Building Homes and Youth Capacity in First Nation Communities

Bryce Wood, Catrina Sallese and Shirley Thompson
Mino Bimaadiziwin Partnership, University of Manitoba
Mino Bimaadiziwin Homebuilders.
Housing is the major issue for many First Nations

<table>
<thead>
<tr>
<th>Housing Issue</th>
<th>Canada</th>
<th>Wasagamack</th>
<th>Garden Hill</th>
</tr>
</thead>
<tbody>
<tr>
<td>More than 1 person/room</td>
<td>1.9%</td>
<td>45.6% <strong>24X</strong></td>
<td>42.6% <strong>22X</strong></td>
</tr>
<tr>
<td>Rooms/dwelling</td>
<td>6.2</td>
<td>4.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Major Repairs needed</td>
<td>6.5%</td>
<td>82.6% <strong>13X</strong></td>
<td>61.8% <strong>9.5X</strong></td>
</tr>
<tr>
<td>Not Suitable</td>
<td>4.9%</td>
<td>52.6% <strong>11X</strong></td>
<td>54.5% <strong>11X</strong></td>
</tr>
</tbody>
</table>

Note: The TB rate is over 50X higher for First Nations living on reserve than non-Indigenous Canadian-born people. Overcrowded, poorly ventilated homes increase risk.

Source: Statistics Canada, 2016
Truth and Reconciliation (TRC) Calls for Action to:

“Ensure that Aboriginal peoples have equitable access to jobs, training, and education opportunities in the corporate sector, and that Aboriginal communities gain long-term sustainable benefits from economic development projects” (TRC, Section 92, ii).
Young Adult Employment Status in Garden Hill First Nation

age = 15 to 30 (n = 384)

Youth Employment Status:

- Employed: 16.46%
- Unemployed: 83.54%
Homebuilding can be community healing & economic renewal

“The integration of housing objectives with other social and economic activities in Aboriginal communities will create a synergistic effect, making housing a source of community healing and economic renewal” (Royal Commission on Aboriginal People, 1996, Vol. 3, p. 341).
Water Supply by Pail, Cistern or Pipe in Garden Hill Homes (n=384)

Our home is where we eat, drink ...
Household Sewage in Garden Hill First Nation
(n=384)

And poop

Survey by GHFN employment & Training - Lakeisha Barkman and Elsie Monias.
Statistics analyzed by Rezwanul Hoque, Keshab Thapa and Shirley Thompson with Excel 2017.
Households surveyed: 384

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Pail</td>
<td>21%</td>
</tr>
<tr>
<td>Cistern</td>
<td>30%</td>
</tr>
<tr>
<td>Piped Sewage</td>
<td>48%</td>
</tr>
<tr>
<td>Not Stated</td>
<td>1%</td>
</tr>
</tbody>
</table>
Overcrowding

Moisture from above

Moisture from below

Groundwater and soil contamination

Foundation & Structural problems

Overcrowding

Source: Lancelot Coar
Imagine if every First Nation community has an education program that builds youth capacity in the trades & homes?
Youth homebuilder education making a big difference

<table>
<thead>
<tr>
<th>Issues</th>
<th>Actions</th>
<th>Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Housing crisis</td>
<td>- community-led housing education</td>
<td>- Reconciliation</td>
</tr>
<tr>
<td>- Economic poverty</td>
<td>- Partnerships on design and training</td>
<td>- Mino Bimaadiziwin</td>
</tr>
<tr>
<td>- Gangs</td>
<td>- Housing and Sawmill Corporation</td>
<td>- HOPE</td>
</tr>
<tr>
<td>- Few services (no food store, no bank, no youth centre, few jobs)</td>
<td>- (MITIK 299 Corps)</td>
<td>- Trades people</td>
</tr>
<tr>
<td>- Drugs and Alcohol Addiction</td>
<td>- Many Funding proposals (education, building, firebreaks, capacity building)</td>
<td>- Education options</td>
</tr>
<tr>
<td>BUT</td>
<td></td>
<td>- Education success</td>
</tr>
<tr>
<td>- Language retention with most people speaking Anishiniimowin</td>
<td></td>
<td>- Higher employment rates</td>
</tr>
<tr>
<td>- Cultural wealth</td>
<td></td>
<td>- Local Business opportunities</td>
</tr>
<tr>
<td>- Strong Indigenous Knowledge systems</td>
<td></td>
<td>- Community Development</td>
</tr>
<tr>
<td>- Large traditional territory still pristine and extensively used</td>
<td></td>
<td>- Healthier homes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Fewer overcrowded homes</td>
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<tr>
<td></td>
<td></td>
<td>- Homes in better repair</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- And hopefully better language retention, traditional knowledge, culture and less gangs, Less drug use/addictions.</td>
</tr>
</tbody>
</table>
Credentials built at every stage

