, it will help planners understand if such widely accepted practices in the professional realm of planning are reflective of the public's experience.

Although the case study approach has been critiqued on the basis of limited generalizability, case studies have been widely accepted as a methodological tool in

social science investigations (Feagin et al., 1991; Neuman 2000). A case study allows us to create a more in-depth investigation into a single set of social phenonmenon (Feagin et al., 1991). In addition, it examines many features that are interconnected over time.

Before performing interviews, critical documents such as the Town of Markham's Secondary Plans for Cornell and the Charter for New Urbanism were analyzed in order to grasp how residents' choices may be informed. The purpose of review and analysis of the documents are meant to discern residents' experience from municipal planning policies.

The Town of Markham is located just north of the City of Toronto. As of 2006 (Statistics Canada), the population was almost 261, 000. 60% of the population in Markham are immigrants and almost half them are recent migrants to Canada. Markham also offers an interesting case study, as the municipality is predominately visible minorities, specifically, of the Chinese community. In 1992, the city anticipated a doubling of the population over a ten-year period and brought on new urbanist projects to house almost 30,000 people in 10,000 units on a 1,500-acre site now known as Cornell (Skaburskis, 2006). People began moving into the neighbourhood in 1998, which now provides a good time frame to assess it's attributes.

Cornell incorporates eleven Secondary Plans and the principles of New Urbanism for the Town of Markham (Gordon & Tamminga, 2002). Because of time and financial restrictions, the Grand Cornell phase was used as the specific new urbanist neighbourhood for this project. Grand Cornell is located at the Southeast corner of the 9th Line and Highway #7 intersection (see figure 2). According to Statistics Canada (2006), the total neighbourhood population is just over 13, 000. Almost half the population are

non-immigrants and non-visible minorities according to the census data (Statistics Canada, 2006).

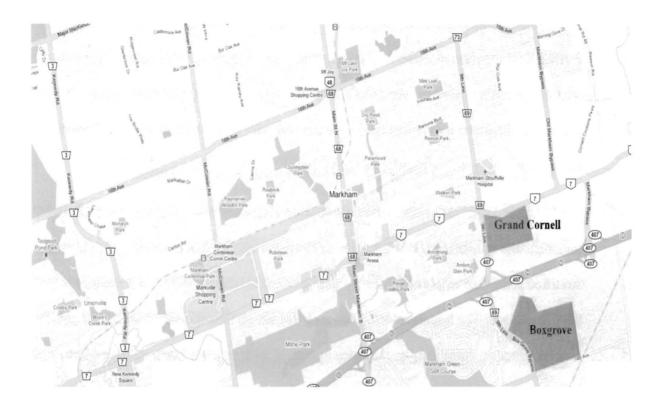


Figure 2) Map of Markham and location of study sites.

The Boxgrove neighbourhood is selected as the traditional neighbourhood group and is comparable with Cornell for price, location and period of development. Boxgrove is located South of Highway 407 and East of 9th Line in Markham. It is located just South of Grand Cornell. Boxgrove is around the same price-range as Cornell, and has similar housing types. Boxgrove was considered a group in this study because it is a traditional neighbourhood that was not created under New Urbanism ideals and guidelines.

Therefore the inclusion of the neighbourhood was necessary, as the residents can evaluate characteristics that can be measured with the new urbanist community of Cornell to

determine any trends or differences. In addition, the residents of Boxgrove provide reasons why they did or did not consider moving to Cornell.

Given these locations, subjects were recruited by door-to-door surveys. Data was collected on a weekend afternoon, as people were more flexible with time. If the respondent did not have the time, the questionnaire was left with the respondent and picked-up at a more convenient time. The process only took 10-15 minutes, as residents were willing to participate under this time frame.

