

**PLANNING FOR THE FUTURE OF DAY CARE:  
An Analysis to Establish Criteria for Site Location.**

By  
**Kelly L. Clark**

A Practicum  
submitted to the University of Manitoba  
in partial fulfillment of the  
requirements for the degree of  
**Master of City Planning**

Department of City Planning  
Faculty of Architecture  
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Winnipeg, Manitoba

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KELLY L. CLARK

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Dedicated To.....

My parents Owen and Verona, as well as, John and Barbara for all of their support, and to my friends for all their patience and understanding. Finally, a very special thank-you to Donna, for her support, interest, and encouragement.

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At last, my thanks to the Board of Directors at Day Nursery Centre for all of their ideas and insight into the evolving world of Child Care.

.....planning does not tell us what we will be doing tomorrow: It tells us how we should act today to deal with the uncertainties of the future, how we can best prepare to deal with emerging problems.

.....Peter Drucker.

## ***ABSTRACT***

This practicum is an investigation into using locational criteria as a means to evaluate potential community based day care facilities. The approach employed examines the components integral to the development of community based day care facilities and establishes a client groups needs and locational criteria checklist. The practicum incorporates the variables into an appropriate evaluative model and applies the model to a specific example in the form of a case study. The basis of this practicum is that knowledge and insight regarding day care services will strengthen the evolutionary process underway within the child care system. The research is based on the belief that a successful relationship between planning and our day care system is essential for developing an effective and efficient future. In addition, this practicum has been organized to facilitate further study and allow for further theoretical considerations.



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## ***PREFACE***

As our society changes, it is evident that one of the traditional roles of the family, the care of children, has become a partnership between the parents and the day care providers. The importance and demand for day care services has dramatically increased since the early 1970's. The present child care system in Winnipeg has evolved specifically due to the change of lifestyle apparent in our population today. The increase in single parent families and the heightened participation by women in the modern workforce, accentuated by the ever increasing economic constraints placed upon the urban family, dictate an increased demand for day care facilities. As the demand for day care services increase, concerned citizens, day care professionals and planners must address the issues that are imperative to successfully establishing appropriate community based day care facilities.

Established in 1909, Day Nursery Centre was the first nursery centre founded in Winnipeg. Originally located in Winnipeg's North End, it was conceived by a group of women known as the Mother's Association, who were "concerned with problems of delinquency and lack of recreational facilities for boys and girls and were responsible for introducing supervised playgrounds in Winnipeg."<sup>1</sup> Today, Day Nursery Centre is a non-profit supportive community service for children. Full day care services are offered at three Winnipeg sites: 650 Broadway Avenue, 336 Flora Avenue, and 355 Kennedy Street. Day care services are provided to children ages two-six years and are offered five days a week from 7:30 a.m. to 6:00 p.m. Day Nursery Centre is an organization governed by a voluntary Board of Directors and staffed by qualified personnel which includes certified

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<sup>1</sup> Day Nursery Centre., "Historical Background", p. 4.

Child Care Workers and an Executive Director. The Centers are licensed under the City Health By-Law No. 17734 and are "concerned with providing to children quality care and appropriate experiences so that every child may grow to their fullest potential as an individual".<sup>2</sup> Within this framework, Day Nursery Centre has specific objectives which it constantly strives to fulfill;

1. To provide a safe, happy, trusting environment for pre-school children which encourages each individual child to develop physically, mentally socially and emotionally.
2. To support and strengthen families through cooperative child rearing and parent education and counselling.
3. To provide children with an adequate quantity of nutritious food to ensure healthy growth and development.

Day Nursery Centre has grown out of the roots it established in 1909. Today, fulfilling its mandate has become increasingly difficult due to changes in the population it serves; more specifically, the growing number of single parent families and the increased participation by women in the labour force. The increased demand, resulting from these societal changes, has caused Day Nursery to look for alternative ways to meet the needs of a growing number of clients, while maintaining the quality of care they provide. In so doing, Day Nursery Centre is looking at relocating its Broadway location to a site which will increase their enrollment capacity from 35 children to 50 children. Foreseeing such a move, Day Nursery Centre felt it would be beneficial to have a study commissioned, which would give them an idea or checklist of criteria which should be examined to help facilitate an appropriate site selection. "Such information is helpful for developing priorities for allocating resources among different types of programs and for predicting how heavily new arrangements will be patronized and how satisfied prospective users are likely to be".<sup>3</sup>

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<sup>2</sup> *Ibid.*, p. 4.

<sup>3</sup> Dennis R. Young and Richard R. Nelson., "Public Policy for Day Care of Young Children", p. 72.

In focusing on the problem presented to me by Mr. Randy Webber-Chairperson Long Term Planning Committee, I felt it would be essential to uncover the elements that effect the integration of such services into our urban fabric. This practicum endeavors to supply Day Nursery Centre with the information it requires, as well, to develop a methodology that can be utilized by City Planners, Day Care Planners or any other community based day care organization.

In undertaking such a study, I feel it is essential to state that my approach to the practicum is from the planner's standpoint i.e. pragmatic, administrative, and implementation oriented. It should be stressed from the beginning, that as a planner and working for a particular client, I have a commitment "to ensure the longterm fit of the organization to its environment and to avoid long term errors and to seize emerging opportunities".<sup>4</sup> In fulfilling this mandate, I must exhibit a "faithful, creative, and efficient performance in pursuit of my clients interests, but I will also owe allegiance to the public interest and a primary commitment to those restricted by social, economic, personal, and other constraints".<sup>5</sup> For as Beneviste (1987) states, "effective planning is planning that makes a difference and is worthwhile and meaningful".<sup>6</sup>

It is not my assumption that this document will solve all of the problems faced by Day Nursery Centre when trying to provide quality day care facilities. This document is meant to be used as a tool to help establish a methodology for obtaining specific locational criteria for a community based day care facility. The applicability of my results or the evolution of

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<sup>4</sup> Guy Beneveniste., "Mastering the Politics of Planning", p. 37.

<sup>5</sup> *Ibid.*, p. 36.

<sup>6</sup> *Ibid.*, p. 35.

my ideas is meant to be the starting point for future research into the complex world of day care.



## ***CHAPTER ONE***

### ***Introduction***

## ***CHAPTER ONE: INTRODUCTION***

In our modern society, day care is a very real and contemporary issue. The importance of day care and the constant evolution of our societal needs prompted this investigation into using locational criteria as one alternative method for evaluating potential day care sites. As outlined in the preface, the practicum is primarily concerned with establishing a comprehensive checklist of locational criteria to fulfill Day Nursery Centres' mandate. Supplementary to this process, the practicum endeavors to create practical guidelines for locating community based day care facilities, with special attention given to non-profit centers. The basis for this train of thought is the desire to provide a comprehensive list of site considerations to be used by other organizations in the initial phase of project development. The approach the practicum employs is threefold: first, to examine the components integral to the development of community based day care facilities; second, from the analysis, to develop a specific locational criteria checklist and incorporate the variables into an appropriate evaluative model; and finally, to apply the model to a specific example in the form of a case study. The practicum addresses the three main client groups associated with day care services (the child, parent and the community) for analysis purposes.<sup>1</sup> Moreover, the practicum is primarily a locational study and is structured to establish a relationship between effective and efficient planning and the future success of community based day care facilities. Furthermore, the practicum is based on the premise that ideas must, in one way or another, become a form of action.

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<sup>1</sup> In this practicum, interest groups and client groups have the same meaning.

Having established the practicum objectives, the purpose of Chapter One is to highlight a working definition of day care and to discuss the role of the day care centre. In addition, the discussion addresses the societal role of day care services and the day care situation in the Winnipeg context. Furthermore, the discussion identifies the factors that must be addressed when planning for future day care services.

## **1.1 What is Day Care: A Definition**

Within the scope of this practicum, a working definition of day care and the role of the day care centre is essential to a complete understanding of what the practicum is endeavoring to achieve. Historically, day care has exhibited a variety of roles, based upon an idea of custodial care, but primarily day care has been a supportive service to the working poor and the single parent family. Specifically day care has been defined as;

...any public or privately sponsored program, which provides for the care of pre-school or school-age children (when not in school) by someone other than adult members of the child's own family, in whatever setting it takes place, whether in an institution, Family Day Care arrangement, foster care, Day Care Center, etc.....<sup>2</sup>

Putting this definition into perspective, day care centers often have various interpretations of the service they provide: hence the term 'day care' is often applied to a variety of services including;

1. temporary babysitting operations.
2. informal custodial care in neighbors' homes.
3. institutional care.
4. pre-school education in day care centers and nursery schools.

Taking this discussion one step further, the expression 'day care' often encapsulates terms

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<sup>2</sup> Dorothy Kispert., "Day Care as a Supportive Service for Low Income Families", p. 1.

such as profit, non-profit, community, workplace, lab school and college. In the Canadian context, two of these terms may apply to every day care center in the country. Within this practicum, day care is defined as an "organized developmental and social service for all healthy pre school-age children away from their homes for part of the day up to a maximum of twelve hours".<sup>3</sup> Furthermore, for the purpose of this research, the focus has been narrowed to "writers or speakers concerned with the more formal day care arrangements, where matters of public policy and subsidy are most directly involved".<sup>4</sup>

## 1.2 The Societal Role of Day Care

Due to the evolution of our society, the social and economic demands placed upon the family have all but removed the traditional role of the household as the care provider, in the early stages of child development. This societal change has introduced day care as "a potentially dynamic resource development perspective at a time when social, educational and employment developments have become a distressing phenomena in free society".<sup>5</sup> With this in mind, one must remember that day care is a societal service that has its merits and drawbacks. For example, the implementation of a day care site into a particular neighbourhood or community may disrupt the harmony of the area and cause discomfort to some of its residents;

the location of a day care center in a specific community will increase the noise level which neighbours will be called upon to tolerate, the possibility of neighbourhood property damage by over-energetic youngsters, and the volume of morning and evening traffic on the day care

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<sup>3</sup> Joe Hollis., "Polemics on Day Care", p. 4.

<sup>4</sup> Dennis R. Young and Richard R. Nelson., "Public Policy for Day Care of Young Children", p. xiii.

<sup>5</sup> Joe Hollis., p. 3.

street necessitated by parents dropping off and picking up their children.<sup>6</sup>

However, if quality day care is provided within a particular neighbourhood it can offer significant benefits to parents, their children and society as a whole. In basic terms, good day care is good human resource development. Day care improves the life chances of the child, at the same time acting as a socio-economic rectifier, offering the family the opportunity to increase their socio-economic position. Improving the socio-economic status of the family has a number of specific benefits. First, it removes, from the youngster, the stigma of being a welfare child, which can only benefit personal development. Secondly, improved socio-economic status can enhance "parental personality horizons, general satisfaction with life, and employment contacts that might serve the child well in later life".<sup>7</sup> Also, a number of benefits emerge from play activities, nutritional meals, and the opportunity for timely medical and dental care. In addition to these specific attributes, good day care will contribute to the "cognitive, intellectual, motor, personality and cultural development" of the child.<sup>8</sup>

In today's modern society, day care is seen as performing a socializing function which is as beneficial to the parent as it is to the child. The parental interaction that takes place at the day care centers can develop friendships and neighbourhood cohesiveness. Parents can learn from each other and slowly integrate themselves into their social environment, thereby learning the functioning of their society, and consequently, how they can guide the conduct of their children in this respect. Complementing this learning process are the benefits acquired through community participation; if the day care professionals involve the

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<sup>6</sup> *Ibid.*, p. 3.

<sup>7</sup> *Ibid.*, p. 12.

<sup>8</sup> *Ibid.*, p. 13.

parents in the day to day functions of the facility, a strong bond is developed with the particular site, further developing parental identification with their community.

### 1.3 The Winnipeg Situation

In the Winnipeg context, the importance and demand for child care services has increased dramatically since the early 1970's and there is a growing concern "that the supply of child care spaces, both private and public, has not kept pace with the demand".<sup>9</sup> As discussed earlier, an increase in demand for day care services can be attributed to a larger number of single-parent families in the population, a heightened participation by women in the modern workforce, and the ever increasing economic constraints placed upon the urban family. In Winnipeg's case;

the level of demand for child care is primarily a function of the number of children of pre-school and early school age whose mothers or sole-support fathers are in the labour force or attending school. Accordingly, changes in the level of demand arise both from shifts in the number of women with young children and the rate at which they enter the labour force or attend school.<sup>10</sup>

In addition, Statistics Canada information reveals that women with children under three years of age had an increased labour force participation rate from 28 % in 1976 to 50 % in 1986, whereas, for women with children three to five years, their labour force participation rate increased from 44 % to 61 % and for women with children six to fifteen, the increase

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<sup>9</sup> Harvey Stevens., "Child Care Needs and Realities in Winnipeg", p. 3.

<sup>10</sup> *Ibid.*, p. 5.

was from 54 % to 68 %. These figures indicate a number of trends associated with the significant increase of women within the modern workforce. It is evident that a woman's role is undergoing drastic changes in our modern society. "The increasingly prevalent view that women can and ought to work or have a career, as well as, raise children, probably accounts for much of the increase in these labour force participation rates".<sup>11</sup> Furthermore, increasing economic constraints placed upon the family to achieve a desired standard of living necessitates the labour force participation of young mothers. Generally, these are low-income families and rely solely on the mothers in the labour force; their ability to obtain employment has a significant influence on the families standard of living. However, in most cases the mothers are working just to achieve a minimally-acceptable standard of living.

The statistics highlighted above indicate that the number of women with day care need will increase by another 10.0 % by the year 1990. This in turn will stimulate further demand for day care spaces. However, if the birth rates drop and the labour market and supply of child care fails to expand, then this estimation may be too high. Alternatively, "if the job market expands, inflation picks up and the supply of child care spaces increases, then these projections may be an accurate, if conservative estimate of the future demand for child care in Winnipeg".<sup>12</sup>

The increased demand for day care services has produced a variety of problems for parents looking to fulfill their needs. "Finding good quality care arrangements, care that is affordable, care for infants, part-days and occasional care are some of the difficulties

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<sup>11</sup> *Ibid.*, p. 6.

<sup>12</sup> *Ibid.*, p. 8.

encountered".<sup>13</sup> Further issues, presented by various literature sources, cite the need for care with flexible arrangements and finding a day care site in close proximity to the home, as significant dilemmas when trying to obtain day care services. However, it is the financial issue, accessibility and the concept of quality care and its benefits which seem to come to the forefront as determinants in day care use.

#### **1.4 Considerations for Community Based Day Care Planning**

So far the discussion has presented the view that the demand for day care services is a constant in our society. Addressing the ever increasing need for community based day care facilities does not come about without a variety of problems. Not only does the term day care imply a complexity all of its own, but it is often the case, that the understanding of the function of those involved in day care range over a wide spectrum of opinions regarding the nature of day care services. As a researcher, "one is faced with a dilemma: should one quote a spokeswoman for woman's liberation, a speaker concerned with the welfare problem, or an advocate of child development and preschool education. Any choice is bound to represent only one aspect of a complex set of issues".<sup>14</sup> Keeping this in mind, there are both pros and cons for the provision of day care services. However, the scope of this practicum is limited in its focus and for this reason the assumption shall be made that day care is an essential amenity of a healthy urban environment. There are five areas of consideration which Day Care planning must address: 1. program format; 2. economic considerations; 3. social conditions; 4. spatial considerations and 5. locational aspects.

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<sup>13</sup> *Ibid.*, p. 81.

<sup>14</sup> Dennis R. Young and Richard R. Nelson., p. 6.



Addressing the program format of a potential day care service is essential for successfully planning a future day care facility. Like any community resource, day care can be used wisely and unwisely; for example, the program format established may benefit one group and not another. Therefore, the program format must conform to the needs and requirements of the community in accordance with the other considerations highlighted above (economic considerations, social conditions, spatial considerations and locational aspects). For the purpose of the practicum the program format considerations are primarily concerned with establishing the type of day care service that is to be provided and the goals and objectives of the organization in place. The existence of a program format that meets the ever changing needs of the interest groups specified allows for a more efficient and effective approach to planning.

There appears to be a consensus that the financial components associated with supplying non-profit day care are always the overriding factor when providing the service. In the Canadian context, the provision of non-profit day care services comes under provincial jurisdiction. The individual provinces control and regulate the supply of the service by setting standards and acting as the licensing and regulatory body. "Although each province currently enters into an agreement with the Federal Government to obtain funds under the Canada Assistance Plan, this cost-shared arrangement neither finances programs, nor provides capital funds to establish new centers".<sup>15</sup> In Winnipeg, fees from parents and grants obtained from the Province of Manitoba-Department of Health and Social Development are the primary funding sources in place. In addition, non-profit day care centres often solicit private organizations for charitable donations towards operating costs.

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<sup>15</sup> Laurel Rothman., "Daycare: A National Issue", p. 17.

The Community Day Care Standards Act (1986) sets out a schedule for the calculation or proportion a parent must pay for day care based upon marital status and the number of children under eighteen. The Standards Act establishes a per diem fee which day care providers are not allowed to exceed. Due to the fact that the parental contribution is based strictly on the family make-up and net income, "the government's payment to the licensed centre is determined by the number of full or half-days of spaces occupied by children".<sup>16</sup> Having established the funding structures in place, the primary economic considerations in planning for community based day care facilities revolve around the capital costs of the project and the availability of funds to cover the cost of development and facility operation and maintenance.

Human social behavior is another problematic component associated with the provision of day care services. It is evident that there is a strong relationship between social factors and an individuals beliefs and thoughts regarding day care services. In dealing with diverse income groups, identifying the social factors that may affect the provision of non-profit day care services and its credibility as a valuable societal service is essential. The provision of day care services can be adversely affected by social factors such as income levels, employment status, educational levels and the interpretation of the service provided. Addressing supplementary social issues such as individual perception, community participation and neighbourhood cohesiveness will lead to a better understanding of some of the problems which may be faced when introducing a site into a particular neighbourhood. It is evident that the provision of non-profit day care services is a more complex process than just the construction of the facility; it is the social behavior, associated with the interaction that evolves from the service, that is essential.

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<sup>16</sup> Province of Manitoba., "Manitoba Child Care Task Force, 1989", p. 97.

Physical or spatial considerations also come to the forefront in locational analysis. In developing locational criteria for a non-profit day care centre, a variety of components of the urban fabric, such as urban transportation, mobility patterns, the urban environment, urban facilities, and the urban infrastructure all have a considerable effect. More specific determinants applicable to neighbourhood selection and site selection evolve within considerations such as accessibility, mixed land use patterns, approximate building size, outdoor play space, existing amenities, parking, and transportation. Specific constraints such as day care licensing requirements, zoning and the possibilities of alternative uses for the site also become determinants in criteria development.

The five areas of consideration outlined above provides a generalized starting point to conceptualize locational criteria. To fully appreciate how these features become integral components of this project, it is essential to highlight the methodology employed in addressing these issues.

### **1.5 Methodology**

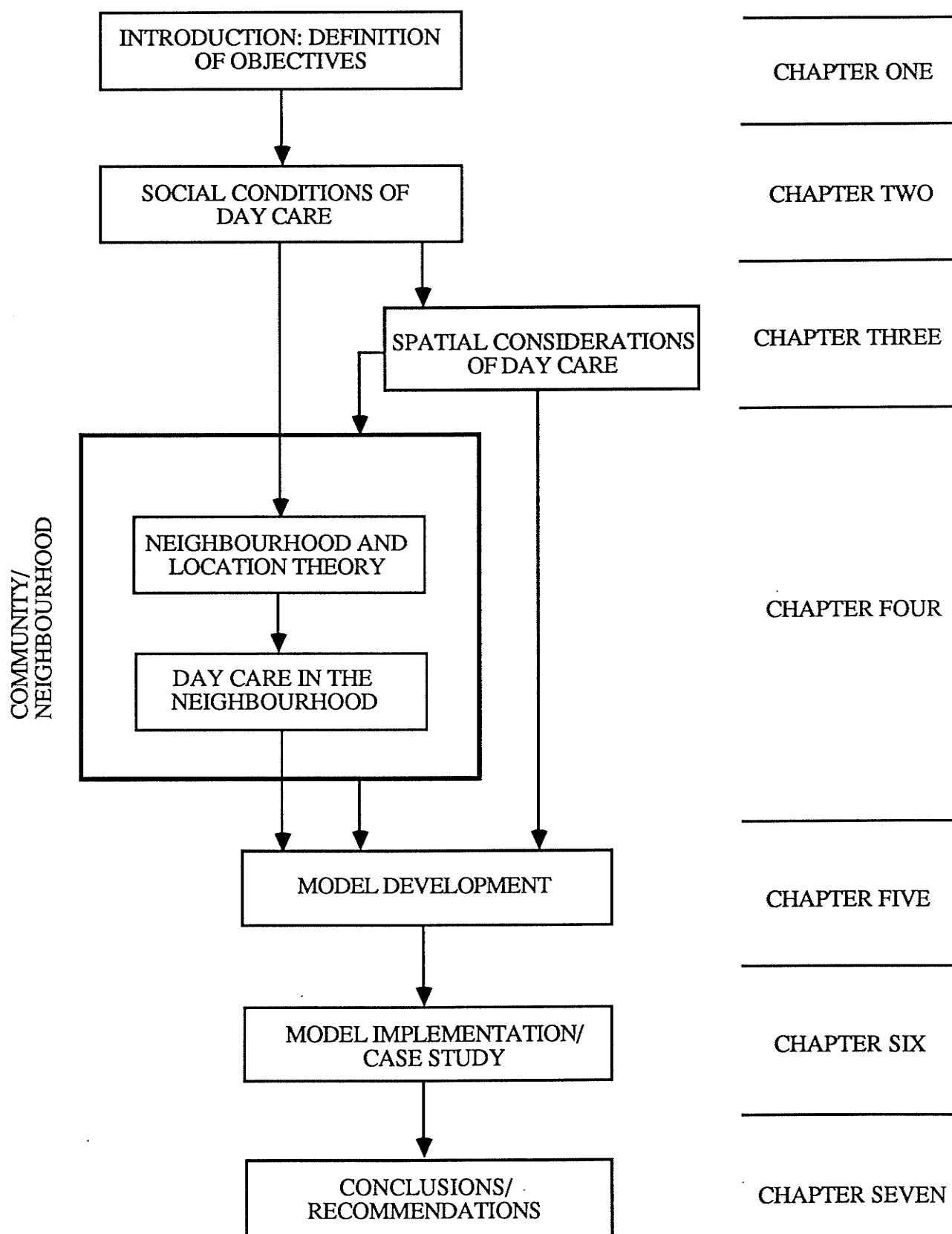
The initial stage of the project was to establish the objective of the practicum (as articulated above). With the project objectives in place, a review of the documented history of Day Nursery Inc., and visits to the three Day Nursery Centre sites helped to establish a hands-on knowledge of day care practices. In addition, individual interviews and a user needs study (See Appendix A) was undertaken to help establish the frame of reference in which the practicum unfolds. Having undertaken these initial steps, a literature review was undertaken to further distinguish the traits connected with day care services and the

theoretical considerations associated with the project. With all of the preliminary research complete, it was essential to categorize data specifically applicable to the project. Once the categorization of data was complete, a further analysis of the data was undertaken, specifically considering its relevance to the original project objectives. Furthermore, a feedback system was built into the methodology, allowing a re-examination of the process, in light of the project objectives.