- Eleven certifiable courses:
  1. Wilderness First Aid (Red Cross) or Standard First Aid (new recruit)
  2. Forestry 1
  3. Forestry 2
  4. Small Motors
  5. Job Readiness
  6. Chainsaw Operation
  7. Construction Safety (COR)
  8. Lumber Grading
  9. Working in Heights
  10. Basic Works Safety/WHMIS 2015 (online)
  11. Lockout Tag out
Mission: To partner to build healthy homes and community-led post-secondary education.
Mino Bimaadiziwin Homebuilders & Mitik

Participatory Design

Infrastructure: Sawmill

Knowledge Exchange

Forest Management

Construction
Designing homes with community

- Family size
- Accessability
- Cultural Practices
- Family Preferences
- Resources (natural, financial, human, etc.)
- Meeting national building code for CMHC funding
Design as language
muskrat hut
Opaskwayak Cree Nation
Idle No More's One House, Many Nations
This timeline displays the oral history of Island Lake presented by Victor and Emma Harper as well as other Elders from Island Lake region. All the Anishiniwuk in Island Lake are one nation united by language, culture, family relations, and geography. All the four Anishininew communities -- Garden Hill, Red Sucker Lake, St. Theresa Point, and Wasagamack First Nation -- were originally part of the Island Lake Band, sharing one chief at the time of Treaty in 1909 until 1969.
Blueprint of Home Designed by Community
Building capacity & homes with local material and local labour
Source: Bjornson, E. https://www.kithouse.ca/
MITIK 299 Corp.
Business Plan

(204) 457-2343 (Band office)
(204) 290-7571 (cell for Ernie Harper)
Email: h31n73@gmail.com

Shirley Thompson
(204) 291-8413
60 trees = 1 home
Training for Forestry, Chainsaw Safety & Sawmilling
Harvesting for Homebuilding
Big trees for homebuilding- stick and log
Improving Homes Built on Past Experience
Mino Bimaadiziwin Homebuilders Program
Garden Hill First Nation
Bryce giving out perfect attendance awards
Perfect Attendance awards presented at Christmas Feast.
Community-led education for development
Learning in the classroom and then hands-on build
Boreal Homebuilding Student Feedback
Feb. 2020

- “This program is making lives better - even saving lives.”
- “Helped to improve skills and understand other people.”
- “This program has taught me to face my fears.”
- “Taught me to build my mind to possibilities & given me a more optimistic outlook.”
- “Taught me to build a house I can live in”
- “Improved my social life and I opened up myself to new things.”
- “The program taught me about safety in my environment.”
- “Developing good workers from youth.”
Investing in Island Lake Homebuilding Students

- Garden Hill: $398,093
- Wasagamack: $342,083
- Total: $740,175
Total $ for Students $987,622 (86% of total grant)
STUDENT COSTS

- Airfare Students: 38%
- Food for workshops and travel: 18%
- Accommodation: 11%
- Car rental: 3%
- Safety: 22%
- Taxi (0.30%)
Wasagamack and Garden Hill Mino Bimaadiziwin Builders Student Certificates

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Certificates</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explorer (1-3 Certificates)</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Forester or Builders (4-6 Certificates)</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Forester &amp; Builders (7-11 Certificates)</td>
<td>12</td>
<td>3</td>
</tr>
</tbody>
</table>

Legend:
- Garden Hill
- Wasagamack

Number of Certificates
Many Student Achievements

To date 302 student certificates were achieved by students, namely:

1. Wilderness First Aid (Red Cross) or Standard First Aid
2. Forestry 1
3. Forestry 2
4. Small Motors
5. Job Readiness
6. Chainsaw Operation
7. Construction Safety (COR)
8. Lumber Grading
9. Working in Heights
10. Basic Works Safety or WHMIS 2015
11. Lockout Tag out
12. Train the trainer Chainsaw Safety for 3 local instructors
13. Proposal Writing for funding

Anokiiwin Training Institute to award Mino Bimaadiziwin certificate/diploma with Forester & Housing Construction Designations at end of 18 months.
299 Certificates achieved by Homebuilder Students

Wilderness First aid or Standard First Aid, Forestry 1 & 2, Small Motors, Job Readiness, Chainsaw Operation, Lumber Grading, Basic work safety, Working in heights, Lockout Tagout
Student defend proposal to win $550,000 towards renovations

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Dear Roxanne and Trenton,

Re: First Nations Youth Summit 2019

Congratulations! Your proposal "Teaching Kitchen Upgrade to George Knott School" has been approved in principle for the amount of $550,000.