A total selected sample of 40 (n=40) questionnaires was collected, given the logistical and budgetary constraints. The interviewer chose 20 homes in order to have a stratified sample of responses from the new urbanist neighbourhood and a traditional neighbourhood. The homes selected had an equal geographical distribution within their neighbourhoods. Additionally, the types of houses such as town-home and semi-detached had an equal representation in the sample size for consistency. Only adults that are homeowners were asked to participate. The process was entirely opportunistic, given that the researcher did not have prior contact to any of the potential participants.

Respondents of the study were first explained the purpose of the project. A respondent had the option to decline to answer any questions at any time, or decline the survey in full. In more closed-ended queries, respondents were asked to provide the characteristics they felt were important in informing their choice given the location.

When residents were asked for the characteristics that attracted them to move, they subsequently ranked the characteristics from 1-5, which was then converted into a Likert Scale. A Likert Scale is a widely accepted tool in survey research that allows the

researcher to gauge attitudes or behaviours of the participants. For instance, an answer of one warrants the lowest importance a characteristic has on their decision and five being of most importance. The characteristics were divided into the categories of housing attributes, location, amenitities and disamenities that are known to be influential qualities that inform choice. This was utilized in order to determine what characteristics were more important than others.

Questions considering if residents chose to live somewhere else and if they are satisfied with their decision were intended to be more open-ended questions. They served to expand respondents' input, as information relevant to the research that the interviewer might not have taken into account could be brought up. In addition, it allowed the interviewer to follow-up with more questions.

Figure 3 describes the output analysis that was desired once empirical evidence was collected. This study employed a slightly different methodology and also considered only one new urbanist site to understand how housing demands has changed land consumption (Skaburskis, 2006). Under this framework planners can understand the contributing factors that inform choice where new urbanist communities have been introduced.

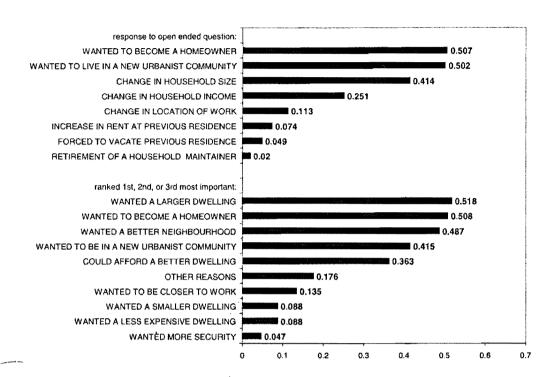


Figure 3) From Skaburskis, A. (2006). Pg.240.

When the questionnaires were completed, all of the answers were tallied. The characteristics were averaged and then converted to the Likert Scale. This gave an indication of what characteristics were most influential in informing housing choice.

Additionally, it was able to describe if buyers of New Urbanism or traditional neighbourhood development have different opinions to the characteristics raised.

When employing this methodology of survey research, we cannot assume that the results from a sample can be representative of the whole (Creswell, 1994; Newman, 2006). However, it is not the goal in planning to make generalizations that can be applied universally similar to quantitative methods. Under this framework, we cannot assume that the results would account for any new urbanist community given Markham's demographic and location variables. The results that this section of Markham will yield

can still be insightful for planners and policy makers in communities experiencing similar circumstances.

Embracing a qualitative methodology allows the study to value information gathered from informants in a way other research designs do not. Planners have strong opinions when it comes to New Urbanism, and it would be interesting for planners to understand how the public has perceived New Urbanism.

CHAPTER 3: DISCUSSION

This chapter discusses the analysis of the data collected from questionnaires distributed throughout Cornell and Boxgrove. The analysis is divided into the characteristics of the neighbourhoods that residents indicated. In addition, the later section of this chapter provides the demographic and family profiles of those surveyed in the neighbourhoods.

In open-ended questions, respondents were given the chance to express the reason they decided to move from their previous location. In most accounts, respondents of Cornell considered the move to be an upgrade from their previous home. Several respondents stated they were first time homebuyers and were attracted to living there long-term given the opportunity to own.

