

**THE KIKINAW HOUSING PROJECT, WINNIPEG MANITOBA:  
GREEN LOW-INCOME HOUSING, TENANT-CENTRED  
MANAGEMENT, AND RESIDENT WELL-BEING**

**BY**

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## ABSTRACT

An individual's housing situation can have a significant impact on their well-being and overall health. Low-income individuals and those on social assistance often have little choice in housing. Increased housing satisfaction can have an immediate impact on quality of life and can also have influence in the longer-term. This case study examines the satisfaction and well-being of tenants in a Winnipeg, Manitoba low-income housing project. The buildings that are part of the Kikinaw Housing Project were renovated using green building strategies, a tenant-centred management model is being implemented, and there are several social supports available exclusively to tenants. Interviews and focus groups were conducted with tenants, support staff and management. The practicum concludes that tenants are more satisfied with their living conditions at Kikinaw compared to their previous residence. Residents generally feel better about their health, have more social ties, and take pride in their homes. This improvement in tenant's lives in turn strengthens the community. The practicum concludes with eight recommendations for housing providers, policy makers, and government bodies. These are divided into three categories: delivery of services, funding provisions and policy, and green and community enhancements. Recommendations include: i) more tenant involvement, ii) improving people's ability to deal with stress, iii) flexible funding and support, iv) consistent funding and cooperation, v) enhancing social interaction and community, vi) green housing for all incomes levels, vii) resident education about the project, viii) healthy housing policy and healthy public policy.

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# 1 Introduction

“Given that some of the ways in which housing would be expected to shape health have long latency periods, it is sensible and useful to measure the impact of housing upon intermediate outcomes – known determinants of health. Improved housing, for example, may enhance social support and self-efficacy, and may reduce the experience of stress, and lack of control. Increased housing satisfaction and quality of life are likely to have effects on health even if those effects cannot be easily measured. Housing improvements may also have effects on intermediate outcomes such as income and employment outcome, educational achievement and child development outcomes, including social, emotional and cognitive development, educational outcomes and over-all health”. (Dunn, Canada Mortgage and Housing Corporation, & National Housing Research Committee, 2002, p. 48)

The Kikinaw Housing Project was identified as a potential research subject through discussions with Brian Grant, the Housing Coordinator for the West Broadway Development Corporation. The author’s interest in green building, community initiatives, and mental health made this an important case to study. The novel nature of the development also made it appealing.

## 1.1 Background

Kikinaw Housing Project is a consortium of private and community-based organizations. These are: the West Broadway Development Corporation, Young United Church, ASH Management, and West Broadway Lan Trus Inc.<sup>1</sup>. Kikinaw Housing Inc. is located at 100-222 Furby Street, Winnipeg, MB R3C 0R6. Funding for the project was provided by the Government of Canada, the Province of Manitoba, and the City of

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<sup>1</sup> Lan Trus Inc. is the name of the company. It is not a misspelling of *Land Trust*.

Winnipeg. Private donations were raised in order to fund on-going building operation and maintenance post-renovation. There are a total of 27 units in two apartment blocks. 284 Langside Street has 16 units and 317 Langside Street has 11 units. One of the units is reserved for transitional housing. It is provided on a temporary basis for an individual in a housing crisis until they are able to find secure accommodation. The apartment blocks are located in the West Broadway neighbourhood, a core neighbourhood west of downtown Winnipeg and south of Portage Avenue. West Broadway is designated a 'Major Improvement Area' by the City of Winnipeg.

Kikinaw is a 'community-demonstrated project'<sup>2</sup> (Kikinaw Housing Project Partnership, 2005) that emerged after a year of public consultations held by West Broadway Development Corporation and the neighbourhood Alliance and Council. The project goal is to address local issues of tenant displacement and increasing rents. The successful revitalization of the neighbourhood has made rents unaffordable for many of the residents and they are being forced to find accommodation in other areas of the city. The project "targets the most vulnerable 'low-income individuals and households' which are prone to homelessness in the community and are now living in substandard housing" (Kikinaw Housing Project Partnership, 2005 p. i.). A workshop on core housing need in July 2004 and feedback from the West Broadway Housing Forum in October 2004

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<sup>2</sup> The distinction from a usual demonstration project and Kikinaw is the involvement of the 'community'. In this case it included the West Broadway Development Corporation, the local Housing Stakeholders Group, and the future involvement of residents of Kikinaw who would help manage the building and sit on the board of directors. (personal email communication with Brian Grant September 7, 2007)

entitled *Striking the Balance* formed the basis for the inclusion of the following three features in the Kikinaw Housing Project<sup>3</sup>:

1. Renovations were undertaken following the West Broadway Green Indicators<sup>4</sup>.
2. Kikinaw will be managed by residents under a tenant-centred model.
3. A wide variety of social supports are offered to tenants.

Each is now further described.

The two apartment blocks comprising the Kikinaw Housing Project were renovated using the West Broadway Green Indicators as a guide throughout their planning. The Housing Proposal (Kikinaw Housing Project Partnership, 2005) states that a ‘Greening Approach’ was taken during the retrofit. Kikinaw is described as “holistic, integrated, systematic and ultimately more efficient and cost-effective than conventional housing development” (p. i). Healthy, environmentally friendly materials were selected whenever possible, and energy and water efficiency was prioritized.

Kikinaw Housing emphasizes a tenant-centred management model. Tenants will be encouraged to become co-owners, and actively participate in management through an advisory committee. The project may potentially become cooperatively owned in the future. The goal of this management model is to “empower residents and lead to greater capacity building, plus support the larger community-building aspects” (Kikinaw Housing Project Partnership, 2005, p. 12).

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<sup>3</sup> Personal email communication with Brian Grant September 7, 2007.

<sup>4</sup> The West Broadway Development Corporation initiated the Green Indicators Project in 2003. The Green Indicators are described in detail in section 2.1 of this document.



Several supports and resources are available to the tenants. A dental plan, computers, and dedicated support person are provided specifically for Kikinaw tenants. Lectures, a food bank, movie nights, and other supports provided by West Broadway Community Services (See question #39 Appendix A for a detailed list) are accessible to tenants but are also available to the public.

## **1.2 Problem Statement**

Low-income individuals often suffer from more health problems than the general population (Raphael, 2002; Sapolsky, 2005; Subramanian, Belli, & Kawachi, 2002) and have less control over housing. Aspects of housing that have been shown to affect mental and physical health include: the amount of control over a living situation (Dunn, 2000), mould and damp housing (Ranson, 1991), factors such as noise levels, space needs, and light (Lowry, 1991), aesthetics (Dunn, 2000; Ranson, 1991), percentage of income spent on housing and sense of security in the housing situation (Dunn, 2000), and the location of housing and available social supports (Spicker, 1991). The amount and type of social capital in the neighbourhood is also positively correlated with the health of residents (Greiner, Li, Kawachi, Hunt, & Ahluwalia, 2004; Lochner, Kawachi, Brennan, & Buka, 2003). These are detailed further in Chapter 3.

The relationship between housing and health is difficult to prove (Ranson, 1991, p. 8). The benefits of the features employed at Kikinaw such as green building renovation, social supports and tenant-centred management can be difficult to quantify as well. The paucity of measurable metrics and data diminishes the ability to assign financial value to housing improvements that may impact the health and well-being of tenants. Funding bodies are therefore reluctant to adopt policy that bases decisions on

these aspects of housing. Health is likely to be affected by increased housing satisfaction and quality of life even if the effects can not easily be measured (Dunn, 2002, p. 48).

### **1.3 Statement of Purpose**

The purpose of this practicum is to assess the importance of various factors in determining the well-being of low-income residents through a case study. The combination of the tenant-centred management model, green building features, and particular social supports demonstrated by Kikinaw Housing Inc is unique in Winnipeg. These project considerations may help to alleviate health problems, allow residents to participate more fully in society, and ease demands on the health care system.

Key research questions are:

- a. In what ways are tenants satisfied or dissatisfied with the Kikinaw housing model?
- b. In what ways has tenant well-being changed since moving into Kikinaw?
- c. What recommendations can be made for future housing projects and housing policy?

Kikinaw Housing Inc. is interested in the outcomes of this research. Other non-profit agencies and government housing services may be as well. The results will enable them to apply recommendations and 'lessons learned' to future projects. This research is undertaken to provide evidence that supports, and to make recommendations for, housing policy and urban planning that would better consider the physical, mental and social well-being of tenants when planning social housing construction and renovation in Winnipeg.

## **1.4 Research Methods**

A literature review and documentation provided by West Broadway Development Corporation provide the background for the study. The green features of the two buildings and the tenant-centred management philosophy were outlined in *A Housing Proposal: Kikinaw Housing Project 2005*.

Self-reporting by tenant participants and the external observations of support persons involved were used to determine tenant satisfaction with their housing and to identify any changes in well-being that have occurred since moving to Kikinaw.

Two different methods of data collection were utilized: interviews and focus groups. Personal interviews were conducted with nine tenant participants, either in their apartments or a private setting. Each interview lasted from 30 to 60 minutes and was recorded with an audio device.

A focus group was conducted with Kikinaw support persons. The two participants were individuals who have extensive contact with tenants. This focus group was recorded with an audio device and lasted approximately one hour.

A second focus group consisting of representatives from some of the development partners involved in Kikinaw Housing Inc was approximately one hour in length and was recorded with a digital audio device. One of the participants unable to attend the focus group at the last minute, was interviewed individually at a later date. Three people participated in total.

## **1.5 Ethics**

Ethics approval was received conditionally on July 6<sup>th</sup>, 2006. The Joint-Faculty Research Ethics Board raised five concerns (see Appendix F). Four of the concerns were addressed by changing the project's research protocol. These were communicated to Margaret Bowman through email. The second concern was discussed with Dr. Wayne Taylor and it was deemed impossible for the researcher not to know who had participated or not when interviews are conducted face-to-face. Dr. Taylor noted that what was meant was that the Director of Kikinaw should have no way of knowing which tenants refused to participate. This new stipulation was included in the research protocol. Final ethics approval was granted on July 21, 2006.

## **1.6 Significance of the Study**

“Housing... is a crucial nexus for the construction of meaning, while material inequalities generated by the operation of housing and land markets significantly impact the types of experiences different people have in their everyday lives” (Dunn et al., 2002, p. 13). While poverty leads to poor health, poor health also makes it more difficult to gain economic status. Health is, in essence, a form of human capital. Healthier housing options for low-income individuals may assist them to make positive changes in their lives. Community benefits could include reduced tenant mobility, greater stability and resident involvement in the community, and community economic development.

Consumers of mental health services indicate that housing is the most important issue affecting their well-being (Dunn et al., 2002, p. 44). This population is often dependent on social assistance and suffers endemic poverty as a result. Constant worry

about money and dealing with multiple providers of benefits “are an impediment to maintaining wellness for people with mental illness (Dunn et al., 2002, p. 44). The possibility of hospitalization, sometimes for an extended period, can lead to a reassignment of housing. This is very disruptive and underscores the importance of secure tenure for those suffering from mental illness.

If the Kikinaw Housing model proves to positively impact tenant health and well-being there are several potential ramifications. Ideally, the model will be replicated for other social housing projects across the city of Winnipeg and the Province of Manitoba. If the green building guidelines, tenant-centred model, and social supports can not all be replicated in a particular project, one of them may still have an impact. Dunn (2002) states that stable housing for those with mental illness can have a cascade effect, reducing social isolation, providing opportunities for work and social activities, and providing a tolerant local environment (p. 44).

Housing policies and neighbourhood renewal may need to incorporate ecological and health priorities into both individual housing projects and community initiatives. Health could be seen in a more holistic manner and the health of communities equated with the health of the individuals residing within them and the health of the natural, physical, and social environment.

This thesis will elucidate linkages between green housing, the tenant-centred management model, social support, and well-being. It is important that professional planning practitioners understand the effects of the above measures and how policy may impact them. If a tenant-centred management model can empower residents and strengthen community it may be important to employ in other projects. How the strength

of a community affects overall resident health may illustrate to planners the need for neighbourhood capacity - and social capital - building.

### **1.7 Assumptions and limitations**

This study is limited by the largely subjective gathering of information. Changes in well-being can only be recorded if the subject is aware of any changes occurring. Likewise, if the tenant is led to believe that changes *should* have occurred they may perceive differences that do not exist in reality. All efforts were made not to direct participant's responses. Satisfaction with Kikinaw may change from one day to the next depending on recent interactions with other tenants or management, on personal, or on external concerns. This may have affected tenant responses. The author had limited access to support staff. This made objective observation of tenant behaviour difficult to obtain.

There is evidence that socioeconomic status at some point in life can have long lasting health effects even after living conditions have changed (Sapolsky, 2005). If most of the tenants have been in the past, or are currently, of low socioeconomic status then changes in their living environment in the present may only have a marginal impact on their health as they age. They will still be at greater risk of illness than people of higher socioeconomic status.

The small sample size of nine resident interviews is a limitation. There are currently no other housing projects in Winnipeg employing the same criteria and standards as Kikinaw that could have been used to supplement the data gathered. It is assumed that the tenants interviewed comprise a representative sample of Kikinaw tenants. There is no evidence to indicate otherwise.

## **1.8 Chapter outlines**

The first chapter provides a background and introduction to the practicum and the questions being raised. Research methods are summarized briefly. Ethics, significance of the study, and assumptions and limitations are explained. The second chapter describes the case to be studied (the Kikinaw Housing Project) in detail and provides background on its development. Chapter three is a literature review with sections on green building, health and well-being, the tenant-centred model, and supported housing. Chapter four discusses the research methods employed, with subsections on the case study, and interviews and focus groups. Chapter five analyses the findings from the interviews and focus groups. Finally, Chapter six provides conclusions, recommendations, and directions for further study.

## **2 Kikinaw Housing Project**

The following chapter explains the philosophy and organization behind the Kikinaw Housing Project, and how the project was funded. As a primer, the Green Indicators Project is examined because of its important influence on Kikinaw.

### ***2.1 The Green Indicators Project***

Kikinaw Housing Inc. used the Green Indicators as a guideline in their renovations of 284 and 317 Langside Street. Particular emphasis was placed on energy efficiency, water conservation and an environmentally friendly approach (Kikinaw 2005, p. 8).

#### **2.1.1 Background**

Since 2003, the West Broadway Development Corporation has undertaken several green housing initiatives. These include assessing the existing housing stock in the neighbourhood, evaluating energy performance, healthy renovations and green infill construction. The Green Indicators Project is a resource, currently under revision, to encourage more green building in West Broadway and potentially throughout the province. The project was initially conceived when housing renovated through West Broadway Lan Trus Inc. was not performing to the standard desired.

The main goal of the Green Indicators Project is to promote energy efficiency and healthy housing principles. The indicators are geared to local climatic conditions and make specific reference to suppliers in the Winnipeg area. The indicators are unique in



Canada in that they focus on the renovation of existing housing stock. Other green building rating systems for housing, such as the US Green Building Council's LEED<sup>®</sup> Homes and Built Green<sup>™</sup> Alberta, focus on new housing. Several novel engineered systems have been created through the project to deal with infill housing (in the EcoHouse) and rainwater storage and use (in the Healthy House). The Green Indicator brochure will also "serve as an educational tool to create awareness about energy efficiency, sustainable housing and new construction technologies" (Architectural & Community Planning Inc, 2005).

A tenet of the Green Indicators Project is that the buildings being renovated or constructed will ultimately be high quality, long lasting, healthy, and economical for the owners or tenants. Improving the housing stock of the city through high-quality renovations means that less new construction will be needed in the future to replace cheaply constructed buildings.

Because the project was initiated at the grassroots level it is open to input from the community. Advances and changing conditions in the building industry entail that the project will continuously be under revision in order to stay current and meet local needs. CHAM Holdings, Architectural & Community Planning Inc, West Broadway Development Corporation, and West Broadway Housing Stakeholders are all partners in the program.

### **2.1.2 How the Green Indicators Work**

The Green Indicators are a "system for measuring building construction or rehabilitation, while emphasizing the general elements of energy efficiency, resource efficiency and indoor air quality" (Architectural & Community Planning Inc, 2005). Each

indicator is a construction method, material or component intended to reduce adverse environmental impacts. Points are awarded depending on the degree to which the indicator has been met.

Four categories of indicator are used for evaluation: general, heating and cooling efficiency, indoor air quality, and resource efficiency. Each category has one or more specific green indicators within it. If a developer meets the minimum of 30% of the indicators, the project will be endorsed by the West Broadway Development Corporation with respect to applications for housing funding from any level of government (Architectural & Community Planning Inc, 2005).