This funding is to cover the costs towards the following:

- Renovations and repairs to the current George Knott School warming kitchen to bring it up to code for a commercial kitchen

A representative from Indigenous Services Canada will be in contact with you and your community over the next few weeks to discuss further details of your proposal and the next steps in the process. A formal letter will also be sent to your Chief and Council advising them of the approval.

Thank you for taking part in the First Nations Youth Summit and the hard work you put forward towards this project.

Sincerely,

[Handwritten note]

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Mino Bimaadiziwin education, culture and business centre:
Building culture, capacity and a future for youth in Island Lake

- Presented by:
  Roxanne Harper and Trenton Harper
Gamechanger - Apprenticeship in First Nation Reserve Schools.
Catrina Sallese

• University of Manitoba
HOME INTERIORS & FURNISHINGS IN REMOTE NORTHERN FIRST NATION COMMUNITIES:
EXPLORING SUSTAINABLE AND CULTURALLY APPROPRIATE SOLUTIONS THROUGH THE MINO BIMAADIZIWIN HOMEBUILDERS

BY: CATRINA GALLESE

A THESIS SUBMITTED TO THE FACULTY OF GRADUATE STUDIES OF THE UNIVERSITY OF MANITOBA
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF THE DEGREE OF
MASTER OF INTERIOR DESIGN

DEPARTMENT OF INTERIOR DESIGN
UNIVERSITY OF MANITOBA
WINNIPEG

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DESIGN INQUIRY:

1. How can interior design support the unique Anishiniwuk cultural identity of both WFN and GHFN within a residential typology?

2. Given the remote and northern location of WFN and GHFN, 
   a. What are the unique challenges that directly correlate with the remote northern site conditions? 
   b. With efficiency, reliability and sustainability as a priority, what interior solutions can effectively address these challenges?

3. What local materials can be respectfully harvested and used as interior design elements?
### KEY FINDINGS:

<table>
<thead>
<tr>
<th>AUTHOR(S)</th>
<th>TITLE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CROSS-CULTURAL LENS</strong></td>
<td></td>
<td>1. A concept of mutual respect and collaboration between Western schools of thought and Indigenous ways of knowing. This framework suggests that the weaknesses of both ways of knowing can be improved or eliminated as the fusion of knowledge begins to fill the gaps within the opposing school of thought.</td>
</tr>
<tr>
<td>Albert Marshall Murdena Marshall Cheryl Bartlett</td>
<td>Two Eyed Seeing</td>
<td></td>
</tr>
<tr>
<td><strong>DESIGN CRITERIA</strong></td>
<td></td>
<td>1. Explores in great detail modern Indigenous architecture and how identity, culture, heritage and history are embedded in the design and design processes. 2. Provides a set of design criteria and form determinates. 3. Is an example of how to analyze traditional and cultural information from an outside perspective.</td>
</tr>
<tr>
<td>Frank Vodvarka Joy Monice Mahnert</td>
<td>New Architecture on Indigenous Land</td>
<td></td>
</tr>
<tr>
<td>Center for American Indian Research and Native Studies</td>
<td>Four Dimensions</td>
<td>1. CAIRNS promotes a list of uniquely Indigenous design concepts, all of which speaks to the design process that prioritizes the community vision. CAIRNS looks at how traditional Native architecture philosophy is evaluated.</td>
</tr>
<tr>
<td><strong>RESILIENCY AND SUSTAINABILITY</strong></td>
<td></td>
<td>1. Dr. Fiksel challenges the current standards of sustainability with the concept of resilience, arguing that more positive environmental impact can be achieved when focusing on a broad range of systems level issues rather than limiting the focus on the function and form of a product or service.</td>
</tr>
<tr>
<td>Dr. Joseph Fiksel</td>
<td>In Designing Resilient, Sustainable Systems</td>
<td></td>
</tr>
<tr>
<td>Dr. Robin W. Kimmerer</td>
<td>The Honourable Harvest</td>
<td>1. Dr. Kimmerer, along with her Elders challenge the current sustainable model, arguing that the answers to questions of how to be more sustainable is not to simply continue to find ways to take from the earth but instead find ways to give gifts back. This will create a bio-cultural relationship where the earth is good for humans and humans are good for the earth, better known as reciprocity.</td>
</tr>
<tr>
<td><strong>OWNERSHIP AND SELF DETERMINATION</strong></td>
<td></td>
<td>1. Bailie and Wayte consider the implications of owning versus renting property. They argue that owning a home instills a sense of security, control and mastery, which is believed to impact health and well-being.</td>
</tr>
<tr>
<td>R.S. Bailie K.J. Wayte</td>
<td>Housing and Health in Indigenous Communities</td>
<td>1. Walker addresses the pursuit of self-determination among Indigenous communities. 2. Walker argues that the most effective low-cost living and welfare solutions for Indigenous peoples would be most successful if they were governed and conducted by Indigenous leaders.</td>
</tr>
<tr>
<td>Ryan C Walker</td>
<td>Searching for Aboriginal/Indigenous Self-Determination</td>
<td></td>
</tr>
</tbody>
</table>
Jackson Beardy was a member of the Woodland School of Indigenous art before becoming a part of the Indian Group of Seven in 1974 (Phillips, 2011). Beardy's work was stylized, painted on canvas, birchbark and beaver skins and often focused on the interdependence of humans and nature (Phillips, 2011). Beardy often aimed to depict figures from his traditional heritage (Phillips, 2011). For nearly twenty years Beardy promoted Indigenous art as a valid category of contemporary art (Phillips, 2011).