## **1.6 Synopsis**

Chapter One of the practicum examined the concept of day care, the social role of day care, the need and demand for day care in Winnipeg and the problems and issues associated with day care planning. Chapter Two, is specifically concerned with the social conditions of day care. It highlights the relationship between specific social factors and human behavioural patterns. Furthermore, it discusses the influence of social factors on day care development, pointing out that the facilitation of appropriate day care is more than just implanting a physical structure into a neighbourhood. Chapter Three, summarizes the spatial considerations associated with day care facilities and special attention is given to the space required to achieve the most appropriate environment for development. The chapter ends with a catalogue of spatial considerations to address when evaluating a proposed site. Chapter Four, is an inquiry into the dynamics and externalities of the community as they exist at the neighbourhood level. The examination addresses a variety of analytical procedures utilized in understanding the neighbourhood. In addition, special attention is given to the nature of Locational Theory and the Site Planning Process. Chapter Five, is a synthesis of the knowledge acquired from the previous chapters and establishes a comprehensive client group needs and locational criteria checklist. This chapter examines

the various land use modelling procedures employed by planners and is devoted to the construction of an evaluative model. Chapter Six, is devoted to an evaluation of the results accumulated from model implementation and reviews the method undertaken in this study. Finally, Chapter Seven presents the summary and conclusions of this research. To supplement this commentary, a dynamic methodological flow-chart will assist the reader in following the steps undertaken in the study (Figure 1).



## ***CHAPTER TWO***

### ***The Social Conditions of Day Care***

## ***CHAPTER TWO: THE SOCIAL CONDITIONS OF DAY CARE***

To integrate successfully a community based day care facility into a particular area, one must not overlook the fact that each community has its own unique social identity. Consideration must be given to the social characteristics of the area so that the planning and development of day care services ultimately benefits the entire community and reflects the needs and requirements of the child, parent and community. Therefore, the objective of this chapter is to delineate the social conditions associated with the integration of day care services and to identify the variables that may have a significant relationship to the original project objectives. To achieve this goal, the chapter is broken down into three components. The first component examines what influences human behavioural patterns with respect to day care services. In addition, the discussion addresses Maslow's theory on what motivates human behavior and incorporates his ideas to establish a formula for articulating the needs and requirements of the previously specified client groups (child, parent, community). The second component of the analysis addresses the concept of day care in the community. This section discusses the social planning approach proposed by Harvey Perloff in an effort to elicit the information required to understand the community make-up and the changes that are characteristic to the area. Moreover, the section discusses the societal benefits of day care services and again relates the analysis to the specified client groups. The final component of the chapter is devoted to establishing a catalogue of social elements that may affect the provision of day care services.



## **2.1 The Social Dimensions of Day Care**

Traditionally, day care programs are established as a custodial service to meet the needs of the adults rather than the needs of the child. This requires that we fully understand the elements that affect individual parental perceptions and determine behavior within society. The implementation of community based day care facilities necessitates that we fully understand and emphasize that the facility must satisfy the child's, as well as, the parent's social needs. The concepts related to the implementation of a community based day care facility are equally valid at both levels. At this point it is imperative to distinguish a few significant facts.

From the standpoint of individual needs, day care services offer the infant a vehicle for the development of their personality, whereas, they offer the parent the opportunity for social interaction. At the community level, day care services are seen to offer a service which simultaneously addresses the essentials of the individual as one or as both the child and parent. This is attributed to the fact that the child and parent are a family unit which in turn is the basic building block of a community, or in other words, a microcosm of the community. Using this approach dictates that we move from an examination of the individual, that is both the child and the parent, towards community behavioral patterns. This will shift the focus to the societal components essential to this practicum, thus avoiding the pitfalls of the past, that is, looking at day care with primarily the parent in mind.

In our society, a strong relationship exists between behavioral patterns and specific social

factors exhibited within one's environment. It is evident that "the culture of the urban community is at once the expression of a broad range of activities - amorphous, diffuse, dynamic, shaping, blending - in short reflective of the many states of mind that are contained within the community".<sup>17</sup> Social psychologists address the complexities evident throughout an individual's expression, by assuming that man is a 'social animal' and must be investigated by "how he thinks, feels and behaves in social situations"<sup>18</sup>. With this in mind, it can be assumed that individual and community behavior is influenced by a variety of factors. More often than not, a human being's understanding of concepts is influenced by one's ethnic origin, religion and the beliefs and values passed down by previous generations. In most cases an individual's personality is influenced by these specific societal beliefs, thoughts and values and may restrict or influence the individual's perception, understanding and attitude towards services such as day care. Some social psychologists have determined that personality influences a person's social behavior. Other social psychologists have built upon this theory and have concluded that "personality and behavior are influenced by a person's social background or by the social setting in which that person finds himself or herself".<sup>19</sup> Therefore, an individual's psychological make-up whatever its root causes, is one determinant influencing the interpretation of the world around him and of his behavior in various social situations.

As stated above, humans are social animals whose behavior patterns are significantly influenced by their psychological make-up. However, it must be noted that behavioral patterns are also influenced by the desire to fulfill a variety of needs, be they love, safety or

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<sup>17</sup> Harvey S. Perloff., "Planning and the Urban Community", p. 48.

<sup>18</sup> Johnathan Freedman, J. Carlsmith and David O. Sears., "Social Psychology", p. vii.

<sup>19</sup> Metta Spencer., "Foundations of Modern Sociology", p. 7.

economic needs. As proposed by Abraham Maslow (1970), the desire to fulfill a variety of human needs is what influences an individual to choose one activity over another. Maslow depicts human needs in a hierarchical structure (See Figure 2) and states that fulfilling basic human needs provides the motivation to satisfy more individualistic needs. The most basic needs are the physiological needs, i.e. air, water and food and these take priority over all other needs. These physiological needs employ the bottom section of Maslow's diagram 'hierarchy of needs', with safety, belongingness, and esteem needs occupying the middle portion of the diagram. "At the apex of Maslow's hierarchy is the need for self-actualization, the desire to achieve one's full potential as a human being".<sup>20</sup>

(Figure 2) Maslow's Hierarchy of Needs



(Source: J. Kalat., "Introduction to Psychology", p. 260).

<sup>20</sup> James W. Kalat., " Introduction to Psychology", p. 259.

Fundamental to Maslow's theory is the idea that an individual must satisfy one level of the hierarchy before undertaking an assault on the next level. Using this framework for analysis, it is often the case that certain needs take priority over others; however, to understand and predict peoples' choices, we need to know a great deal about what motivates them. Applying Maslow's theory shows that a dichotomy (division) exists between child and parental needs and also emphasizes their relationship with regards to community based day care facilities.<sup>21</sup>

To address child and parental social needs and requirements, it is essential to approach the examination from the following perspective: which needs can and must be addressed when implementing a community based day care facility, and which needs stand out as the most important with regards to both groups. As stated earlier, today's day care services offer the opportunity for enhanced child development. Within the child development stage, community based day care facilities can offer an environment that lends itself to the satisfaction of Maslow's hierarchy of needs within the dimensions of their early development stage. For example, the facility should satisfy the basic physiological needs such as food, oxygen, sunlight, and shelter while the child is at the site. With these in place, the child would start to develop a feeling of safety and security, the second phase of Maslow's hierarchy. The educational programs implemented at the site should lend themselves to child development through social interaction which would foster feelings of belonging and accomplishment, the third and fourth phases of the hierarchy. Building upon these development phases, the child may eventually reach the optimum point in the early developmental stage and may experience its full potential. This development would

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<sup>21</sup> Abraham Maslow's theory of a Hierarchy of Needs was utilized over other theories such as the Drive Theory conceptualized by Konrad Lorenzo or the Incentive Theory put forth by Clark Hull because it compliments the inquiry and provides the optimum format for obtaining the desired results.

help to prepare the child for the next life stage transition which would be fulfilled at the elementary school level. Therefore, it is imperative that when we plan for future community based day care facilities, we address and supply services which facilitate the optimum environment (i.e. physical and social) for child development.

It is generally the case, that the first concern of parents is the physiological, safety, and educational needs of their children. However, looking at Maslow's hierarchy it is evident that parental development can be enhanced through the social interaction inherent in the patronage of a day care service. Social interaction evolves from the basic desire to satisfy a variety of personal needs such as group identification and self-actualization. An individual partakes in a variety of relationships because "other people are the only or primary means of satisfying certain needs, and man therefore affiliates in order to obtain this satisfaction".<sup>22</sup> The relationships and perceptions obtained through social interaction develop and influence one's attitude and reactions towards services like day care. The individual attains an understanding of the traits associated with the service through the mechanisms of association, reinforcement, and imitation developed through the process of social interaction. For example, most parents believe that day care services should be provided by appropriate day care professionals or educators. This component is very important to the concerned parent with a limited income. These parents are highly concerned with the development of their child and want the best care available for their money. The understanding the parents have acquired regarding the educational component of the institution has evolved through individual perception and is stimulated by social interaction. This understanding works together with the economic restrictions of the

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<sup>22</sup> Johnathan Freedman, J. Carlsmith and David O. Sears., p. 27.

family to determine patronage and participation with a particular day care provider. With all of this in mind, we must be able to identify specific social requirements of the parents and consider them when planning for a future site. A mechanism must be employed which will satisfy their concerns regarding the physiological, safety and educational components of the service, while at the same time providing an environment which is suited to social interaction, individual development and the satisfaction of specific human requirements. As highlighted, specific requirements and needs envisioned through Maslow's hierarchy, show the strong relationship evident between both child and parental requirements. This relationship effectively distinguishes some specific needs and requirements associated with community based day care facilities. Human behavior patterns are greatly affected by the satisfaction of such needs. If a community day care facility does not adequately identify and address these issues, it is often the case that the patronage of that specific site may be affected.

Another factor that influences human behavior is the desire to fulfill basic economic needs. Day care services are essentially a component of the social service network within our urban framework and are often seen as a means to an end for an individual to enhance their economic position. Quite often families rely upon day care services to give them the opportunity to obtain employment or attend educational institutions to increase their earning capabilities. In most cases,

one's level of education affects one's level of income, which, in turn, affects the type of care arrangement chosen, it is necessary to account for the level of income when looking at the relationship between education and child care.<sup>23</sup>

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<sup>23</sup> Harvey Stevens, "Child Care Needs and Realities", p. 72.

In these circumstances, day care services are perceived as an essential social service and the attitudes and beliefs regarding the services are often formulated from an economic standpoint. People strive for an improved socio-economic position, yet without the service, their economic opportunities would be limited.

Day care services do not remain static and are subject to changing socio-economic factors such as income, employment, tenure and marital status which invariably influence the demographic make-up of a particular area and the behavior of individuals. To fully understand how an area is changing we must constantly examine its significant components. "How many people and families, what are the age groupings, what is the ethnic composition, the income levels, the occupations, and the educational level of the inhabitants"<sup>24</sup> All of this information helps to give an adequate description and explanation of the continuous changes in a particular neighbourhood and how they will affect individual perception and behavior patterns within the community.

The above discussion leads to the conclusion that human behavioral patterns are influenced by a variety of factors such as, environmental conditions which influence an individuals psychological make-up, to the different social groups and their desires to satisfy a variety of needs. Furthermore, this analysis shows that in day care planning there should be a permanent awareness of the dichotomy between child and parental needs. Understanding what influences human behavior in these circumstances will enable the facilitators of a community based day care service to be able to anticipate the type of actions that will take place in the future.

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<sup>24</sup> *Ibid.*, p. 62.

## 2.2 Day Care in the Community

Every community is unique and develops its own identity, complete with specific strengths and weaknesses. Its development is contingent upon the history of the area and the evolution evident within its demographic make-up. The integration of a day care facility into a community can be greatly affected by neighbourhood composition and can only be successful if we fully understand and address the essential (needs and requirements) elements of the area.

To comprehend the needs of the community and its residents, it is beneficial to employ a social planning strategy to identify the specific characteristics. "Good use could be made of group and neighbourhood profiles which attempt to get at changing characteristics, major unfulfilled needs, and actual and potential strengths of one or various groups in the community".<sup>25</sup> In planning for future day care facilities, one must realize the value of sociological research while trying to completely understand the situation in a specific community and offer the most appropriate approach. There are five areas of research which can contribute to a workable understanding of the present situation within a community. They are:

*Population studies*-the study of the size, distribution, and composition of a specific population and the changes in these aspects.

*Human ecology*-the study of the community as an economic and social organization of patterned relationships-spatial, temporal, and functional.

*Social organizations*-the study of the human groupings in the community: memberships, participation in community institutions.

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<sup>25</sup> Harvey S. Perloff., p. 297.



*Social disorganization and community problems*-the study of social conditions that are regarded as problematic or pathological.

*Social psychology*-the study of individuals as members and participants of groups within the community, and of their attitudes and opinions-and how these are formed and changed.<sup>26</sup>

Employing the social planning approach supplies the information needed to understand the community make-up and changes that are characteristic to the area. Building on the above mentioned approach, incorporating a successful process of community participation to completely understand each communities needs and requirements is beneficial. Utilizing such an approach enables "citizens to join politicians, planners, and other bureaucrats in determining how goals and policies are set regarding the future of the community".<sup>27</sup> This approach helps to alleviate some of the inconsistencies of a quantitative approach to planning and benefits the overall effectiveness of the planning process.

Uncovering specific neighbourhood characteristics leads us to the realization that communities hold within them, specific desires often based upon the overall health of the community. This 'health' aspect addresses the physical, mental and most importantly the social welfare of the community. A community envisions a set of needs and values it hopes to achieve. Community health and livability are perceived as the means for developing community identity which can, in turn, facilitate the development of community values, such as crime prevention, conservation of the environment, and the ability to express and incorporate different lifestyles, into the community.

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<sup>26</sup> *Ibid.*, p. 60 & 61.

<sup>27</sup> Gerald Hodge., "Planning Canadian Communities", p. 351.

Building upon the community needs discussed and putting this information into perspective, it is essential to implement services which facilitate the development of community identity while addressing essential needs.

If a community is to be a community, and not just  
a random collection of people and things, then it  
needs both the feel and substance of community living.  
It needs a community life support system.<sup>28</sup>

As stated earlier, appropriate day care services are seen as a foundation stone of a well built system of neighbourhood services; an essential social service that provides opportunities to the child, parent, and community. Day care services attempt to facilitate an environment which lends itself to human development. "Healthy personalities and healthy physical beings are two of the most important indicators of well developed human resources".<sup>29</sup>

Quality day care provides a variety of educational lessons, introducing the child to aspects of everyday life, such as, human interaction, personal hygiene, household duties, physical fitness and promoting their overall well being.

Young children need peer relationships, additional adult models, enriched educational programs, particularly true because half of the intellectual development of a child is achieved by age 4...<sup>30</sup>

This educational process helps to develop an improved physical and ethical health so that "children will not suffer from apathy, lack of initiative, irritability and intellectual retardation".<sup>31</sup> Individual development will benefit society as a whole, creating a

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<sup>28</sup> A Review of Educational Policies in Canada., p. 14.

<sup>29</sup> Joe Hollis., "Polemics on Day Care", p. 86.

<sup>30</sup> *Ibid.*, p. 21.

<sup>31</sup> *Ibid.*, p. 86.

foundation for further development and growth of individuals who may eventually become the catalysts of a successful community.

Moreover, day care services can lend themselves to further parental development. As briefly examined in Chapter One, day care participation promotes a variety of relationships which enhance the educational opportunities of the parents. Day care provides the parents the opportunities to learn from other parents, and at the same time, enabling them to integrate into a social environment where they learn the "whys and where-fores" of the functioning of society and consequently how they can guide the conduct of their children in this respect.<sup>32</sup> Parental social interaction allows the individuals to identify with a specific community service. This identification can essentially become the main ingredient in guaranteeing the success and development of community based services.

Acknowledging educational development, it is easy to address the specific community benefits of day care services. As stated earlier, community development often hinges on the demographic changes in a community and the overall health of the community. Essentially, day care services provide benefits to the community in that they act as a vehicle for the acculturation of the child and the socialization of adults. In addition, day care facilities allow the residents of the community to partake in other activities which can lead to community enhancement while feeling confident in a service with which they can have input in and with which they can identify. Therefore, day care services lend themselves to community cohesiveness and development by facilitating opportunities for enhanced community health, livability and identity. All of these community benefits arise from human development opportunities, stimulated by day care services.

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<sup>32</sup> *Ibid.*, p. 15.

### **2.3 A Catalogue of Social Elements/Variables**

As articulated above, the location and development of a community based day care facility should benefit the interest groups specified and reflect upon the social characteristics prevalent to ensure an equitable program format and facility design. With this premise in place, the analysis shall catalogue the social variables (derived from the previous research) that have a direct effect upon facility development. Moreover, the catalogued variables are conducive to the evaluation procedure proposed in Chapter Five.

The consideration of a potential day care site must incorporate such area characteristics as population change, family profile, population stability, tenure and income levels. Within the parameters of a day care study, these demographic elements may either become positive or negative elements to site evaluation. For example, whether the population base (age/sex, ethnic composition, family characteristics) of a community increases or decreases is essential in determining the present and future demand for day care services and the short and long term viability of the centre. In addition to predicting present and future demand, these elements help to decide upon the most compatible type of day care service (i.e. part time, full time, lunch or after-school programs) to meet community needs. Other areas of consideration are founded in the stability of the population base. An examination into the transient nature of the population and the tenure patterns characteristic to the area determines the length the residents have resided in the community and whether or not they own/rent their living accommodations. This is essential to a site evaluation process because as a planner or an organization attempting to integrate a community based facility, one must understand the populations desire to stay in the community. A strong community presence

may lead to overwhelming support and patronage of such facilities, whereas, a highly transient population may not support community services such as day care due to the fact they view their stay in the area as a point in transition.

As discussed earlier , it is the financial situation of the residents that often necessitates their patronage of day care facilities. Parental commitments to the family necessitate the use of day care services to satisfy basic needs such as food and shelter. In these cases, the families turn to government subsidized day care facilities in order to avail themselves of the opportunity to increase their earning capabilities. Therefore, it is essential for a site evaluation process to understand the income level pattern in a community.

In a site evaluation process, consideration must also be given to a variety of needs and values expressed by the community. These needs and values exist within such variables as community crime levels, whether or not the facility is an asset to the community, and the availability of a substantial resident component devoted to community participation practices. Crime levels are a very significant factor to the specified interest groups; a higher occurrence of criminal activities in the area is not especially conducive to successful day care services. Furthermore, the development of a community based day care service must be analyzed to determine its worth to the community. Will the day care services act as a cornerstone of a community social service network, and will the service help to build community cohesiveness and identity by providing services which promote livability and development at all levels? In addition, the social climate must be examined to determine the existence of a strong participatory network. This is essential to locational analysis and the planning process, because input from the community can only lead to a more effective and

efficient day care service, for as the adage goes, you don't have to be an expert to know what you want.

Identifying all of the social elements that may effect a potential day care service is a very complex and difficult task and is just one component of a locational analysis. As we have seen there exists a vast array of social considerations in each community which provide it with its own identity. Therefore, the identification of a variety of social variables is essential in determining the locational viability of a site and service. The main consideration is whether or not the variables used for analysis purposes adequately reflect the social climate present.

## **2.4 Summary and Conclusion**

Utilizing social-psychological research and social planning techniques provides the means to understand the social conditions directly related to day care services. The identification of the various elements that effect human behavior allows for an examination of the social dimensions encompassing the child, parent and the community. Furthermore, the analysis articulated a variety of community characteristics which may directly affect the interest groups and the viability of a potential day care site. It is obvious community based day care services help contribute to the overall livability and health of a community. Understanding and incorporating the various social concerns that have been addressed, will ensure the day care services implemented, contribute to individual and community development.

## ***CHAPTER THREE***

### ***The Spatial Considerations of Day Care***

### ***CHAPTER THREE: THE SPATIAL CONSIDERATIONS OF DAY CARE***

Examining the characteristics associated with community based day care facilities necessitates an investigation into the spatial dimensions required by the facility. Chapter Two identified the social conditions relevant to day care services, and it is apparent that the opportunities offered by day care services is contingent upon specific spatial requirements. The goal of this chapter therefore, is to examine the nature of the space required to achieve the most appropriate environment for development. To obtain this information, the analysis breaks down the previously determined client groups into two significant user groups: the primary users (the children) and the secondary user groups (the parents and the community). As in Chapter Two, the inquiry is structured hierarchically in the following manner: individual (private) space; group (semi-private) space; and service (common) space. These levels are examined in relation to their ability to facilitate the social conditions and requirements addressed in Chapter Two. The analysis concludes with a specific focus upon the needs exhibited by Day Nursery Centre. The dimensional parameters created are in accordance with the requirements established by The Community Child Day Care Standards Act (1986).<sup>33</sup> It is essential, as planners and day care professionals, to realize the importance of adequately providing facilities that offer the greatest environment for human development. However, in an analysis such as this one, the spatial considerations must also conform to the program format, economic considerations, and social conditions previously discussed.

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<sup>33</sup> "The Community Child Day Care Standards Act of the Government of Manitoba", (1986).



### 3.1 Providing an Appropriate Environment

Addressing all of the spatial requirements essential to the provision of an appropriate physical environment "enables a good staff to plan and carry out good programs for children with greater effectiveness".<sup>34</sup> In addition, appropriate space utilization can offer opportunities to parents and the community. With this in mind, it is essential to understand that certain basic spatial requirements must be fulfilled; these in turn, provide a physical environment which can be used flexibly for additional activities, thus maximizing the effectiveness of a program. The space utilization program matrix (Figure 3) shows how diverse user groups can make use of the spaces:

(Figure 3) Space Utilization Program

		Individual Space (Private)	Group Space (Semi - Private)	Service Space (Common)
Primary	Child	●	●	□
	Parent	□	●	□
Secondary	Community	□	●	◐

● Significant

□ Non - Significant

◐ Partially Significant

<sup>34</sup> Sally Provence, Audrey Naylor, and June Patterson., "The Challenge of Day Care", p. 82.

Child spatial requirements are addressed by individual (private) and group (semi-private) space, whereas, parental and community requirements are addressed primarily by group (semi-private) space. At this point it should be noted that the parental and community spatial need is based upon a time specific requirement instead of an actual space specific requirement. Finally, communal requirements encompasses group space and more specifically service space which consists of all non-child space and is based upon specific requirements for the operation of the facility. A generalized inventory investigates the spatial requirements applicable to each category and relates them to the social conditions addressed in Chapter Two. Approaching it at this level allows for a consideration of the spatial requirements essential to support development.

### **3.2 Individual Space**

As stated in Chapter Two, individual needs and requirements can include both the child and parent or be singular in nature. This discussion concerns itself with the child's individual requirements; 'individual' refers to the actual per child space required (i.e. private space) for development.

Within the walls of any day care facility a certain percentage of 'individual space' is essential for an environment conducive to child development, numerous day care professionals and child psychologists have concluded that children need an appropriate amount of individual space for development.<sup>35</sup> As discussed in Chapter Two, once the

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<sup>35</sup> Interviewing various day care professionals substantiated the theories put forth by Paul Mussen, Piaget, and Louis Sander regarding individual space for development.

child is provided with the initial physiological needs of food and shelter, it aspires to achieve more progressive levels of development. For example, the previous discussion alluded to the child's need to achieve feelings of safety and belonging. To address this need or requirement, day care providers dealing with a "full time day care centre" conceptualized the amount of space needed.<sup>36</sup> Their experience has show that approximately 3% of the facility should be used for a coat storage area which supplies each child with a locker or cubicle with his/her name attached to the space. This space provides the child with a sense of belonging and permanence, somewhere with which they can identify. To reinforce this position, specific articles of furniture may also lend to child identification. Each child can be issued a chair with its name on it for identification purposes. This again acts as a tool for positive reinforcement and stimulates feelings of security.

Every child is similar to an adult in their need for individual space or a personal envelope. A child can function more appropriately if not forced into interaction because of limited space. For example, professionals have concluded that approximately 9 sq.ft. per child should be allocated and used for individual play space and approximately 6 sq.ft. per child for sleeping space. Furthermore, professionals have calculated that each child must be allotted approximately 21 sq.ft. of the total outdoor play space area for individual use. These dimensions work to provide the child with the space needed to develop on an individual basis, which is as important, as the development opportunities stimulated at the group level.

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<sup>36</sup> A full time day care centre is one where care is provided for more than four hours a day and three or more times a week.