Boxgrove respondents generally relocated because the community offered an upgrade in size from their previous home. A significant reason for this is that respondents of Boxgrove tended to be younger families. In most cases, respondents moved from a smaller unit size such as a condo or apartment in downtown Toronto and needed to accommodate their growing families.

In another open-ended question respondents were asked, "were you considering anywhere else to move, and why" to which the majority surprisingly answered "no". In response to this question, the residents that were surveyed had a very strong idea as to the location they wanted to live in.

Before moving to these communities respondents had knowledge about the services and neighbourhoods of Markham. They were quite content with this information,

as it was influential in narrowing Markham as their most desirable municipality to live in. According to their answers, the first reason they listed Markham was that they were pleased with the Town's reputation, or were recommended by friends and family to move to the area. Some were also very familiar with the community, as they lived in other neighbourhoods of the town.

The locations varied for those that considered moving somewhere else other than Boxgrove and Cornell. The other municipalities considered in some decisions were Stouffville, Richmond Hill, and Vaughan, which are in close proximity to the neighbourhoods studied. These municipalities were considered for relocation because respondents felt they offered similar housing characteristics to other suburban settings of Toronto.

Interestingly, the enhancement of walkability and residential proximity in new urbanist communities like Cornell were not the most influential attributes prevalent from the residents' responses. Figure 4 indicates that the proximity to services such as transit, recreation and others did not have much bearing on respondents' decision to move. Skaburskis (2006) also noted in the study of another section of Cornell, Markham that dominating themes of New Urbanism such as walkability did not have tremendous influences in residents' decisions. About one quarter of the respondents in the previous study done in the first phase of Cornell expressed the importance of pedestrian features (Skaburskis 2006). Home and neighbourhood characteristics were found to be most influential.

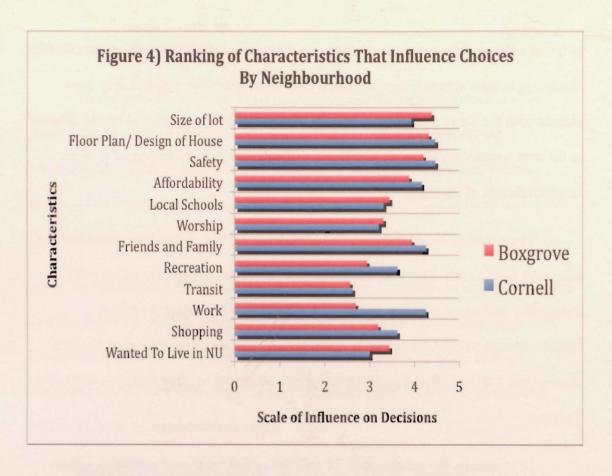


Figure 4) The characteristics that were influential to the residents of Boxgrove and Cornell.

The results displayed in figure 4 indicate that safety, the house floor plan/design, and lot size were the most influential factors that residents considered when relocating to Boxgrove and Cornell. The house floor plan/design, and lot size characteristics refer to the physical attributes and scale of properties found within the two neighbourhoods. While Cornell and Boxgrove slightly differ in these categories, the house floor plan/design and size of lot have the highest rating of importance (average= 4.5/5) for residents of both neighbourhoods. In their answers, respondents were very keen on the design and size of the house, as they believed these aspects have importance to the property values in the area.

Other key variables that respondents pointed out were safety, and proximity to friends and family. These variables were not explored in previous studies and proved to have a tremendous effect on most residents' choices. As the neighbourhoods are mainly comprised of young families, it is apparent that people heavily factor in safety when moving into these communities, especially those with children. Many of the respondents of Cornell highly favoured (>4/5) whether the neighbourhood was in close proximity to friends and family over the desire to live in a new urbanist community.