Beardy was born and grew up in Island Lake. Beardy told stories learned from his land and house, therefore forever connecting his art to the long and inter-woven history of the Anishinaabek.
**LAND, WATER AND ANIMAL INSPIRATION:**

- **Local Wood**: can be harvested and milled locally. A defining material of the home, lining walls, ceiling and floors as well as all furniture and cabinetry.

- **River rocks**: are a part of the land identity. Bringing this material into the home helps reflect the gifts of the earth in the interior.

- **Regional Fish**: - Texture, - Colour, - Water & Kitchen, - Washer, - Material & Car roofs, - Application, - Back splash, - Table tops, - Wall finish.

- **Sturgeon**

- **Trout**

**MATERIAL SELECTION:**

- **Pourled concrete**: is a durable and cost effective solution for solid surfaces such as counter space.

- **When vehicles die the metal sits relatively untouched and begins to rust. This material would be otherwise wasted if not harvested and used for this fish scale inspired wall application.**

- **Quilt**: can be made for bed coverings as well as for couch cushions. They can act as simple pops of colour or as comfortable art pieces that tell stories throughout the home.

- **Animal hide**: can be used in various textile applications. Pillows, seat cushions and area rugs can all be made from animal hides.
MODULAR HOUSE PLAN
The family wall provides a space to showcase pictures of the entire clan as well as a place to display family relics and ceremonial objects.

A long bench with storage provides an abundance of storage for the family but also provides seating for large feasts and celebrations. Additional tables and chairs can be added to accommodate twenty-four people comfortably.

Windows on this wall face north to address solar gain and loss strategies.

Two removable racks are hung on this wall. These racks are used for drying winter gear around the wood burning stove.
STORAGE AND ENTERTAINMENT

All windows on this wall face south to address solar gain and loss strategies.

A shared entertainment system is included in this space for friends and family to gather and watch movies, sporting events.

A locally built wall unit was designed with low drawers for people of all ages and capabilities to easily access. This wall unit also provides interior storage for wood that feeds the central wood burning stove.

The open concept design allows for the wood burning stove to be central and unobstructed, allowing heat to disperse throughout the entire building envelope.

There is custom lounge seating on either side of the wood burning stove. The wood burning stove is a transition area between dining and lounging but also provides a space for gathering and story telling. Couch cushions are locally made and display a variety of colourful quilts.
STORAGE AND ENTERTAINMENT
The kitchen features a recycled cork roof wall in lieu of a standard tile backsplash. The diamond pattern is gradually extruding off the wall resulting in a texture that creates shadow and movement. This wall is inspired by the sharp diamond shaped scales of the sturgeon while the shiny blues and silvers refer to the twinkling skin of the colourful trout. All metal can be salvaged from junk metal found in Island Lake as there is an abundance of scrap ears with no purpose or place to be disposed of.

This shared kitchen is intended to be used for large feasts and therefore has been equipped with a double cracked oven, electric stove top, microwave and double door fridge.
There are two family units to choose from, the one-bedroom and the two-bedroom unit. Each unit is equipped with a wood burning stove, a kitchen, living space and a bathroom. The same materiality is used in the family units as in the long house shared spaces. However, a family wall is also included in each unit for the individual family to display their own pictures and objects.
FAMILY UNIT: TWO-BEDROOM
AN Kit YOU FOR YOUR TIME,
QUESTIONS, COMMENTS AND SUGGESTIONS ARE WELCOMED
Meegwich

Questions??
Do Homebuilder students have Stable housing?

STUDENTS NEED A JOB AND HOUSING…

- “Build a home I can live in”
- “Do handy work at home”
- “Build their cabin during camping”