Further individual spatial requirements are essential to individual hygiene development. Children are taught the importance of personal hygiene which in-turn acts as a vehicle for acculturation. Experts have found that approximately 250 sq.ft. of the facility should be devoted to washroom facilities. This breaks down to approximately 7 children for each toilet and washbasin.

Essential to understanding these figures is the idea of flexible space as referred to in (Figure 4). In every case, individual space can be transformed and utilized for an alternative function, for example a child's individual spatial requirements for sleeping can later be utilized for a group activity. For this reason the conceptual spatial dimensions exhibited in Figure 4 are for specific allotment purposes only.

The spatial requirements articulated above are essential to individual child development. Individual space is a key element in a child's developmental continuum. If an appropriate amount of space is not provided to facilitate individual development, we may infringe upon the child's developmental process. It is essential to allow for space which promotes developmental opportunities, further preparing the child for their next life transition stage.<sup>37</sup>

### **3.3 Group Space**

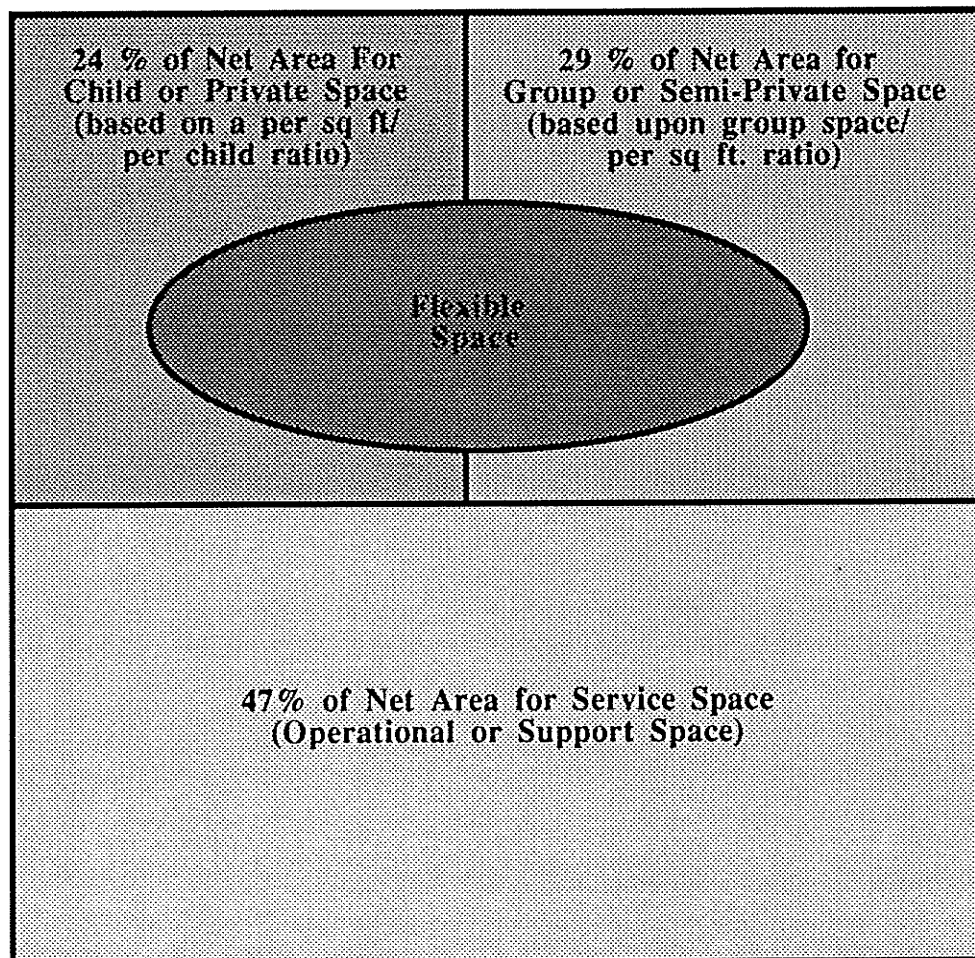
As illustrated in the space utilization program matrix (Figure 3), group space or semi-private space encompasses all the categories exhibited in the matrix. Chapter Two discussed the importance of interaction at both the child and parent levels, as well as





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<sup>37</sup> Paul Mussen, John Conger and Jerome Kagan., "Child Development and Personality", p. 176.

(Figure 4)

Conceptual Spatial Requirements



-  Individual Space
-  Group Space
-  Service Space
-  Flexible Space

the parental concerns regarding the care and development of their children. Chapter Two also alluded to the community benefits fostered by day care services. Putting these conclusions into perspective, it became apparent that certain spatial requirements were required to provide the environment needed to stimulate interaction. The purpose of this section is to discuss the group spatial requirements for the primary users, the children. Parental and community spatial requirements are addressed in section 3.5 Parent and Community Space for the reason that the satisfaction of their needs is maximized within the group setting.

The space required to create an environment suited to group interaction amongst the children is designated for play and educational programs. The spatial requirements for child development are specific in nature, however, the incorporation of space with a changing identity is very important to the development of the child and the overall success of the facility. With this in mind, spatial dimensions must address the area needed for group activities to occur. In addressing the space required for the educational programs of the facility, i.e. the play area, multi-purpose room, or group space, day care professionals have stipulated that these spatial requirements should encompass approximately 29% of the facilities Net Area (as exhibited in Figure 4). If we break down the space further, the actual percentage of play space required for each child in a group setting, consists of 3% of the 29% estimated for group activities. The actual dimensional requirements can vary, but day care professionals further estimate that approximately 20% to 40% of the group space can be utilized in conjunction with the flexible individual space at any one time in order to provide space for specialized group activities. The interaction evolving through group activities stimulate the child at both the physical and mental level. Furthermore, the

relationships developed through group activities encourage association, as well as imitation, which are central to the educational process and the hierarchical development exhibited in Maslow's diagram.

### **3.4 Parent and Community Space**

The flexible space concept referred to earlier helps to incorporate the spatial requirements for parental interaction and community use within the facility. The space required for parental interaction shall be of a more flexible nature and shall be composed of space in the facility used for a variety of activities, often including a large portion of the individual, group or flexible space shown in Figure 4. Highlighting the fact that parental spatial requirements essentially revolve on a time specific basis rather than a space specific basis helps to conceptualize the flexible space concept. The utilization of the entrance way and the multi-purpose room for interaction amongst parents helps to stimulate relationships and a feeling of community. As stated above, the spatial requirements for these areas are meant to handle a peak load at specific times. For example, day care professionals recommend an entrance way that covers at least 2% of the entire facility. In addition, they stipulate that 8% of the site be used as a multi-purpose room which can become a large muscle area, or a waiting room for parents, again displaying its flexible nature. The relationships developed through the interaction opportunities facilitated by this space can assist in the socialization process of the adults and can educate them with regards to the mechanics of the facility. Furthermore, day care professionals have also determined that a large portion of the play space can also be used for parent group meetings. At any time approximately 37% of the space used for educational programs and play can be transformed into a meeting room.

The relationship exhibited between spatial requirements and parental needs revolves around the satisfaction of needs stimulated by a space or spaces that nurture social interaction.

The interaction facilitated by the day care facility fosters relationships that can further benefit the entire community. As stated in Chapter Two, day care services act as a cornerstone of the community social services network which help to build community cohesiveness and identity. Providing a percentage of space for social interaction amongst community members increases human development opportunities which nurture future community enhancement and growth. Furthermore, the utilization of the flexible space for alternative community groups would also contribute to the overall strength and health of the community.

### **3.5 Service Space**

In order to address the spatial requirements delineated under the service space category, it must be thought of as space which is essentially non-child space, space that is utilized for the daily operational aspects of the facility; i.e. food preparation, maintenance, and clerical or managerial duties. As was evident in Chapter Two, most parents have a very strong opinion on the environment needed for a day care service to function appropriately. Day care experts have often used the suggestions supplied by parents and the knowledge they have obtained through theoretical examinations to formulate specific dimensional requirements pertaining to service space. To provide a facility which offers the best care possible, service space becomes a very critical component of the facility. It becomes the backbone or life-line to the environment required for human development. Comparing



the spatial requirements for service space to the previously described needs, it becomes apparent that service space does not have a flexible nature, but has a more rigid composition.

Utilizing the information gathered from various sources, day care professionals conceptualized spatial requirements for the components regarded as service space. The following list incorporates the elements considered as support space, and the variables attached to each are approximations of the net area required to support the facility.

(Table 1)

Conceptual Service Space Requirements.

	<u>Percentage of Net area</u>
1. Kitchen and Laundry space:	4%
2. Directors Office:	2%
3. Program Office:	3%
4. Interview Office:	2%
5. General Office:	3%
6. Staff Room:	3%
7. Storage:	<u>5%</u>
	22%

As is evident in (Figure 4), the total Net Area for service space accounts for 47% of the facility. This figure is comprised of the 22% listed above and 25% of the net area is allowed for circulation, wall thickness and mechanical space. This space becomes complementary to the operational space of the facility and is better incorporated in actual architectural drawings. The incorporation of these spatial requirements satisfies the essential child needs, as well as the parental concerns referred to earlier; however, the most

important relationship evident is between service space requirements and the community. It is essential to include all of the components required to obtain the most appropriate service to meet community needs and requirements.

The spatial considerations addressed above have been of a generalized nature, but should be considered by anyone providing a community based day care facility. Each day care facility or program will have very specific requirements based upon their mandate and the community they serve. The theoretical discussion above is meant to provide information regarding the different levels of development and their relationship to spatial requirements. Putting this information into perspective, it is apparent that a strong relationship exists between spatial dimensions, program format, and the individual or group needs and requirements articulated in Chapter Two. The socialization and educational opportunities offered to the child, parent, and community are contingent upon the provision of space appropriate to satisfy their requirements. To focus on a specific example, the discussion shall now turn to Day Nursery Centres requirements for their future site.

### **3.6 Day Nursery Centre Requirements**

At this point it is essential to note that each province employs specific regulations and requirements for the operation of a community based day care facility. The legislation enacted by a provincial body often addresses the theoretical spatial concerns discussed previously in this chapter. In Manitoba, specific dimensional requirements for full time day care facilities are regulated under The Community Child Day Care Standards Act (1986). Taking into consideration that Day Nursery Centre is looking to relocate its facility

requires an examination into the spatial requirements necessary to its service. The examination considered the dimensional requirements stipulated in the legislation and revolved around Day Nursery's mandate and their plan to increase patronage from 35 to 50 children. The following breakdown was "developed from the Government Standards Act and revised through consultations with the Executive Director and staff of the Day Nursery Centre".<sup>38</sup> As we have seen, "if the physical facility is grossly inadequate, staff cannot function well, and making the children's experiences rich and appropriate will be very difficult".<sup>39</sup> This principle also applies to the other groups who may be utilizing the facility.

The requirements exhibited on (p. 44) are comparable to the theoretical spatial dimensions discussed earlier in the chapter. The 6,000 sq. ft. is meant to address the child, parent, and community needs and requirements for development, as well as, the service or operational space required by the facility. These dimensions are essential in establishing a significant relationship between the social conditions discussed in Chapter Two and the spatial requirements referred to above. Moreover, the results help to provide a benchmark for further examination into the actual site planning process.

### 3.7 Summary and Conclusions

The identification of the specific social conditions articulated in Chapter Two, has produced the framework for a theoretical examination into the spatial dimensions essential to the creation of the most appropriate environment for development. Consideration was given to

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<sup>38</sup> Friesen, Tokar, and Reynolds, (Architectural Partnership)., "Day Nursery Centre New Facility Options", p. 3.

<sup>39</sup> Sally Provence, Audrey Naylor, and June Patterson., p. 82.

(Table 2)	<u>Day Nursery Centre Spatial Requirements.</u>	<u>%</u>
Vestibule and Entrance Area	100 sq. ft.	2%
Children coat storage etc.	200 sq. ft.	3%
Play area - 50 x 35 + 500 (subdivided in Junior/Senior)	2,250 sq. ft.	37%
Multi-purpose Room	500 sq. ft.	8%
Kitchen/Laundry	280 sq. ft.	4%
Children's Washroom	250 sq. ft.	3%
Executive Directors Office	120 sq. ft.	2%
Volunteer Program Office	200 sq. ft.	3%
Unit Leader/Interview Office	100 sq. ft.	2%
General Office	250 sq. ft.	3%
Staff Room	200 sq. ft.	3%
Storage	350 sq. ft.	5%
Net Area	4,800 sq. ft.	75%
Allowance for circulation, wall thickness and mechanical/electrical space:	1,200 sq. ft.	25%
<u>Gross Area</u>	<u>6,000 sq. ft.</u>	<u>100%</u>

(Source: Friesen, Tokar and Reynolds. Architectural Partnership)

development at all three levels, the child, parent and community. The spatial requirements exhibited at each level allow for a conceptual spatial analysis to occur. Each spatial category has very specific requirements, based upon a variety of factors, the relationships of which became an essential cornerstone of the analysis. Focusing upon the information obtained, results in very specific conclusions regarding the spatial dimensions required to provide the most appropriate day care environment. Utilizing this information, the chapter has addressed the spatial requirements Day Nursery Centre needs in order to fulfill its mandate. Specifications were guided by The Community Child Day Care Standards Act (1986) and the expertise of child care professionals. The information gained by the investigation of the spatial requirements needed to address the social concerns discussed earlier, signifies the strong relationship between space and development opportunities. The analysis further substantiates the idea that the joining of social and physical planning could provide a continuous process of human development and neighbourhood improvement.

## ***CHAPTER FOUR***

### ***Day Care Planning***

## ***CHAPTER FOUR: DAY CARE***

### ***PLANNING***

The decision to implement a community based day care facility hinges upon a variety of factors. First, it is imperative to address the program intent and economic considerations associated with the original project objectives. Second, it is essential to highlight the social conditions of day care as exhibited in Chapter Two. Third, to meet project expectations the examination must address the spatial considerations required to meet the individual and community needs, as presented in Chapter Three. Finally, the decision process must include the physical dynamics and externalities of the community, as they exist at the neighbourhood level. As stated earlier, the practicum is bringing forth information for the development of a locational criteria checklist. With this in mind, the purpose of this chapter is to interpret the ideas behind the Neighbourhood Unit Concept and Neighbourhood Analysis for locational criteria development purposes. Uncovering the theoretical considerations required to understand the neighbourhood, will distinguish their importance to the land use planning process. In addition, the examination will address two other theoretical approaches utilized for site evaluation purposes, i.e. Locational Theory and the components of the Site Planning Process. Once this examination is complete, conclusions will be drawn regarding the variables contingent to the development of a community based day care facility. The elements applicable to the development of a locational criteria checklist are considered of equal value to the previously delineated criteria, and will be catalogued for model construction purposes. The approach taken in this chapter is based upon the idea that the development of community based facilities must incorporate a

strategy which includes variables that are already in place and the variables which will invariably affect its future. These considerations must be addressed in order to meet the needs and requirements of the interest groups established.

#### **4.1 The Neighbourhood Unit Concept**

To begin this discussion, it is important to highlight the fact that no one definition of a "neighbourhood" has come forth which encapsulates the true meaning of the concept. "Its very complexity baffles the investigator, one merely carves out slices of the problem and investigates them according to the concepts and procedures of specific disciplines".<sup>40</sup> Throughout history, neighbourhood units have been studied at a morphological level, based on configuration and urban land use structures. Recently, neighbourhood research has taken a more sociologically oriented approach, focusing on the significant relationship between physical design and social behavior. This theoretical principle has fostered arguments both for and against this approach and has further added to the dilemma of the neighbourhood definition. However, within the realm of an undefined entity, the idea of the "neighbourhood unit" has become a significant topic for research since the early 1920's and "the concept of neighbourhood is generally acknowledged to be one of the most important physical organizing principles in modern city planning".<sup>41</sup> Although complicated in its theory, and often charged with being illusionary and unrealistic, the concept has presented planners with a workable scale under which community services can be designed.

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<sup>40</sup> Anne Buttimer., "Social Space and the Planning of Residential Areas", p. 279.

<sup>41</sup> Masters 2 class., "Future Foundations: Towards a Multi-Use School Concept", p. 11.



To the modern city planner, urban neighbourhoods become the cornerstones of a complex metropolis and the neighbourhood units become the cells or parts of a living organism. This interpretation becomes the foundation for the neighbourhood unit concept which is generally attributed to the research and theories conceived by Clarence Perry. Perry's concept was based upon the "area which embraces all the public facilities and conditions required by the average family for its comfort and proper development within the vicinity of its dwellings".<sup>42</sup> The following list highlights the objectives to fully understand the main functions of the neighbourhood unit concept:<sup>43</sup>

1. Introduce a principle of physical order into the chaotic fragmented urban aggregate.
2. Reintroduce local, face to face types of contacts into the anonymous urban society, thereby helping to regain some sense of community.
3. Encourage the formation of local loyalties and attachments and thereby offset the impact of social and residential mobility.
4. Stimulate feelings of identity, security, stability and rootedness in an environment which threatens such feelings.
5. Provide a local training ground for the development of larger loyalties to city and nation.

Considering the above, it becomes apparent that the neighbourhood unit concept is both a social and physical planning entity designed to delineate a social unit whose size is sufficient enough to support a variety of community facilities. In other words, "the main function of such a unit is to supply the immediate needs of its inhabitants by the convenient location of its components", to promote an environment best suited for optimum individual and community development.<sup>44</sup> To achieve his objectives, Perry utilized six planning principles to create complete neighbourhoods:

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<sup>42</sup> Clarence Perry., "The Neighbourhood Unit", p. 259.

<sup>43</sup> *Ibid.*, p. 259.

<sup>44</sup> Micheal Chan., "Toward an Integrated Theory of Neighbourhood Planning", p.13.

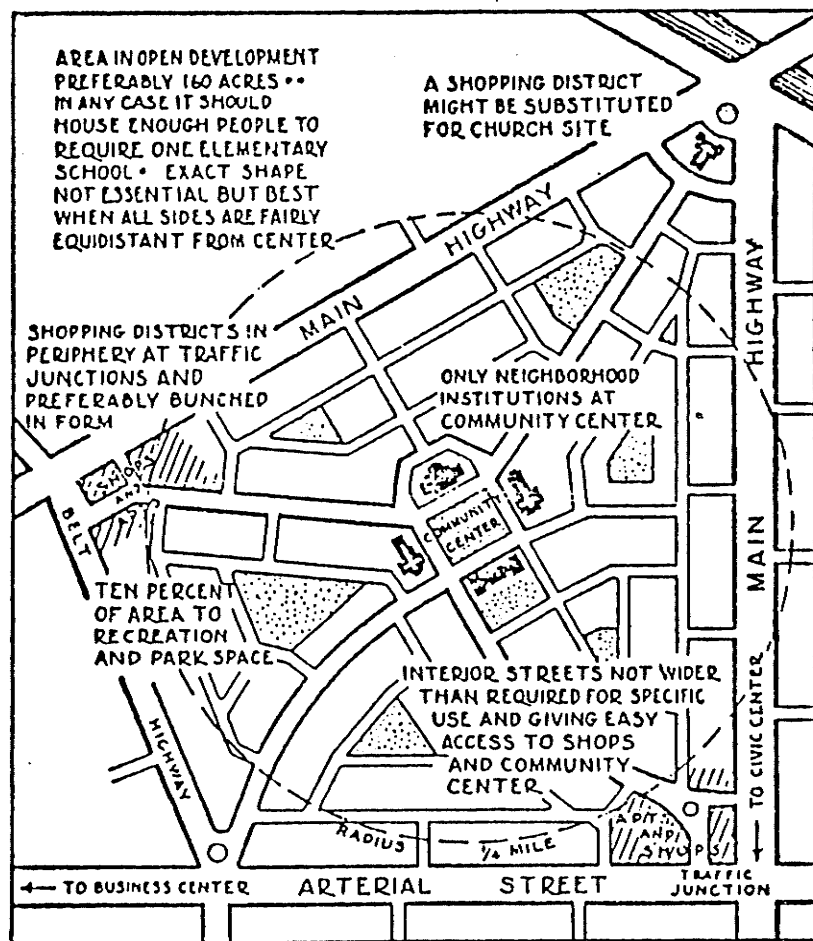
1. Size, in relation to the population required to maintain one primary school.
2. Boundaries, which should define, separate and articulate the neighbourhood within the body of the town.
3. Open space and a system of small parks which would provide for recreational needs.
4. Institutional buildings providing educational and social services to the neighbourhood should be grouped at the center.
5. Local shops should be laid out on the periphery of the unit.
6. An internal street system which should be proportional to their traffic load. They should discourage through traffic but facilitate internal circulation.

Basing his approach on the residents concern for a safe and pleasant environment, Perry felt his conceptualization should foster surroundings that would contribute to social interaction, stimulated through the utilization of a variety of community amenities. Planning neighbourhoods, which situated shopping centres at the periphery and street patterns which facilitated easy access to the neighbourhood institutions at the center of the community, was meant to provide an effective and efficient environment (To further understand Perry's concept refer to Figure 5). Perry felt that social interaction, stimulated through the utilization of physical design, would promote association which was an integral component of the community health and development process.

It becomes apparent, upon examining Perry's principles, that his proposition is very simple and straight forward: identify the neighbourhood and its residents, then create the atmosphere, through design, necessary to stimulate and strengthen the relationship between the two. It is this simplicity that has, in all probability, given Perry and his concepts so much credibility and longevity within the planning discipline.

(Figure 5)

The Neighbourhood Unit - Clarence Perry



*Reproduced from New York Regional Survey*

(Source: Clarence Perry, "The Neighbourhood Unit", Monograph 1. Neighbourhood and Community Planning, Regional Survey of New York and Its Environs. 1929).

Today, Perry's concept is accepted by planners and planning authorities who must constantly defend their theoretical approach in practical terms. Furthermore, the acceptance of the concept is supported by its appeal to a variety of diverse interest groups who are constantly concerned with addressing their individual requirements. The philosophy in which it is based revolves around the ability to create a community through the use of physical design. His approach is meant to identify the neighbourhood and its residents and to stimulate and strengthen the relationship between them.<sup>45</sup>

In utilizing Perry's approach for the purpose of this practicum, a few assumptions have to be made and accepted. First, we must assume that the use of a community based facility will provide the setting for the residents to get to know each other and develop relationships which can in turn be useful to the community. Second, it must be assumed that physical planning can contribute to an integrated community life. Assuming these conditions allows for the utilization of Perry's theory within this section of the practicum. "So that we may extract from it the principle attributes of the neighbourhood unit idea", to produce a list of criteria which will be beneficial in addressing the complexities involved with the implementation of a community based day care facility.<sup>46</sup>

## **4.2 Neighbourhood Analysis**

In attempting to address specific characteristics of an area, it is essential to employ an approach which is understood by the researcher, as well as, the people utilizing the

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<sup>45</sup> Regardless of the ups and downs of The Neighbourhood Unit theory over the years, people keep coming back to Perry's concept for analysis purposes.

<sup>46</sup> Micheal Chan., p.18.

information obtained. To accomplish this task, an examination into the neighbourhood analysis procedure will be undertaken to distinguish what it is, how it works, and why it is important. The traits it exhibits shall be instrumental in generating all the information required to successfully integrate a service into a particular area or region. To begin, we must address the question: what is neighbourhood analysis? Fundamentally, neighbourhood analysis is a study undertaken to identify the evolutionary stage being experienced by the neighbourhood. It entails a specific examination of the area and a gathering of information on:<sup>47</sup>

1. housing conditions, including the location and extent of blight and potential blight.
2. characteristics of families affected by poor housing.
3. conditions in non-residential areas, including location and extent of blight and potential blight.
4. adequacy of community facilities and services, both public and private.
5. causes of blight.
6. steps needed to eliminate present blight and prevent future blight.