Respondents of both neighbourhoods valued proximity to work very differently when deciding to move to their respective neighbourhoods. Proximity to work in Cornell was found to be a much more influential factor in the new urbanist community compared to the traditional neighbourhood development of Boxgrove. My hypothesis is that Boxgrove's geographical location in relation to the local major transportation routes is a contributing factor to this finding. Boxgrove only connects with one major axis route (9th Line), whereas Cornell connects with Highway 7, 9th Line and is close to Highway 407. Similarly, Boxgrove is not serviced with bus routes as well as the Cornell neighbourhood.

However, the findings revealed that the proximity to transit was consistently the least influential characteristic in both neighbourhoods. When considering other neighbourhoods in the region, Cornell and Boxgrove are not well serviced in terms of public transit. Residents are most dependent on personal cars as the main mode of transportation. Even though new urbanist communities like Cornell are attempting to curb dependency on the car through residential proximity, the majority of respondents noted a lack of public transit in the neighbourhoods.

The prevalence of places of worship in a neighbourhood can be a very important variable for people deciding to live in a community. Some religious practices require congregations to walk on specified days to the place of worship or can be visited several times during the week, which signifies that the location of a place of worship within a neighbourhood is critical. This factor did not appear in the residents surveyed in Cornell and Boxgrove. The residents of both communities indicated that they did not seriously consider the proximity to a place of worship as an influential factor. There are places of worship located near the neighbourhoods, but none are built within the boundaries of Cornell and Boxgrove.

For the most part, respondents of Grand Cornell were aware of Cornell's status as a new urbanist community. Respondents of the Boxgrove neighbourhood were understandably not as familiar with Cornell's status as a new urbanist community. An interesting finding from this portion of the survey indicates that the desire to live in a new urbanist community was not the most influential reason respondents decided to move. The respondents describe a moderate level of importance that moving into a new urbanist community had on their decision making process.

When residents of the traditional neighbourhood of Boxgrove were asked, "did you consider Cornell, Markham, as an option?" most respondents answered, no. They cited varying reasons as to why they excluded Cornell from their neighbourhood of choice, and it was not because Cornell is a new urbanist community. For example, some respondents revealed that they were not keen on the builders of Cornell, and the floor plan did not match up with their housing needs. My hypothesis for this response is that

the sizes of lots in Cornell were slightly smaller than the Boxgrove neighbourhood, and did not offer as much privacy.

Figure 5 illustrates the responses to the immigration and ethnicity questions of the questionnaire. It is important to note that Grand Cornell and Boxgrove are neighbourhoods that were settled after the last Canadian census available from 2006. Consequently there were no previous studies or census data available to confirm the results of the questionnaire in this project. From the survey results collected, the responses indeed indicate that the traditional neighbourhood of Boxgrove is settled by a higher percentage of immigrants, and ethnic minority groups when compared to Cornell. While it is not certain that the entire Boxgrove neighbourhood is a more ethnically diverse community than Cornell, the demographic results are noticeably similar to previous studies discussed. For example, Day (2003) concluded that new urbanist communities have not become as ethnically diverse as planned for, and tend to be settled by residents with higher incomes as evidenced in a new urbanist community of Costa Mesa, California.

The demographic portion of the survey was able to yield some differences in terms of the ethnic responses in the neighbourhoods studied (see figure 5). For example, Boxgrove had significantly more Tamil and West Indies respondents when compared to Cornell. Cornell was different because the majority of respondents answered Canadian and Indian, followed by Chinese. Even though a significant portion of Markham's population is Chinese, the study locations of Cornell and Boxgrove do not indicate a high level concentration of Chinese as other areas of Markham has. Similarly they do not indicate a concentration of one particular ethnic group.