### **2.1.3 Green Indicators Categories**

#### General

- sizing space to occupational requirements
- taking advantage and responding to the site specific natural elements
- reduction or elimination of construction waste

#### Heating and Cooling Efficiency

- passive cooling
- insulation and other winter heat retention components
- heat sink utilization

#### Indoor Air Quality

- reduced or no VOC (volatile organic compound) producing products

#### Resource Efficiency

- water conserving techniques and appliances
- rainwater utilization

- energy efficient appliances
- self-generation of energy
- resource efficiency and durability of building materials
- integration of previously used construction material into renovation process

(Architectural & Community Planning Inc, 2005)

## **2.2 The Kikinaw Project**

The following section describes the Kikinaw philosophy and organization. The Green approach and the tenant-centred model are explained. Funding for the project is detailed.

### **2.2.1 Philosophy and Organization**

Kikinaw’s philosophy is to

“develop an appropriate, sustainable, environmentally-friendly, energy efficient, water conserving and tenant-centred, stable facility that will meet the current and future needs of the residents and community. It has become essential over these last few years that a sustainable community be defined as one that gives its residents an opportunity to attain both individual and collective assets. Kikinaw will provide a solution to this challenge”.  
(Kikinaw, 2005, p. 3)

Kikinaw Housing Project is a partnership between the community and private interests in West Broadway. Community involvement included Young United Church and West Broadway Development Corporation. Private partners were ASH Management and West Broadway Lan Trus.

The Kikinaw Housing Project consists of two apartment blocks on Langside Street in the West Broadway community of Winnipeg, Manitoba. 284 Langside Street has

16 units and 317 Langside Street has 11 units. One of the units at 317 Langside Street is reserved for transitional housing. This unit is for temporary accommodation for an individual in housing crisis.

Kikinaw is a ‘community-demonstrated project’ (Kikinaw, 2005, p.i) that emerged after a year of public consultations held by West Broadway Development Corporation and the neighbourhood Alliance and Council. The project goal is to address local issues of tenant displacement and increasing rents. The project “targets the most vulnerable ‘low-income individuals and households’ which are prone to homelessness in the community and are now living in substandard housing” (Kikinaw, 2005, p. i).

### **2.2.2 Green Approach**

The two apartment blocks comprising the Kikinaw Housing Project were renovated using the West Broadway Green Indicators as a guide throughout their planning. The Housing Proposal (Kikinaw, 2005) states that a ‘Greening Approach’ was taken during the retrofit. It is described as “holistic, integrated, systematic and ultimately more efficient and cost-effective than conventional housing development” (p. i). Healthy, environmentally friendly materials were selected whenever possible, and energy and water efficiency was prioritized.

One of the incentives for WBDC to make a green building approach a priority for housing development in the neighbourhood was the high utility burden experienced by tenants and homeowners in both new and rehabilitated dwellings (Kikinaw, 2005, p. 6). It was determined that a green approach to housing initiatives would also improve the life expectancy of the local housing stock and improve the health and well-being of residents.

Maintenance and operating expenses are generally lower for a green building (RICS, 2005, p. 3).

### **2.2.3 Tenant-Centred Model**

Most successful Community Development Corporations believe strongly that cooperation between owners, tenants, and management is important (Atlas & Shoshkes, 1996). Tenant organizations are a concrete way to provide some control to tenants. The original intent of the project includes the “capability of tenants to build personal assets in the future ownership of the facility” (Kikinaw, 2005, p. 4). A cooperative model is suggested as the most likely way of achieving this. At the present time an advisory committee made-up of tenants exists to make recommendations to management and represent the tenants. One tenant also sits on the board of directors. The tenant-centred model is intended to empower residents, lead to greater capacity building, and support the larger community building goals of the project.

Kikinaw would like to follow the West Broadway Lan Trus Inc. rent-to-own model. Under this program, a tenant who has rented for at least 5 years will acquire a 99-year renewable lease in a condominium unit that is fully transferable to another person. The leasehold interests may be sold, with the tenant retaining 35 % of the proceeds after 5 years of tenancy. The percentage of proceeds of sale would grow at 1% per year over 15 years, to a maximum of 50% of the proceeds of any sale of the lease. There was some concern from Affordable Housing Initiatives (AHI) over the proposed tenancy ownership model. AHI felt that condominiumizing the Kikinaw apartments and providing an equity interest in each unit to tenants would result in public money invested in low-income housing being lost due to flipping of the units. An article entitled *Alternatives for Equity*

*Distribution* was drafted that clarifies the arrangement (Kikinaw, 2005, p. 12). There were three alternatives proposed to reduce the potential for flipping the leasehold interests (Kikinaw, 2005, Appendices):

Alternative 1: Follow the Lan Trus model but exert more control over the lease sale circumstances:

- a) Transfers of the leasehold interest would be to the condominium corporation only;
- b) The Kikinaw Board of Directors would determine who could acquire the lease; and,
- c) The Board of Directors of Kikinaw would determine the leasehold transfer price whether or not that price was consistent with market rates;

Alternative 2: Follow the Lan Trus model and the conditions of Alternative 1, but reduce the maximum equitable interest acquirable by the tenant to 25%.

In this alternative, a tenant would begin with 10% equity after 5 years.

Alternative 3: Convert the corporation into a for-profit cooperative and provide a tenant distribution sinking fund in addition to the capital reserve fund. The Board of Directors of Kikinaw would create rules of access to the tenant distribution sinking fund. This option would require greater income in the early years of operation as it does not depend on the value of the condominium unit to provide equity.

Alternative 3, “an equity-share housing cooperative type arrangement”, was the preferred choice of AHI (Kikinaw, 2005, p. 12).

Several supports and resources are provided for Kikinaw residents. Each suite is equipped with a computer and all tenants receive a free dental plan. Supports within the immediate community, from Young United Church and West Broadway Community Services, include a food bank, emergency food, hair cuts, drop in lunches four days/week, free laundry, a parenting program, a pre-natal program, seminars and talks, movie nights, insulin checks, card playing nights, Bible study, cooking classes, the Good Food Club, and holiday dinners. The Kikinaw proposal included provision for a part-time support worker who would “be available to encourage and foster personal capacity building activities within the facility and link the tenants to other available resources and supports within the community” (Kikinaw, 2005, p. 4).

#### **2.2.4 Funding Sources**

Funding for the project was provided by the Government of Canada, the Province of Manitoba, and the City of Winnipeg. An Affordable Housing Initiatives forgivable loan of \$941,707.00 was provided by the Manitoba Housing Renewal Corporation, a joint funding program of the Federal and Provincial Governments. The City of Winnipeg contributed \$85,000.00 to the project.

Private donations from various sources were raised in order to fund building operation post-renovation. Funders include the Thomas Sill Foundation (funds plus 30 used computers), the Winnipeg Foundation, Entrepreneurial Start up Funds, and Anonymous donors from Alberta and Manitoba. The Dental Program is provided at a reduced rate to tenants through the Faculty of Dentistry at the University of Manitoba.

## 3 Literature Review

The following literature review is divided into four main sections; Green Building, Health and Well-Being, Supported Housing, and Tenant-Centred Management. Each of these topics is a relevant aspect of the Kikinaw project. Interview questions for tenants focused on these four topics.

### 3.1 Green Building

“In general, a green building reduces the impact on the environmental and social systems that surround it. Green buildings enlarge our economic, social and environmental capital. Compared to conventional buildings, green structures use less water and energy, as well as fewer raw materials and other resources. They are also better places in which to live and work, for green buildings improve human wellbeing as measured by health and productivity” (RICS, 2005, p. 12).

Green buildings offer economic, health, environmental, and social benefits to residents and to the broader community. There exist several green building rating systems including Leadership in Energy and Environmental Design (LEED<sup>®</sup>), Green Globes<sup>™</sup>, British Research Establishment Environmental Assessment Method (BREEAM), and Built Green<sup>™</sup> among others. While some criteria and standards differ between these there are several commonalities. Examples of green building features include:

- Energy and water efficiency
- Quality of the indoor environment (air quality, thermal comfort, lighting)
- Waste management and air emissions
- Reduced greenhouse gas emissions from the building and from the construction techniques and material used
- Site disturbance and storm water management
- Transportation options for occupants
- Longevity (durability, adaptability to changing building user needs)
- Life cycle costs of the building (environmental costs of construction, operation, maintenance, and removal)



- Social enhancement of the community (i.e building greater local networks)  
(adapted from [www.greenbuildingsbc.com](http://www.greenbuildingsbc.com))

Green Buildings offer superior performance in a variety of areas, without increasing up-front costs in a manner that is cost prohibitive so long as the project is well executed. Over the long-term, they are more economic than conventional buildings and have a greater return on investment (Turner, 2004, p. 5). Some of the social benefits of green building include “increased productivity, better health and well-being, higher academic performance, improved morale and lower absenteeism” (RICS, 2005, p. 20). In a survey of executives involved in green buildings 91% felt that health and well-being of occupants increased in green buildings, 84% felt that a green building had a higher value, and 83% felt that productivity increased (Turner, 2004, p. 6). *World Changing* states, “dense, green housing complexes may be the only way to shelter everyone without compromising the planet” (Steffen, 2006, p. 155).

Green building is becoming increasingly popular in the commercial sector because of the potential cost savings and the high profile this approach can provide to corporations. Adoption in the residential sector appears slower (RICS, 2005, p. 4). The benefits of green building need to be communicated to the consumer in terms they can understand (RICS, 2005, p. 8). Governments of various levels across Canada and the United States have adopted green building standards for their own portfolios. The *Green Building Policy for Government of Manitoba Funded Projects* was implemented in April 2007 (Manitoba Green Building Policy Interdepartmental Working Group, 2007). It states that all new commercial and institutional buildings built with provincial funding must meet, at a minimum, the LEED® Silver certification of the Canada Green Building

Council<sup>5</sup>. Though future versions of the policy are anticipated to include residential projects there is of yet no provision for them. Low-income homeowners and those living in rental housing have few resources to improve the energy efficiency of their accommodations. Federally, the Government of Canada discontinued the *EnerGuide for Low-Income Households* program in January 2007. It was replaced with the ecoENERGY Retrofit Grant. This program requires the owner to pay upfront for an energy audit and upgrading. Reimbursement may take up to 3 months. Participation in the ecoENERGY program requires capital that low-income individuals lack. At the provincial level, Manitoba Hydro offers several energy efficiency programs. One of these – the *Power Smart Residential Loan* allows homeowners to borrow up to \$7500 for energy efficiency upgrades. Others require payment on the part of the recipient before reimbursement.

Lower-income citizens are most affected by energy inefficiency and a poor quality indoor environment. The older housing stock and low quality dwellings that are affordable for this segment of the population can be very expensive to heat because of energy inefficiency and can lead to energy poverty (Canadian Housing & Renewal Corporation, 2005). Poor health already plaguing low-income individuals is often exacerbated by the poor quality of housing available to them (Hwang et al., 1998, p. 13).

While the perception exists that green building cost significantly more than conventional building, studies show that they often have only a small capital cost increase. The capital cost premium for commercial green buildings using some form of rating system, or that are recognized as green by the media or public, ranges from “no significant difference” (Langdon, 2007, p. 3) or “fairly small” (RICS, 2005, p. 3), to 2.6%

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<sup>5</sup> There are four levels of LEED® certification: certified, silver, gold, and platinum. For more information see the Canada Green Building Council website at [www.cagbc.org](http://www.cagbc.org)

(McDonald, 2005, p. 43) or under 5% (WBCSD, 2007, p. 14). Financial benefit can be gained by reducing a building's negative social and environmental impacts, and a change in one of the three will ultimately impact the other two (RICS, 2005, p. 12). If there is an additional cost the investment is quickly paid back by the energy savings. Renters, however, have little say in the management of their building or in the type of renovations that should be carried out. The World Business Council for Sustainable Development feels, "it is vital that energy efficiency permeates all levels and is not restricted to high-end properties" (2007, p. 9). Healthy, cost effective, green accommodation should be available to all income classes.

Material and energy costs are going to continue rising and become more volatile as peak oil production approaches (Hirsch, 2005). In addition, climate change will increase site energy demand (WBCSD, 2007, p. 9). Buildings must be constructed with lower energy consumption and a longer lifespan for all segments of the population. Green building meets this need while simultaneously helping to preserve our health and the environment for future generations.

The Affordable Efficient Housing National Symposium 2005 (Canadian Housing and Renewal Association, 2005) states that there is undeniable proof in jurisdictions where energy retrofit programs have been carried out that both tenants and housing providers benefit financially. The Green Value Report states that "the greatest value of green features/performance is to be found in the value to the occupant" but that valuers have not yet accounted fully for this (RICS, 2005, p. 22). Investing money in long-term sustainable solutions provides greater benefits than simple short-term fuel price relief programs.

## **3.2 Health and Well-Being**

The mental and physical health effects of the Kikinaw Housing model were of significant interest in this project. The literature on health and well-being was divided into three sections: Whole Health and Population Health, Material Housing Factors Influencing Health, and Neighbourhood and Social Factors Influencing Health.

### **3.2.1 Whole Health and Population Health**

Adequate shelter is particularly important in northern climates. It must provide basic protection but is also a social setting and place of refuge. The health of a home cannot be assessed in narrow hygiene terms but must be seen as part of an overall function in satisfying social, aesthetic and intangible human needs (Ranson, 1991, p. 46). Healthy housing must consider affordability and ownership, physical and social location, and amenity and protection (Hunarī & Boleyn, 1999, p. 195). Housing should provide for pleasant surroundings with adequate indoor space and privacy. Housing includes the house (the physical structure, design and characteristics), the home (the social and psychological aspects), the neighbourhood (the immediate physical area), and the community (social characteristics and range of important services in a neighbourhood) (Hwang et al, 1998, p. 7).

The World Health Organization defines health as ‘a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity’ (*About WHO*). “There is a substantial body of knowledge to support the idea that medical care... makes relatively little contribution to health compared with the potential contribution of broader social and cultural conditions” (Hunarī & Boleyn, 1999, p. 193). Medical treatment occurs after illness or infirmity is already present whereas preventing the social

and cultural conditions that may lead to disease is much more successful for maintaining health. Housing and health studies have generally examined the correlation between poor housing and ill health while neglecting correlations between good housing and the maintenance and promotion of good health (Ranson, 1991, p. 13).

The population health perspective argues that there is a gradient of health across the social and economic spectrums. Gradients have been found in virtually all human populations and are “evident for various measures of social status (class, income, educational level and perceived control over life circumstances) and for various measures of health status (mortality, morbidity, sickness absence and self-reported health status)” (Dunn et al., 2002, p. 5). Appropriate public policy can help to redress this situation. Health research and social policy reform in Canada has moved away from health promotion toward population health themes since the 1990s (Dunn et al., 2002, p. 3). The latency model and the pathways model both explain the effects of life-course on health in a complementary manner (Dunn, 2002). The latency model suggests that discrete events early in life have a strong independent effect later. The pathways model suggests that there is a cumulative effect of life events and that life conditions are of an ongoing importance. Both models could very well play an important role in health and therefore policy must be sensitive to the conditions of life across the entire human life-span (Dunn et al., 2002, p. 11).

Current health models have limited diagnostic and prognostic methods to deal with physical, mental, and social health needs. The overdeveloped world has largely dealt with infectious, nutritional, and acute disease. They are left with degenerative, chronic, and psychosocial diseases with complex aetiologies that are still largely misunderstood

(Ranson, 1991, p. 11). What is clear is that societies that have relatively equal distribution of wealth, and a high level of overall wealth, enjoy a higher level of health at the population level (Dunn et al., 2002, p. 4). According to literature reviewed by Dunn (2002) the social gradient in health cannot be attributed to a reduction in earnings of those with health problems, differences in risky behaviour by status, or material deprivation (p. 5). Certain diseases, such as breast cancer in developed countries, and coronary heart disease in some newly industrialized societies, are important exceptions to the trend that higher socioeconomic status is associated with better health (Evans, Barer, & Marmor, 1994, p. 79). These can be explained by marked differences in particular causal factors.

“In terms of housing, information about epidemiology and identification of causal factors rarely includes psychosomatic and social pathologies. As a result, little is known about the contribution made by housing in causing stress-related diseases such as hypertension, migraine, depression, neurosis, alcoholism and social diseases manifested by pathologically derived antisocial behaviour (e.g. crime, violence, street mugging, vandalism, child abuse, and mental or sexual disorders).” (Ranson, 1991, p. 11).