This type of analysis is meant to nurture a neighbourhood plan of action which is designed to create externalities that become assets to the residents of the community. Similar to comprehensive community planning, neighbourhood analysis is concerned with the improvement and development of the entire community. Neighbourhood analysis generally supplements planning studies to supply more detailed information regarding the condition of residential and non-residential structures, and to refine studies of community facilities and public improvements.<sup>48</sup> To undertake such a study, it is first necessary to delineate the neighbourhood or area which will be studied. Once this has been accomplished an examination into housing conditions, family types, and amenities can

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<sup>47</sup> U.S. Department of Housing and Urban Development., "Answers on Neighbourhood Analysis", p.1.

<sup>48</sup> *Ibid.*, p. 1.

provide a general picture on family size, race, income and other neighbourhood characteristics.

Next, we must understand how neighbourhood analysis works. To obtain the required information, neighbourhoods must be seen as a cell or part of a living organism that "changes over time in patterns roughly analogous to the life cycle of a living being".<sup>49</sup> A convenient tool is to view the neighbourhood as endowed with a five stage life cycle continuum (See Figure 6). Stage One neighbourhoods are relatively new neighbourhoods which have desirable locations and attract residents who care for and maintain the area. These areas are generally healthy and do not exhibit any physical signs of declining. "Stage Two areas are generally older neighbourhoods where some functional obsolescence exists, densities may be higher and minor physical deficiencies in housing are visible".<sup>50</sup> Stage Three neighbourhoods exhibit clearly visible deficiencies in housing and the rental tenure is quite high. The social status in these areas is significantly lower and many structures have been converted to higher density uses. Stage Four is characterized by a large number of deteriorating housing structures, and poverty level households often dominate the area. Stage Five neighbourhoods "are characterized by massive abandonment and populated by those of the lowest social status", in the Canadian context the stage five situation rarely exists.<sup>51</sup>

The classification of an area along the life cycle continuum entails a detailed analysis of a variety of criteria. The criteria may exhibit a greater or lesser significance with regards to

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<sup>49</sup> Masters 2 class., p. 11.

<sup>50</sup> *Ibid.*, p. 12.

<sup>51</sup> *Ibid.*, p. 12.

(Figure 6)

Life Cycle Continuum.

Stages	Dwelling Type	Pop. Density	Family Structure	Social Status	Migration Mobility
Stable and healthy (suburbanization)	Single-family	low	young, small children	high	high, net in-migration
Infilling (minor decline)	single-family/ multi-family	medium	aging, older children	high	low, net in-migration
Downgrading (clear decline)	conversion of dwelling to multi-use	medium	older families few children	medium	low, net out-migration
Accelerated deterioration	non-residential construction, demolition of existing stock	declining	older families few children more non-family households	declining	higher, net out-migration
Unhealthy & abandonment (renewal)	public housing	increasing	non-family households, young families, many children	declining	high, net out-migration

(Source: W.H. Rohe and L.B. Gates, "Planning with Neighbourhoods", 1985).

the neighbourhood. In most cases the planner refines the criteria that will be examined to arrive at the most accurate area characterization. In refining the classification, each area will be tested against a predefined set of criteria (See Appendix B) to distinguish the relationship they exhibit to the neighbourhood. Certain criteria can be tested against statistics to obtain results; however, in most instances the criteria reflect a bias in favour of the physical conditions or programmes present. An example list of the types of criteria that may be examined is presented below:

(Table 3)

Area Characterization Criteria

1. age / condition;
  2. intensity / use / zoning
  3. traffic / transportation corridors;
  4. services;
  5. isolation / fragmentation; although population characteristics have been included.
  6. tenure / transience;
  7. ethnicity;
- other criteria introduced, and considered appropriate, are:
8. population growth / decline;
  9. income;
  10. household / family number / size / children;
  11. age (population);
  12. property value change;
  13. property turn over;

Finally, we must answer the question; why is neighbourhood analysis important? Neighbourhood analysis is important because it provides an avenue for the researcher to understand the character of a neighbourhood and to establish the neighbourhood at a point on the life cycle continuum. The present stage a neighbourhood is at, has a significant



relationship to the planning of its community based services. Planning programs must look closely at the neighbourhood and the characteristics it exhibits to successfully understand the role of the services that may be implemented and its relationship to the community. Furthermore, the neighbourhood analysis approach provides the point of departure or frame of reference for a more detailed approach to site selection.

#### **4.3 The Land Use Planning Process**

Complementary to the neighbourhood unit concept and the neighbourhood analysis approach, the planner must rely on land use planning to address factors that may be significant to the location of a facility. The development of a community based service must be considered within the complex urban planning scheme and must coincide with the land use policies already in place in the community. Evaluating the community needs and the civic resources will help to establish the type of effect the service will have on the surrounding community.

As discussed in Chapter One, the need for community based day care is constantly rising, and if this trend continues, the need for future facilities is essential. In this case, a more appropriate method for effectively integrating these sites into our urban fabric is needed. One way of ensuring effective and efficient development of these sites is to plan ahead. Anticipation and planning should accompany a vision for the future, where preliminary design, operational planning, and a specific end use of the site are all included in the overall plan. An appropriate planning process must evolve, and must contain the five essential planning elements;<sup>52</sup>

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<sup>52</sup> Sanford M. Brown., "Planning Environmental Health Programs", p. 4.

1. Identify the Problem and formulate problem statement.
2. Establish the Objective and define mission and goals.
3. Determine the Methodology and list alternative activities.
4. Develop the Evaluation procedures that assess program impact.
5. List the Implementation techniques to carry out the action program.

To illustrate how the planning process would work, a flowchart (See Figure 7) shows the process from "the statement of goals and objectives, through the base studies, analysis of information, general plans to implementation and evaluations, and then cycles back to the goals statement".<sup>53</sup> The entire procedure follows the methodology mentioned above; however, each component of the process may or may not occur simultaneously throughout its application. Furthermore, the stages of the land use planning process have been established to achieve specific objectives pertinent to the successful completion of the project (See Appendix C).

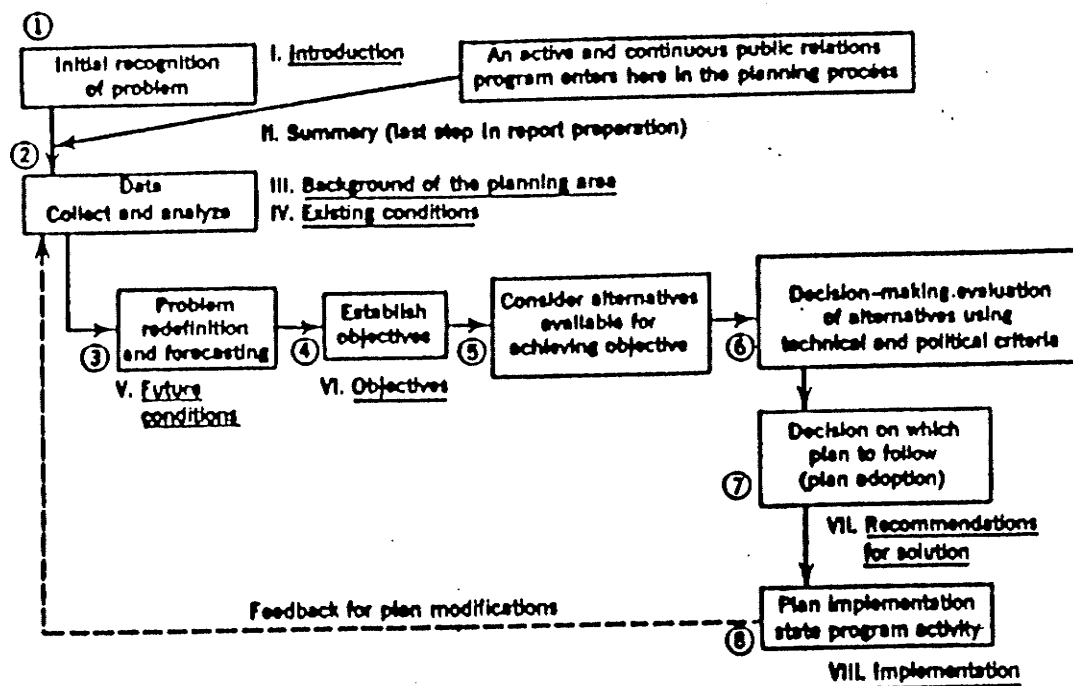
Within this framework, the relationship between community needs and civic resources is addressed through the identification of specific land use patterns which are related to the development of an effective community based facility. These patterns become complementary to the information obtained from the processes previously examined and work together to meet the demand for a new site, the type of programs provided and the lifespan of the site. Along with land use patterns, criteria must be formulated that are concerned with the land area requirements of the future site, the availability of the land, and the compatibility between the service and existing land uses. Furthermore, an adequate economic assessment associated with the operation of the service is essential. Operating costs associated with the cost of the equipment, labour costs, and the land costs are

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<sup>53</sup> *Ibid.*, p. 7.

(Figure 7)

# Land Use Planning - Flow Chart



(Source: Sanford M. Brown, "Planning Environmental Health Programs", p. 6).

pertinent issues, and can be adequately addressed through proper planning. However, it is the methodology exhibited by the land use planning process and the relationships portrayed between the existing land uses and the future land use that are the essential components utilized for this practicum.

#### **4.4 Location Theory**

The selection of a site is influenced by a variety of factors, as discussed earlier. Primarily, the discussion has addressed the approaches undertaken by planners to adequately integrate a service into a particular community. To understand another component associated with the location of a service, the examination turns to a geographical approach to site selection and briefly discusses the ideas associated with the concept of location theory. Location theory can be attributed to the pioneering work of three classical locational theorists, von Thünen, Weber and Christaller. Fundamentally, location theory focuses upon distance and relative position as the key variables in explaining spatial economies. More specifically, "the key variable in location models is distance, or more accurately the costs in money, time, and inconvenience of overcoming distance".<sup>54</sup> Understanding the theoretical basis of location theory provides an explanation into the process of economic location and the evolution of land-use activities within the urban context.

Location theory has its origins in Germany where Johann Heinrich von Thünen emphasized the pervasive role of distance costs and that the cost of rent varied with the distance from the market. Von Thünen's theoretical explanation of ordered zonation of land use speaks specifically to agriculture and other activities that utilize vast areas of space.

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<sup>54</sup> Joseph H. Butler., "Economic Geography", p. 73.

His theory "recognized that there exists a collective reluctance on the part of society to expend more effort in the movement of people and goods than is necessary in fulfilling economic demands".<sup>55</sup> For von Thünen and other location theorists, the spatial structure of economic activity is based upon the factor of distance (i.e. the distance from an individual's home to the market place). The basis for studying von Thünen's theory is that "if the mosaic of economic landscapes throughout the world is viewed with the explanatory model in mind, endless examples can be cited of spatial ordering of land use on the basis of location rent".<sup>56</sup> Von Thünen's theory can be used as a principal explanatory device for the location of other kinds of economic activity by utilizing distance costs as the key variable for systematic analysis.<sup>57</sup>

Similar to von Thünen, Alfred Weber based his approach on a minimum cost factor analysis and utilized distance costs as the key factor for analysis. Weber's thoughts were based on the premise that his theory could be a complete universal approach that would apply in any political or economic system. Weber's ideas differed from von Thünen in that he did not recognize a spatially homogeneous environment. He assumed that an irregular occurrence of resources existed which he termed localized resources. "Weber's model relates to industrial landscapes and transport-oriented industries that require evenly distributed localized resources such as coal and iron ore".<sup>58</sup> Within his analysis, the localized resources were given a fixed site and the location of transport oriented industries were determined by the distance from the market, as well as, the distance from the localized resources. He considered two other factors that may influence site location, "spatial

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<sup>55</sup> *Ibid.*, p. 74.

<sup>56</sup> *Ibid.*, p. 84.

<sup>57</sup> *Ibid.*, p. 84.

<sup>58</sup> *Ibid.*, p. 104.

differences in labor cost, and the efficiencies of firm agglomeration (clustering)".<sup>59</sup> Weber established market centers as permanent sites, which in turn, established the pattern of consumption as a spatial constant. Furthermore, Weber conceptualized a spatial pattern of labour costs based upon the idea that at any place, the supply of labour, at a fixed wage, was unlimited and permanent. He believed that production sites are influenced by the market and the labour resource; however, he did not believe that the location of the production site influenced the location of the market or the labour resource. Weber's ideas became an important extension to the location theory concepts put forth by von Thünen and his utilization of "distance and transport costs as his major explanatory variable places him directly in the main stream of location theory".<sup>60</sup>

Building upon the ideas put forth by von Thünen and Weber, Walter Christaller conceptualized a theory based upon the distribution and functions of the urban settlement. Christaller's theory, better known as "Central Place Theory deals with the spatial distribution of consumer demand, and the locational pattern of service industries and of certain market oriented manufacturing industries".<sup>61</sup> Christaller's theory is based upon manufacturing activities that are not drawn toward localized resources, but are in turn attracted to urban market places. His model is founded upon the principles established by von Thünen and extends itself to explain two interrelated components of urban development: "(1) the location of settlements as optimal distribution centers for services and certain goods, and (2) the way in which these services and goods are distributed within the spatial system of urban places".<sup>62</sup> Christaller assumed that men behaved similarly on a

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<sup>59</sup> *Ibid.*, p. 85.

<sup>60</sup> *Ibid.*, p. 85.

<sup>61</sup> *Ibid.*, p. 92.

uniformly distributed flat plain that has an even distribution of resources and a transportation system where the cost of movement was a function of the distance travelled. With these assumptions as his base, Christaller interpreted that the evolution of settlements was based on the fact that individuals required places to satisfy their day to day trading requirements and he interpreted the location of a service on its proximity to the urban market place. Furthermore, Christaller realized that human beings create, within their minds, a mental model of the city and what they will find within its boundaries. It is these mental models, although most often unrecognized, that eliminate a random spatial distribution of services and create an ordered pattern of central place functions within the economic landscape. The importance of Christaller's work is the fact that he provides a rational to solve a complex and never ending question; what determines the number, sizes and distributions of settlement patterns and functions of urban places.

Analyzing the concepts behind the locational theories put forth by von Thünen, Weber and Christaller provides a good example of alternative approaches to the site selection process. Taken together, the three approaches "furnish a substantial measure of explanation for existing economic landscapes and can improve land-use planning".<sup>63</sup> It is the relevance locational theory has to land use planning and the distance variable associated with locational theories that necessitated its analysis. Within the planning component of a project, alternative approaches are beneficial in attempting to address all the elements of a project.

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<sup>62</sup> *Ibid.*, p. 92.

<sup>63</sup> *Ibid.*, p. 104.

#### 4.5 The Site Planning Process

The above analysis has addressed a variety of concerns implicit in the development of a community based facility. To take this inquiry one step further, it is essential to identify the elements at work within the Site Planning process. First of all, one might ask what is 'Site Planning'? Site Planning "is the art of arranging external physical environments to support human behavior".<sup>64</sup> Furthermore, Site Planning has specific goals which are moral and esthetic, and are focused upon making places which will enhance our everyday lives, "which liberate the inhabitants and give them a sense of the world they live in".<sup>65</sup> Similar as Neighbourhood Analysis and the Land Use Planning process, Site Planning asks a variety of questions which it hopes to answer for the effective development of a site. The first is defining the problem. Defining the problem involves answering a variety of questions: "for whom is the place being made? for what purpose? who will decide what the form is to be? what resources can be used? what type of solution is expected? and in what location will it be built".<sup>66</sup> Addressing these concerns builds the basis for site planning to manifest.

Site planning is practised by architects, landscape architects, civil engineers and planners, and is an approach that involves more than just a look at the land. Site planning is a classification procedure which takes into consideration the ordinary and unique characteristics of the land. Site planning essentially involves three phases; the process phase, the approach phase and the inventory phase which work in accordance with one

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<sup>64</sup> Kevin Lynch and Gary Hack., "Site Planning". p. 12.

<sup>65</sup> *Ibid.*, p. 1.

<sup>66</sup> *Ibid.*, p. 3.



another to obtain a conceptual plan. The phases are utilized to achieve a very specific list, catalogue or inventory obtained from a specific site. The process phase incorporates the conceptual desires of site planning and further addresses the purpose of the analysis:

1. Match or fit a given program for a project with specific or suitable site.. The site selection is often determined by a comparative analysis of several available sites for the same predetermined program. The site is often selected on the basis of access, context, and/or adaptability of site.
2. To determine what the parcel of land is best suited for. The development program is then a direct reflection of the site's amenities.
3. The site analysis undertaken to enable the development of appropriate management criteria.<sup>67</sup>

The approach phase of site planning works within the process phase and is a more direct and comprehensive procedure. The approach phase is another step in addressing the questions referred to above and utilizes the following systematic analysis to obtain the desired results.

1. Program Development - What are the needs, desires, expectations, philosophy of the client?
2. Site Inventory - What's there? Look at everything on site and record it as it is! Understand the natural and cultural processes at work. Document the site in photos, sketches, diagrams, plans and note personal impressions of the site.
3. Site Analysis - Assess the site in terms of its physical assets and liabilities. Identify site hazards and fragile areas that should be avoided and what potential does the site has for development.
4. Program Evaluation - Identify the interrelationships of program elements and assess intensity of these relationships.
5. Concept Plan - Organize program elements to actual scale and integrate with the natural features of the site.<sup>68</sup>

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<sup>67</sup> *Ibid.*, p. 7.

<sup>68</sup> *Ibid.*, p. 7.

Utilizing the site planning procedure, the site planner is faced with the questions: What do you look for at the site and who is going to use the site? What is the site going to be used for? The answers to these questions will be the information base to address the components pertinent to the proposed program. Site planning incorporates a variety of criteria considered essential to the overall effectiveness of the procedure. The list below highlights the criteria that need be addressed to effectively obtain the information required to formulate a conceptual plan.

(Table 4)

Site Planning Criteria

1. Geology - Depth and type of bedrock.
2. Soils - Soil type and depth.
3. Landforms - Elevations, slope gradients and wet areas.
4. Water - Watersheds and surface drainage patterns.
5. Ecology - Dominant plant/animal communities.
6. Climate - Temperature variation, precipitation, humidity, solar angle, cloudiness, wind direction.
7. Sensuous Qualities - Character and relation of visual spaces; viewpoints, landmarks, focal points.
8. Man - Made Structures - Existing buildings: location, size, type, use, condition.
9. Legal Description - Ownership boundaries, easements, zoning restrictions, ordinances.
10. Land Use - Historical patterns, landmarks, historic significance.
11. Human Factors - Phenomenology of place or of the site. The Genus Loci. Personal impressions of the site.<sup>69</sup>

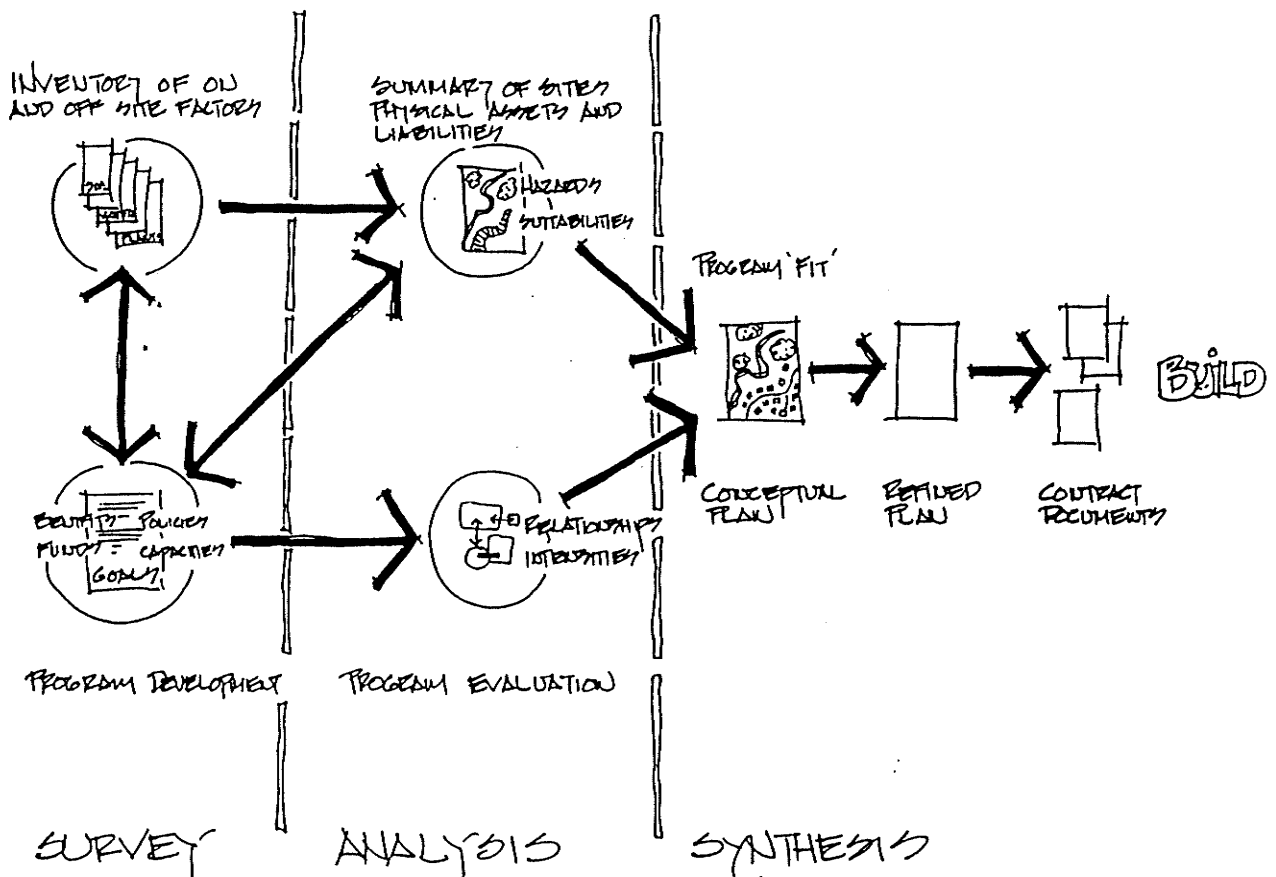
The process, approach and inventory phases make site planning a logical and comprehensive procedure (See Figure 8) which encompasses a variety of other stages such

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<sup>69</sup> *Ibid.*, p. 42.

(Figure 8)

Site Planning - Approach



(Source: C.P. Thomsen, "Site Planning", Unpublished Article: University of Manitoba, 1988).

as bidding, contracting, detailed costing, construction, occupation and management. These components combined with the above process form the basis of site planning proper as articulated by Lynch and Hack (1984). At this point, however, it is the site analysis procedure that is the critical component. Site planning "deals with the qualities and locations of structures, land, activities, and living things".<sup>70</sup> It acknowledges that sites are subject to change and the sole function of its being is to supply a framework for analysis to occur. Thus, it is the key elements of analysis and the interrelationship amongst the sites characteristics that become the desirable concepts utilized within this practicum.

#### 4.6 Summary and Conclusions

As stated earlier, this practicum sets out to establish locational criteria for a community based day care facility. The essential premise behind the study is to uncover the elements that may affect or are effected by the integration of such a service into a community. It was essential to address the afformentioned approaches to planning and site location to obtain a basic understanding of the components that must be addressed when integrating a service into a particular community. Each process articulated specific avenues for exploration and produced conclusions which provided the framework for a selection process to occur, which focuses upon criteria that are applicable to this project. Similar as the neighbourhood analysis approach, the criteria produced are manipulated to address specific variables applicable to the integration of a community based day care facility.

The following conclusions drawn from the analysis provide the framework for the creation of locational criteria and are based upon the opportunities and constraints associated with

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<sup>70</sup> *Ibid.*, p. 12.

the integration of a community based service. The 'neighbourhood unit concept' purports to create or influence community development through the use of physical design. This concept leads to the realization that a successful community design is based upon the delineation of specific neighbourhood boundaries in order to assess community resources and provide the amenities needed to create a strong and cohesive community. The implication of this train of thought is that, if proper community design has been accomplished, improved interaction will occur conducive to community cohesiveness and future development.