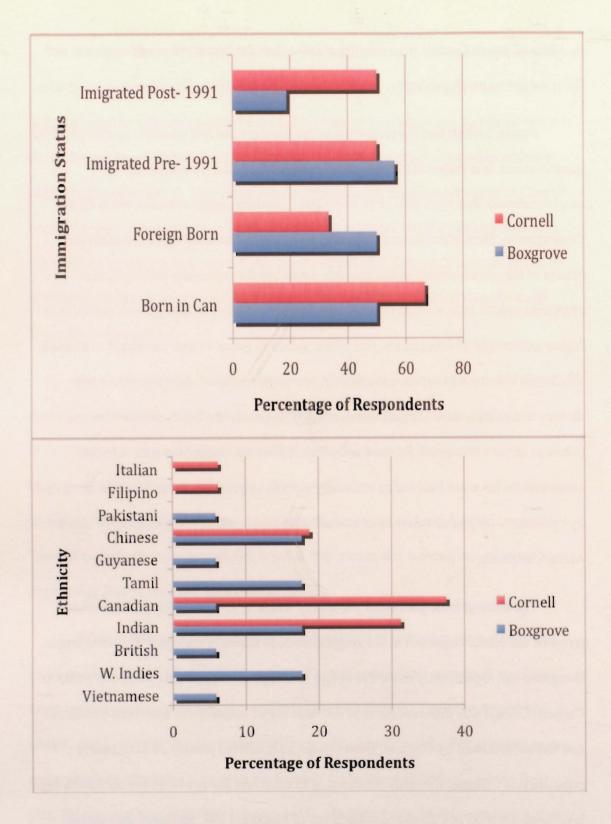


Figure 5) Responses to Immigration and Ethnicity Portion of Survey

However, there did appear to be more clustering in the neighbourhoods when considering the levels of average household income. Cornell respondents tended to have higher average household incomes per year than the Boxgrove community. In addition, the averages of household incomes in Cornell were less skewed, as 70% of household respondents had an average income of over \$100,000/year. In comparison, almost half of the household respondents in Boxgrove had an average income of \$60-80,000. The other half of the respondents' answers in Boxgrove was above \$80,000.

In an open-ended question, residents of Cornell and Boxgrove were asked, "having lived here, are you satisfied with your decision to move here and why?" residents of Cornell and Boxgrove surveyed overwhelmingly answered yes (>90%). Respondents were content with their choice and will likely live in these communities for many years. A contributing reason for this is that respondents are homeowners and many have growing families.

Those that were not satisfied with their neighbourhoods have noteworthy explanations that could warrant further investigation. One family that lived in the original Cornell developed in the 1980's had interesting comments about their experiences moving into the newest phase called Grand Cornell, which is the study location of this project. They stated that the first Cornell development was a better neighbourhood having lived in both locations. They believe that Grand Cornell does not have adequate parks and services when comparing the two.

Others that were not satisfied with the neighbourhood indicate the lack of public transportation in the area and being new to the community as reasons. This is a valid

remark because Cornell is located on the fringe of the region at a distance from local urban centres.

Respondents in this study produced quality and timely answers that were able to satisfy the research question of this project. The survey benefited from the input of a diverse range of respondents in both neighbourhoods. The findings were able to show that the demand for housing in general in the GTA, is greater than the demand for new urbanist communities presently. Respondents from Cornell and Boxgrove were informed by the same neighbourhood characteristics regardless of where they decided to move. Even though many respondents were aware of Cornell's status as a new urbanist community, it had little bearing on their housing decision. For instance, respondents of both neighbourhoods considered safety, the size of lot, and floor plan of homes within the community as the most influential characteristics. The proximity to transit and other services were determined to have little influence on their decisions. If more time and funding were available under this methodology, it would be beneficial to provide some incentive for participation to test the findings of this study with a larger sample of residents.

CHAPTER 4: CONCLUSION

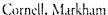
Almost all of the respondents were satisfied with their choices to move to their respective neighbourhoods. The cases studies revealed that the characteristics of the neighbourhoods contain features that respondents were looking for and were able to obtain. Based on the number of growing families and the desire to own homes in the area, many respondents will likely reside in their current locations for a long period of time. However, there are still improvements to be made from a planner's perspective.