Prolonged psychosocial stress can also result in type 2 diabetes, gastrointestinal disorders, impaired growth, sexual dysfunction, suppressed immune responses, and impaired cognition (Sapolsky, 2005, p. 96). Sapolsky states that in general,

“...individuals are more likely to activate a stress response and are more at risk for a stress-sensitive disease if they (a) feel as if they have minimal *control* over stressors, (b) feel as if they have no *predictive information* about the duration and intensity of the stressor, (c) have few *outlets* for the frustration caused by the stressor, (d) interpret the stressor as evidence of circumstances *worsening*, and (e) lack *social support* for the duress caused by the stressors.” (Sapolsky, 2005, p. 96)

Several of these concerns are often reoccurring issues for tenants of low-income or social housing. The amount of control people exercise over their daily lives, how demanding their lives are, and the degree to which they feel a sense of dignity, status and pride in themselves can have a significant impact on their well-being (Dunn, 2000, p. 4). Housing tenure has been demonstrated to affect health outcomes as well. Renters show higher levels of several types of cancer, and self-reported chronic or acute illness, as well as “higher rates of problems on all dimensions” (Hwang et al., 1998, p. 65), though this may not be true in some European countries where the upper classes choose to live in rental accommodation and the same stigma would not exist. People of lower social class tend to experience less control, more demand and more indignity. This can be diminished by the provision of resources to cope with stressors (Dunn, 2000, p. 4). Likewise, when a large percentage of income must be spent on housing, opportunity costs accrue that may affect health (Dunn et al., 2002, p. 51). There is less money left to pay for other health-affecting things such as nutritious food, recreation, and education.

Where individuals place themselves on the social hierarchy (subjective socioeconomic status) is related to indicators of both physiological and psychological functioning (Adler, Epel, Castellazzo, & Ickovics, 2000). Self-perception of lower social status may increase disease risk either by increasing feelings of stress or by increasing vulnerability to the effects of stress. This is important both in early childhood and throughout the life course (Dunn et al., 2002, p. 11). Evans (1994) discusses a study of U.K. civil servants that found large unambiguous health differentials that were linked to hierarchy, not to deprivation (p. 69). Gradients were shown across groups as well and could not simply be explained by life-style choices. Long term data from the U.K. Office

of Population Censuses and Surveys exhibits the stability of the gradient over the 20<sup>th</sup> century, despite massive changes in the “extent, effectiveness, and accessibility of health care” (Evans et al., 1994, p. 69).

Society has an obligation to provide for basic human needs, including shelter. It also has a duty to protect citizens as much as possible from “environmental pollution, occupational hazards, infectious disease and other preventable causes of illness, dis-ease or disability” (Hunarī & Boleyn, 1999, p. 193). Health and shelter must be considered holistically in order to fulfil these obligations. One’s housing situation is crucial to them on a daily basis and is a clear representation of socio-economic inequality. Housing is “a highly relevant policy arena through which to address socio-economic inequalities in health” (Dunn et al., 2002, p. 12).

### **3.2.2 Material Housing Factors Influencing Health**

Housing provides physical shelter and protection from many threats. Paradoxically, it also has the ability to expose occupants to certain health threats arising from its structural properties (Dunn et al., 2002, p. 22).

Ranson (1991, p. 8) lists four major reasons for the difficulty of proving a relationship between housing and health:

1. Studies usually fail to take into account non-housing variables that affect health such as poverty, poor nutrition, ignorance and lack of medical care.
2. The direction of causality between housing and health variables is often unclear.
3. Measurement methods are often too insensitive, inappropriate, or lack universal acceptability. More intangible data such as housing effects on



social well-being, comfort levels and quality of life, are even more difficult to measure. [*because of their qualitative nature*]

4. Few epidemiological studies have been conducted into the effect of particular housing factors on health and are insufficiently corroborated.

The World Health Organization (WHO) states that the effect of the residential environment on health is the sum of the individual factors present within the overall environment. A strong relationship can therefore be established through deductive measuring (Ranson, 1991, p. 9). Britain has a medical priority re-housing program that has shown improvements for those re-housed on mental health grounds but the evidence for those re-housed on reasons of physical health is mixed (Dunn et al., 2002, p. 15).

A negative feedback loop can arise when health status and socio-economic status lead to poor quality housing, which in turn may negatively affect health (Hwang et al., 1998, p. 13). The housing/health relationship put forward by Hwang et al. (1998) identifies the following as potential confounding factors in the home: chemical exposure; biological exposure; physical characteristics of the house; social and economic characteristics of the housing; psychological factors relating to housing. These will be discussed in the next several pages.

### **3.2.2.1 Chemical and biological exposure**

While many people are concerned with the effects of outdoor air pollution on their health they often neglect the effects of indoor air pollution. Studies indicate that indoor air is often more polluted than outdoor air (Small, 2002, p. 3). In addition to this we spend about 80% of our time indoors, as much as three quarters of this in our own home (Lowry, 1991, p. 22). The elderly, children, the sick, and the unemployed can spend even

more time than this in their primary residence. Lowry (1991, p. 22) states that the health effects of indoor air pollutants are difficult to measure because of trouble isolating the effects of individual agents. Occupational and personal history can complicate measurements as well. The effects of exposure depend on the concentration of pollutant and the duration of exposure (Lowry, 1991, p. 22). Certain pollutants, such as CO, are harmful only as a large dose at once, while others will slowly build up in the human system through repeated low exposure over months or years. “The concentration of a pollutant depends on its rates of production and removal, where it comes from, and its dilution by ventilation. The quality of indoor air can be improved by increasing the ventilation, removing or modifying the source of pollution, cleaning the air, or changing the occupant’s behaviour.” (Lowry, 1991, p. 23).

Indoor air quality is a factor of outside air quality, pollutant emissions within the building, and the ventilation rate (Ranson, 1991, p. 130). Indoor pollutants arise from several sources including the toxic chemicals and materials used for building and furnishing a home, and consumer goods brought into the home. “Modern building materials include some 70 000 chemical combinations, releasing perhaps 1000 chemicals to the indoor air” (Day, 2004, p. 60). Formaldehyde and volatile organic compounds (VOCs) can off-gas from carpets, paints, varnishes and other items. Numerous polymers are used in housing for covering floors and walls, insulating pipes, waterproofing and sealing wall panels, and in the manufacture of prefabricated homes. If heated above 60°C they liberate volatile substances that may be harmful (Ranson, 1991, p. 89). Cleaning agents may also contain organic constituents that evaporate into the air (Ranson, 1991, p. 89). Some education on benign types of household cleaners was discussed for Kikinaw

residents but has not yet been implemented. Not only can individual pollutants be harmful to health they may interact with other toxins and have synergistic effects (Ranson, 1991, p. 131). New chemicals are constantly being introduced into our environment with little testing regarding their long-term effects or how they may react with other chemicals already present. The literature reviewed by Hwang et al. (1998) generally supports the association between VOCs and various respiratory outcomes (p. 58).

Formaldehyde is a chemical that is often present in carpeting. It builds up in rooms at different rates depending on ventilation, air temperature and age of the material releasing it. At low concentrations it irritates the eyes and the upper respiratory tract and leads to nausea, headaches, rashes, tiredness and thirst (Ranson, 1991, p. 13).

Formaldehyde is a known mutagenic and may be carcinogenic. “It can affect the menstrual cycle, cause difficulties during pregnancy and result in a lower birth weight (Ranson, 1991, p. 134).

### **3.2.2.2 Physical and psychological characteristics**

Housing health is affected primarily by the following: dampness and mould, natural light, air quality, noise and space. Designing housing that promotes good health is more effective than preventing housing that is harmful to health.

Damp housing can contribute to rheumatism, arthritis, and respiratory diseases such as pneumonia, bronchitis and upper respiratory infections. Mental health may be adversely affected by the stress of high heating bills and destruction of private belongings that can accompany damp housing (Ranson, 1991, p. 47). It can also become a stigma that causes feelings of shame, depression and alienation or a sense of injustice. Social

well-being may be affected as a mouldy home is not seen as a desirable place for company. Many moulds are allergenic or provide a food supply for mites, which are also allergenic (Ranson, 1991, p. 140). When the mould in a house is toxic serious illness can result. There is evidence that post hoc procedures to reduce dampness and allergens in the home are expensive, require a large commitment, and are not generally successful long-term (Hwang et al., 1998, p. 39). This indicates a need for housing design that prevents these problems before they occur.

Health status and age as well as social and economic factors impact one's tolerance for noise (Ranson, 1991, p. 62). "Noise is defined as unwanted sound. People are usually very tolerant of sounds they make themselves, but when they have no control over the source, or if the sound is unwelcome it becomes noise." (Lowry, 1991, p. 41). Impersonal noise such as from traffic or machines is often tolerated well, while human voices are one of the most irritating noises (Lowry, 1991, p. 42). Domestic noise can cause stress. Disturbed sleep and psychological/hormonal disturbances have been demonstrated at low noise levels (Ranson, 1991, p. 62). It can also be stressful knowing that your neighbours can hear your noise as well as you hear theirs. This leads to a lack of privacy (Lowry, 1991, p. 42). Alternately, people accustomed to high levels of noise often have difficulty adjusting to low-noise environments (Ranson, 1991, p. 62).

Space needs are often determined by cultural norms. Overcrowding is rarely linked to physical health problems in modern western society but mental health may suffer (Lowry, 1991 p. 45 and Hwang et al., 1998, p. 50). The number of simultaneous demands on available space seems to be more important than the number of people per

unit of space (Lowry, 1991, p. 45). Similar to the issue of noise, it is the lack of personal control over space that leads to stresses on mental health.

The amount of natural light in a home has important physiological and psychological benefits (Ranson, 1991, p. 53). Recent studies indicate faster healing time in hospital patients with more natural light and views of nature from their room (Weller, 2006). Plants and laboratory animals exposed only to restricted-spectrum light become ill (Day, 2004, p. 59). Natural daylight is broad spectrum. Sunlight also has known antibacterial properties.

Heat stress has been demonstrated to influence individuals with poor mental health more strongly by affecting sleep patterns (Hwang et al., 1998, p. 63). The ability to have some control over temperature increases comfort and satisfaction as well (Hwang et al., 1998, p. 62).

The aesthetics of a home can be important for health and well-being. Several studies have determined that residents tend to judge the value of their home largely on appearance and perceived visual impressions (Ranson, 1991, p. 43). Dunn (2002) states, “the home is one of the most important arenas for the construction of meaning in nearly every human culture” (p. 24). Aesthetics of the home environment may have an important impact on mood and mental state. As Dunn (2000, p. 50) has shown, respondents who are proud of their home report better general health, greater health satisfaction and better mental health. This was a factor considered when Kikinaw chose to put new doors on every unit rather than fixing the old doors that had holes and scratches on them. Aesthetic standards are dependent on social, cultural, economic and individual factors (Ranson, 1991, p. 43). Housing satisfaction may have both an affect on health and be an outcome

of health (Hwang et al., 1998, p. 67). Housing dissatisfaction is a significant predictor of psychological distress, while alternately, “health status may predispose individuals to be satisfied with most things, including their housing” (Hwang et al., 1998, p. 68).

### **3.2.2.3 Economic and psychological characteristics**

Dunn (2000, p. 47) states that there is a strong relationship between housing costs as a proportion of total income and general health status. A similar but weaker relationship was found with mental health. Respondents who spent more than 30% of their income on housing-related costs were more likely to report poorer general health. Housing owners who reported higher capital gains were more likely to report better mental health. Respondents who worried most about being forced to move from their home were more likely to report poorer general health, lower health satisfaction, and poorer mental health.

“Enhancing health in housing, neighbourhood, and community environments requires integrating perspectives that include ecological, biological, environmental protection, resource protection and planning considerations with a perspective that emphasizes human health and well-being, from a holistic context.” (Hunari & Boleyn, 1999, p. 201).

Day (2004, p. 60) is careful to warn that a toxic environment is not certain to cause disease just as exposure to a pathogen does not guarantee becoming sick. Illness is not only due to physical exposure but also to genetics, personal history and the emotional and spiritual state of an individual. Each of these can affect susceptibility.

### **3.2.3 Neighbourhood and Social Factors Influencing Health**

Housing must take into consideration the wider community and social setting of individuals. Improvements in housing quality and neighbourhoods have been found to

improve the mental health of residents in several studies (Moloughney, 2004, p. 16). Community infrastructure and the services available can be very important to individuals, and the community as a whole, especially during times of hardship or illness (Ranson, 1991, p. 13). The neighbourhood can be an immediate extension of the home and provides a sense of identity and belonging to a community (Hunarī & Boleyn, 1999, p. 199) – this context should not be neglected when considering the health of a home.

Individuals without social ties are more likely to die from various causes than those with more intensive social contacts (Evans et al., 1994, p. 94). Reciprocal supportive relationships with friends and/or family can offer the material and emotional resources that reduce stress and anxiety (Dunn et al., 2002, p. 7 (Smith, Smith, Kearns, & Abbott, 1993, p. 604). Social isolation is well linked to reduced psychological well-being (Kawachi & Boleyn, 2001, p. 458). Social capital may be an important determinant of personal and neighbourhood health. The theory of social capital is a way of describing the forces that shape the quality and quantity of social interactions and social institutions (McKenzie, Whitley, & Weich, 2002, p. 280).

“Social capital is applied to those features of a community that promote cohesion and a sense of belonging and that enable its members to cooperate” (McCulloch, 2001, p. 208). Social capital measures social context, not individual actors within that context (Lindstrom, Merlo, & Ostergren, 2002, p. 1780, and McKenzie et al., 2002, p. 280). It is an ecological characteristic. Social networks and social supports, on the other hand, are individual characteristics. Social capital has been used to explain why some communities work better than others, benefiting the entire local population (McCulloch, 2001, p. 208). Research on social capital at the neighbourhood scale demonstrates that community

perception and community involvement are related to individual self-reported health status and behaviors (Greiner et al., 2004, p. 2310). The importance of support networks and strong community to the well-being of tenants will be assessed in this study.

A difficulty with studying social relationships is the potential bias distressed individuals may display in the retrospective recall of social ties (Kawachi & Boleyn, 2001, p. 458). Were the social ties lacking *before* the psychological distress, or as a result of it? There are also differences in the affects of social ties based on gender, socioeconomic position, and stage of life (Kawachi & Boleyn, 2001, p. 460). Women with low resources may have difficulty meeting the needs of their social network. This may be more harmful than helpful to them (Kawachi & Boleyn, 2001, p. 462). There is also often a burden of obligation towards those who have provided social support. More homogeneous societies may have high social capital for the majority of their members while minorities may experience marginalization, exclusion or persecution unless they conform (McKenzie et al., 2002, p. 281).

The two dominant models for explaining the relationship between social relations and health are the main effect model and the stress-buffering model by Cohen and Wills (Kawachi & Boleyn, 2001, p. 459). The main effect model posits that social influence guides health-relevant behaviours and that integration in a social network may produce a sense of self-worth, purpose, belonging and security (Kawachi & Boleyn, 2001, p. 459). This may work at the neighbourhood scale as well. Community norms could influence good or bad behaviour, thus, as West Broadway is revitalized it may encourage more good behaviour through positive feedback. In the stress-buffering model the perceived availability of social support when faced with stress may lead to a more benign appraisal



of the situation (Kawachi & Boleyn, 2001, p. 460). However, an individual with a poor social network may not necessarily perceive a need for support (Kawachi & Boleyn, 2001, p. 465).

Individuals exposed to small amounts of housing stressors show less distress when there is social support, regardless of the level of stress experienced (Hwang et al., 1998 p. 51 and Smith *et al.* 1993). This supports the main effect model. Research also demonstrates that support does not mitigate the effects of high levels of housing stressors. It is less effective at high levels of stress exposure than at low levels (Smith et al., 1993, p. 610). A poor quality environment with crime, threats to safety, transiency, etc., “undermine one’s ability to construct a dignified set of social meanings around one’s home” (Dunn et al., 2002, p. 26).

Participation in social activities like volunteerism and religious organizations does not necessarily provide strong personal interaction but can provide a sense of belonging and social identity that improve psychological well-being (Kawachi & Boleyn, 2001, p. 263). Lin et al. define three layers of social ties along a continuum from belonging, to bonding, to binding. They hypothesize that each outer layer allows an individual to establish inner layers. Thus, norms of trust and reciprocity that develop among individuals through social interaction may have spillover effects in the neighbourhood as a whole (McCulloch, 2001, p. 209).