The 'neighbourhood analysis' approach established the fact that neighbourhoods exist on a life cycle continuum and that the stage to which a neighbourhood is developed, will have a very beneficial or adverse affect on a community based service. Essentially, the utilization of an area characterization study will establish neighbourhood characteristics (often based upon statistical analysis) and help one to understand the role of the service in relation to the community's position on the life cycle continuum.

A sound knowledge of the land uses present will help to alleviate a situation of conflicting usages and the methods utilized within the land use planning process establish a systematic approach to analysis. The conclusions drawn from the land-use planning process highlight the relationship between community needs and civic resources. The relationship between existing and future land uses is very important when integrating a service into a community.

Location theory was explored to furnish an explanation for the existing economic

landscape. The concepts employed for this practicum revolved around the distance component of location theory and the cost in time, money, and inconvenience in overcoming the distance to the service. To cite an example, if the primary users of a day care program are low income families who have to travel a great distance to use the facility and their basic mode of transportation is walking, they may be deterred from using the service because of the resources expended to overcome the distance.

Site planning acknowledges that sites are subject to change, and it deals with the qualities and locations of structures, land, and living things to highlight the interrelationship between the site and surrounding area characteristics. These considerations make site planning an important element in envisioning locational criteria for a community based day care facility.

With these conclusions in place, specific locational criteria focusing on the integration of a community based day care facility can be conceived. The variables discussed above act as integral components of an actual locational analysis. At this point it must be reiterated that all the elements examined exist at an equal level and have been manipulated from the approaches discussed, focusing upon factors directly related to day care. The testing of the criteria will be discussed during the model construction phase in Chapter Five.

## ***CHAPTER FIVE***

### ***Locational Criteria Model Development***

## ***CHAPTER FIVE: LOCATIONAL CRITERIA MODEL DEVELOPMENT***

The integration of a community based day care facility is closely tied to a wide variety of aspects associated with urban life. The "urban infrastructure, transportation systems, mobility patterns, urban environment (social and physical), urban facilities and city size" are all factors which affect the locational considerations and decision making processes associated with facility development.<sup>71</sup> The first four Chapters of the practicum have highlighted the specific client groups needs and a variety of the variables (determinants) directly related to the development of a community based day care facility.<sup>72</sup> The method of analysis and evaluation proposed in this practicum is derived from the amalgamation of the above theoretical considerations according to their importance to the planning process. The purpose of this chapter is, therefore, threefold: first, to examine different types of land use modelling methods employed by planners; second, to establish a specific list of client group needs, as well as a comprehensive list of locational criteria (derived from the previous analysis); third, to select an appropriate model type for the purpose of this practicum and to develop a community based day care modelling procedure to fulfill the practicum objectives. The implementation of the model on an actual case study will be carried out in Chapter Six.

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<sup>71</sup> Wal F.L. Van Lierop., "Locational Developments and Urban Planning", preface.

<sup>72</sup> For the purpose of this practicum variables and determinants shall have the same meaning or function.



## 5.1 Land Use Planning Models

To the planner, models act as a valuable tool for evaluating proposals and provide a systematic approach to the analysis essential in the decision making process. In today's society, the word model has a variety of meanings ranging from abstract mathematical models, such as an economy of scale model, to iconic or representative models, such as a model automobile. The use of models in the land use planning process is primarily targeted at simulating reality and establishing a scenario as close to the situation or problem as possible. As a researcher, the utilization of a model enables one to understand and deal with the complexity of a project, by simplifying and generalizing existing relationships. Furthermore, the utilization of a model, in land use planning, can be very beneficial in that "the model is amenable to manipulations which would be too expensive, impractical or impossible to perform on the entity it portrays".<sup>73</sup> In basic terms, the model's function is "to assist understanding by revealing patterns of interaction among different aspects of the subject of study, which can contribute to the predictive and evaluative components of the planning process".<sup>74</sup>

Within the planning profession, a wide variety of models exist, however, in most cases planners utilize three specific mathematical model types for dealing with land use problems or projects. The first type, the *descriptive* model, is intended to express a set of relationships at one point in time. The second type of model employed by planners is the *predictive* model, "which carries a set of descriptive relationships into the future, by some treatment of the time factor".<sup>75</sup> The third type of model commonly used is referred to as

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<sup>73</sup> Margaret Roberts., "An Introduction to Town Planning Techniques", P. 94.

<sup>74</sup> *Ibid.*, p. 93.

<sup>75</sup> *Ibid.*, p. 95.

"the *planning* model (also called the evaluative or prescriptive model), which incorporates some criteria against which alternative futures are tested, to discover which should be preferred".<sup>76</sup> The majority of the land use models used today supply only a fraction of the interrelated aspects of an urban setting, "in that they focus on one or a few activities, which are known to be in fact only part of a much greater network of relationships".<sup>77</sup> This may seem problematic, however, from a planning perspective, these modeling procedures are invaluable in that they simulate very specific activity systems.

Taking into consideration the variety of models used by planners, it becomes apparent that a quantity of variables exist in any planning project, contributing to the complexity of the model and the relationships which affect the land use planning process. Variables may consist of aspects such as demographics, transportation networks, capital investment requirements, etc. Essentially three types of variables exist. The first, termed the 'planning variable', is controlled by planners through the implementation of policies. The second type, the 'exogenous' variable, largely affects the land use planner rather than being affected by him; fundamentally the 'exogenous' variable can be termed a variable which is externally determined, such as the climate. The third type of variable is the 'endogenous' or internal variable. These variables are "consequent in some way upon the planning variables-for example, the population structure will be influenced by employment and the housing structure".<sup>78</sup> They exist in every planning problem and "ascertaining as much as possible about exogenous variables, as constraining future possibilities, then considering alternatives for the planning variables, taking into account what the effects would be on the

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<sup>76</sup> *Ibid.*, p. 95.

<sup>77</sup> *Ibid.*, p. 96.

<sup>78</sup> *Ibid.*, p. 95.

endogenous variables".<sup>79</sup> It is this process that "establishes a key place for forecasting in land use planning, both for assessment of the externally determined factors and for the exploration of alternative planning possibilities".<sup>80</sup>

As stated earlier, models are a valuable resource for depicting reality in a given situation. The importance and characteristics of model application, within the land use planning process, revolves around supplying the researcher "with a systematic representation of some relevant part of the real world".<sup>81</sup> By so doing, the model provides new information regarding the relationships among the various characteristics of a project and the behavioural patterns that exist due to their correlation. Fundamentally, land use models are models of spatial interaction and the elements or variables discussed earlier determine the validity of the land use modelling process. Understanding the variables applicable to a particular project enables the planner to classify them as either generators, attractors or deterrents. The classification of these variables helps to further distinguish their applicability to such complex problems. For example, within a community based day care facility scenario, generators may be the change in the population base, whereas, attractors may be the type of facility and the services it provides. On the other hand, the deterrents in this situation may be the high cost in travel time and money in utilizing the service offered.<sup>82</sup> Establishing the effect each variable may have upon a project enables the researcher to undertake the next stage in the modelling procedure, that being model development.

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<sup>79</sup> *Ibid.*, p. 95.

<sup>80</sup> *Ibid.*, p. 95.

<sup>81</sup> *Ibid.*, p. 95.

<sup>82</sup> *Ibid.*, p. 98.

An essential element of a model is the identification of the proponents present in any given situation. Subsequently, model development can proceed and generally consists of three main phases. The first phase is model design and is considered essential "for a problem which is considered susceptible to treatment by a model, it is necessary to initially decide on a general mathematical formulation deemed relevant".<sup>83</sup> Within the design phase, it is essential to define the precise study area and divide up the components applicable to the study at an appropriate level of detail. The second phase in the modelling process is referred to as the calibration process, "in which the generalized model developed in the design phase is made more specific to fit the real world and the particular area and time".<sup>84</sup> The final phase of the process is termed the forecasting phase and can only exist once the model has been designed and calibrated for a specific situation. To employ the forecasting phase of the model, "appropriate values for the date in time must be substituted into the formula, to be used with the values for the parameters or variables that were established in calibration".<sup>85</sup>

## 5.2 Client Group Needs and Locational Criteria Checklist

As discussed above, the first step in model creation is to identify the components applicable to any given situation and categorize them according to the original project objectives. The needs of the client groups and locational criteria are developed on the basis of the theoretical approaches, classifications and categories discussed in the previous chapters. The client group needs are established under the categories addressed throughout the practicum,

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<sup>83</sup> *Ibid.*, p. 99.

<sup>84</sup> *Ibid.*, p. 99.

<sup>85</sup> *Ibid.*, p. 100.

Child, Parent, and Community. The locational criteria are grouped into five categories: Program Format, Economic Considerations, Social Conditions, Spatial Considerations, and Locational Aspects. It should also be noted that the categories are developed deliberately in a manner that is conducive to an evaluation procedure required for model development. The following (See Tables 5 & 6) is a catalogued list of the client group needs and locational criteria developed for the purpose of the practicum. Furthermore, to reiterate the position taken in the preface, the demand for day care services is a given and is constant throughout the process, and for this reason a specific demand category does not exist.

The client group needs, locational criteria categories and the subsequent variables of which they consist, provide a framework for evaluating the locational viability of a community based day care facility, as well as the deficiencies or advantages of a potential site. The process employed is meant to establish a foundation for decision making and is soundly based in the belief that the integration of a community based facility should not be undertaken randomly. It must be stressed that addressing the factors that may influence facility location is important in a developmental context, however, it must be recognized that these considerations should not take priority over the benefits that a day care facility may provide to the entire community.

### **5.3 Community Based Day Care Model**

Examining the various modelling types employed by land use planners and establishing specific client group needs and a locational criteria checklist, provides the theoretical

(Table 5)

Client Group Needs

I. CHILD

1. Clean Air
2. Food
3. Noise
4. Safety
5. Room to Play
6. Outside Play Space
7. Activities
8. Social Interaction
9. Distance to Centre

II. PARENT

1. Perception of Environment
2. Educational Needs
3. Utility to Parent
4. Cost of Service
5. Accessibility of Site
6. Drop off & Pick up
7. Parental Space
8. Support for Centre
9. Compatibility with Environment

III. COMMUNITY

1. Equity
2. Benefit to Community
3. Cost of Facility
4. Accessible to All
5. Promotes Identity
6. Safety
7. Social Welfare
8. Compatibility with Environment
9. Educational Development
10. Neighbourhood Commitment

(Table 6)

Locational Criteria

**I. PROGRAM FORMAT**

1. Program Alternatives
2. Joint-Use Options
3. User Fee Equity
4. Standards and Regulations
5. Political Will

**II. ECONOMIC CONSIDERATIONS**

1. Site Cost
2. Service Cost
3. Equipment Cost
4. Monetary Sources

**III. SOCIAL CONDITIONS**

1. Population Change
2. Family Characteristics
3. Stability
4. Tenure
5. Income Levels
6. Crime Levels
7. Community Participation
8. Community Asset

**IV. SPATIAL CONSIDERATIONS**

1. Sun Exposure
2. Facility Size
3. Parking

**V. LOCATIONAL ASPECTS**

1. Land Availability
2. Proximity to other Day Cares
3. Centrality
4. Neighbourhood Accessibility
5. Quality of Environment
6. Mixed Land Use
7. Community Amenities
8. Zoning Regulations
9. Traffic Safety
10. Proximity to Public Transit
11. Building Design/Aesthetics

framework for the model developed in this practicum. The model brought forth is essentially an *evaluative* or otherwise termed *planning* model, intended, specifically, for use within this practicum and by any organization concerned with the development of a community based day care facility. The model consists of four specific components and is structured systematically so as to assist future organizations or researchers employing this approach. The first component consists of three generalized Determinant Impact Tables identifying which determinants have an impact upon the client groups needs and serve as a basis for the Evaluative Scoring Matrices. The second component is a Site Evaluation Key which defines the determinants and assigns numerical values to the impact the determinants have upon the client needs. The third component of the model consists of three Evaluative Scoring Matrices; these are based on the Determinant Impact Tables and are adjusted to each particular client group. These tables are specifically used to assign a score in each category for a prospective site. The final component of the model is an Evaluative Scoring Matrix - Summary Table which summarizes the score in each category to establish an Optimum/Minimum Locational Index for site evaluation purposes. In actual model application, the results accumulated from the Site Evaluation Key will be presented in the matrices, tabulated, and then compared to the established locational index to determine the sites viability.

Given the exhaustive list of criteria, the tables allow each individual project or study to undergo a calibration procedure to unequivocally address the inherent aspects of a project. The variables determined not applicable (N/A) in the Determinant Impact Tables are removed or adjusted in this phase to create the most life-like scenario for model



implementation in Chapter six.<sup>86</sup> It must be noted that the calibration procedure is undertaken in three separate phases. First, the determinants are calibrated or adjusted according to the Winnipeg situation. Second, the procedure involves adjusting the determinants to meet the specific client group needs and community values (i.e. how they are to be measured in the Site Evaluation Key). Finally, as mentioned above, the calibration procedure adjusts the Evaluative Scoring Matrices (the third component of the model) to specifically represent each client group.<sup>87</sup>

#### *First Component: Generalized Determinant Impact Tables*

The first component of the model, the Determinant Impact Tables are used to identify the impact of the determinants on the needs of the specified client groups (See Tables 7-9). Each variable is cross referenced with the client groups to determine a specific impact, which will subsequently be assessed through the use of the Site Evaluation Table. Besides establishing the various impacts between the determinants and the client groups, the Determinant Impact Tables are utilized for a variety of reasons. First, they establish a format that is conducive to presenting the client groups needs and locational criteria in an organized manner. Second, the tables act as a comprehensive checklist for the variables essential to locational analysis.

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<sup>86</sup> As described in the section on Land Use Planning Models the calibration procedure is one where the elements/variables not essential to a specific project are removed, added, or adjusted so that the model adequately represents the situation present.

<sup>87</sup> A "truly" generalized model, not calibrated - may include determinants other than those shown.

(Table 7)

# Determinant Impact Table

## Client Group: Child

Category	Needs Determinants											Remarks
		Clean Air	Food	Noise	Safety	Room to Play	Outside Play Space	Activities	Social Interaction	Distance to Centre		
Program Format	Program Alternatives		●					●	●			
	Joint Use-Options							●	●			
	User Fee Equity											N/A
	Standards and Regulations		●					●				
	Political Will											N/A
Economics	Capital Costs											N/A
	Hard Services											N/A
	Equipment Cost											N/A
	Monetary Source											N/A
Social Conditions	Population Change											N/A
	Stability				●							
	Tenure											N/A
	Income Levels											N/A
	Crime				●							
	Community Participation											N/A
	Community Asset											N/A
Spatial	Sun Exposure						●					
	Facility Size					●	●		●			
	Parking											N/A
Locational Aspects	Land Availability											N/A
	Proximity to other Centre's											N/A
	Centrality									●		
	Neighbourhood Accessibility											N/A
	Neighbourhood Blight	●			●							
	Mixed Land Use & Zoning	●		●	●							
	Community Amenities						●	●	●			
	Traffic	●		●	●							
	Proximity to Public Transit	●		●						●		
	Building Design/Aesthetics											N/A

● = Impact

□ = No Impact

N/A = Not Applicable

(Table 8)

**Determinant Impact Table**

**Client Group: Parent**

Category	Determinants	Needs										Remarks
		Perception of Environments	Educational Needs	Utility to Parent	Cost of Service	Accessibility of Site	Drop Off & Pick Up	Parental Space	Support for Centre	Compat W/ Environ.		
Program Format	Program Alternatives		●	●	●							
	Joint Use-Options		●									
	User Fee Equity				●							
	Standards and Regulations		●						●			
	Political Will								●			
Economics	Capital Costs				●							
	Hard Services				●							
	Equipment Cost		●		●							
	Monetary Source			●	●				●			
Social Conditions	Population Change											N/A
	Stability	●										
	Tenure											N/A
	Income Levels				●							
	Crime	●										
	Community Participation								●			
	Community Asset								●			
Spatial	Sun Exposure	●										
	Facility Size		●					●				
	Parking					●	●					
Locational Aspects	Land Availability				●							
	Proximity to other Centre's					●						
	Centrality			●		●						
	Neighbourhood Accessibility											N/A
	Neighbourhood Blight	●										
	Mixed Land Use & Zoning	●										
	Community Amenities		●									
	Traffic	●										
	Proximity to Public Transit			●		●						
	Building Design/Aesthetics									●		

● = Impact

□ = No Impact

N/A = Not Applicable

(Table 9) **Determinant Impact Table**

**Client Group: Community**

Category	Needs Determinants											Remarks
		Equity	Benefit to Comm.	Cost of Facility	Accessible to All	Promotes Identity	Safety	Social Welfare	Compat W/ Environ.	Educational Develop.	Neigh. Commitment	
Program Format	Program Alternatives	●	●					●		●		
	Joint Use-Options	●	●									
	User Fee Equity	●	●					●				
	Standards and Regulations											N/A
	Political Will					●		●				
Economics	Capital Costs			●								
	Hard Services			●								
	Equipment Cost			●								
	Monetary Source			●								
Social Conditions	Population Change										●	
	Stability						●				●	
	Tenure										●	
	Income Levels	●										
	Crime						●	●				
	Community Participation		●			●				●	●	
	Community Asset		●			●						
Spatial	Sun Exposure											N/A
	Facility Size		●						●			
	Parking		●									
Locational Aspects	Land Availability			●								
	Proximity to other Centres											N/A
	Centrality				●							
	Neighbourhood Accessibility	●			●							
	Neighbourhood Blight					●	●					
	Mixed Land Use & Zoning						●					
	Community Amenities									●		
	Traffic						●					
	Proximity to Public Transit	●			●							
	Building Design/Aesthetics								●			

● = Impact

□ = No Impact

N/A = Not Applicable

### *Second Component: Site Evaluation Key*

The second component of the model, the Site Evaluation Key (See pages 85-97), allows the researcher, or the organization involved, to assess the identified impacts and convert the information into a numerical scoring system for evaluation purposes. The evaluation procedure provides the researcher with a simplified and accurate account of how each variable is related to the interest groups specified and identifies the factors that may have an impact on the site in the future. Each variable is looked at individually and defined according to its inherent characteristics, then a standardized method of measurement is applied to each definition. The measurement procedure is undertaken at all three levels the child, parent, and community where applicable to distinguish the degree of impact on the client groups needs.<sup>88</sup>

### **Site Evaluation Key**

**I. Program Format:** The program format criteria have been developed to determine the type of day care service that is to be provided and the goals and objectives of the organization in place. The category focuses on the existence of a flexible program format that can adapt to the characteristics displayed by the interest groups involved. Furthermore, the variables determine the validity of the program format in accordance with the political structures in place. The existence of a program format that addresses the changing role of day care, as well as, the ever changing urban fabric, allows for a more flexible approach to planning and development.

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<sup>88</sup> The scoring procedure unfolds identically at all three levels: child, parent and community. However, there are anomalies present amongst the interest groups therefore, a scoring differentiation may exist in certain instances due to the nature of the elements/variables involved.

1. *Program Alternatives*: This variable addresses the flexible nature of the program (its goals and objectives), to adequately assess its ability to meet the needs and requirements of the client groups. Concerned with such aspects as the program format's ability to provide activities desirable to the child, meeting the educational requirements articulated by the parent, as well as the program's ability to improve the social welfare of the community.

- Highly flexible. 3
- Moderately flexible. 2
- No flexibility. 1

2. *Joint-Use Options*: This issue is concerned with the community programs that may exist and the possible integration of a joint-use program with the centre. Such opportunities provide educational and socialization opportunities for the child and parent, which in turn benefits the entire community.

- Large number of community programs available for integration. 3
- Moderate number of community programs available for integration. 2
- Low number of community programs available for integration. 1

3. *User Fee Equity*: Primarily, this issue is concerned with a financial structure that is compatible with the economic situation of its clients. (i.e. this makes the service available to everyone on an equal level).

- Highly compatible financial structure. 3
- Moderately compatible financial structure. 2
- Incompatible financial structure. 1
- Child N/A

4. *Standards and Regulations:* This issue is concerned primarily with the program format and its compliance with provincial standards and regulations. This consideration addresses the program format's ability to facilitate an appropriate amount of physical, mental, social and emotional development.

- Completely fulfills provincial standards. 3
- Partially fulfills provincial standards. 2
- Does not fulfill provincial standards. 1
- Community N/A

5. *Political Will:* This issue addresses the political will exhibited towards the integration of the facility and the type of program offered. A strong political will exhibited towards the centre helps to promote community identity and support for the facility. These two attributes stimulate an improved social service network within the community.

- Strong political will towards project development. 3
- Moderate political will. 2
- Low political will. 1
- Child N/A

**II. Economic Considerations:** The economic considerations addressed herein are primarily concerned with the capital costs of project development. This category also addresses the availability of funds to cover the cost of development, facility operation and maintenance. As stated earlier, the funds for such projects are derived from various sources, such as; user fees, the three levels of government or alternative service organizations. Economic considerations are significant to the user groups specified in that facility development and the program format may be enhanced or inhibited due to the financial opportunities or constraints.

1. *Capital Costs*: This variable is meant to consider the capital costs associated with the project (i.e. land and construction costs). It is measured in accordance with project objectives to determine the viability of the project in relation to the funding sources available. Capital costs may determine the cost and the type of services provided in a profit oriented scenario.

- Low capital costs. 3
- Moderate capital costs. 2
- High capital costs. 1
- Child N/A

2. *Hard Services*: Consideration must be made regarding the hard services in place (water, sewer, sidewalks) and the cost of upgrading or installation (if necessary) to meet the needs of the client groups.

- Low service costs. 3
- Moderate service costs. 2
- High service costs. 1
- Child N/A

3. *Equipment Costs*: Based upon facility design and program format, this cost refers to the indoor and outdoor equipment needs essential in providing the most optimum environment for development, as well as the costs in relation to the funding sources in place. It May also increase the cost of the service in an appropriate scenario.

- Low equipment costs. 3
- Moderate equipment costs. 2
- High equipment costs. 1
- Child N/A



4. *Monetary Sources:* This variable addresses the availability of funds from government agencies or alternative service organizations for the development and maintenance of the facility. (Concerned with the utility to the parent and community provided through financial support).

- |                                      |     |
|--------------------------------------|-----|
| • Potential for funding is high.     | 3   |
| • Potential for funding is moderate. | 2   |
| • Potential for funding is limited.  | 1   |
| • Child                              | N/A |

**III. Social Conditions:** Before successfully integrating a community based day care facility into a particular area, it must be remembered that each community has its own unique social identity. Consideration must be given to the social characteristics of an area so that the planning and development of the day care services benefits the entire community and reflects the needs and requirements of the client groups specified. The creation of the social conditions category, therefore, is based upon the social characteristics evident within a community and their effect on the viability of a potential day care facility.

1. *Population Change:* This variable addresses the population changes in the area, specifically, an increase or decrease in the population base of the community (i.e. based upon age, sex, and family characteristics). This consideration helps to predict future demand, as well as, the evolutionary process underway in the community, in order to determine the centres viability and longevity.

- |                                  |     |
|----------------------------------|-----|
| • Low population change.         | 3   |
| • Moderate population change.    | 2   |
| • Significant population change. | 1   |
| • Child & Parent                 | N/A |

2. *Stability*: This variable refers specifically to the number of years that dwellers have lived in the community, and implies transience or the lack thereof. It is important to community planning because if the population base sees their stay in the neighbourhood as part of a transitional phase, the support for services such as day care becomes temporary and self serving. Conversely, a stable environment may foster an overall safer environment.