Cornell has yet to disentangle itself from the notion that new urbanist housing is often associated with higher housing values. This has limited the possibility that new urbanist communities can provide for a wide range of incomes. New urbanist housing is often more expensive and has been critiqued extensively for this reason, as the main intention was to create a number of affordable housing options especially in suburban settings.

Recent statistics from the Toronto Real Estate Board point out that regardless of the housing type, Cornell homes are more expensive in relation to comparable properties in its locale (TREB, 2009). Even though the Boxgrove neighbourhood contained similar housing types and larger lots, Cornell homes were generally more expensive. This suggests that residents of Cornell may be more willing to pay more for premiums such as walkable streets and proximity to services, which are found in Cornell and not as attainable in other neighbourhoods. According to the family and demographic data collected in the survey, Cornell appears to attract wealthier families than Boxgrove.

Given this trend, it is apparent that new urbanist development must incorporate affordable housing options and be less susceptible to private market forces.







Cornell, Markham

Figure 6) Typical displays of neighbourhood in advertisements of Cornell Markham.

Cornell appears to be a more ethnically diverse community than other new urbanist housing developments as evidenced by Day (2003), in American case studies. Respondents were represented by a number of ethnic groups, but the highest percentage of responses was Canadian.

In order for new urbanist communities like Cornell to become more affordable, it is clear that the planning of new urbanist communities will have to go beyond a singular vision as propagated through the marketing of these communities. Even though Cornell represents a recent shift in residential development, it has yet to break away from the

class, nature, and recreational themes of creating and marketing places discussed by Perrott (2007, see figure 6). Enabling difference should balance the influence of the private market in New Urbanism. Cornell and future new urbanist developments should implement more affordable housing options that can also accommodate a wide array of ages and social groups.

As evidenced by respondents' answers in this study, transportation options in Cornell have not been significantly improved from the traditional neighbourhood model. Transit has the least influence on choice for respondents of both neighbourhoods, as they are mainly still dependent on cars as the primary mode of transit.

Cornell will have to develop a stronger link with public transit in order to distance itself from the traditional suburban neighbourhood development. Cornell is particularly disadvantaged because it is distant from regional urban centres. As a result, residents are mainly still commuting to work and activities even though some aspects of the community promote pedestrianism.

One of the key arguments that proponents and critics will agree upon is that New Urbanism must go beyond its commitment to urban form and develop a deeper theoretical foundation (Grant, 2006). New urbanist projects like Cornell are built upon the assumption that neighbourhood form will be able to tackle wide challenges such as, sprawl and community development. New Urbanism must distance itself from the attention to physical details, and provide justification for social and political goals.

Now that planners have experience with the product of Cornell, implementation of its outcomes and goals must be assessed. Implementing New Urbanism has proven to

be difficult task as there are noticeable gaps between its end product, and the recent performance (Talen, 2000). For example, Cornell has likely not been able to produce the residential proximity of the core ideals according to respondents of this study. The results indicated that there has been little difference between a traditional suburban neighbourhood and Cornell.

The survey methodology has proven to be successful in raising characteristics that are influential to informing residents' choice where New Urbanism has been introduced in Markham. The quality of answers and the willingness of respondents to participate were able to produce distinguishable results between a new urbanist community and a traditional neighbourhood.

While it was assumed that there would be differences in the responses of the two groups, respondents tended to be influenced by the same characteristics regardless of whether they chose to live in a new urbanist community or not. Most importantly, the desire to live in a new urbanist community was not a major factor in most decisions for the residents surveyed. Housing characteristics such as size of lot and floor plan were among the most influential categories that respondents considered.

Future investigations on this topic should also consider the residential preferences for suburban settings. In order to understand the public's acceptance of New Urbanism, it would be beneficial to understand what neighbourhood characteristics residents prefer for suburban settings like Markham. Under this approach, planners would learn if residents would favour new urbanist or traditional neighbourhood standards over the other. This

will help planners uncover the differences in community plans, lot densities, design details and others that the public considers when considering a neighbourhood to live in.