While the socio-economic status of a household has an important influence on the health of individuals in the house, it can also influence the quality of their housing situation (Hwang et al., 1998, p. 9). There can be independent contributions to health from the socio-economic dimensions of a particular locale as well. Numerous studies

have demonstrated that poor children growing up in a poor neighbourhood have depressed health and human development compared to poor children raised in mixed-income neighbourhoods (Dunn et al., 2002, p. 36). Populations in areas of high social fragmentation show higher rates of psychoses independent of deprivation and urban/rural status (Allardyce et al., 2005) though causality is not proven. Urban planning policies encouraging socially mixed neighbourhoods may help reduce inequalities in health and human development (Dunn et al., 2002, p. 36).

Any increased health risks that an individual may have as a result of his/her socio-economic status is exacerbated by the social environment and the quality of his/her housing (Dunn et al., 2002, p. 27). Housing location has large consequences on one's ability to access social resources, economic resources, public services, education and health.

“Living in low-quality, run-down, rental housing, in neighbourhoods reputed to be less desirable, exerts considerable influence not only on an individual's self-concept, but the way in which they are perceived by others. The stigma associated with one's housing may undermine the home's use as a site for the building of social ties, and may even lead to things like hiring discrimination”. (Dunn et al., 2002, p. 35)

“At the individual level, one's immediate social and economic environment and the way that this environment interacts with one's psychological resources and coping skills, shapes health much more strongly than the biomedical model would suggest” (Dunn et al., 2002, p. 4).

Lindstrom (2002) suggests that social participation is a characteristic of individuals as well as a contextual characteristic (p. 1786). The extent to which an individual may participate in social activities is partially affected by the context they live in (Lindstrom et al., 2002, p. 1789). If there are few organizations or informal social

networks, or low mutual trust, it is more difficult to participate socially. McCulloch (2001) found that “people in the lowest categories of social capital had increased risk of psychiatric morbidity and that those in the lowest categories of social disorganization had lower rates of some health problems” (p. 209). The social environment is shown here to have an impact on health.

### ***3.3 The Tenant-Centred Model***

A study of the conversion of run-down apartments into cooperatives in New York City found that it was most successful when the tenants had taken the initiative and had a chance to develop group cohesion during their struggle to save their building (Atlas & Shoshkes, 1996). When well-meaning outsiders came in and tried to organize the tenants and persuade them to convert to a co-op ownership success was much less likely. The time of struggle that forms group cohesion in the tenant led cooperative movements also helps to establish leaders and allows them to develop the skills and self-confidence required for the future.

Two American groups, the Center for Community Change and ACORN, have been very active in organizing public housing residents. Both organizations are premised around the belief that a tenant-driven and tenant-controlled movement is necessary to truly benefit people living in public housing. “They’re the primary stakeholders...The policies that tenants generate are much more legitimate and resident-friendly than even advocates can propose.” (Hwang, 1997).

Training in oversight and conflict resolution should be provided for residents in order to work through unresolved problems (Atlas & Shoshkes, 1996). It is important to provide ongoing training and orientation for new tenants as well. St. Nick’s Housing in

New York City, has a tenant relations specialist (TRS) in each building. The TRS works with the tenants to organize and connects them with social services on a retail basis. The ACORN Tenant's Union (ATU) helps tenants network, provides them with information about proposed federal and state policy changes, does research for tenants on formulating strategy, and arranges meetings with elected officials for them (Hwang, 1997).

Encouraging tenant participation can take on many forms. One property in the Atlas & Shoshkes study (1996) allows residents easy access to the property manager, the program manager, and the director, in order to voice their opinions. Co-op members (all tenants) of the Marksdale and New York City co-ops attend meetings in varying numbers depending on the issues, but the long-term commitment and low turnover of board members encourages respect, good teamwork and consensus decision making. In order to build participation, a sense of community responsibility and self-help need to be encouraged. Tenant associations must be democratic. Ceraso (1997) remarks on concerns about management-controlled tenant associations expressed at the National Alliance of HUD Tenants.

In the projects examined by the *Saving Affordable Housing* study (Atlas & Shoshkes, 1996), residents took better care of their developments when they felt they had a stake in them. They were more active in minor repairs, helping with security, garbage pickup, and reducing expenses. Projects requiring sweat equity self-select for people willing to engage in self-help efforts (Atlas & Shoshkes, 1996).

The location of a co-op has been found to greatly affect its viability (Atlas & Shoshkes, 1996). Co-ops in strong or gentrifying neighbourhoods could screen new residents whereas those in less desirable neighbourhoods were forced to accept almost

any applicant willing to live there. One solution is to attempt to affect broader neighbourhood change after the co-op has been established.

The policies that Atlas & Shoshkes (1996) propose for dealing with the affordable housing crisis rest on the foundations of citizen participation and reciprocal responsibility. These both help to empower citizens and strengthen communities. They suggest that future housing programs offer more, and require more, of beneficiaries. “Only by doing so will residents develop a sense of ownership, responsibility, pride and participation that will foster close-knit relationships and community-organization building, which are vital components of the civil society”. Many housing organizers have found that reliable information is what tenants most lack (Hwang, 1997).

### **3.4 Supported Housing**

Accommodation is often a crucial form of support and a need in itself. The location, environment, and impact on social relationships that housing can have are directly linked to the support and well-being of residents. The needs of residents vary and change over time. There should be room to adapt to this. A tenant-centred model inherently allows for this change to be guided by the needs of the residents.

A *home* is a combination of several factors: physical (housing), environmental (neighbourhood), and social (family) (Hunarī & Boleyn, 1999, p. 195). The ecology of a home is affected by surrounding societal forces and the possibility of making a home healthy is determined by the availability of social resources (Hunarī & Boleyn, 1999, p. 195). Providing various supports for tenants can increase their access to social resources.

Separating the needs of ‘accommodation’ from those of ‘support’ can be beneficial to residents as *tenants* have greater rights than *residents* (*residents* referring to

individuals in residential care). “A conditional right is necessarily weaker than an unconditional one, and if the right to accommodation is dependent on a person’s need for support, it is diminished by it” (Spicker, 1991, p. 123). Alternatively, separating accommodation from support legitimizes the view that housing can be considered separately from other supportive mechanisms (Spicker, 1991, p. 128).

As noted in chapter 4, *The Tenant-Centred Model*, cooperative housing is most successful when there are supports and resources for tenants/members. Training in conflict resolution and oversight, and orientation for new members are important. In many cases, outside support can help tenants network, get connected with social services, keep abreast of political developments relevant to them, and arrange meetings with officials.

Spicker (1991, p. 126) discusses how the level of training that support staff have can be problematic if it is too specialized. Housing officers have little training to prepare them for the needs of people discharged from psychiatric institutions, while nursing support may not be able to cope with a leaky roof. Kikinaw’s Executive Director is the main support person for tenants in this project. The Director has no formal training in social work or health care. However, as Hunarī & Boleyn note, “Supportive environments for health must be quality environments, not in the sense of luxury but in the sense of caring for people” (1999, p. 201). This is a skill that is not dependent on formal education. Many of the programs offered at Crossways in Common are more specialized and may be able to meet some tenants needs that the Director is unable to fulfil.

## 4 Research Methods

The following chapter describes the research methods of *Case Study*, and *Interviews and Focus Groups*. These techniques were employed during the study.

### 4.1 The Case Study

Case studies are used when a researcher is attempting to understand complex social phenomena. “The case study allows an investigation to retain the holistic and meaningful characteristics of real-life events... The case study has been a common research strategy in psychology, sociology, political science, and planning” (Yin, 1989, p.15). It is useful when examining current events whose relevant variables can not be manipulated. Causal links that are too complicated for surveys and experiments can be explained using a case study. The opportunity to use several sources of evidence is a strength of the case study (Yin, 1989, p. 96). Direct observation and interviews are generally the main sources of information during a case study. Interviews and focus groups will be used for this practicum.

The first step in developing an effective case study is a good literature review. This is done in order to “develop sharper and more insightful *questions* about the topic (Yin, 1989, p.20). Literature reviews were done on the following: green building; health and well-being in terms of populations, materiality, and social circumstance; the tenant-centred model; and social supports.

A case study can not be generalized on a broad scale, but may be generalized to theoretical propositions (Yin, 1989, p.21). The case does not represent a sample and

cannot create statistical frequencies. This case study may be used by housing providers to determine future projects, and will provide suggestions for policy makers and funders in terms of the types of initiatives it would be beneficial to support.

According to Yin (1989, p. 23), a case study is an empirical inquiry that:

1. investigates a contemporary phenomenon with its real-life context; when
2. the boundaries between phenomenon and context are not clearly evident;  
and in which
3. multiple sources of evidence are used.

There are four important criteria that can determine the quality of the research design: construct validity, internal validity, external validity, and reliability. Construct validity can be enhanced by having several sources of evidence, establishing a chain of evidence, and having a key informant review the draft report (Yin, 1989, p. 42). Multiple sources of evidence allow the researcher to develop converging lines of inquiry (Yin, 1989, p. 97) that corroborate each other. It is also important to focus on the specific changes that are being studied and to demonstrate that the method of measuring these changes will provide accurate information. Interviews with several tenants and focus groups with people who interact with the tenants on a regular basis provide several sources for corroboration in this practicum. The use of both objective and subjective information in this study provides multiple angles of evidence. A chain of evidence allows an external reader to “follow the derivation of any evidence from initial research questions to ultimate case study conclusions” (Yin, 1989, p. 102). Internal validity is important for causal or explanatory studies. It is a way of testing whether your inferences are correct and whether all other explanations have been considered. External validity



demonstrates whether the findings of a study can be generalized to other studies.

Evidence that substantiates the literature provides some external validation. A case study relies on *analytical* generalizations, unlike experimental research, which relies on *statistical* generalizations (Yin, 1989, p. 43). Analytical generalizations are made from a particular set of results to a broader theory, not to other case studies (Yin, 1989, p. 44). Finally, the reliability of a case study is to ensure that the experiment could be replicated and would arrive at the same findings and conclusions (Yin, 1989, p. 45). This can only occur if there are minimal errors and biases in a study.

In addition to the importance of the research design, the skills of the investigator are also important. Robson (1993) lists the following as necessary (p. 163)

1. Question Asking: having an inquiring mind
2. Good Listening: having an open mind and good observation skills with all senses
3. Adaptiveness and Flexibility: the ability to respond to unanticipated events and adapt the study design to suite
4. Grasp of the Issues: interpreting information during the study, not simply recording it
5. Lack of Bias: no preconceived position and open to contrary findings

An analytical strategy should be determined early on in the research design. Coding events and responses can make evidence conducive to statistical analysis. This is possible when there are embedded units of analysis but fails to address the analysis of the whole case (Yin, 1989, p. 106). Robson (1993) states that qualitative data may be used to supplement quantitative data (p. 371). If the amount of qualitative data within a larger

quantitative study is small there is no need for detailed and complex analysis. The qualitative data can be used to help communicate the account or data to the reader through quotation or example. In the current study both quantitative and qualitative data were collected. The small sample size for the interviews made analysis relatively simple. Quantitative data was sorted according to response and enhanced with qualitative responses in the form of direct quotes.

## **4.2 *The Interviews and Focus Groups***

Interviewing face-to-face is useful for allowing the interviewer to modify the line of inquiry, follow up interesting responses, and investigate underlying motives (Robson, 1993, p. 229). The focus group can be advantageous when studying an established group, but make it difficult to follow up individual views (Robson, 1993, p. 241). Group dynamics can make it difficult to hear everybody's opinion when there are individuals dominating the conversation. The researcher tried to assure that all voices were heard. The author believes that the focus group with Kikinaw management may have elicited more accurate and detailed responses if individual interviews had been conducted as there was significant tension between participants and the researcher feels that honest responses were suppressed.

There are two types of research interview: qualitative and standardized. An interview may fall along the structural continuum somewhere between these two extremes (Jones, 1996, p. 140). The qualitative interview is very open, with the interviewer providing the least amount of structure. It can also be called an unstructured interview (Robson, 1993, p. 231). The standardized interview is much stricter in wording and protocol. The order of questions cannot be altered and there are often a range or

responses to select from. The standardized interview is also referred to as a fully-structured interview (Robson, 1993, p. 230). The semi-structured interview sits in the middle of this continuum.

The type of interview utilized in this study was closest to a standardized interview, with most questions having predetermined answers to choose from. A few of the questions were more open ended allowing for the collection of qualitative data. Open-ended questions have the advantage of obtaining the response that the interviewee deems the most appropriate. The disadvantage of them is that the interviewer may elicit a lot of superfluous information or material that is difficult to make sense of (Jones, 1996, p. 145). Probes can be used to draw out a more detailed and relevant response. They are four basic varieties of probes: direct questions, requesting specific additional information, repeating the question, echoing the respondent's last words, and silence (Jones, 1996, p. 146). Probes, like questions, should not lead to a particular response. They must remain neutral. The amount and type of probe used in the interviews and focus groups for this case study was catered to the individual needs of the participants.

Closed-ended questions have specific answers that the respondent must choose from. There can be two or more choices for each question. Interviewees for this research were often asked to rate their answers through a series of statements such as *strongly agree, agree, neutral, disagree, or strongly disagree*. There were also several dichotomous questions such as *Do you feel more healthy or less healthy?* Robson, (1993, p. 233) refers to closed questions as 'fixed-alternative' questions and differentiates them from scale items.

Questions using a rating scale often have a trade-off between validity and reliability (Jones, 1996, p. 157). When there are few choices along a continuum there will be high reliability in consistently evoking the same response when asked by different interviewers or at different times. When there are more response options there is more sensitivity and therefore precision, but less reliability. While a 7-point scale has been demonstrated to provide good reliability and validity (Jones, 1996, p. 157), a 5-point scale was used for most of the scaled questions in this research and qualitative additions to responses were noted.

Social desirability bias may lead to respondents answering questions untruthfully in order to be seen in a socially desirable light (Jones, 1996, p. 158). Strategies to help alleviate this phenomenon include emphasizing the confidentiality of the data, appearing non-judgemental, rephrasing the question, and asking sensitive questions near the end of the interview after some rapport has developed. All of these techniques were used during the interviews for this case study.

The sequence of questions and the context around them is important for eliciting accurate responses in an interview. The order of questions should make sense to the respondent (Jones, 1996, p. 158). Interviews for this case study were broken down into sub-sections on the themes of a) comparing the respondent's last home to Kikinaw b) the neighbourhood c) the respondent's social network d) and the respondent's health. Each transition was marked with a statement informing the respondent of the theme to be focused on for the following section.

Interview subjects were solicited by sending a letter of explanation and request for participation to 26 tenants<sup>6</sup>. Remuneration of \$10 was offered to each participant. Each interviewee was asked to remind their friends and neighbours to contact the author if they were interested in participating. Four tenants responded directly to the letter of invitation and encouraged five of their neighbours to participate. Nine tenants were interviewed in total. Seven were interviewed in their own apartment and two were interviewed in a private room at 222 Furby Street, the Crossways in Common building. The low initial response (1/6) may have been due to a) a lack of understanding or interest in the project b) no perceived benefit to the participant other than remuneration c) lack of time to participate or d) social insecurity and unwillingness to talk to a stranger. The author feels that the final participation rate of 1/3 of the tenants was very good. It is hypothesized that word of mouth and a recounting of others experience increased the trustworthiness of the author.

Focus group participants were identified through key informants. Three people participated in the management focus group and two people participated in the support staff focus group. Both were held in private rooms at 222 Furby Street. One participant of the management group was unable to attend at the given time and was interviewed individually on a separate occasion.

Every participant signed a consent form. For details on ethics approval by the Joint-Faculty Research Ethics Board please see Appendix E. All interviews and focus groups were recorded with a digital audio device. They were not transcribed verbatim.

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<sup>6</sup> One apartment was unoccupied at the time.

Notes taken during the meetings were enhanced and clarified with the recording and direct quotations of interest were transcribed.

## **5 Data Analysis**

The following chapter describes and analyzes the findings from tenant interviews and from focus groups with the support staff and management team. Sub-sections reflect different parts of the interviews and the key questions used in the focus groups.

### **5.1 *Tenant Interviews***

Nine individuals residing at Kikinaw were interviewed at the end of July and beginning of August 2006. Most of the tenants interviewed had been living in Kikinaw for six months, since renovations had been completed. Two had been there for five months. One had only been at Kikinaw for two and a half months but this individual was in the transitional unit, which is temporary accommodation for someone in need.