- Stable population: 2 years to 5 years. 3
- Moderately stable population: 1 year to 2 years. 2
- Non-stable population: 6 months to 1 year. 1

3. *Tenure*: This variable delineates the percentage of household owners to the percentage of renters. The importance of this category is that it highlights the residents commitment to the community. This is very important in community planning because if the residents are not committed to their community, planning social service programs becomes difficult due to a lack of community support and involvement.

- A very large ownership component. 3
- A very moderate ownership component 2  
(a significant number of renters).
- Primarily a renting population. 1
- Child & Parent N/A

community, this variable considers the residents ability to pay for the type of service provided. Its primary function is to determine whether or not the type of service established is compatible with the income level characteristics of the community. (i.e. chart may be inverted for an alternative scenario).

- |                           |     |
|---------------------------|-----|
| • Low-income families.    | 3   |
| • Middle-income families. | 2   |
| • High-income families.   | 1   |
| • Child                   | N/A |

5. *Crime*: This variable is concerned with the amount of criminal activity in the community and its' adjacent areas. A high degree of criminal behavior in the community is not conducive to the outdoor activities required by day care facilities. Furthermore, this consideration is extremely important to the parental perception of a safe environment. The category also relates to the possibility of increased crime rates around the facility if it is to be developed. The category may also include the opportunity to reduce crime rates in the area through programs such as the neighbourhood watch.

- |  |   |
|--|---|
| • Low crime rate and no probability of increased criminal activity.          | 3 |
| • Moderate crime rate and modest possibility of increased criminal activity. | 2 |
| • High crime rate and a great possibility of increased activity.             | 1 |

6. *Community Participation*: This variable is concerned with community participation as a resource and the amount of participation and support for facility development that is available. A significant amount of community participation promotes the services identity and educational development opportunities, and also fosters neighbourhood commitment to the day care facility.

- |  |     |
|--|-----|
| • Significant amount of community participation. | 3   |
| • Moderate amount of community participation.    | 2   |
| • Low amount of community participation.         | 1   |
| • Child  | N/A |

7. *Community Asset*: Primarily, the community asset variable is concerned with whether or not the facility will have a significant, moderate or low impact on the community. It is concerned with how the facility and the service improves the social welfare of the community and is based upon the demand for the type of services provided (i.e. full day care services, lunch and after school space, and joint-use options).

- |                       |     |
|-----------------------|-----|
| • Significant impact. | 3   |
| • Moderate impact.    | 2   |
| • Low impact.         | 1   |
| • Child               | N/A |

**IV. Spatial Considerations:** The primary concern of this category is with the needs of the client groups who may occupy the facility. This consideration incorporates the concept of maximum space utilization and is based upon the facilitation of the most optimum environment. It is essential to understand and assess the planned project to determine whether the facility meets the spatial requirements of the interest groups, as discussed in Chapter 3.

1. *Sun Exposure:* Related to sun exposure at the site, the outside play space and windows of the facility must be situated appropriately in order to provide the most optimum exposure to natural sunlight.

- The most optimum positioning for sun exposure. 3
- An adequate positioning for sun exposure. 2
- Inadequate positioning for sun exposure. 1
- Community N/A

2. *Facility Size:* Addressing the proposed building size and adjacent outdoor space will determine whether the facility meets the spatial requirements of the client groups, as well as the provincial licensing agency. The consideration primarily focuses upon such factors as usable floor space per child, toilet facilities, storage space, administrative space, meeting space, community space, service space etc...

- Adequately meets the spatial requirements. 3
- Partially meets the spatial requirements. 2
- Does not meet the spatial requirements. 1

3. *Parking:* This variable addresses the type of parking arrangements at the site or in the surrounding area. It also includes the area required for an adequate vehicular drop-off and pick-up area.

- On site parking sufficient for drop-off and pick-up, as well as, teachers and most meetings; off-site parking readily available. 3
- On and off site parking sufficient, however, drop-off and pick-up areas inadequate. 2
- No on-site parking; off-site parking available, however, no drop-off or pick-up areas. 1
- Child N/A

**V. Locational Aspects:** Fundamentally, the locational concerns address primarily site related attributes (as opposed to more regional locational criteria). The issues examined under this category are physical community characteristics that directly affect location viability. They are of a less complex nature than the social elements assessed earlier, however, their function is to tie more general aspects of the model to a specific site.

1. *Land Availability:* This examines the availability of land within the community for facility development and determines the city's or project initiators ability to obtain a site.

- Potential site for development readily available 3  
and limited costs associated with project development.
- Potential site available but may involve legal aspects 2  
and some additional costs.
- Potential site for development unavailable - 1  
the cost factor unacceptable.
- Child N/A

2. *Proximity to Other Day Cares:* This point addresses the proximity to alternative day care services. This variable is important to day care planning because an over saturation of the market will become a deterrent to the facility.

- Low proximity to alternative services. 3
- Moderate proximity to alternative services. 2
- Very close to alternative services. 1
- Child N/A

3. *Centrality*: This variable identifies the center of gravity in relation to existing geographical client distribution. This consideration is very important to the child and parent client groups, children do not like to travel great distances, especially on foot, furthermore, if the site is as close to the centre of gravity as possible, it maximizes it's availability to the largest number of families. <sup>89</sup>

- Very close to the center of gravity. 3
- Moderately close to the centre of gravity. 2
- Low proximity to the centre of gravity. 1

4. *Neighbourhood Accessibility*: Here the accessibility to the community by the pedestrian and automobile is measured.

- Community very accessible. 3
- Vary degrees of accessibility for pedestrian and automobile. 2
- Very inaccessible for pedestrian and automobile. 1
- Child N/A

5. *Neighbourhood Blight*: Related to the environmental quality of the community, i.e. physical characteristics; pollution, urban blight, decaying housing stock, etc. An area which is suffering from severe blight may affect parental perceptions of a safe environment and may hamper the developmental opportunities offered by day care services.

- Neighbourhood very pleasant, minor urban blight, minor pollution and limited potential for further decay. 3
- Neighbourhood acceptable but could be subject to further decay. 2

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<sup>89</sup> Analysis based upon DeChaira and Koppleman's "Site Planning Standards" which establishes acceptable travel distances to and from day care facilities.

6. *Mixed Land Uses and Zoning*: This variable deals with the identification of the dominant land uses within the community, primarily, the identification of conflicting land uses. Furthermore, it addresses the type of zoning regulations or variances that may apply to a particular facility and determines whether or not the zoning category is conducive to development.

- No conflicting land uses and zoning conducive to development. 3
- A low proportion of conflicting land uses and restricted zoning, however, locational viability may be enhanced through zoning change. 2
- A high proportion of conflicting land uses and zoning very restrictive, of such a nature as to prohibit development. 1

7. *Community Amenities*: This variable is concerned with the number of community amenities available which would enhance the centres' services by providing the widest possible range of support services and educational experience. It is also concerned with the proximity of the centre to the amenities.

- A high proportion of excellent amenities that would enhance the centres program. 3
- A significant number of good amenities and a few poor quality amenities provide a moderate benefit to the centre. 2
- Few amenities and of low quality, which provide no benefit to the centre. 1



8. *Traffic*: This point identifies the traffic conditions that exist in the community, focusing on the major arteries and collector routes adjacent to the site. Furthermore, it is concerned with the traffic conditions prevalent, traffic safety and its effect on the environment (pollution, noise, safety).

- Minor traffic; not very dangerous and a minimal effect on the environment. 3
- Moderate traffic; safety levels, and environmental impact. 2
- Much traffic; extremely dangerous and major environmental impact. 1

9. *Proximity to Public Transit*: This deals with the proximity of the site to the public transit system in place and is concerned primarily with site accessibility.

- Site very close to main public transit routes. 3
- Site moderately close to public transit routes. 2
- Site not close to public transit routes. 1

10. *Building Design and Aesthetics*: This variable is concerned with the facility and how it will fit within the existing built environment.

- Completely fits with the existing urban form. 3
- Partially fits with the existing urban form (not completely conducive, but not offensive). 2
- Incompatible with existing urban form. 1
- Child N/A

### *Third Component: Evaluative Scoring Matrices*

As previously discussed, the third component of the model is comprised of three evaluative scoring matrices (See Tables 10-12). In the initial model development, each matrix presents the possible score (derived from the Site Evaluation Key) in each category and establishes a maximum/minimum value range to provide the researcher with a cumulative possible score which will later be used to identify the sites viability in relation to each client group. In the actual model implementation stage of the practicum (Chapter Six), the site evaluation results will be presented in the matrices to determine the score of the site in comparison to the established value range. The utilization of the scoring matrices exhibit a variety of benefits; first, they provide a systematic approach to presenting the results. Second, the matrices further delineate the significant relationships evident between the client groups and the specified variables (determinants). Finally, the matrices allow for the identification of specific site advantages or deficiencies.

### *Fourth Component: Evaluative Scoring Matrix - Summary Table*

The fourth component of the model (See Table 13) is referred to as an Evaluative Scoring Matrix-Summary Table and presents the possible score within each category (derived from the Evaluative Scoring Matrices) to establish an optimum/minimum locational index. The creation of a locational index is to provide the researcher with a benchmark for determining how a particular site may score in comparison to the established index. A site must score above the minimum locational index to be considered for development and the closer the

(Table 10)

Evaluative Scoring Matrix  
(Calibrated to Client Group)

Client Group: Child

Category	Needs Determinants												Possible Score Max/Min
		Clean Air	Food	Noise	Safety	Room to Play	Outside Play Space	Activities	Social Interaction	Distance to Centre			
Program Format	Program Alternatives		●					●	●				9/3
	Joint Use-Options							●	●				6/2
	Standards and Regulations		●					●					6/2
Social Conditions	Stability				●								3/1
	Crime				●								3/1
Spatial	Sun Exposure						●						3/1
	Facility Size					●	●		●				9/3
Locational Aspects	Centrality									●			3/1
	Neighbourhood Blight	●			●								6/3
	Mixed Land Use & Zoning	●		●	●								9/3
	Community Amenities						●	●	●				9/3
	Traffic	●		●	●								9/3
	Proximity to Public Transit									●			3/1
Possible Score Max		9	6	6	15	3	9	12	12	6			78
Min		3	2	2	5	1	3	4	4	2			26

Scoring Key

1 = Low/Poor

2 = Medium/Acceptable

3 = High/Very Good

Maximum Value Range = 78

Minimum Value Range = 26

(Table 11)

**Evaluative Scoring Matrix**  
(Calibrated to Client Group)

**Client Group: Parent**

Category	Needs Determinants	Perception of Environ	Educational Needs	Utility to Parent	Cost of Service	Accessibility of Site	Drop Off & Pick Up	Parental Space	Support for Centre	Compat W/ Environ.	Possible Score Max/Min	
Program Format	Program Alternatives		●	●	●							9/3
	Joint Use-Options		●									3/1
	User Fee Equity				●							3/1
	Standards and Regulations		●						●			6/2
	Political Will								●			3/1
Economics	Capital Costs				●							3/1
	Hard Services				●							3/1
	Equipment Cost		●		●							6/2
	Monetary Source			●	●				●			9/3
Social Conditions	Stability	●										3/1
	Income Levels				●							3/1
	Crime	●										3/1
	Community Participation								●			3/1
	Community Asset								●			3/1
Spatial	Sun Exposure	●										3/1
	Facility Size		●					●				6/2
	Parking					●	●					6/2
Locational Aspects	Land Availability				●							3/1
	Proximity to other Centre's					●						3/1
	Centrality			●		●						6/2
	Neighbourhood Blight	●										3/1
	Mixed Land Use & Zoning	●										3/1
	Community Amenities		●									3/1
	Traffic	●										3/1
	Proximity to Public Transit			●		●						6/2
	Building Design/Aesthetics									●		3/1
Possible Score Max		18	18	12	24	12	3	3	15	3		108
Min		6	6	4	8	4	1	1	5	1		36

**Scoring Key**

1 = Low/Poor

2 = Medium/Acceptable

3 = High/Very Good

Maximum Value Range = 108

Minimum Value Range = 36

(Table 12)

**Evaluative Scoring Matrix**  
(Calibrated to Client Group)

**Client Group: Community**

Category	Needs Determinants												Possible Score Max/Min
		Equity	Benefit to Comm.	Cost of Facility	Accessible to All	Promotes Identity	Safety	Social Welfare	Compat W/ Environ.	Educational Develop.	Neigh. Commitment		
Program Format	Program Alternatives	●	●					●		●			12/4
	Joint Use-Options	●	●										6/2
	User Fee Equity	●	●					●					9/3
	Political Will					●		●					6/2
Economics	Capital Costs			●									3/1
	Hard Services			●									3/1
	Equipment Cost			●									3/1
	Monetary Source			●									3/1
Social Conditions	Population Change										●		3/1
	Stability						●				●		6/2
	Tenure										●		3/1
	Income Levels	●											3/1
	Crime Levels						●	●					6/2
	Community Participation		●			●				●	●		12/4
	Community Asset		●			●							6/2
Spatial	Facility Size		●						●				6/2
	Parking		●										3/1
Locational Aspects	Land Availability			●									3/1
	Centrality				●								3/1
	Neighbourhood Accessibility	●			●								6/2
	Neighbourhood Blight					●	●						6/2
	Mixed Land Use & Zoning						●						3/1
	Community Amenities									●			3/1
	Traffic						●						3/1
	Proximity to Public Transit	●			●								6/2
	Building Design/Aesthetics							●					3/1
Possible Score Max		18	21	15	9	12	15	12	6	9	12		129
Min		6	7	5	3	4	5	4	2	3	4		43

**Scoring Key**

1 = Low/Poor

2 = Medium/Acceptable

3 = High/Very Good

Maximum Value Range = 129

Minimum Value Range = 43

(Table 13)

Evaluative Scoring Matrix  
(Summary Table)

Locational Criteria Categories	Client Groups			Possible Score
	Child	Parent	Community	
Program Format	21/7	24/8	33/11	78/26
Economic Considerations	N/A	21/7	12/4	33/11
Social Conditions	6/2	15/5	39/13	60/20
Spatial Considerations	12/4	15/5	9/3	36/12
Locational Aspects	39/13	33/11	36/12	114/38
<b>Total</b>	<b>78/26</b>	<b>108/36</b>	<b>129/43</b>	<b>315/105</b>

**Scoring Key Max/Min**

**Optimum Locational Index = 315**

**Minimum Locational Index = 105**

site scores to the optimum locational index, the more appropriate it is for facility development. In Chapter Six, the Summary Tables present the scoring results from both Site A and Site B to determine how they score in comparison to the optimum/minimum locational index. The Summary Tables are used to compare the sites to one another to further support the results obtained from the evaluation procedure.

The scoring system employed in the model assigns a value of 1 for a Low/Poor rating, a 2 for a Medium/Acceptable rating, and 3 for a High/Very Good rating, N/A refers to a Non-Applicable rating in relation to the interest groups involved and is only utilized in the first component of the model. In addition, a scoring anomaly may exist where a specific relationship is evident between the client group and the determinant. These anomalies are earmarked with an asterisk (\*) to signify their existence.

To complement the measurement procedure, undertaken in the model, evaluation of the variables is being facilitated through the utilization of a variety of resources. For example, the use of Statistics Canada Census Material and an appropriate user needs study helped to distinguish the characteristics applicable to the program format and social conditions categories established. Assessing the economic viability of the potential projects is undertaken by a comparative analysis of the project costs and the funding sources available. In addition, a site specific physical assessment and windshield survey help to address the other physical components of the project (i.e. the spatial conditions and locational aspects of the project).

## 5.4 Summary and Conclusions

Planners are often faced with determining the location of a variety of facilities and the utilization of various approaches ensures that the information required for successful facility development is obtained. The considerations discussed in the first four Chapters, revealed specific means for exploring the significant constraints and benefits associated with such a project and the knowledge obtained revealed the significant relationship between the externalities of the community and the service to be integrated. Moreover, the inquiry provided the vehicle needed to appropriately delineate the elements required for an adequate locational model to be fashioned. The creation of the Determinant Impact Tables and the subsequent Site Evaluation Key and Evaluative Scoring Matrixes is meant to provide a systematic method for assessing the considerations essential to a successful planning decision. Furthermore, "this information facilitates successful oversight, planning, and regulation of local day care, and is obtained in a manner well within the analytical and other resource capabilities of local agencies; hence, the approach can serve as a prototype for adoption in most communities".<sup>90</sup>

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<sup>90</sup> Dennis R. Young and Richard R. Nelson., "Public Policy for Day Care of Young Children", p. 198.



## ***CHAPTER SIX***

### ***Model Implementation***

## ***CHAPTER SIX: MODEL APPLICATION***

The purpose of this chapter is to apply the model created in Chapter Five to an actual case study. As stated in the preface, Day Nursery Centre is planning to move its Broadway Avenue location to a new site to increase the number of day care spaces they provide and to maintain its high quality of care for area children. The site they are currently pursuing is within the proposed redevelopment of Young United Church at the corner of Broadway Avenue and Furby Street, which is scheduled for construction in the fall of 1991. The model was applied to this site to determine its viability as a potential day care location and for comparative purposes, the Young United Church site was tested against a (putative) site at the corner of Westminster Street and Furby Avenue, which is currently occupied by the Saint Demetrious Romainian Orthodox Church. The sites are designated as Site A and Site B (See Page 109) and a complete evaluation procedure was undertaken to assess the sites and score them in comparison to the established locational index, as well as to delineate their advantages and deficiencies. With the results in place, the discussion turns to an evaluation of the model developed for this practicum, as well as some recommendations for future studies of this nature.

### **6.1 Model Application**

As stated above, the model was applied to both sites to determine their viability as potential community based day care facilities. Moreover, it was specifically targeted or calibrated to the conditions of the case study. The evaluation procedure began with the second component of the model, the Site Evaluation Key and presented the scoring of the variables

in the Evaluative Scoring Matrixes to establish the characteristics prevalent at and around both sites. Both sites were compared to the locational index, by way of the Summary Tables, which provide an aggregate total for each site. The discussion turns to an overall comparison of the sites and works towards identifying specific site advantages and deficiencies.

The Spence/Memorial Neighbourhood study area (See Map 1) is comprised of two distinct neighbourhoods. The *Spence* area was originally developed around 1920 as a low density residential area. Today, the area is divided by commercial and multiple-family corridors on Ellice and Sargent Avenues, into three smaller sub areas. The east and west boundaries are Balmoral and Sherbrook Streets and the Notre Dame/Cumberland corridor forms the north boundary, whereas, Portage Avenue frontage forms the south boundary.<sup>91</sup> The *Memorial* area "was originally developed prior to the 1900's as a low density residential area of some prestige, but multiple-family development over the past 75 years and more recent commercial growth have produced fragmentation without clear boundaries between densities and uses".<sup>92</sup> The area boundaries are Portage Avenue to the north, Good Street to the east, the Assiniboine River and Cornish Avenue to the south and Maryland Street to the west.

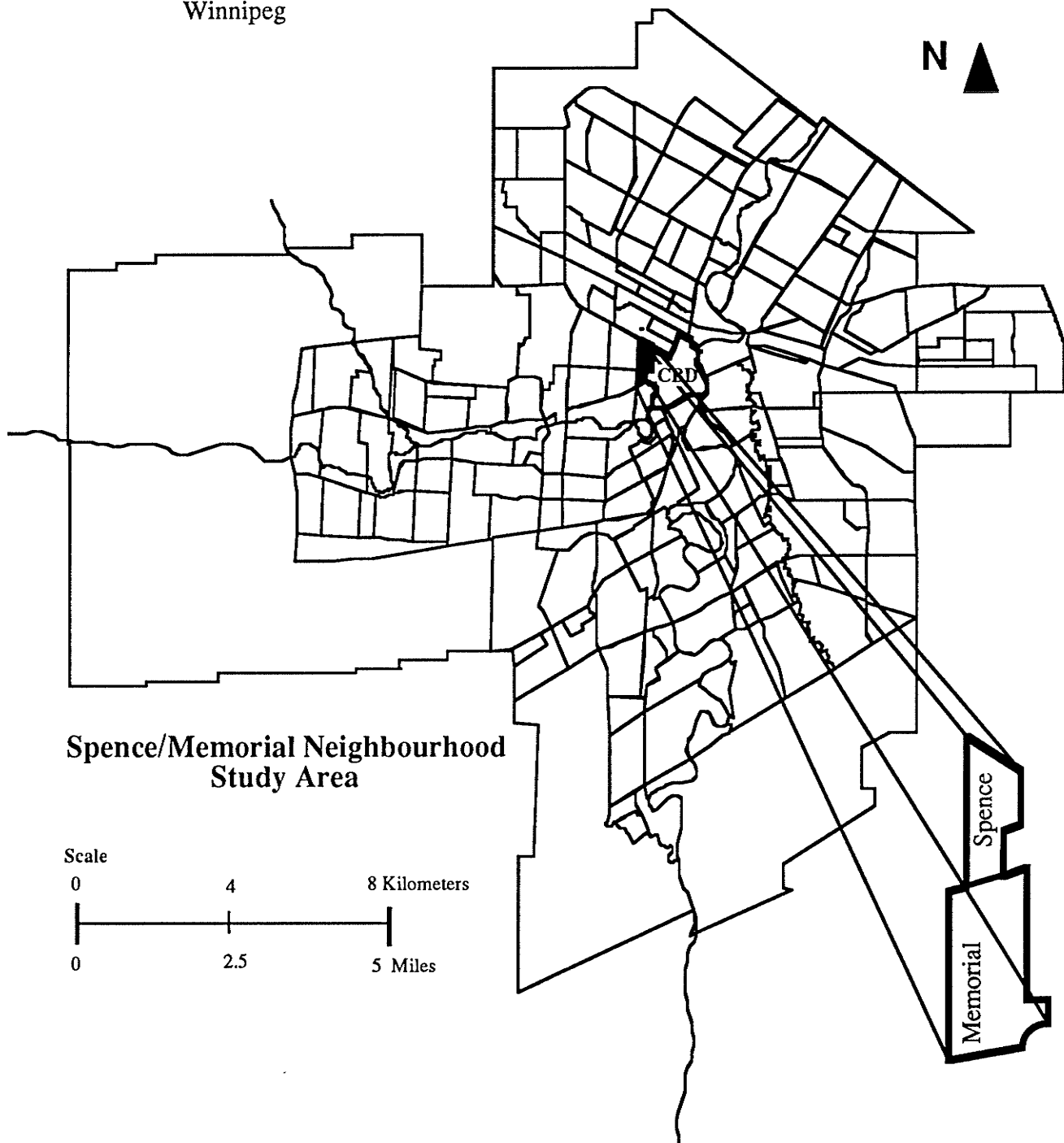
Both sites are located in the Spence/Memorial Neighbourhood (See Map 2) and consistent with the preliminary research, either site, if developed, would serve the same clientele as the existing Day Nursery Centre on Broadway Avenue. The clientele consists primarily of

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<sup>91</sup> Manitoba/Winnipeg Community Revitalization Program., "Community Revitalization Strategy for the Spence-Memorial Neighbourhoods", p. 4.

<sup>92</sup> *Ibid.*, 4.