APPENDIX A- Cornell Questionnaire

- 1) What is/are the reason(s) you moved from your previous home?
- 2) What characteristics were influential in your decision to move to this community?

Please rank the following reasons that were influential in your decision from 1-5.

1=Least Important 5=Most Important

- A) Wanted to live in a New Urbanist community 1 2 3 4 5
- B) Proximity to shopping. 1 2 3 4 5
- C) Proximity to work. 1 2 3 4 5
- D) Proximity to transit. 1 2 3 4 5
- E) Proximity to recreation. 1 2 3 4 5
- F) Proximity to friends and family. 1 2 3 4 5
- G) Proximity to place of worship. 1 2 3 4 5
- H) Local schools. 12345
- I) Affordability 1 2 3 4 5
- J) Safety 1 2 3 4 5
- K) Floor plan and design of the house. 1 2 3 4 5
- L) Size of the house. 1 2 3 4 5
- M) Other, please describe 1 2 3 4 5

3) Were you considering anywhere else to move, and why?
4) Having lived here, are you satisfied with your decision?
Demographic and Family characteristic questions
How many people are currently living in your household, including yourself?
Number of people
What are the age characteristics?
Of these people, how many are children? 0-12 Of these people, how many are teens? 13-17 Of these people, how many are adults? Of these people, how many are seniors? 55+
Selected family characteristics?
Married-couple familyCommon-law family lone-parent family single
What is the level of schooling for occupants?
No degree-diplomaHigh-school or equivalentCollegeUniversityApprenticeship/Trade certificate
On average what is the household income per annum?
20,000-40,000 41,000-60,000

60,000-80,000
80,000-100,000
100,000+
What is your cultural/ethnic background?
What are the Immigration characteristics of the household?
Born in Canada
Foreign born
Immigrated before 1991
Immigrated between 1001 2001

APPENDIX B- Boxgrove Questionnaire

- 1) What is/are the reason(s) you moved from your previous home?
- 2) What characteristics were influential in your decision to move to this community?

Please rank from 1-5, the following reasons that were influential in your decision.

1=Least Important

5=Most Important

- A) Wanted to live in a New Urbanist community. 1 2 3 4 5
- B) Proximity to shopping. 1 2 3 4 5
- C) Proximity to work. 12345
- D) Proximity to transit. 1 2 3 4 5
- E) Proximity to recreation. 1 2 3 4 5
- F) Proximity to friends and family. 1 2 3 4 5
- G) Proximity to place of worship. 1 2 3 4 5
- H) Local schools. 1 2 3 4 5
- I) Affordability. 1 2 3 4 5
- J) Safety. 1 2 3 4 5
- K) Floor plan and design of the house. 1 2 3 4 5
- L) Size of the house. 1 2 3 4 5
- M) Other, please describe. 1 2 3 4 5

3) Were you considering anywhere else to move, and why?
4) Having lived here, are you satisfied with your decision?
5) Did you consider Cornell, Markham as an option. If yes or no, why?
Demographic and Family characteristic questions
How many people are currently living in your household, including yourself?
Number of people
What are the age characteristics?
Of these people, how many are children? 0-12 Of these people, how many are teens? 13-17 Of these people, how many are adults? Of these people, how many are seniors? 55+
Selected family characteristics?
Married-couple familyCommon-law familylone-parent familysingle
What is the level of schooling for occupants?
No degree-diploma High-school or equivalent

College
University
Apprenticeship/Trade certificate
On average what is the household income per annum?
20,000-40,000
41,000-60,000
60,000-80,000
80,000-100,000
100,000+
What is your cultural/ethnic background?
What are the Immigration characteristics of the household?
Born in Canada
Foreign born
Immigrated before 1991
Immigrated between 1991-2001

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