At least two of the interviewees had been living in rooming houses before and wanted something larger, quieter, cleaner, more private, and more respectful. Affordability was mentioned by several of the respondents as a reason for wanting to move to Kikinaw, and the new renovations were mentioned by two individuals. Two tenants specifically mentioned the zero drug and alcohol tolerance policy as their reason for wanting to live at Kikinaw.

Four of the interviewees had heard about Kikinaw through their affiliation with Young United Church and their involvement in activities in the Crossways building. Several others heard about it through word of mouth and one from somebody at Alcoholics Anonymous.

### 5.1.1 Kikinaw Compared to Previous Residence

All of the tenants interviewed had been living in rental accommodation before moving to Kikinaw. Six had been paying higher rent, two lower, and one of them the same rent as previously. The vast majority, seven out of nine, also had some form of assistance at their last residence. Types of assistance mentioned included social assistance, employment insurance, disability, and alcoholics anonymous. All but one of the respondents had lived alone prior to moving into Kikinaw. Four of them had had pets previously and five now had pets.

There were several specific attributes that interviewees were asked to compare between their previous residence and Kikinaw. These were: physical condition, noise from inside the building, noise from outside the building, levels of natural light, amount of space, heating, indoor air quality, safety and security, as a place to live, as an expression of self-identity, as a status symbol, and general satisfaction. These were rated on a scale from 5 to 1, 5 being *much worse* than their previous residence and 1 being *much better* than their previous residence. The responses from the interviewee in the transition unit were left out during the calculation of the average and the median because they were anomalous. This individual was only living at Kikinaw temporarily and was clearly hoping to move back to his former residence once this was possible. Every attribute except for *noise from outside the building* was rated as better or much better by interviewees. External noise levels were rated the same as in previous accommodations. The results are summarized in Table 1., below.



**Table 1. Summary of results from Question 7**

“Is Kikinaw much worse, worse, the same, better, or much better than your last residence for the following attributes?”

5 = much worse; 4 = worse; 3 = the same; 2 = better; 1 = much better

ATTRIBUTE	AVERAGE RESPONSE	MEDIAN RESPONSE
Physical Condition	1.5	1 (much better)
Noise from inside the building	1.5	1 (much better)
Noise from outside the building	3	3 (the same)
Levels of natural light	2.1	2 (better)
Amount of space	1.9	1 (much better)
Heating	1.9	1 (much better)
Indoor air quality	2.1	2 (better)
Safety and security	1.9	1.5 (better / much better)
As a place to live	1.6	1.5 (better / much better)
As an expression of self-identity	1.8	2 (better)
As a status symbol	1.5	1 (much better)
General satisfaction	1.4	1 (much better)

Some of the comments made during the response to this question were of note. In response to Kikinaw as a status symbol, one respondent stated “Now I could turn to my mother and say *come on down*”. One respondent stated, “This feels like home”. Specific matters of importance pointed out were a better stove in Kikinaw (mentioned by two respondents), better ventilation, and the hardwood floors. There was some discrepancy in response to whether there was more or less noise from outside the building now than

before. This appeared to be related to where in the building the respondent's suite was located, and which building they were in. It was noted by several people that there is a noisy rooming house across from 317 Langside Street.

Most tenants interviewed were away from their apartment between 9 to 12 hours a day. Five felt it was less of a strain to meet their monthly housing costs now than before, three felt it was the same, and one felt it was more of a strain.

Tenants had some anxieties and concerns about Kikinaw, though several said that they had no concerns at all. A few residents did not like the monthly inspections while one noted that they didn't mind getting checked but thought that those not wanting a monthly check should be respected, while another said they didn't want to be inspected but that inspections could be done for those requiring them. One felt that the rules were not being enforced equally and that the zero tolerance rule was being broken by intoxicated visitors to the buildings. One resident mentioned there were too many bosses. Safety was cited in two cases as being a concern, one resident wanted bars on the windows, another did not want tenant's names listed beside the buzzer outside. One tenant had complaints about some things that needed fixing in the apartment but seemed more concerned about being charged for the damage than worried about anything being broken.

Most of the tenants like the zero drug and alcohol policy. The low noise level within the buildings was credited to this policy by one of the tenants. The move toward cooperative style management was noted positively by a tenant who also thought the current management was good and that things were repaired readily (in contrast to the slowness of repairs mentioned above). A resident who had talked to board members said

that they felt impressed by them and that the board cares about who is allowed to live in Kikinaw. The individual in the transition unit was pleased with being able to find temporary residence on no notice. One resident stated, “the place and the people that are in here. I know quite a few of them”.

In terms of physical attributes of the buildings, the renovations were noted as being well-done. The hardwood floors were mentioned as nice in the winter and the bullet-proof Plexiglas windows were appreciated. One resident mentioned that the caretaker was good and several noted that the hallways were well kept.

A few of the residents interviewed said they were not familiar with the tenant-centred management model being used at Kikinaw. One, very articulately, stated that tenant-centred management should mean that tenants have a say in the implementation of rules, policy and procedures, and how the buildings are operated. Tenant wishes would be relayed back to the Executive Director and the management. This makes Kikinaw more of a place to build community than just a place to sleep. Two tenants noted that the skills and ideas learned by being involved in management decisions can be transferred to other parts of life and that it can build confidence and self-esteem. One tenant understood it as meaning that there was an ownership of shares in the buildings and that tenants would be responsible for maintaining, painting, and caring for the buildings in the future. It was noted by another however that some people may not want the responsibility of managing a building. The author feels that if a cooperative model were implemented this may be difficult to reconcile. There are however, several ways that tenant management could be set-up. Not everyone must necessarily be an active participant. As people got more comfortable with it they may feel like they have something to contribute or want to

provide their opinion. The general feeling from the residents seemed to be that tenant-centred management was good but that the details were still being worked out and it could be improved. One interviewee did not understand the need for it and said tenants should just follow the rules set out by the board – they all signed the lease agreeing to the zero tolerance policy when they moved in (monthly room inspections are not written into the lease). One respondent noted it would be “good if [the Executive Director] can listen to what we have to say. Not listen and then say, fine well forget it.” A few of the residents interviewed were active on the tenant advisory committee. One of these mentioned that the president of the advisory committee moved out of Kikinaw because the Executive Director would not respect his wish to not have his room checked monthly. Another interviewee said they had heard the advisory committee had a lot of influence on the board but they didn’t seem to have enough to get rid of the monthly inspections.

Most of the tenants interviewed did not know about any of the green features of the building renovations. A few of them noted that they would have liked to know about them. One respondent felt that the workers were not trained properly to do the work and that the green features could not all be done because of the extra cost. This individual does not believe that the hardwood floors were actually finished with water-based sealant and stated that the carpets in the hall were already coming unglued. One tenant noticed the energy efficient appliances, another said that the use of products with fewer chemicals was good for their asthma. A resident noted that there is no recycling capability in either building. One respondent had been told not to use too much soap on the hardwood floors (because of the water-based sealant). Others did not remember receiving any special instructions about cleaning and caring for the building.

### **5.1.2 The Neighbourhood**

Seven out of nine tenants interviewed were already living in the West Broadway neighbourhood before moving into Kikinaw. The two that were new to the area liked West Broadway better than their old neighbourhood. Both sited the strength of the community as being important. One liked knowing the neighbours on the street, the other mentioned a time when residents mobilized to stop the arsons active in the area. This respondent also felt that the police patrol the community more than where they were living previously. In contrast to this, there were two long-term residents of the neighbourhood who felt that the police don't come quickly enough and that people living in West Broadway are not treated equally with residents of other neighbourhoods in the city.

The strong community feel was mentioned by several long-term residents of the area as well. Examples of people knowing your name, general friendliness and ambiance, and holding credit at local stores were provided. There were two interviewees that mentioned the "different people here" and variety of personalities as an asset. At least three of the people interviewed had moved to West Broadway over 8 years ago. One of these noted that the neighbourhood has improved since then.

Several tenants liked the proximity to amenities. Downtown, bus routes, work, church and the food bank were all mentioned as important to be close to. The ability to walk places was deemed important because no bus fare is necessary. One respondent mentioned that they felt it was a safe area, while four noted that there were too many crack houses, drug users and gangs.

Other negative aspects of the neighbourhood mentioned by interviewees were loud streets and people, and use of bad language. It was mentioned that [welfare] “cheque day” was especially bad. It was also felt that the city of Winnipeg neglects side-streets in the neighbourhood and doesn’t fix them up properly.

Table 2 summarizes the responses to question 15.

**Table 2. Summary of answers to Question 15**

“Please tell me the answer you feel best represents your feelings for the following question: Do you strongly disagree, disagree, neither disagree nor agree, agree, or strongly agree that:”

5 = strongly disagree; 4 = disagree; 3 = neither disagree nor agree; 2 = agree; 1 = strongly agree

QUESTION	AVERAGE RESPONSE	MEDIAN RESPONSE
You feel like you belong in this neighbourhood	2.3	2 (agree)
You are proud to tell people what neighbourhood you live in	2.3	2 (agree)
You can trust most people in your neighbourhood	3.9	4 (disagree)
Most people in the neighbourhood look out for each other	2.8	2 (agree)
You are proud to show your home to visitors	1.7	2 (agree)
You often worry about being forced to move out of Kikinaw	4.1	5 (strongly disagree)

Some comments made while answering question 15 were: “I don’t like being in this neighbourhood but unless you’re making more money you got no choice. You’re like stuck here.” (in response to feeling like you belong in this neighbourhood). In terms of feeling able to trust most people in the neighbourhood, one respondent noted specifically that you could trust the people in the Crossways building. The author feels there is a

strong sense of belonging in the neighbourhood and a high level of pride in their homes and neighbourhood. This reflects vibrant social capital, which has been demonstrated to decrease health problems and psychiatric morbidity.

### **5.1.3 Social Networks**

Seven out of nine respondents had friends and family living in the neighbourhood. Three said that they had more friends since they moved into Kikinaw than they did before, while one said that they had less. One respondent who said that they had the same number of friends noted that they were different people now than before “The friends I had when I was drinking I don’t really associate with anymore”. The majority of tenants see their friends and/or family more than twice a week, while two see them one to two times a week, and two see them one to two times a month. Almost all of the tenants talk to their neighbours more than twice a week.

Six respondents felt more satisfied with their social network since they moved to Kikinaw, two felt less satisfied, and one felt the same. One tenant mentioned that it was easier to socialize now because they were living in an unsafe place before. Another mentioned that they felt more comfortable now. A tenant who had been living in Manitoba Housing previously said people at Kikinaw are more caring. It is more of a community and people look out for each other. The whole building is home, not just your suite. The author feels this is important because strong social contact and support are important determinants of well-being.

#### 5.1.4 Health

Seven out of nine participants had a family physician. Only one did not suffer from some sort of chronic condition. These included a wide range of problems such as diabetes, epilepsy, polycystic ovarian syndrome, various cancers, asthma, thyroid conditions, heart conditions, kidney troubles and mental health. Nonetheless, five out of eight<sup>7</sup> participants rated their own health as *good*, *very good* or *excellent*. None rated their own health as *poor*. Over half of respondents noted that they felt *more healthy* since moving into Kikinaw, none felt *less healthy*. The author feels that while the tenant's answers are subjective there is a strong correlation between perceived health and actual health. Feeling healthy also reflects a positive outlook, which, in itself can be important in determining actual health. One respondent felt that the cleaner conditions (as opposed to a shared bathroom in a rooming house), as well as prayers and church, were important in making him healthier. Around half of the tenants interviewed had tried to change habits to try and be healthier since moving into Kikinaw. Some of the things they were doing differently were not eating meat, going for walks, trying to lose weight, and smoking less.

Renters have greater health difficulties than those in other forms of tenure. It is hypothesized this may be due to a greater lack of control over one's situation when renting rather than owning a house. External noise was the only attribute of their housing that interviewees consistently noted as being worse or unimproved compared to their last residence. Tenants may feel powerless over the excessive external noise but the author

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<sup>7</sup> At this point, one of the interviewees had a visitor. The author was distracted and questions 23 to 29 were missed. There are therefore only 8 respondents for the next few questions.



feels that improvement in, and greater control over, many other attributes of their housing may compensate for this feeling. The author noted that tenants also have much greater control over their personal space at Kikinaw. As well, the tenant advisory committee provides them with some input into the management of the buildings.

Two respondents felt more stressed since moving to Kikinaw while five felt less stress. Five noted that the sources of stress in their lives had changed since moving. Some of the changes in stress included: not having furniture for the apartment yet; loud neighbours; moving itself was stressful; and feeling safer in your apartment. The author feels there are several ways that Kikinaw is helping to mitigate the stress response in tenants; the comfort that tenants feel in expressing their frustration with Kikinaw provides an outlet, the formal and informal social support provided to tenants, and the control that tenants have over their stress if it is caused by something that the tenant association or the board of directors can change.

Half of eight respondents felt more satisfied with themselves since moving to Kikinaw and half felt the same. Five felt more satisfied with their life, two felt the same and one felt less satisfied with their life since moving to Kikinaw. One resident stated, “my life is a lot better. I wouldn’t trade it for the world right now”.

Six out of nine interviewed tenants said that there was someone they made appointments with to discuss life issues. Those listed were ministers, hospice palliative care, a psychiatrist, a family friend, a therapist, a doctor, and a community mental health worker. These people provide physical and mental health support, coping skills for daily life, and moral support. Five out of nine tenants said that there had not been any major changes in their life that might have affected their well-being since moving into Kikinaw.

Of those that did note changes, one tenant noted they had started working and had a new relationship since moving to Kikinaw. Another said they had gone into remission and were much better spiritually. Another re-iterated that they were less stressed and felt a lot better.

Of the supports provided by Young United Church, West Broadway Community Services and Kikinaw Housing, the only ones not used by any interviewees were *seminars, card playing nights, and afternoon church service*. The dental plan had not been set up at the time of the interviews so this had also not been used by anybody. A few of the tenants had external dental coverage through Indian and Northern Affairs Canada or disability services. As well, not all participants had had the personal computer set up in their room yet.

**Table 3. Summary of results from Question 31**

“Do you use any of the support provided by Young United Church, West Broadway Community Services or Kikinaw Housing, for residents of Kikinaw?”

SUPPORT	YES	NO
Computers	4	4*
Dental plan	N/A	N/A
Advisory committee	6	2
Lectures/talks	1	7
Seminars	0	8
Movies	5	3
Emergency food	7	1
Food bank	7	1
Hair cuts	5	3
Drop in lunches	7	1
Card playing nights	0	8
Thanksgiving dinner	5	3
Christmas dinner	5	3
Insulin checks	1	7
Bible study	4	4
Good Food Club	5	3

Cooking class	3	5
Afternoon Church service	0	8
Sunday Church service	4	4**

\*2 of these did not have their computers yet

\*\*2 of these attend a different church

## **5.2 Support Staff Focus Group**

Two support staff participated in this focus group. The sections below summarize and group answers according to the major questions. The focus group lasted approximately one hour.

### **5.2.1 Changes in the Tenants**

Many of the tenants are regulars at West Broadway Community Ministry (WBCM) as guests or as volunteers. It was noted by one of the participants that at least three of the tenants that do attend WBCM are much calmer, enthusiastic, energized and easier to get along with than before they lived in Kikinaw. It was stated that they were “clearly happy”. Though they still have problems at times, their interaction with other people seemed to be quite improved and there are less frequent episodes of disruptive behaviour. It was believed that these changes stemmed from their living accommodations at Kikinaw and the closer proximity of two of them to WBCM and its supports. While the participant was careful to state that it is difficult to attribute the changes just to Kikinaw “It would seem to be a fairly odd coincidence if there wasn’t some direct relationship”. The other participant added that having stability and a place of their own – more of a home – makes them try to be more responsible and want to improve themselves.

One participant commented that the computers provided to each tenant are very significant for some of them. They provide tenants with access to materials and resources and allow them to stay in contact and converse with others. The apartments are much

higher quality than what some of them were used to. Those that came from rooming houses no longer have to share facilities. These improved living conditions may be responsible for some of the changes seen in the tenants.

It was noted by one participant that the tenants comment on the apartment buildings, both negatively and positively, in a way that conveys a sense of pride and ownership that many of them didn't have with their previous accommodations. In many of their old living spaces they would not have been able to comment on anything or make suggestions about what they would like to see changed – “It was more about survival and hoping you didn't have problems with the neighbours”. They would have been focused on not getting hurt and avoiding the drugs and crack users. It was noted that tenants now make suggestions about the caretaker and how people should behave. The author feels that this is an indication that tenants are relatively comfortable with each other and secure in their living situation. They are living as part of a community and are part of a group now.