(Map 1) City of  
Winnipeg

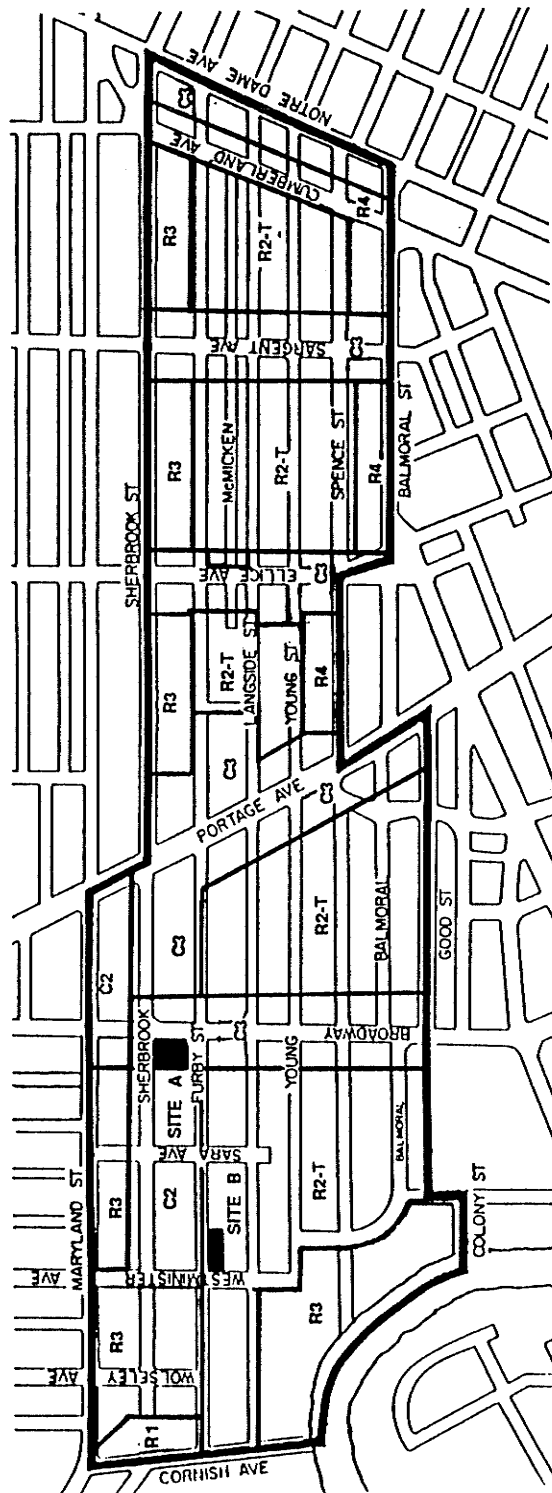


(Map 2)

Site Plan and Zoning  
Spence/Memorial

Zoning

R1 One Family  
R2-T Two Family  
Transitional  
R3 Multiple Family  
R4 Multiple Family  
C2 Commercial  
C3 Commercial



\*For information only - exact zoning lines should be obtained from the  
Zoning Branch - Department of Environmental Planning - City of Winnipeg.

residents from five separate neighbourhoods outlined by the Winnipeg Area Characterization Study undertaken by The City of Winnipeg - Department of Environmental Planning. More specifically, these neighbourhoods are delineated as Spence/Memorial, St. Matthews, Westminister, Daniel MacIntyre and the eastern portion of the area termed Downtown. The majority of the clients, however, are located in the Spence/Memorial area. For the purpose of this practicum, therefore, the Spence/Memorial Neighbourhood becomes the specific focus for the neighbourhood analysis component of the study, due to the fact that the majority of the clients reside in the area, that both sites are located in the neighbourhood, and that the area is characteristic of the aforementioned neighbourhoods. The site evaluation component of the appraisal will deal primarily with site specific characteristics. To be consistent with the approach discussed in Chapter Four, it is essential to determine the study area boundaries to establish the areas' location in the much larger urban setting and to provide a frame of reference for which conclusions may be drawn regarding the community directly being served by the sites.

## **6.2 Case Study**

In this section of the practicum, each of the locational criteria and their subsequent variables will be described and analyzed to portray the characteristics of Site A and Site B. The description of site and area characteristics will assist the scoring procedure undertaken in the Evaluative Scoring Matrices.

*Program Format:*

Day Nursery Centres program alternatives are of a highly flexible nature and within the specified study area would work to meet the child's physiological and developmental needs, the parental needs and requirements, as well as to improve the social welfare of the community. The programming objectives, stated in Day Nursery's historical perspectus, provide a framework that is conducive to change and that will meet the ever changing requirements of modern day care services.

Within the Spence/Memorial neighbourhood, a few community programs exist which may be integrated into the program format to enhance the educational and socialization opportunities presented by the service. For example, the City of Winnipeg - Parks and Recreation Department offers summer programs such as arts and crafts and organized sports at the Redboine Leisure Centre and the Broadway Optimist Community Club. Furthermore, the West End Cultural Centre offers such activities as music and theatre. These activities could in turn be integrated into the Centres programming to enhance the service they provide.

The patrons of Day Nursery Centre are primarily low-income families who depend solely upon government subsidies in order to obtain day care services. The financial infrastructure established by Day Nursery Centre is targeted at the low-income groups and works in conjunction with the Province of Manitoba - Department of Health and Social Development to provide a subsidized system to meet the needs of low-income families. This approach is an equitable one which offers day care services to everyone at an even

level so that even the most underprivileged can utilize day care services to increase their life chances.

The programming format created by Day Nursery Centre works towards providing an appropriate amount of physical, mental, social, and emotional development (as discussed in Chapter Two) by establishing a core of activities which meet the provincial standards and regulations regarding play time, educational time, rest time, etc. It must be noted however, that within the case study, the program format category exhibits a scoring anomaly at Site B; even though Day Nursery Centres programming strives to fulfill the developmental standards and regulations, the spatial limitations at the site inhibit developmental activities and subsequently, support for the centre.

The political support (Provincial, Municipal) exhibited towards the Young United Church site is very strong due to the program format and the type of day care services provided. In addition, political will for the centre is further strengthened through community support and involvement primarily resting upon the historical significance of Young United Church. However, the political will and community support exhibited toward Site B is moderate because of the site constraints evident, even though the demand for day care services is high.

#### *Economic Considerations:*

The *capital costs* associated with Site A consist primarily of land and construction costs and are quite considerable in relation to the funding structure in place (See Appendix D)



even with the arrangement established with Young United Church (Day Nursery Centre is required to pay their portion of total facility development). As the figures illustrate, there is an approximate \$20,000 shortfall in funding, however, the cost to the client, and the services provided, will not be affected due to the shortfall. Funding for capital costs is met through the variety of service organizations solicited and is separate from operating costs which are facilitated through the parental fees and the subsidy system established through the government agencies in place. In the Site B scenario, the capital costs would be moderate when compared to the funding structures in place, however, a disparity between the capital costs and the funding in place may become more pronounced due to the site and facility constraints apparent at Site B. As is the case with Site A, the cost to the client, and the services provided, would not be affected by the cost of facility redevelopment due to the financial structure established by Day Nursery Centre.

The hard services in place at Site A are adequate. The sewer and water systems have been recently upgraded and will sufficiently meet facility needs and requirements. In addition, the sidewalks directly adjacent to the site have also been upgraded, therefore, the service costs associated with the development of Site A score low on the evaluation table. As per the Spence/Memorial Community Revitalization Strategy the hard services associated with Site B development score high on the evaluation table due to the fact that the water and sewer systems in that part of the neighbourhood need upgrading. In addition, the sidewalks servicing Site B and the surrounding area, require a great deal of repair to reach an acceptable grade (as per the Spence/Memorial Revitalization Strategy, the sidewalks in the area have been scheduled for reconstruction, but as to date the only visible work done adjacent to the site has been on Furby Ave).

Having examined the facility design of both sites, as well as the programming of Day Nursery Centre a variety of indoor and outdoor equipment needs became apparent. Indoor activity stations and a variety of educational tools (toys) or support equipment, as well as outdoor play equipment are essential in providing the most optimum environment for development. The equipment costs at both Site A and Site B will be considerable relative to the funding structure in place (See Appendix D). As was the case in the section on capital costs, however, the cost to the client and the provision of equipment would not be affected by the significant equipment costs due to the budgeting structure established by Day Nursery Centres Board of Directors. However, as is evident in the section on capital costs, the equipment costs may have a greater value than originally anticipated, thus affecting the score of the variable.

Due to the nature of Site A, i.e, a new facility, the proposed services offered, and the need for day care, the monetary support by government agencies and alternative service organizations for the project is high (See Appendix D) which in turn reduces the construction budget for facility development and increases the utility to the parent. Site B, on the other hand exhibits a variety of constraints, including facility design, location, and a less than desirable social climate. The funding organizations solicited, therefore, may not offer the same support for Site B as compared to Site A, thus increasing the cost of the services and decreasing the utility the centre may provide to the parents and the community.

#### *Social Conditions:*

The population of the Spence/Memorial area has been declining since 1971, however, from

1981-1986 it has increased at a rate of approximately 20%. Today the population in the area stands at approximately 12,000. The neighbourhoods have a fairly young population and approximately 75% of the population of the Spence area is under 45 years of age, while in Memorial 68% falls into this category. Furthermore, approximately 25% of the Spence population is in the 0-17 age category, whereas, in the Memorial area it is 14%. Conversely, 17% of the Memorial population is 65 years and older, while in the Spence neighbourhood the figure is approximately 9%.

The family characteristics of the area are as follows; in the Spence area, there are approximately 2,100 households of which 57% are households with no children and 10% are single parent households. Households with two parent families comprise 33% of the total. In the Memorial area, there are approximately 3,800 households and almost 80% of the household forms represent either single people living alone or childless couples. Single parent households represent 11.% of the household forms and two adult families with children represent only 2% of the total household forms.<sup>93</sup> Overall, the percentage of one person households in both Spence (40%) and Memorial (60%) is quite high compared to the city averages.

In the M/WCRP Neighbourhood survey conducted in the spring of 1988, it was found that over 50% of the respondents in the Spence/Memorial area intended to move within 2 years. Of the residents surveyed, 63% stated that their stay in the area was a transition point in their lives and that when their life situation improved they would be moving to a much more appealing environment. Within the two neighbourhoods, having children was the

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<sup>93</sup> Manitoba/Winnipeg Community Revitalization Program., "Spence Memorial Neighbourhood Survey".

biggest factor influencing the decision to relocate. Of those planning to move from the area 77% of the residents surveyed in the Spence area planned to move because the neighbourhood was not safe, while in the Memorial area, 65% of the survey had the same response. In addition, in the Spence area, 45% of the survey wanted to move because the neighbourhood was run down, while in the Memorial area the figure was 50%. The following are results of the survey of the length of stay in the community.

(Table 14) Shows Length of Stay in Case Study Neighbourhoods.

	<u>Spence Area</u>	<u>Memorial Area</u>
Less than one year	12.0%	19.2%
One to two years	21.4%	18.7%
Three to four years	13.4%	22.5%
Five to nine years	18.1%	14.0%
Ten years or more	35.1%	25.6%

The Spence/Memorial area has a high percentage of renters in comparison to the rest of the City of Winnipeg. In the Spence area, approximately 81% of the households are rented and 19% of the households are owned. In the Memorial area approximately 94% are rented and 6% of the households are owned.

A statistical examination of the income levels in the area indicate they are predominantly low. Within the Spence area 45% of the total families had an income less than \$10,000 per year. At the top end of the scale, 5.1% of the population had incomes over \$40,000 per

year. The statistics also indicate that approximately 43% of the residents are employed full time, 35% are unemployed, 11% are employed part time, 7% are students, and 4% are retired. Of these figures, the sources of income are as follows; 56% Employment, 20% Retirement Pension, 19% Social Assistance, 3% Unemployment Insurance, and 1% Student Aid. Within the Memorial area, 33% of the population has a total family income of less than \$10,000 per year. At the other end of the scale, 6% of the population has a total family income of over \$40,000 per year. The statistics indicate that 39% of the residents are employed full time, 28% are unemployed, 14% are students 10% are employed part time, and 10% are retired. Of the above, the income sources are; 50% Employment, 39% Retirement Pension, 13% Social Assistance, 5% Student Aid, and 3% Unemployment Insurance.

The crime rate in the area is moderate to high depending on the activity and time of day. Within the area, the crimes that predominate are breaking and entering, domestic disputes and vandalism. The majority of criminal activity takes place at night and on the weekends and is primarily attributed to alcohol related activities. A higher rate of criminal incidents seems to occur closer to Site B due to the activity in and around the Sherbrook Inn, which is located directly across the street from Saint Demetrious Romainian Orthodox Church. In addition, a low income housing co-op exists opposite Site B and a high proportion of juveniles loiter around the building and frequently cause disturbances. This may be problematic for the day care workers who may have day to day confrontations with these teens.

The user needs study undertaken, as well as, some personal interviews within the community revealed the fact that community participation towards facilities such as a day

care centre, would be relative to the services offered. Therefore, community participation, if viewed as a resource, would seem to be considerably higher at Site A than at Site B due to the fact that it is a new facility and seems to offer more to the community's social service network.

The trends exhibited in the community participation determinant are reflected in the community asset consideration in the model. The clientele surveyed felt that a new facility with joint-use programs and an environment conducive to development would be more of a benefit to the community than an upgraded site with locational and spatial limitations. The residents also felt that any service of this kind would ultimately be beneficial to the community at large.

#### *Spatial Considerations:*

Preliminary sketch plans for Site A, indicate that the day care component of the church redevelopment, including outside play space and the windows of the facility, are situated in the optimum position for exposure to natural sunlight. This is not the case for Site B. The proposed area for outdoor play space is situated on the east side of the building and therefore is shaded during the afternoon hours when the majority of outside activities take place. Furthermore, the facility design is not conducive to providing an adequate amount of natural sunlight to the interior space.

It is evident from the preliminary sketch plans that the interior and exterior space of Site A adequately meet the spatial requirements for a facility with a clientele of 50 children

according to the regulations established under The Community Child Day Care Standards Act (1986) of the Government of Manitoba (See Chapter Three). The facility meets all of the dimensional requirements discussed in Chapter Three regarding individual space, group space, parent and community space and service space. The useable floor space for Site B however, does not provide a sufficient amount of floor area to meet the spatial requirements for individual and group space. As well, parent, community, and service space appears to exist, but is of an insufficient size to suitably fulfill the spatial requirements previously discussed. In addition, it must be noted that Site B exhibits a scoring anomaly; it is compatible with the existing built environment, but the facility does not provide any benefit to the community in terms of useable space.

Parking is a site specific concern within the planning stage of facility development and Site A provides more than adequate parking arrangements. The planned site includes sufficient space for a drop-off and pick-up area, as well as space to meet the requirements of the day care employees and the various meetings that may be held at the facility. In addition, Site A is situated adjacently to a residential community where off-site parking is readily available. In contrast, Site B has no on-site parking available for staff or meeting purposes, and there is limited space available to adequately integrate a drop-off and pick-up area. Off-site parking , however, is available on the residential streets adjacent to the site.

#### *Locational Aspects:*

Site A is readily available for development. The site is owned by Young United Church and an agreement between the church and Day Nursery Centre for a day care component in

the new building has been entered into at a very reasonable cost, where as, Site B is not readily available. An agreement would have to be secured, associated with potential legal problems.

Both Site A and Site B exist in moderate proximity to alternative day care services. There are seven alternative day care options in the neighbourhood, however, the statistical analysis and research indicates that a strong need for full time day care services is required in the area, and that the proximity to other services would have a marginal effect upon the patronage of the service presently discussed.

In relation to the existing geographical client distribution (present clients and waiting list), the research determined the centre of gravity to be the corner of Broadway Avenue and Spence Street. Site A is in very close proximity to the center of gravity, whereas Site B is located two blocks south, in moderate proximity. Referring to DeChaira and Koppleman's Site Planning Standards the access standards for Nursery Schools within a neighbourhood should not exceed one half mile walking distance (one way) from the facility, with one quarter mile being an ideal walking distance. If the day care centre is not within the one half mile maximum, it should be within at least fifteen minutes elapsed time by public transit or automobile. Both Site A and Site B fulfill the standards for walking distance, as well as the desired time limit for travel by car or public transportation.

Neighbourhood accessibility rates very high on the site evaluation table. The major thoroughfares mentioned on page 107 (See Map 2), with the addition of Westminster



Avenue, Broadway Avenue, Ellice Avenue, and Sargent Avenue, provide a very accessible community to the pedestrian as well as vehicular traffic.

Neighbourhood blight relates to the environmental quality of the surrounding community and examines physical characteristics such as the condition of buildings, pollution, community decay, etc. Both Site A and Site B score an acceptable rating in the site evaluation process, however, the community could be subject to further decay. This trend towards further decay is evident in the condition of the housing stock and the deterioration of the neighbourhood parks. Within the Spence/Memorial Neighbourhood, 50% of the housing stock was constructed prior to 1920 and more than half of this housing is in fair to poor condition and requires repairs in excess of those provided in the course of regular maintenance. In addition, the neighbourhood parks are in a state of decay, they are poorly maintained and in a run down state.<sup>94</sup>

In contrast to the residential areas, the commercial corridors at Sherbrook Street, Broadway Avenue and Portage Avenue appear to be in somewhat better condition. As stated earlier, Site A is situated within the commercial corridor on Broadway Avenue and benefits from a safer, cleaner environment than Site B, which may result in a parental perception of a safe environment for day care services. Site B, is located in a primarily residential component of the neighbourhood which displays signs of decay due to the condition of the housing stock and general uncleanness (pollution) of the area. Site B, is therefore perceived as having a less desirable environmental quality which is reflected in the scoring.

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<sup>94</sup> Manitoba/Winnipeg Community Revitalization Program., "Community Revitalization Strategy for the Spence-Memorial Neighbourhoods", p. 10.

Site A is distinguished as a Public/ Quasi Public land use and is situated in an area which has a significant proportion of commercial land use activity. Commercial activity exists to the north, east, and west of the site, whereas, to the south of the site the land use is primarily Multiple Dwellings and Low Density Dwellings. Within close proximity to Site A there are no significant conflicting land uses. Site A is zoned C3 Commercial and day care facilities are a permitted use in this zoning category. Site B is also a Public/ Quasi Public land use and is located in an area with a high proportion of Low Density Dwellings. Directly adjacent to the east and west of the site, however, is Commercial activity, and to the south of the site exists a significant proportion of Multiple Dwellings. The Sherbrook Inn is located directly across from Site B and would appear to be a conflicting land use primarily due to its patronage and activities. The zoning for the area is R2T-Two Family Transitional, and to integrate a day care facility within Site B, a zoning variance would be required (See Map 2).

The community amenities in the vicinity of Site A and Site B are of a poor nature. Within the Spence/Memorial area, there is a lack of recreational space and only a few neighbourhood services and amenities which may enhance the centre's services. The Broadway Optimist Community Club is located on Young St., just south of Broadway Ave, and may be used for some activities. According to the revitalization strategy referred to earlier, however, the facility is in poor condition. The lighting is inadequate, the fence is broken, the wading pool needs repair, and so on. Located on the west side of Langside St. is the Redboine Neighbourhood Centre. This site also needs upgrading. The building is triangular in shape and is awkward for use, while the grounds are uneven which makes it difficult to use the site effectively. The Furby Street Playground and Spence Tot Lot offer outdoor play space, however, these sites contain play equipment that is uninspiring, with

the Spence Tot Lot viewed as undesirable due to its location between major traffic arteries and its proximity to a hotel. There are also passive parks that exist at Ellice Ave and Balmoral St, Cumberland Ave and Balmoral St. and Mostyn Place, but these parks are seen as being poorly maintained and unsafe (i.e. not suitable for recreational use by a day care centre). In contrast, the Sherbrook Pool is situated in the community and may be a significant benefit to the programming of the facility. The scoring differentiation exhibited in the evaluative scoring matrixes primarily is due to Site A being in closer proximity to the amenities that do exist.

The location of Site A poses some significant problems with regard to traffic safety and environmental quality. As discussed earlier, Site A is situated on Broadway Ave and one block east of Sherbrook St. These roadways are major arteries into the study area for patrons of the commercial activities present, as well as the residential component of the area. Thus, the amount of traffic directly around Site A would be substantial, making safety questionable, and in turn, having a direct effect upon environmental quality. Site B is located in a much less travelled area, although Westminister Ave is a major collector route which runs directly in front of the site. Furthermore, there may be some question about traffic safety due to the close proximity of Site B to the commercial activity on Sherbrook Ave, such as the Sherbrook Inn and the neighboring physicians office on Westminster St. The area is seen, however, as having moderate traffic levels which consequently produce average safety levels and result in a slight environmental impact.

Both Site A and Site B are situated close to the Winnipeg Public Transit System making transit service readily accessible. As previously discussed, Site A is located on a major

artery with a bus stop located directly in front of the site. Site B is situated on a collector route and its proximity to public transit is sufficient as a locational concern. To access transit services one must walk one block west, thus making transit services at Site B, marginally less accessible than Site A.

The proposed building design for the new Young United Church (Site A) will fit appropriately into the existing built environment. The architectural firm undertaking the project is committed to ensuring the building stands on its own as a religious facility and that it does not dominate the street front, but offers an aesthetically pleasing quality to the neighbourhood. As discussed earlier, Site B is an existing facility and its design fits appropriately into the community's existing urban fabric.

On the basis of the above analysis and descriptions, the results shall be translated and scored in the calibrated scoring system established so that each site can be compared on an individual basis and by specific client group (See Tables 15-20).

(Table 15)

Evaluative Scoring Matrix  
Site A: Young United Church

Client Group: Child

Category	Needs Determinants	Clean Air	Food	Noise	Safety	Room to Play	Outside Play Space	Activities	Social Interaction	Distance to Centre				Score
Program Format	Program Alternatives		3					3	3					9
	Joint Use-Options							2	2					4
	Standards and Regulations		3					3						6
Social Conditions	Stability				1									1
	Crime				2									2
Spatial	Sun Exposure						3							3
	Facility Size					3	3		3					9
Locational Aspects	Centrality									3				3
	Neighbourhood Blight	2			2									4
	Mixed Land Use & Zoning	3		3	3									9
	Community Amenities						1	1	1					3
	Traffic	1		1	1									3
	Proximity to Public Transit									3				3
	Score	6	6	4	9	3	7	9	9	6				59

**Scoring Key**

**1 = Low/Poor**

**2 = Medium/Acceptable**

**3 = High/Very Good**

**Locational Index = 59**

(Table 16)

Evaluative Scoring Matrix  
Site A: Young United Church

**Client Group: Parent**

Category	Needs Determinants	Perception of Environ	Educational Needs	Utility to Parent	Cost of Service	Accessibility of Site	Drop Off & Pick Up	Parental Space	Support for Centre	Compat W/ Environ.				Score
Program Format	Program Alternatives		3	3	3									9
	Joint Use-Options		2											2
	User Fee Equity				3									3
	Standards and Regulations		3						3					6
	Political Will								3					3
Economics	Capital Costs				2									2
	Hard Services				3									3
	Equipment Cost		2		2									4
	Monetary Source			3	3				3					9
Social Conditions	Stability	1												1
	Income Levels				3									3
	Crime	2												2
	Community Participation								3					3
	Community Asset								2					2
Spatial	Sun Exposure	3												3
	Facility Size		3					3						6
	Parking					3	3							6
Locational Aspects	Land Availability				3									3
	Proximity to other Centre's					2								2
	Centrality			3		3								6
	Neighbourhood Blight	2												2
	Mixed Land Use & Zoning	3												3
	Community Amenities		1											1
	Traffic	1												1
	Proximity to Public Transit			3		3								6
	Building Design/Aesthetics									3				3
	Score	12	14	12	22	11	3	3	14	3				94

**Scoring Key**

**1 = Low/Poor**

**2 = Medium/Acceptable**

**3 = High/Very Good**

**Locational Index = 94**

(Table 17)

**Evaluative Scoring Matrix**  
**Site A: Young United Church**

**Client Group: Community**

Category	Needs Determinants											Score
		Equity	Benefit to Comm.	Cost of Facility	Accessible to All	Promotes Identity	Safety	Social Welfare	Compat W/ Environ.	Educational Develop.	Neigh. Commitment	
Program Format	Program Alternatives	3	3					3		3		12
	Joint Use-Options	2	2									4
	User Fee Equity	3	3					3				9
	Political Will					3		3				6
Economics	Capital Costs			2								2
	Hard Services			3								3
	Equipment Cost			2								2
	Monetary Source			3								3
Social Conditions	Population Change									1		1
	Stability						1			1		2
	Tenure									1		1
	Income Levels	3										3
	Crime Levels						2	2				4
	Community Participation		3			3				3	3	12
	Community Asset		2			2						4
Spatial	Facility Size		3						3			6
	Parking		3									3
Locational Aspects	Land Availability			3								3
	Centrality				3							3
	Neighbourhood Accessibility	3			3							6
	Neighbourhood Blight					2	2					4
	Mixed Land Use & Zoning						3					3
	Community Amenities									1		1
	Traffic						1					1
	Proximity to Public Transit	3			3							6
	Building Design/Aesthetics								3			3
	Score	17	19	13	9	10	9	8	9	4	9	107

**Scoring Key**

1 = Low/Poor

2 = Medium/Acceptable

3 = High/Very Good

Locational Index = 107

(Table 18)

**Evaluative Scoring Matrix**  
**Site B: Saint Demetrious Romainian Orthodox Church**

**Client Group: Child**

Category	Needs Determinants	Clean Air	Food	Noise	Safety	Room to Play	Outside Play Space	Activities	Social Interaction	Distance to Centre				Score
Program Format	Program Alternatives		3					3	3					9
	Joint Use-Options							2	2					4
	Standards and Regulations		3					2*						5
Social Conditions	Stability				1									1
	Crime				1									1
Spatial	Sun Exposure						1							1
	Facility Size					2	1*		2					5
Locational Aspects	Centrality									2				2
	Neighbourhood Blight	2			2									4
	Mixed Land Use & Zoning	2		2	2									6
	Community Amenities						1	1	1					3
	Traffic	2		2	2									6
	Proximity to Public Transit									2				2
	Score	6	6	4	8	2	3	8	8	4				49

\*Scoring Anomaly (See Footnote 84)

**Scoring Key**

1 = Low/Poor

2 = Medium/Acceptable

3 = High/Very Good

Locational Index = 49



(Table 19)

Evaluative Scoring Matrix  
Site B: Demetrious Romainian Orthodox Church

**Client Group: Parent**

Category	Needs Determinants	Perception of Environs	Educational Needs	Utility to Parent	Cost of Service	Accessibility of Site	Drop Off & Pick Up	Parental Space	Support for Centre	Compat W/ Environ.			Score
Program Format	Program Alternatives		3	3	3								9
	Joint Use-Options		2					2					4
	User Fee Equity				3								3
	Standards and Regulations		3						2*				5
	Political Will								2				2
Economics	Capital Costs				2*								2
	Hard Services				2								2
	Equipment Cost		2*		2*								4
	Monetary Source			2	2				2				6
Social Conditions	Stability	1											1
	Income Levels				3								3
	Crime	1											1
	Community Participation								2				2
	Community Asset								2				2
Spatial	Sun Exposure	1											1
	Facility Size		2					1*					3
	Parking					1	1						2
Locational Aspects	Land Availability				1								1
	Proximity to other Centre's					2							2
	Centrality			2		2							4
	Neighbourhood Blight	2*											2
	Mixed Land Use & Zoning	2											2
	Community Amenities		1										1
	Traffic	2											2
	Proximity to Public Transit			2		2							4
	Building Design/Aesthetics									3			3
	Score	9	13	9	18	7	1	3	10	3			73

\* Scoring Anomaly (See Footnote 84)

**Scoring Key**

1 = Low/Poor

2 = Medium/Acceptable

3 = High/Good

Locational Index = 73

(Table 20)

**Evaluative Scoring Matrix**  
**Site B: Saint Demetrios Romainian Orthodox Church**

**Client Group: Community**

Category	Needs Determinants												Score
		Equity	Benefit to Comm.	Cost of Facility	Accessible to All	Promotes Identity	Safety	Social Welfare	Compat W/ Environ.	Educational Develop.	Neigh. Commitment		
Program Format	Program Alternatives	3	3					3			3		12
	Joint Use-Options	2	2										4
	User Fee Equity	3	3					3					9
	Political Will					2		2					4
Economics	Capital Costs			2									2
	Hard Services			1									1
	Equipment Cost			2*									2
	Monetary Source			2									2
Social Conditions	Population Change										1		1
	Stability						1				1		2
	Tenure										1		1
	Income Levels	3											3
	Crime Levels						1	1					2
	Community Participation		2			2				2	2		8
	Community Asset		2			2							4
Spatial	Facility Size		1*						3				4
	Parking		1										1
Locational Aspects	Land Availability			1									1
	Centrality				2								2
	Neighbourhood Accessibility	3			3								6
	Neighbourhood Blight					2	2						4
	Mixed Land Use & Zoning						2						2
	Community Amenities									1			1
	Traffic						2						2
	Proximity to Public Transit	2			2								4
	Building Design/Aesthetics								3				3
	<b>Score</b>	16	14	8	7	8	8	9	6	3	8		87

\*Scoring Anomaly (See Footnote 84)

**Scoring Key**

1 = Low/Poor

2 = Medium/Acceptable

3 = High/Very Good

Locational Index = 87

### 6.3 Site Evaluation

The scoring of the site evaluation unfolds in the following manner: Site A scores 260 out of a possible 315 points and therefore is above average when compared to the established locational index (See Table 21). In contrast to Site A, Site B scores 209 out of a possible 315 and could be considered for development as the aggregate total is above the minimum locational index of 105. However, as a result of the analysis, many advantages and deficiencies at each site become apparent.

As mentioned above, each site exhibits a variety of advantages and deficiencies. The analysis however, revealed that the program format established by Day Nursery Centre would be a benefit to either site if developed due to its flexible nature and ability to meet the needs and requirements of the client groups.

#### *Site A: Advantages*

Site A exhibits a number of advantages for development (See Tables 15-17). First, the economic considerations associated with Site A could be seen as favorable due to the arrangement established between Day Nursery Centre and Young United Church. Facility development is further supported, monetarily, by a variety of service organizations. In addition, the economic considerations associated with this site are advantageous due to the quality of the hard services in place. Second, the potential for a high degree of community participation was exhibited by the existing clients, and the residents surveyed in the M/WCRP study indicated that this type of facility would benefit the community. Third, the

(Table 21)

Evaluative Scoring Matrix  
Site A & B Summary Table

**Site: A**

Locational Criteria Categories	Client Groups			Score
	Child	Parent	Community	
Program Format	19	23	31	73
Economic Considerations	N/A	18	10	28
Social Conditions	3	11	27	41
Spatial Considerations	12	15	9	36
Locational Aspects	25	27	30	82
<b>Total</b>	<b>59</b>	<b>94</b>	<b>107</b>	<b>260</b>

**Scoring Key**  
**Locational Index = 260**

**Site: B**

Locational Criteria Categories	Client Groups			Score
	Child	Parent	Community	
Program Format	18	23	29	70
Economic Considerations	N/A	14	7	21
Social Conditions	2	9	21	32
Spatial Considerations	6	6	5	17
Locational Aspects	23	21	25	69
<b>Total</b>	<b>49</b>	<b>73</b>	<b>87</b>	<b>209</b>

**Scoring Key**  
**Locational Index = 209**

**\*Both Sites scored out of a possible 315 points.**

preliminary sketches indicate the building design presents a variety of advantages. The proposed day care component of the facility fulfills the spatial requirements discussed in Chapter Three, and is positioned to provide an acceptable amount of sun exposure both indoors and outdoors. In addition, an adequate amount of parking space has been allocated for employees, clients and community use. Fourth, Site A is situated in a central location within the community, and its close proximity to public transit makes it very accessible to the residents. Finally, there is a very low proportion of mixed land uses and the area is zoned C3 Commercial. Day care services are a permitted use within this category.

#### *Site A: Deficiencies*

Even though Site A exhibits a variety of advantages, some deficiencies are apparent. First, the Spence/Memorial population base displays a high degree of instability and the majority of respondents in the M/WCRP survey viewed their stay in the neighbourhood as a transitional point in their lives. This characteristic could be interpreted as a lack of commitment to the community. Second, the criminal activity, as well as the high proportion of transients in the area, may be seen as having a detrimental affect on day care services. Third, the parks and community centres in the area are in a run down condition and would not solicit any use from the day care facility. Finally, with the site location surrounded by major traffic arteries, the safety of the children is a constant concern.

#### *Site B: Advantages*

In contrast to Site A, Site B displays few advantages for development, and these advantages are primarily of a locational nature (See Tables 18-20). First, Site B is located

in a fairly central location in the community, and the public transit routes and major thoroughfares are of a close enough proximity to make the site accessible. Second, and probably most advantageous, is the low traffic flow directly adjacent Site B. The traffic flow is substantially less than Site A, and would offer an increased degree of safety to the child. Finally, the building design of the existing structure fits well with the urban fabric and would offer a benefit for redevelopment due to the fact that major exterior renovations would not be required.

#### *Site B: Deficiencies*

As previously mentioned, the program format established by Day Nursery Centre would be beneficial to either site. However, the spatial limitations exhibited by Site B may work against meeting the programming objectives of Day Nursery Centre and may hinder a variety of developmental activities. Second, the capital costs associated with Site B appear to be moderate in relation to the funding structures in place, however, the capital costs may increase due to the leasehold agreement. Furthermore, the cost for the upgrading of hard services may also increase as a result of a more in-depth engineering study. Third, as was the case with Site A, residents in the neighbourhood view their stay in the area as transitional and this may result in a lack of community commitment. In addition, Site B is located one block east of the Sherbrook Inn and crime statistics indicate that the majority of the criminal activity within the community occurs in this area. Fourth, Site B is deficient in useable floor space and does not adequately meet the needs articulated in Chapter Three. The outdoor play space available at Site B is insufficient in size and is situated in the least optimum position for maximum sun exposure. The interior space which would be used for

day care services is also poorly situated, and therefore would result in an inadequate amount of sun exposure. Finally, the zoning category for Site B is R2T-Two Family Transitional and a zoning variance would be required for facility redevelopment. Furthermore, as was the case with Site A, the neighbourhood amenities are in a run down state and would be of little benefit to the day care facility.

As a result of the scoring procedure, as well as the identification of advantages and deficiencies, Site A is deemed more desirable for day care facility development than is Site B. Site B could, however, be considered for facility development due to the fact that it scores above the established minimum locational index, but the likelihood of its being developed is remote due to site specific deficiencies.

#### **6.4 Methodological Overview and Model Evaluation**

The methodology incorporated in this practicum proved to be an effective process for evaluating potential community based day care sites. The preliminary research (Chapters One - Four) set out to consider the components integral to the development of community based day care facilities by establishing the significant client groups associated with day care services and their specific needs and requirements. In addition, the research created an exhaustive list of locational criteria which have a direct impact upon the interest groups and subsequent facility development. The remaining three chapters of the practicum (Chapters Five - Seven), established the type of planning model used within the practicum (to evaluate the criteria), implemented the model on a case study, and provided conclusions and recommendations for future studies of this nature. Overall, the process proved to be

effective in meeting the goals and objectives of the practicum by providing a pragmatic approach to analysis which in turn lends itself to an implementation strategy, administrative in nature, determining the viability of a potential day care location (site). However, despite the overall success of the methodology, no approach is perfect and a variety of problems pertaining to the model were uncovered during the model implementation phase. The following discussion will address how the model responded, overall, by exhibiting its specific contributions to an analysis of this nature and will identify the problem areas encountered.

The success of the model lies in the criteria chosen for model construction purposes as well as the calibration procedure previously discussed. The utilization of the three interest groups (child, parent and community) and the five locational criteria categories (program format, economic considerations, social conditions, spatial considerations and locational aspects), is based on the assumption that the determinants (variables) identified address the considerations essential in determining the viability of a potential day care facility, and are therefore, founded (entirely) on the effect of these determinants on the interest groups.

The utilization of a model comprised of four specific components proved to be very effective. The first component of the model provided a comprehensive checklist of variables essential to a locational analysis. In addition, the first component of the model identified the impact of the determinants on the client groups and furthermore enabled the exhaustive list of criteria to be calibrated or adjusted to the case study undertaken in Chapter Six.



The second component of the model enabled the specific impacts encountered in the first component to be evaluated through the use of the Site Evaluation Key. This type of evaluation process provided a means for assessing the determinants (variables) and converting the results into a numerical scoring system for measurement purposes.

The evaluative scoring matrices, the third component of the model, presented the scoring results accumulated from the evaluation table and in each case established an aggregate total determined as the maximum/minimum value range. The total accumulated in each of the matrices provided a variety of conclusions pertaining to the specific interest group and specific site characteristics. In addition, the evaluative matrices provided a systematic process for presenting the scoring results, as well as delineating specific site advantages and deficiencies.

The fourth component of the model, the Summary Tables, provided a means for determining how each particular site scored in comparison to the established locational index. The summary tables also furnished a method for comparing the sites to one another and assisted the researcher in further supporting the results obtained from the analysis.

A variety of problems became apparent when evaluating the model. Due to its simplistic nature, the model incorporated limited statistical information for example, and may have been more precise if the process included a wider range of criteria determinants. Another problem is exhibited in the scoring of the variables in the second and third components of the model. Even though the value range is stipulated, the scoring procedure is subjective in nature and therefore open to various interpretations as to the impact on the client groups. It is this ambiguity which may subsequently affect the viability of a potential site. Another

aspect of the model that becomes a limiting factor is that it does not lend itself to the incorporation of additional variables once the criteria determinants have been calibrated. It may be difficult, therefore, to apply the calibrated model to an alternative site because as was discussed in Chapter Four, each site has unique characteristics which must be incorporated into the analysis to guarantee its overall success.

Even though the model exhibited a variety of shortcomings, it was successful in achieving two objectives. First, it provided a set of locational criteria which could be used for subsequent examinations of this nature. Secondly, the model provided a simple and adequate indication of site viability through the utilization of a numerical scoring procedure.

Having evaluated the methodology and the model created for the purpose of this practicum, a few recommendations can be made which would strengthen the overall process. First, the preliminary research should incorporate more areas of study to ensure a more comprehensive analysis. Second, where applicable additional statistical information should be utilized to strengthen the model. Third, criteria identification and model development should be undertaken at the same time so as to ensure the overall success of the model. Fourth, the model should be constructed in a manner so as to allow for the incorporation of additional variables unique to a particular case study. Fifth, the ambiguous nature of the numerical scoring procedure should be eliminated by creating a more precise evaluation process through a mathematical weighting system, for example. Finally, if recommendation number five proves to be unobtainable, add a Plus (+) Minus (-) value range to the scoring procedure (as opposed to a scoring anomaly

characteristic \*) to account for the subjective nature of the evaluation process, which would subsequently provide a degree of flexibility when determining the overall viability of a site.

## ***CHAPTER SEVEN***

### ***Conclusions***

## ***CHAPTER SEVEN: CONCLUSIONS***

The overall objective of this practicum was to establish a client group needs and locational criteria checklist which would subsequently be integrated into an evaluative model for site evaluation purposes, thus fulfilling the requirements articulated by Day Nursery Centre. The approach undertaken was pragmatic, administrative and implementation oriented and was based on the premise that knowledge and insight will strengthen the relationship between planning and day care.

The five areas which comprise the basis for criteria development: program format, economic considerations, social conditions, spatial considerations, and locational aspects, identified a variety of considerations essential to the decision making process. It became apparent through the research that each of these categories are individual in nature, but highly dependent upon one another for effective and efficient facility development.

The model developed in this practicum does not attempt to be the "best method" for site evaluation, but rather establishes an approach which can be utilized in neighbourhoods in other cities. The calibration procedure undertaken allows the planner to determine which unique characteristics should be included or excluded based on specific or unique characteristics present in the community. Identifying the criteria necessitates a procedure be developed to evaluate them in relation to the project at hand, i.e. the creation of the model. It is this process that enables the planner to evaluate the potential sites and draw conclusions on the advantages and deficiencies present which helps determine the validity of a site. Although the results in this practicum are specifically related to the

Spence/Memorial Neighbourhood, there are general considerations which are evident in other cities across the country.

Several conclusions can be drawn as a result of this research. First, there is a need for day care services in Winnipeg, and more specifically, within the inner city neighbourhoods. Second, the practicum uncovered the benefits that an adequately planned day care facility can provide to the neighbourhood if consideration is given to the characteristics of the community: the people, its physical traits and its potential future. Third, the practicum distinguishes the relationship between planning and day care and emphasizes the importance of the planning component in our present and future day care system. Finally, it became apparent from the research that the type of service to be provided, the capital costs associated with the project, and the affordability of the service, are the overriding factors for facility development.

The research and analysis revealed that the integration of a community based day care facility is a complex endeavor and involves much more than simply implanting a physical structure into a neighbourhood. Planning for future day care facilities presents the opportunity for both the planning profession and day care professionals to move in a direction that recognizes the link between the two. It is hoped that this practicum will be utilized by those individuals committed to ensuring the successful planning of community based day care facilities.

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## ***APPENDICES***



**APPENDIX A:**  
***Day Nursery Centre Client Survey***

1. Where do you live? Could you please give your present address, including the closest intersection.

.....

2. Do you own your home, or do you rent? Own.....rent.....

3. How long have you lived at your present address?

.....

4. Were you born in Canada? Yes.....No..... If no, what country were you born in?

.....

5. How long have you lived in Canada?

.....

6. Are you married.....single.....divorced.....widow.....common law.....

7. Who is completing the survey? Mother.....Father.....

8. How old are you? Mother.....Father.....

9. What is the highest grade you have completed?

Mother

Father

Grade 1-9.....

Grade 1-9.....

Grade 9-12.....

Grade 9-12.....

University.....

University.....

Other.....

Other.....

10. Are you employed? If so: full time.....part time.....student.....unemployed.....

11. What is your occupation(s), and where are you employed?

.....



11. What is your total household income per year?

- 0----9,000.....
- 10---14,000.....
- 15---20,000.....
- 21---24,000.....
- 25---30,000.....
- 31---35,000.....
- 36 and up.....

12. What form of transportation do you use? Car.....Bus.....Walk.....Other.....

If you use the Bus, are you close to the Bus Stop? Yes.....No.....

	<u>Boys</u>	<u>Girls</u>
13. How many children do you have?	.....	.....
How old are they?	.....	.....
How many are in Day Care?	.....	.....

14. Do you think Day Care is good for your child(ren)? Yes.....No.....

15. Was Day Nursery Centre your first choice for Day Care? Yes.....No..... If no, what centre or alternative to Day Care was your first choice?

.....

16. Are you satisfied with Day Nursery Centres services? Yes.....No..... If No, Why?

.....

17. What is your cost per child/per week for Day Care services?

.....

18. As a parent and a client of Day Nursery Centre, what issues do you feel are important when determining the future site of a Day Care center?

.....

.....

.....

**APPENDIX B:**  
***A Predefined Set of Criteria for Neighbourhood Analysis***

1. Physical Conditions
  - a) age/condition (i.e. level of maintenance appropriate to age)
  - b) intensity/use/zoning (i.e. compatible/incompatible development and/or regulations)  
includes pressure from adjacent development--transportation subsumed as a land use
  - c) services (i.e. level of service appropriate to population size and type or non-residential land use)
  - d) isolation (enhancement of other effects)
  - e) fragmentation (including pockets)
2. Population Characteristics
  - a) tenure/transience
  - b) ethnicity (relative to income, tenure/transience, family/household characteristics)
  - c) income (relative to cost of housing, welfare incidence, etc.)
  - d) population growth/decline (relative to household/family size/age)
  - e) household/family growth/decline, size, number of children
  - f) age
3. Neighbourhood Image
  - a) historical development
  - b) level of organization/ethnicity
  - c) incidence of issues (use/intensity)
  - d) -income  
-employment  
-education  
-age  
-tenure/transience
  - e) property value/turn over

### **APPENDIX C:** ***Land Use Planning Process***

**Stage 1. Broad Assessment of Context** - the process may be said to begin with the institution of some form of organization that will subsequently decide that one of its proper functions is land use planning.

**Stage 2. Framework for Organizing and Controlling** - once the organization is in place, the establishment of a framework for the organization and control of all subsequent activities.

**Stage 3. Specification of Broad Goals** - broad policy goals are specified, in the knowledge that they will subsequently be much developed and refined by the later stages in the planning process.

**Stage 4. Formulation of Feasible Objectives** - the broad policy goals, although obviously influenced to some extent by the known realities of the particular situation, were formulated as ideals, to be refined by subsequent examination, and eventually translated into programmes of action, control and influence. The refinement begins with the postulation of specific objectives that would ensure progress towards the policy goals, but which can be made into achievable, testable and clearly understood proposals.

**Stage 5. Data Assembly** - the next step is to assemble the data needed to amplify and assess the objectives. Techniques for assembling data, including surveys and the use of published material, are always given much attention in planning literature.

**Stage 6. Data Analysis** - collection of data is simply the preliminary task to its analysis to provide understanding of the existing situation and of likely futures. It is highly desirable that it is known before the data is assembled what analytical techniques are to be used, even if some modification proves necessary.

**Stage 7. The Refinement of Goals** - at this point, much more is known than at the beginning of the land use planning process about the actual situations with which the planners are confronted, both in the present and the future. It is, therefore, appropriate to revise the objectives, and possibly even the goals, which were formulated in relative ignorance, in light of the known circumstances. This can be followed by the development of alternative programmes of action.

**Stage 8. Development of 'objectives' Measures** - as a necessary preliminary to the evaluation process, in which alternative possibilities are carefully compared according to predetermined criteria of usefulness, objective measures must be established. In practice, this means measurable targets which can be assessed to give the benefits side of a balance sheet against costs. The more apparently sophisticated the evaluation techniques used, the more crucial this stage of the process is. It is extremely important that these objective measures should be thought out before the evaluation is undertaken.

**Stage 9. Evaluation** - this stage in the planning process, puts together facts and values in a comparison of the alternative possibilities - how well they achieve the objectives specified and at what cost.

**Stage 10. Decisions** - the decision makers make their choice of the alternative courses of action which the land use planners present to them as representing the most reasonable means of achieving the goals originally specified.

**Stage 11. Implementation Procedures** - once the decisions are made, procedures for implementing the chosen policies and programmes begin. The range of functions involved includes answering questions, encouraging ecumenical co-operation and the statutory control of development.

**Stage 12. Monitoring** - monitoring of events provides the information needed to gauge the real success or failure of implementation. That assessment constitutes one of three factors which will necessitate revision of objectives, and possible even broad goals. The other two are elements in the pattern of events that were not foreseen and a change in the principles or values held by the decision makers, the community or even the land use planners.

**Stage 13. Revision of Objectives, Possibly of Goals** - It is certain that there will be a need for revision of objectives, and maybe even of goals, due to one of the three possible causes suggested above. We are thus, in effect, back at Stage 7.

(Source: Margaret Roberts, "An Introduction to Town Planning Techniques", p. 33-40, 1974).

**APPENDIX D:**  
**Preliminary Design Construction Budget - Day Nursery Centre**  
**Young United Church**

Hard Costs	Project cost	Other Costs	Total
Land	63,700		63,700
Construction	426,560		426,560
Furnishings/Equip		7,000	7,000
Soft Costs			
Interim Dev Coord	733		733
Development Coord Fees	11,503		11,503
Architectural Fees	31,992		31,992
Technical Reports	2,961		2,961
Special Costs	2,066		2,066
Operating Expenses	1,033	1,000	2,033
Legal/Audit	4,132	5,000	9,132
Administrative Costs	1,033		1,033
Real Estate Fees		7,875	7,875
Other		2,200	2,200
Total	545,713	23,075	568,788
Contingency	13,643		13,643
GST	2,695		2,695
Total Cost	562,051	23,075	585,126
Funding in Place			
Sale of Building			112,500
Mortgage			110,000
Heritage Fund			31,927
Spence/Memorial			100,000
Core Area Initiative			50,000
Winnipeg Foundation			30,000
Other			25,000
Subtotal			459,427
Funding in Progress			
Sill Foundation			30,000
Community Places			50,000
Community Incentive			20,000
Subtotal			105,000
Total Funding			564,427
Surplus (Shortfall)			(20,699)