One of the participants stated that 90% of the tenants wouldn't leave Kikinaw if you tried to make them. “I think that they are very happy that they have a house. They finally have something to call a house”.

### **5.2.2 Effects of Tenant Supports**

It seemed that the supports specifically for Kikinaw tenants were generally useful. The focus group participants saw the computers as a way for tenants to communicate more with others. The dental plan had just started the day of the focus group and there were six tenants who attended. One participant said that the tenants had been very excited about it. Some tenants who already had coverage through other means, like Indian and

Northern Affairs, never thought about going to the dentist before this option was given to them. They came for the Kikinaw program because it was convenient. Some support programs that were in the original proposal for Kikinaw were not followed through with. Communal telephones in the hallway were not installed because it was thought outsiders coming into the building might use them.

Not all of the tenants take advantage of the informal support provided by programs at Crossways in Common and WBCM. People who were not connected before moving into Kikinaw are still not connected. However, several residents who have been active with WBCM are now in closer proximity than before – this has been important for tenants. One respondent stated “One tenant I did a house blessing, because he felt that the place was haunted. Someone had died.” There is more receptivity now to have people considered *in authority* – people tenants have a more professional relationship with – over to their house. This is because of the pride in their home. “They were too embarrassed even to have you near their place before. Which is sad”.

### **5.2.3 Effects of Green Building Features**

Neither of the focus group participants knew a lot about the green features of the building renovations but it was thought that just living in a better quality environment must be beneficial and that tenant’s overall health would improve. “I would say that the better spirit that they would have day to day. That would count for everything – by living there”. The author feels that lack of knowledge about the green renovations that were employed at Kikinaw is indicative of the poor education about these features provided for tenants, support staff, and the public. Responses to this question during the focus group focused on the community aspects of Kikinaw. The author believes this reflects the

participants' understanding of green building and the relative importance of its social aspects to them.

One participant noted that the community aspects of Kikinaw were very important. "It's a struggle and challenge [for the tenants] to learn that this is a community kind of project where they before lived in a place, or places, where the main focus was to survive and to keep away from your neighbours, and not have any interaction, period, unless you're sharing a bathroom and you gotta kind of watch out... Here there is the challenge, and the blessing, and the curse if you will, of saying there are certain ground rules here, not just for you but for the whole community". There is a lot of growth that occurs in learning how to be a community. The respondent noted that volunteers at WBCM are taking on more responsibilities and take more initiative than before. It is thought this is because of the pride they have in WBCM and the pride in Kikinaw and a new understanding of how to live in a community.

Participants made an important point that there may be some sense of obligation from the tenants towards Crossways in Common. The tenants may see Young United Church, Crossways, WBCM and Kikinaw as all being one entity because they are housed in the same building (many non-Kikinaw residents do as well). The extra care being put in by tenants who volunteer at WBCM may be a way of giving thanks for "this place" and giving back.

#### **5.2.4 Management of Kikinaw**

There is one tenant representative that has been on the board of directors for three months (the focus group was held mid-February 2007). He brings tenant issues and recommendations to the table. One of the participants believed that there was not much

tension between the board and the tenant association. The board will pursue reasonable issues and the tenant association has a say as to how they will be managed. The respondent noted, “They come up with some pretty good ideas... They are getting together to do things. That’s something nice”. The author notes however, that without a majority of seats on the board, tenants in reality have little control.

There have been several functions put on exclusively for the residents in the last few months. The first one was a Christmas Dinner which seven people attended. The following one was a Valentine’s Day party which 16 residents attended. The next event will be bowling, and they are hoping to have an even greater turnout.

### **5.2.5 Improvement for Kikinaw**

One respondent had been quite concerned with the way the project was going initially, and that there could be too much control over people’s lives. “I really like the way things have moved. I had some really serious reservations, I’ll be honest, initially.” The respondent was reminded of a social housing project in England where tenants were given a much better physical lifestyle but were expected to live according to a particular moral lifestyle. If they did not comply they would be evicted. It became overbearing for many of them. “I had people [from Kikinaw] in my office crying, because they felt that their life – their personality, their character, their lifestyle, – was being attacked and if they didn’t shape up they’d be out. That has changed now.” There are still ground rules for Kikinaw residents but that people have more independence and freedom now. This respondent mentioned that the new director’s style is more of an invitation to be supportive and less of an invasion into tenant’s lives. “There’s a fine line between trying to work with and serve, and saying this is the way you should be.”

The new director has proposed the idea of a school program to the board and it has been well received. He would like to send three or four residents a year for some kind of further education. This will help them “so they can get ahead and move away from [Kikinaw] if they can so we can bring more people in.” The goal would be to educate people enough so that they can get off social assistance and their suites could be opened up to new tenants.

Kikinaw is also planning some renovations on other buildings in the West Broadway area in order to increase the number of low-cost units available. Two fourplexes are going to be built on Furby Street. They will follow a similar model as Kikinaw.

### **5.2.6 Additional Comments**

The respondents expressed concern about gentrification in the West Broadway area. Buildings and houses are being fixed-up, which is good, but this increases rents and those on welfare and low-incomes cannot afford to stay in the neighbourhood. They feel that this leads to slums in other areas. They indicated that there needs to be more government support and funding and more buildings like Kikinaw. “There needs to be more public awareness and advocacy to ensure that funding is in place and these kinds of projects can have priority.”

One respondent also noted the use of local people to assist in the construction and renovation work for Kikinaw.



## **5.3 Management Focus Group**

Three of the main proponents of the project, who have been involved since its inception, were involved in this question group. Two of them were involved in the focus group, the third was unable to attend and was interviewed individually. Since the focus group, one of them has withdrawn from any involvement with Kikinaw Housing Inc. for personal health reasons.

### **5.3.1 Tenant-Centred Model**

All three participants have varying approaches to Kikinaw and a slightly different vision as to how it should evolve. In response to the first question *What was the original design and intent of the tenant-centred model?* one of the participant's first comments was "What makes you think it was supposed to be tenant-centred management?". Another commented that the plan was to have it convert to condominiums, while the third had a vision that the tenants would eventually do all of the management work (read meters, shovel walk, clean halls, maintain building, etc.) and there would be no external management company involved at all in the future. One participant elaborated that the merits of several forms of tenure were discussed over the course of designing the project, including Rent, Rent-to-Own, Rent-to-Own Cooperative, and Condominiums. There were difficulties with the condominium model because of rules in the Income Tax Act making it illegal to convert charitable assets into for-profit uses. The idea of *tenant-centred management* was to "begin the process of teaching them to run their own affairs". After the 15-year agreement with the Province of Manitoba expires, the form of tenure can be revisited. One participant is concerned that the management company taking care of

Kikinaw wants to take over the buildings and is weakening the board of directors in order to do so.

The Tenant Association (TA) was seen by two of the participants as a way to build capacity. One mentioned that the TA would start to take over representation on the board of directors but that there was only one representative there, as far as he knew, as of February 2007. Previous to this, at the time the focus group was conducted with the other two participants, the TA had met 4 times and the President of the board had attended every meeting. He stated that it was a learning process for both Kikinaw and the tenants. The tenants were viewed as not knowing how to have a voice because they have come from situations where they were beholden to the landlord due to a lack of housing options. The respondent stated that problems will arise when tenant expectations are too high for their own economic means and those of Kikinaw. At the time of the focus group there were no tenants on the board of directors, but a representative of the board (the president) attended every TA meeting. The author feels this lack of independence for the TA demonstrates a low level of confidence in their ability to make responsible decisions and may be disempowering.

The TA has been offered a budget for events they would like to host but they must submit a budget proposal. There have been disagreements over the monthly room inspections that take place. One participant relates this to problems with authority, stating “people who have not had influence in their life will seek to gain it.” His rationale for continuing the inspections against the wishes of some tenants and members of the TA is that the board cannot discriminate and must treat all tenants equally (therefore, not exempting some from inspections), and that the buildings need to be preserved in order to

maintain some equity to transfer. He stated that people on the TA are looking to their own interest, and not the interests of the whole building and all of the tenants. “We have to let them win one, just not this one.” Another respondent mentioned that only six to eight people out of 27 have been evicted since tenants moved in almost a year ago. It was thought this was especially low considering how strict the house rules are.

One respondent felt that the tenants need to take ownership over the project because they have no obligations as a renter. This respondent stated that the caretaker for the buildings (a resident of Kikinaw) did not like the previous director of Kikinaw, does not like the current one, and does not like the President of the board. The caretaker feels that tenants are treated as less than equal, in a top-down fashion, and that tenants are not having their concerns met. He stated, “the dynamic involvement of tenants seems to be sliding since the beginning. It takes a lot of work to bring people together”. The author believes these conflicts within management over tenant control result in inconsistent rules and a lack of power for tenants. As a result, tenants have a poor understanding of their rights and responsibilities in terms of tenant-centred management.

No training has been provided for the tenants in terms of skills such as conflict resolution or other community building skills. According to the literature, Kikinaw needs to invest in training for its residents if it would like to successfully provide them with more management capacity in the future. Conflict resolution skills and management skills need to be fostered. Providing more for tenants and expecting more from them in return helps to foster the sense of pride and ownership that makes people take better care of their residence. The author feels that once this ownership is fostered toward someone’s

apartment or building, it may in time expand to encompass the broader community and lead to a stronger, more resilient neighbourhood.

None of the participants could outline any community consultation process that occurred for this project. All of the people listed in the inception and planning of the project were relatively influential in the community and worked with West Broadway residents in various capacities. One respondent stated it was at the WBDC Housing Forum in 2004 that the idea came about. They wanted to create a corporation to compete with the private sector and fill a gap that other stakeholders were not interested in working on.

All participants in this focus group agreed that the intent of the project was to provide low-income housing. One participant mentioned the desire to create a more stable living environment and that it was about the stability of the neighbourhood and not a revitalization scheme. It was felt that involving tenants in the community would give them a sense of place.

Two of the participants emphasized that this experimental model will never be repeated. Reasons stated for this were that the Winnipeg Housing & Homelessness Initiative will not let a renewal corporation take over apartment buildings anymore, and that the high level of funding provided by the province will never be available again.

One participant noted that Kikinaw is proving to be a good business case because of the energy efficiency of the buildings but it is difficult to sell the social sustainability case. Physically, people can come in, do the work and leave. Socially, there needs to be more of a commitment made and people have to stick around longer to see the project stabilize before leaving.

### 5.3.2 Green Features

The most worthwhile green building features identified by the respondents were the boiler efficiency, the insulation and R-50 roof, the windows, the cross ventilation (achieved through bedroom fans and operable windows), and the hardwood and linoleum floors. These features were all mentioned by more than one participant. Additional green features mentioned were the low-flow toilets, low VOC paints, a minimized amount of carpeting, and the new gables on the roof. It was mentioned that the Green Indicators Project was being used initially as a guide but that one of the proponents started to scale back on the criteria. Ultimately there was \$40 000 left over that could have been put into other green features during renovation. It is now being used for efficiency features and to fix cracked windows, among other things. Due to the disagreements over the green aspects of the renovation, none of the participants in the management group were fully satisfied with the final results. The author feels that if they had been able to communicate their needs to each other they may have been able to work together more effectively and been happier with the results.

One of the respondents stated that certain specifications agreed upon initially had been changed without consultation, such as the type of insulation installed in the walls and the types of windows installed. The contractors had been given a different specification sheet without it being discussed with all the partners. This led to cheaper, less environmentally friendly insulation being installed and created bad feelings between at least two of the proponents. One of the buildings received the casement windows specified but the contractors said that the construction style of 248 Langside St. did not allow for this type of window. Double-hung windows, which are less efficient, were

installed in that building instead. There were several green items that had been desired but that Kikinaw was unable to afford, such as full tub surrounds, a heat recovery ventilator, and non-PVC windows.

### **5.3.3 Barriers**

The largest barriers to the realization of the project mentioned by participants were trust and the different mindsets of the partners (WBDC, Young United Church, and ASH Management). There were differences of opinion on environmental management and on tenant management. As one participant noted – each person’s “respective worlds [of public, private and not-for-profit interests] were foreign to the other people”. One participant mentioned that everybody made their wish list but that cost ended up being the reality, while another said that an Memorandum of Understanding was developed at the outset that stated what each of them wanted out of the project – “It was a principles document” – but one of the partners would not sign it. This led to bad feelings within the team. The government was also rigid about which green features they would fund and which they wouldn’t. For example, they would not fund cork flooring or stainless steel counter tops.

It was mentioned that there needed to be more community consultation to get everybody on the same page and that it is real grassroots initiatives that work best. The board of directors was not very actively involved initially; the Executive Director managed all of the affairs. When he left the board was overwhelmed with trying to figure out how to manage everything. It was implied that if everybody had been involved from the beginning one person leaving would not have jeopardized the project. Another barrier mentioned to community run projects is the government’s stipulation that the board

cannot manage the property themselves and must hire externally as long as the buildings are subsidized.

Funding did not seem to be a barrier as the only participant who mentioned it stated that the managers went straight to the Minister instead of through the bureaucratic system, and that this allowed the project to meet approval at the speed with which it did.

#### **5.3.4 Enabling Future Projects**

In order to enable more projects like Kikinaw, there needs to be strong policy and funding. The federal and provincial levels of government were both mentioned as being crucial. It was noted that the provincial government will spend large amounts of money greening their own buildings but are reluctant to help low-income projects become greener.

The amount of time and work put into the project by the private sector was unusual and it was felt this was a result of the commitment of Kikinaw to provide continued direction and support to the project. It was noted again that it is difficult to maintain this relationship between the private, public and not-for-profit sectors because of their disparate worldviews. One participant mentioned repeatedly the loss of good feeling between the proponents because of these different worldviews, approaches, and expectations. The author feels this may have been noted more strongly by all of the participants if they had been interviewed individually rather than being part of a focus group. The tension felt in the room during the focus group would likely have been talked about more frankly in private.

One respondent stated he “needs to believe in Community Private Partnerships again” for another project like Kikinaw to happen. It was stated that people “need to be

forced into cooperation... you need to break people down to build community”. He believes that better connections and emotional intimacy would have helped to prevent the bad feelings that arose.

Finally, it was stated, “We need to feel like we are successful” for more projects like this to happen.

#### ***5.4 Reflections on the Interview Process and Focus Groups***

In retrospect additional questions may have enhanced the research. Tenant interviewees might have been asked how they would have improved upon the Kikinaw model if it were to be repeated. It would be interesting to know what makes Kikinaw special to them: what stands out as the most important aspect of the project for them (green features, tenant management, or social support)? They could also have been asked if they would have wanted to be involved in the planning and management of the project from the beginning.

In terms of support services used by tenants, it would have been interesting to know the level of satisfaction with the types and quality of service in order to better plan in the future. Are there services that would be more helpful than those provided?



## **6 Conclusions, Recommendations, and Directions for Further Study**

The following section will provide a conclusion to the document, elaborate recommendations for housing providers, policy makers, and government bodies, and discuss directions for further study.

### **6.1 Conclusions**

The four major sections in the literature review each draw attention to different matters relevant to this case study. The salient points are summarized here and will appear throughout the recommendations and suggestions for further study. Green buildings can benefit housing providers, tenants, and the environment. They can improve the well-being of their occupants. Likewise, both social and cultural conditions can have a large impact on health. The greatest benefits in low-income housing emerge when there is a tenant-driven and tenant-controlled movement toward change. Training and resources make this even more successful. And finally, the availability of social resources and appropriate support creates healthy homes.

There were three main questions addressed in this practicum: In what ways are tenants satisfied or dissatisfied with the Kikinaw housing model? In what ways has tenant well-being changed since moving into Kikinaw? and, What recommendations can be made for future housing projects and housing policy? The answers to the first two questions will be summarized in the following section. The latter will be the basis for section 6.2.

In general, it can be concluded that tenants are satisfied with Kikinaw. There were three major components to the housing model: green renovations, the tenant-centred management, and social supports. Tenants generally seemed satisfied, though not very well-informed about the green features of the building. There were mixed feelings from residents regarding tenant-centred management and whether it was working effectively or not. Social supports provided through Kikinaw are well utilized.

Management did not involve tenants in the green features of the building to any great extent. Most tenants were unaware of the green elements in their building. Education about how to clean and maintain the hardwood floors and how to use natural ventilation effectively in the apartments, would have been beneficial to the tenants and allowed them to take better advantage of these features. The author feels that the managers did not consider that the tenants would be interested in the green features or that they would be of importance to them, therefore they did not communicate openly about them. Green features provide significant value to occupants (RICS, 2005, p. 22) and the residents should be informed of them.

The tenants will need to decide which direction they want to take tenant-centred management in the future. It will be difficult to transition to tenant management without solid support from all the tenants. As noted in the literature review, cooperative formation is often less successful when pushed for from the outside, and not a priority of the tenants. When tenants must fight to obtain management rights there is often greater cohesion formed within the group and natural leaders come forth. The author's impression from various statements was that the head of the tenant association left, due to conflict over the monthly room inspections. This destroyed some capacity, and may have

harmed a possible move toward greater tenant management in the future. The lack of agreement over the goals and philosophy of Kikinaw within management has led to misunderstanding from the tenants. In order for the goals of the project to be realized both the tenants and management need to be in agreement so they can work in tandem to achieve them.

The high levels of tenant use of the supports provided through Kikinaw, Young United Church, and the West Broadway Community Services indicate a need for these services. Tenants were not specifically asked whether they felt satisfied with the types and quality of service provided. This may be an important inquiry to make. Under “tenant-centred management” residents should have input into the types of supports they are provided with. As stated by Hwang (1997), tenants are the primary stakeholders and generate much more legitimate and resident friendly policy than even advocates.

Tenant well-being has improved since they have been living at Kikinaw. While the author feels that the tenants, in reality, have little control over management at Kikinaw, they have much more input than in their previous residences. It appears that simply the ability to freely express themselves about their home and feel that they are being heard is important for their well-being. They are comfortable and secure enough with the stability of their situation that they can complain about their accommodations. Tenants are taking greater pride and ownership over their apartments and feel good about inviting others into their home. Evidence by Dunn (2000) shows this improves health satisfaction and mental health. Several respondents mentioned that Kikinaw feels like a home and that other tenants are part of their community. This was most likely not the case for the majority of them before.

Tenants interviewed for this study stated they are more satisfied with their living situation at Kikinaw compared to where they resided previously. This may have led to an improvement in their well-being. Causality between housing satisfaction and health has been mentioned as an uncertainty in the literature. The improved health tenants have experienced since moving to Kikinaw may predispose them to be satisfied with their housing, likewise, satisfaction with their housing may have improved the health of tenants. The cause and effect could also be mutually reinforcing. The greater sense of dignity, status and pride in themselves and their home appears to have had a positive impact on tenant well-being.

Strong social contact and support are important determinants in well-being. The Kikinaw apartment blocks have become a small-scale community for many of the tenants. They report having more friends than before they moved there, interact with their neighbours several times a week, and feel more satisfied with their social network. The building becomes an extension of the apartment and is considered *home*.

## **6.2 Recommendations**

The recommendations from this case study are divided into three broad categories: delivery of services, funding provision & policy, and green & community enhancements. Eight recommendations are made in total.

### **6.2.1 Delivery of services**

**Have more tenant involvement in management and planning from the earliest stages.** Atlas & Shoshkes (1996) show how having a dynamic innovative leader in a community-based nonprofit or low-income co-op works to produce successful projects. The leader operates as a ‘producer,’ “mobilizing the participants, motivating

other members of the community, and attracting capital to their communities.” While the partners involved in Kikinaw each had some of the above qualities there was not enough collaboration with tenant leaders and there was too much central control. Greater community consultation and involvement from the grassroots would have made this project stronger. A high degree of control from the first director led to little tenant ownership over the project and a board of directors that had a difficult time adjusting to the loss of the director. The board was overwhelmed trying to manage things that they had had little involvement in previously. More equally shared responsibilities could have prevented this. The new director seems more willing to allow the tenants some participation in governance and decision-making. There is also less of an expectation of tenants that they should change their lifestyle as long as they follow the rules. Trust created among individuals living in housing projects such as Kikinaw, and the leadership capacity fostered within them, will have positive spillover effects for the neighbourhood. Kikinaw should involve tenants early on in future projects and continue to actively involve them in management. Greater representation from tenants on the board of directors is recommended.

**Improve people’s ability to deal with stress by a) encouraging social support, b) making healthy housing available to those in need, and c) providing a range of housing options.** The main effect model and the enhanced well-being of Kikinaw residents illustrate how social support can improve people’s ability to deal with stress. Government programs such as *Neighbourhoods Alive!* should be expanded to encourage social support in the community in order to assist those in substandard housing. The stress-buffering model indicates however, that high levels of housing stressors must be

dealt with before the main effect model can function effectively. It is therefore also recommended that the Manitoba Housing Authority improve social housing standards and that healthy housing is made more readily accessible to those in need. Once the major stressor of substandard living conditions is ameliorated, social supports will prove much more effective. While the level of satisfaction with one's housing situation has been shown to be important, certain living situations may be suitable and satisfactory to some but not to others. A range of housing options should therefore be available that can be matched with a person's needs. These can be provided through a mix of public, private and community projects that each strive to meet a variety of needs.

### **6.2.2 Funding provision & policy**

**Provide more flexible support for projects that will lead to mixed-income neighbourhoods.** The primary goal of Kikinaw was to provide low-income housing. The West Broadway area has had great success in its revitalization efforts over the last several years. Unfortunately, this had led to many low-income people having to move out of the neighbourhood as rent prices have increased. This leads to a loss of socio-economic diversity. Pushing these people out as West Broadway develops may create slums elsewhere. The federal, provincial, and municipal governments should be concerned with this issue. Projects, such as Kikinaw, that provide healthy low-income housing options in gentrifying neighbourhoods should be emulated. Funding regulations stating that subsidized buildings must be managed by an external company create barriers to realizing a truly tenant managed or cooperative project. Funding policy should allow flexibility for unique projects such as this one. Grassroots community development that is active in housing should be supported. The federal government should take a leadership role by

providing a minimum funding level but local community groups or agencies should deliver programs to take advantage of local knowledge (CHRA, 2005). Provincial housing policy can improve the effectiveness of such organizations by developing structure, functions and services to enable community involvement. Policy needs to ensure that groups with strong leadership and community involvement have access to the finances and technical assistance they need to create and restore good affordable housing.

**Provide consistency in support, cooperate with service providers, and improve the bureaucratic atmosphere.** Housing funders such as Winnipeg Housing and Homelessness Initiative, the Affordable Housing Initiative, Manitoba Housing Renewal Corporation, and private funders must provide consistency in their support and cooperate with service providers in order to improve the quality of affordable housing projects. Long-term stable funding is needed (CHRA, 2005). Tripartite agreements and partnerships with the private sector, such as occurred with Kikinaw, can help to develop innovative programs and finance low-income housing. Leadership at the local and provincial level must understand the inherent risk/reward relationship in real estate. Provincial and local leaders must help protect non-profit organizations from risk while encouraging them to seek rewarding investments (Atlas & Shoshkes, 1996). The important role of nonprofits must be valued. Bureaucratic delays can be fatal for community organizations trying to cultivate low-income housing. The bureaucratic atmosphere is important. It can be lacklustre, ineffective, and maddening so that it hinders the implementation of a program or it can be activist, entrepreneurial, and helpful (Atlas & Shoshkes, 1996).

### 6.2.3 Green & community enhancements

**Make green housing options available to all income classes.** There is strong government support for green projects and as of April 1<sup>st</sup> 2007, a policy that commercial construction funded by the Province of Manitoba must meet the LEED<sup>®</sup> Silver<sup>8</sup> certification for green building. There is of yet, little transfer of this commitment to low-income housing developments. The author recommends that the provincial policy be extended to include residential buildings. New low-income housing projects should not receive provincial funding unless they meet the CaGBC LEED<sup>®</sup>-NC Silver rating. This should be expanded to allow certification under the USGBC LEED<sup>®</sup><sup>9</sup> for homes. The federal and municipal governments are encouraged to adopt similar policy but in the absence of a policy may still decide to fund the project at their discretion. Provincial grants should be withheld in this case.

The renovation of existing buildings is also very important. Research in the EU demonstrated that retrofits can save as much as 80% of heating energy savings in the least efficient buildings and an average of 28% energy saving (WBCSD, 2007, p. 26). LEED<sup>®</sup>-EB for existing buildings should be mandated for those projects that qualify. This is not applicable to many of the types of low-income renovation projects undergone however. The West Broadway Green Indicators could be adopted by the Province of Manitoba until more cohesive national guidelines emerge that address smaller scale renovations. Solid funding and policy commitments must be in place to encourage further developments like Kikinaw. “Appropriate policies and regulations are essential to achieve market changes”

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<sup>8</sup> Silver is the second level achievable under the LEED<sup>®</sup> rating system for green buildings. There are four possible levels of certification.

<sup>9</sup> The United States Green Building Council (USGBC) LEED<sup>®</sup> for Homes is expected to be launched in the fall of 2007.



(WBCSD, 2007, p. 17). Well-constructed housing, having low energy costs and high indoor air quality, should be available to low-income households. The 2005 Affordable Efficient Housing National Symposium recommended that any new housing built under the Federal/Provincial Affordable Housing Agreement must meet standards for energy efficiency. The *Tenant Protection Act* should be amended to prevent rental increases in energy efficiency retrofitted buildings where improvements were financed through grants (CHRA, 2005). It is also suggested a revolving fund be established for projects based on avoided energy costs (CHRA, 2005).

**Enhance social interaction and strengthen community.** While horizontal linkages within a community are important, the degree to which individuals are able to interact purposefully and collectively is partly determined by the policies and interventions of local and national governments “and the impact of power relations, group integration and opportunities within a society” (McKenzie et al., 2002 p. 281). Atlas & Shoshkes’ recommend in *Saving Affordable Housing* (1996): a) promote resident empowerment, b) cooperatize, don’t privatize, housing projects, c) work with community developers to save the housing supply and rebuild troubled neighbourhoods, and d) ensure access to technical assistance. The City of Winnipeg and Province of Manitoba can impact the above through funding policy and housing policy. These actions would enhance social interactions and strengthen the community, and hence social capital.

**Educate residents about the green, social, and management features of Kikinaw and ensure this knowledge is passed on.** A lack of education about the green features of Kikinaw means they are underappreciated by residents. The environmental aspects of their home are something they should be proud of. The behaviour of occupants

can have just as much impact on energy consumption as efficient equipment (WBCSD, 2007, p. 28). If residents are properly informed they can increase the benefits of the building even more. An operations manual explaining the green systems and how to maintain them should be developed so that this knowledge stays with the building, not with a caretaker or external management company who will not be around in perpetuity. The Executive Director and the Board of Directors should create this document in conjunction with the green consultant who worked on the project. An orientation package should be created to introduce residents to aspects of Kikinaw such as:

- a) The green features of the building and how to best take advantage of them.

This would include how to care for the wood floor, how to maximize cross-ventilation, and how to clean with non-toxic supplies, among other things.

- b) How the tenant-centred management system works. Who is responsible for what, and how decisions are made. The role of the Tenant Association and the Board of Directors, and how residents are able to participate in them should be made explicit as well.

- c) The kinds of supports available to residents of Kikinaw and those available in the West Broadway neighbourhood. This should include a process for feedback on the services provided and a mechanism for suggesting new supports Kikinaw should consider.

All existing residents should go through the orientation once it is designed, and each new resident should be taken through it when they arrive. Details of the orientation package

should be included in an *owner's manual* available in each suite so that residents can reference it. This will lead to better use of, and more satisfaction in, their homes.

**Move toward healthy housing policy and healthy public policy.** Preventing the social conditions that lead to ill-health through efficient and healthy green housing for all citizens is much more successful and cost effective than treating disease. Governments and social institutions must move toward 'healthy public policy' rather than health care policy (Dunn et al., 2002, p. 1). This shift in emphasis includes reducing inequalities and improving conditions of everyday life (Dunn et al., 2002, p. 4). Social policy and health policy can meet similar goals when they are directed to the improvement of everyday living conditions such as housing, with emphasis on those of lower socio-economic status. Under a population health approach "Ministries of labour, education, social services, environment and housing have crucial roles to play in the development of comprehensive 'healthy public policy' designed to address 'upstream' factors that underlie social inequalities in health". (Dunn et al., 2002, p. 1). The demonstrated link between housing conditions and health status should inform the revision of building codes, municipal bylaws, and public and environmental health regulations (Hwang et al., 1998, p. 1). A healthy housing policy would establish minimum holistic health standards for residential development. Individual health status impacts community perception and community involvement (Greiner et al., 2004, p. 2310) and is therefore important in creating healthy communities. The creation of healthy communities reflects population health goals. There are two main barriers to this recommendation:

- a) Insufficient evidence to support the financial benefits of green buildings, tenant-centred management, and social support. Further research demonstrating

causality between these three features, health and well-being, and long-term financial value is necessary. More studies need to be done on the correlation between good housing and good health, rather than that of poor housing and ill health (Ranson, 1991, p. 13).

- b) Compartmentalization within government that makes health a discrete priority from housing, urban land use planning, socioeconomic development, and community service goals. These silos need to be taken down so that health care professionals, community planners, housing providers and social workers can pursue and implement a more holistic view of health and well-being.

The Canada Green Building Council is a resource that can educate the building trades and professions, as well as policy makers, about the health impacts of buildings and assist them in working towards change.

### ***6.3 Directions for Further Study***

While several questions were answered through this case study, several more were raised. Further evidence in support of the above recommendations would lend them strength and increase their possibility of implementation. Many interesting questions arose throughout this research and would provide solid direction for further study. These are elaborated below.

Research with children demonstrates improved health for poor children living in mixed-income neighbourhoods, yet large disparities in socioeconomic status within a country lead to lower population health overall. How does this translate to the local level? In a recently gentrifying neighbourhood like West Broadway there is now more income disparity than in the past. This may affect resident's well-being and their sense of control

over their own destiny, particularly with the fear of rent increases forcing them out of the community. This in turn, may impact their overall health. Are low-income residents in West Broadway benefiting from the new mix of incomes moving into the neighbourhood or is the growing disparity leading to decreased health?

How can health be improved to the greatest extent? Is it through a reduction of the income gap by improving the socio-economic status of those at the bottom? Is it by investing in primary medical treatment and preventative medicine? Or, is it by renovating existing dwellings, improving neighbourhoods and ensuring that new homes are built with the health of the individual and the community in mind? All of these questions could lead to further study on the subject of healthy low-income housing. The effect of green buildings on mental health prognosis is also an interesting direction of study that the author would like to pursue in the future. There is a need to better understand the impact of the built environment on human health. Strong causality may encourage health agencies to partner with other agencies responsible for buildings and affect positive change.

Tripartite funding arrangements within government and between public, private, and community groups have been very successful but can also be complicated. If one of the funders at the table has a policy (such as a green building requirement) that the others lack, the entire agreement may be damaged. Government policy tends to be driven by current conditions and the public agenda from one province to the next may differ. Agreements between the public, private, and community sector can also be fruitful but delicate. It is important for all of the groups involved to have a similar goal and similar mindset. As seen in the Kikinaw project, if there is a large discrepancy in worldviews,

project goals may not be realized as intended. How can agreements like these be made more successful? At what level does education need to occur to ensure all of the different players are striving for healthy green housing?

Housing must be considered holistically by acknowledging the impact of physical, social and community characteristics not only on the individual but also on the broader population. The housing model employed by Kikinaw focuses on meeting the physical and social needs of its tenants. This research demonstrates that Kikinaw's success in meeting these creates externalities that can positively affect the community.

The board of directors for Kikinaw was reviewing the idea of further education for tenants at the time of writing. This may be a positive way to help people get off of social assistance and move into other housing, thus making apartments at Kikinaw available for new tenants. Kikinaw Housing Inc. is also planning new renovation projects in the community. Ideally, the results of this study will assist them in planning this next stage and in securing funding to continue their work.

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## 8 Appendices

### 8.1 Appendix A – Interview Questions

*Preamble*

This interview will last approximately one hour. There are several different sections to the interview. Please answer as truthfully as you can. Take as much time as you need to think about your answers and feel free to ask for clarification. You have the right not to answer any question without affecting your rights as a participant in this study.

1. How long have you been living at Kikinaw?
2. What made you want to live at Kikinaw?

Now, I will ask you a few questions regarding your last home compared to Kikinaw.

3. What form of tenure did you have at your last residence (rental, owned, co-op, etc.)?
  - a. If renting – Was your rent higher or lower?
  - b. If not renting – elaborate.
4. Was there any social support available? YES NO (did you use it? What form was it: employment income assistance, mental health workers, church support, family, etc)
5. Did you live alone? YES NO PETS
6. Do you now? YES NO PETS
7. Please tell me the answer you feel best represents your feelings for the following question. Is Kikinaw much worse, worse, the same, better, or much better, than your last residence for the following attributes? (if circled 3 ask *what* is the same)

	MUCH WORSE	WORSE	THE SAME	BETTER	MUCH BETTER
Physical condition	5	4	3	2	1
Noise from inside the building	5	4	3	2	1
Noise from outside the building	5	4	3	2	1
Levels of natural light	5	4	3	2	1
Amount of space	5	4	3	2	1
Heating	5	4	3	2	1
Indoor air quality	5	4	3	2	1
Safety and security	5	4	3	2	1
As a place to live	5	4	3	2	1
As an expression of self-identity	5	4	3	2	1
As a status symbol	5	4	3	2	1
General satisfaction	5	4	3	2	1

8. How many hours a day are you usually away from your apartment? 1-4, 5-8, 9-12, 13-16, 17 or more
9. Do you find it more or less of a strain to meet your monthly housing costs now than before? Why do you think this is?

10. What are your anxieties and concerns in relation to Kikinaw?
11. What do you like, or are satisfied about, in relation to Kikinaw?
12. What does tenant-centred management mean to you?
  - a. Do you feel it has been working?
13. Are you aware that this building is renovated to include some green features?
  - a. Was this a factor in your desire to move into Kikinaw? Why?
  - b. Which features are especially important to you? (ex. low-VOC carpet and paints, energy efficiency, operable windows, water-based floor sealant, low-flow toilets and taps, etc)

Now, I will ask you some questions about your neighbourhood.

14. Was your old residence also in West Broadway?
  - a. If yes – what do you like/dislike about this neighbourhood?
  - b. If no – which neighbourhood do you like better, the old or new one? (why)
15. Please tell me the answer you feel best represents your feelings for the following question: Do you strongly disagree, disagree, neither disagree nor agree, agree, or strongly agree that:

	STRONGLY DISAGREE	DISAGREE	NEITHER DISAGREE NOR AGREE	AGREE	STRONGLY AGREE
You feel like you belong in this neighbourhood	5	4	3	2	1
You are proud to tell people what neighbourhood you live in	5	4	3	2	1
You can trust most people in your neighbourhood	5	4	3	2	1
Most people in the neighbourhood look out for each other	5	4	3	2	1
You are proud to show your home to visitors	5	4	3	2	1
You often worry about being forced to move out of Kikinaw	5	4	3	2	1

Now, I will ask you a few questions about your social network.

16. Do you have friends and family living in this neighbourhood? YES NO
17. Do you have more or less friends now than before you moved into Kikinaw?
18. How often do you see your friends and/or family? MORE THAN 2 X/WEEK, 1 OR 2 X/WEEK, 1 OR 2 X/MONTH, 1 OR 2 X EVERY 6 MONTHS, 1 OR 2 X/YEAR, OR LESS OFTEN.

19. How often do you talk with your neighbours? MORE THAN 2 X/WEEK, 1 OR 2 X/WEEK, 1 OR 2 X/MONTH, 1 OR 2 X EVERY 6 MONTHS, 1 OR 2 X/YEAR, OR LESS OFTEN.
20. Are you more or less satisfied with your social network and social activities since moving into Kikinaw?

I will now ask you some questions about your health since moving into Kikinaw.

21. Do you have a family physician? YES NO if no, Would you like to?
22. Do you have any chronic conditions? (circulatory system, mental health, dermatology, heart disease, diabetes, incontinence, arthritis)
23. How would you rate your own health? EXCELLENT, VERY GOOD, GOOD, FAIR, or POOR
24. Do you feel more or less healthy since you moved into Kikinaw? (ex. headaches, nausea, rashes, allergies, energy levels, other)
25. Have you changed any habits to try and be healthier since moving into Kikinaw?
26. Do you feel more or less stressed since you moved into Kikinaw?
27. Have the sources of stress changed i.e. different *kind* of stress? (from what to what? ex. stress of being stuck and locked in VS stress of striving for something new)
28. Do you feel more or less satisfied with yourself?
29. Do you feel more or less satisfied with your life?
30. Do you have someone you make appointments with to discuss life issues such as a therapist, councillor, priest, psychiatrist, psychologist, family therapist, mental health care worker or caseworker?
  - a. If yes
    - i. Who do you see?
    - ii. How often?
    - iii. Do you see him/her more or less since moving into Kikinaw?
    - iv. What mental health advantage do you gain from seeing him/her?
    - v. Would you be comfortable with me talking to him/her about any changes they have noticed since you moved to Kikinaw?
31. Do you use any of the support provided by Young United Church, West Broadway Community Services or Kikinaw Housing, for residents of Kikinaw?
  - a. If yes – which kinds? How often? (see chart)
  - b. If no – Why not? Do you feel that it may be useful to you in the future?

SUPPORT	HOW OFTEN DO YOU USE IT?
Computers	
Dental plan	
Advisory committee	Do you belong to it or ever provide them with your input?
Lectures/talks	
Seminars	
Movies	
Emergency food	

Food bank	
Hair cuts	
Drop in lunches (M,W,Th,F)	
Free laundry	
Free showers	
Pre-natal program	
Parenting program	
Computer café	
Card playing nights	
Thanksgiving dinner	
Christmas dinner	
Insulin checks	
Bible study	
Transition unit	
Good Food Club	
Cooking class (Wed.)	
Afternoon Church services	
Sunday Church services	

32. Have there been any major changes in your life that might have affected your wellbeing since moving into Kikinaw? (Ex. employment status, illness or injury in self or loved-one, income, etc.)

Do you agree to let me invite your support person(s) to a focus group with other support people?

Please circle and sign YES NO Signature: \_\_\_\_\_

## **8.2 Appendix B – Support Staff Focus Group Questions**

Please take a moment to think back to the way the tenants (or your client) were x months ago, before moving into Kikinaw. I would like you to compare them before and after the move so it is important to try and stimulate your memory.

1. What kinds of changes do you notice in the tenants since they moved into Kikinaw? (i.e. are they happier? sadder? healthier physically? healthier mentally? more confident? more outgoing? etc.)
2. What would you attribute these changes to?
3. In what ways has the support provided specifically to Kikinaw residents been beneficial to the tenants? (i.e. computers, telephones, dental plan, support person, etc.)
4. In what ways have the connections to Crossways in Common and the accompanying informal support work been important for the tenants?
5. How have the healthy, green, features of the buildings affected the tenants?
6. How have tenants become involved in management of the project?
7. Has this management model been effective?
8. How do you think Kikinaw could improve tenant:
  - a. Well-being?
  - b. Satisfaction?



### **8.3 Appendix C – Management Focus Group Questions**

This focus group aims to reflect on the Kikinaw Housing Project and determine any recommendations for future projects that may have arisen from it. The discussion should take approximately half an hour.

1. What was the original design and intent of the tenant centred model? (5-6 principles)
  - a. How has it changed since then? Why?
  - b. Have these changes resolved the issues?
2. What green building features do you feel were the most worthwhile?
  - a. Which did not have the intended consequences or meet your expectations?
  - b. What would you change/add?
3. What barriers did you encounter in the realization of this project?
4. What needs to be done to enable more projects like Kikinaw?

## **8.4 Appendix D – Letter of Request to Tenants**

July 24, 2006

Dear Kikinaw Resident,

My name is Jessica Roder. I am a graduate student at the University of Manitoba. For my master's thesis I will be doing a case study of Kikinaw Housing. Because you are a tenant of Kikinaw Housing I would like to interview you to ask about your experiences living here. All of the information I collect will be confidential. The final report will be shared with Kikinaw Housing Inc. to help them improve future projects, but there will be no way of them knowing who participated in the study and who did not, or what you said in the interview.

The interview will last approximately one hour and will take place in your apartment (or at another location if this is a problem). My schedule is flexible and we can arrange to meet whenever is convenient for you.

You will receive \$10 to thank you for your participation at the end of the interview.

If you would like to be interviewed or have any questions please contact me at ####.#### or by email at YYYY.

There is no obligation to participate and you can decide you do not want to participate anymore at any time.

I look forward to hearing from you,  
Sincerely,

Jessica Roder

## **8.5 Appendix E – Consent Forms**

### **Consent Form for Interviews**

**Research Project Title:** Green low-income housing, tenant-centred management, and resident well-being: The Kikinaw Housing Project, Winnipeg.

**Researcher:** Jessica Roder

**Supervisor:** David van Vliet

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The purpose of this research project is to determine the level of your satisfaction with the Kikinaw Housing Project and how living there has affected your well-being. Interviews will be approximately 1 hour in length and will be recorded with an audio device. You will be provided with a \$10 remuneration for each interview to thank you for participating. Information gathered will be used for a University of Manitoba graduate student thesis. The final report will be shared with Kikinaw Housing Inc. to help them improve future projects.

Confidentiality will be maintained by making no association between your name and the answers you provide in the interviews. A letter-number code will be used instead; for example, P3 would mean Participant number 3. I am the only one who will know what your code is. This information will be kept under password access on my computer. After the thesis is complete all research records will be destroyed. Sections of the interview transcripts may be written out in the final document, however, they will not be labelled with your real name.

You will be notified when the study has been completed. A written summary of the results will be provided to you and you will be allowed to comment on them before publication. If you move out of Kikinaw please forward your contact details to me so that I may reach you.

There is minimal risk to participating in this study. Benefits may include an increased awareness about how your home and community can impact your health and well-being.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to stop participating in the study at any time, and /or choose not to answer any questions you do not want to answer, without consequence. Your continued participation should be as

informed as your initial consent, so you should feel free to ask any questions throughout your participation if there is anything you would like to know more about, or do not understand.

Researcher: Jessica Roder  
(204) ###-####

Supervisor: Dr. David van Vliet  
(204) ###-####

**This research has been approved by the Joint-Faculty Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at 474-7122, or e-mail [margaret\\_bowman@umanitoba.ca](mailto:margaret_bowman@umanitoba.ca). A copy of this consent form has been given to you to keep for your records and reference.**

\_\_\_\_\_  
Participant's Signature Date

\_\_\_\_\_  
Researcher and/or Delegate's Signature Date

**Please provide your contact information so that you may receive the study results.**

Apartment # and street # \_\_\_\_\_ Email address \_\_\_\_\_

## Consent Form for Kikinaw Partners Focus Group

**Research Project Title:** Green low-income housing, tenant-centred management, and resident well-being: The Kikinaw Housing Project, Winnipeg.

**Researcher:** Jessica Roder

**Supervisor:** David van Vliet

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The purpose of this research project is to determine tenant satisfaction with the management model and green renovations employed by Kikinaw and to assess whether living there has affected their well-being in any way. Information gathered will be used for a University of Manitoba graduate student thesis. This focus group should take approximately 1/2 an hour. A \$10 remuneration will be provided to thank you for your time.

In order to maintain confidentiality please refrain from mentioning any tenants by name during the discussion. Anonymous quotes from the discussion may be written out in the final document.

A written summary of the results will be provided to you upon completion and you will be allowed to comment on them before publication. There is minimal risk to participating in this study. Benefits may include an increased awareness about how a person's home and community can have an impact on their health and well-being. You may also have fostered ideas for improving your next housing project.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, or involved institutions from their legal and professional responsibilities. You are free to stop participating in the study at any time, and /or choose not to answer any questions you do not want to answer, without consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask any questions throughout your participation if there is anything you would like to know more about, or do not understand.

Researcher: Jessica Roder  
(204) ###-####

Supervisor: Dr. David van Vliet

(204) ###-####

**This research has been approved by the Joint-Faculty Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at 474-7122, or e-mail [margaret\\_bowman@umanitoba.ca](mailto:margaret_bowman@umanitoba.ca). A copy of this consent form has been given to you to keep for your records and reference.**

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Participant's Signature

Date

---

Researcher's Signature

Date

Contact information for release of results:

Address:

Email:

## Consent Form for Support Person Focus Group

**Research Project Title:** Green low-income housing, tenant-centred management, and resident well-being: The Kikinaw Housing Project, Winnipeg.

**Researcher:** Jessica Roder

**Supervisor:** David van Vliet

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The purpose of this research project is to determine tenant satisfaction with the management model and green renovations employed by Kikinaw and to assess whether living there has affected their well-being in any way. Information gathered will be used for a University of Manitoba graduate student thesis. The final report will be shared with Kikinaw Housing Inc. to help them improve future projects. I have conducted interviews with several tenants and have received written permission to discuss them with you if they are your only client in the project. This focus group should take approximately 1 hour. There will be a \$10 remuneration. The focus group will be recorded with an audio device.

In order to maintain confidentiality please refrain from mentioning any tenants by name during the discussion. Anonymous quotes from the discussion may be written out in the final document. Once the focus group has ended there will be no more discussion of the content of the session.

A written summary of the results will be provided to you upon completion and you will be allowed to comment on them before publication. There is minimal risk to participating in this study. Benefits may include an increased awareness about how a person's home and community can have an impact on their health and well-being.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to stop participating in the study at any time, and /or choose not to answer any questions you do not want to answer, without consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask any questions throughout your participation if there is anything you would like to know more about, or do not understand.

Researcher: Jessica Roder  
(204) ###-####

Supervisor: Dr. David van Vliet  
(204) ###-####

**This research has been approved by the Joint-Faculty Research Ethics Board. If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at 474-7122, or e-mail [margaret\\_bowman@umanitoba.ca](mailto:margaret_bowman@umanitoba.ca). A copy of this consent form has been given to you to keep for your records and reference.**

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Participant's Signature

Date

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Researcher's Signature

Date

Contact information for release of results:

Address:

Email:



## **8.6 Appendix F – Ethics Approval**

06 July 2006

**TO:** Jessica Roder  
Principal Investigator

**FROM:** Wayne Taylor, Chair  
Joint-Faculty Research Ethics Board (JFREB)

**Re:** Protocol #J2006:077  
“Green Low-income Housing, Tenant-centred Management, and Resident Well-being: the Kikinaw Housing Project, Winnipeg”

Your above-noted protocol was reviewed by members of the Joint-Faculty Research Ethics Board. A few concerns were noted and are listed below:

1. Please identify a third party who will introduce the study to potential respondents. It is not acceptable that the tenants be contacted by the housing project manager, because it is likely that a number of tenants would feel obligated to participate in the research.
2. The procedure for identifying respondents should be such that it is not possible for the manager or the researcher to know who refused to participate.
3. Share the summary results with all participants before the research is circulated elsewhere or published as a thesis. There needs to be an opportunity for participants to make comments,
4. Please confirm that research records will be destroyed along with the identification key.
5. Please state on the consent form that the information will be used for a University of Manitoba graduate student research thesis. The consent form must also state that the report will be shared with the housing project leadership.

Approval is pending your response to the above items. Your written response, **including a cover letter which addresses each of the above items, and includes any revised forms (with revisions highlighted, if possible)**, should be sent to Margaret (Maggie) Bowman, Human Ethics Coordinator, 208 - 194 Dafoe Road (CTC Building) or by e-mail to [margaret\\_bowman@umanitoba.ca](mailto:margaret_bowman@umanitoba.ca). **(Please note that there is no need to re-submit the entire submission, just those pertinent sections.)** If you have questions, please contact the Chair at 474-8877.

## APPROVAL CERTIFICATE

21 July 2006

**TO:** **Jessica Roder** (Advisor D. van Vliet)  
Principal Investigator

**FROM:** **Wayne Taylor, Chair**  
Joint-Faculty Research Ethics Board (JFREB)

**Re:** **Protocol #J2006:077**  
**“Green Low-income Housing, Tenant-centred Management, and Resident Well-being: the Kikinaw Housing Project, Winnipeg”**

Please be advised that your above-referenced protocol has received human ethics approval by the **Joint-Faculty Research Ethics Board**, which is organized and operates according to the Tri-Council Policy Statement. This approval is valid for one year only.

Any significant changes of the protocol and/or informed consent form should be reported to the Human Ethics Secretariat in advance of implementation of such changes.

**Please note:**

- if you have funds pending human ethics approval, the auditor requires that you submit a copy of this Approval Certificate to Kathryn Bartmanovich, Research Grants & Contract Services (fax 261-0325), including the Sponsor name, before your account can be opened.
- if you have received multi-year funding for this research, responsibility lies with you to apply for and obtain Renewal Approval at the expiry of the initial one-year approval; otherwise the account will be locked.