



Bingwi Neyaashi  
Anishinaabek



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**NORTHERN** RECONCILIATION  
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# Welcoming Public Spaces

Nation Rebuilding Series, Volume 10

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## Land Acknowledgement

NPI would like to acknowledge the First Peoples on whose traditional territories we live and work. NPI is grateful for the opportunity to have our offices located on these lands and thank all the generations of people who have taken care of this land.

### Our main offices:

- Thunder Bay on Robinson-Superior Treaty territory and the land is the traditional territory of the Anishnaabeg and Fort William First Nation.
- Sudbury is on the Robinson-Huron Treaty territory and the land is the traditional territory of the Atikameksheng Anishnaabeg as well as Wahnapiitae First Nation.
- Kirkland Lake is on the Robinson-Huron Treaty territory and the land is the traditional territory of Cree, Ojibway, and Algonquin Peoples, as well as Beaverhouse First Nation.
- Each community is home to many diverse First Nations, Inuit, and Métis Peoples.

We recognize and appreciate the historic connection that Indigenous peoples have to these territories. We support their efforts to sustain and grow their nations. We also recognize the contributions that they have made in shaping and strengthening local communities, the province and the country as a whole.

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## Partners



### Animbiigoo Zaagi'igan Anishinaabek

Our people have been present in these lands for time immemorial. Our ancestors were strong, independent people, as we are today, who moved with the seasons throughout a large area of land around Lake Nipigon. We governed ourselves using the traditional teachings we still teach our children today. Now, our community members widely scattered throughout many communities, the majority of which are located in northwestern Ontario in and around the shores of Lake Superior. We are unified by our connection to the environment, our commitment to our traditional values, and our respect for each other.



### Bingwi Neyaashi Anishinaabek

The people of Bingwi Neyaashi Anishinaabek – formerly known as Sand Point First Nation – have been occupying the southeast shores of Lake Nipigon since time immemorial. Our community is dedicated to fostering a strong cultural identity, protecting Mother Earth, and to providing equal opportunities for all. Furthermore, our community vision is to grow Bingwi Neyaashi Anishinaabek's economy and become recognized as a sustainable and supportive community where businesses succeed, members thrive, and culture is celebrated.



### Lac des Mille Lacs First Nation

The community of Lac des Mille Lacs First Nation is located in Northwestern Ontario, 135 km West of Thunder Bay, and encompasses roughly 5,000 HA of Mother Nature's most spectacular beauty. Our people have held and cared for our Lands and Traditional Territories since time immemorial. To fulfill our purpose and in our journey towards our vision, we, the Lac Des Mille Lacs First Nation are committed to rebuilding a strong sense of community following a holistic approach and inclusive processes for healthy community development.



## About the Authors

### Mercedes Labelle



Mercedes Labelle graduated from McGill University in 2020 with an Honours Bachelor of Political Science and Urban Systems. During her studies, she focused on Canadian politics and public policy processes, specifically researching the uneven distribution of benefits and services between urban and rural communities. Having grown up in Canada, the United States, and Spain, Mercedes is eager to return to Northern Ontario, where her family now resides. In her free time, Mercedes enjoys listening to podcasts, cooking, and reading.

### Mateo Orrantia



Born and raised in Marathon, ON, Mateo is proud to call Northern Ontario home. Currently in his first year of medical school at NOSM U, Mateo tries to bring an interdisciplinary approach to problem-solving. A firm believer in a self-directed and diverse North, he wants to apply his experiences in research and grassroots activism to help foster stronger and more sustainable communities across Northern Ontario. After spending his last few summers working at Pukaskwa National Park, Mateo has become passionate about protecting the region's unparalleled natural resources. Unsure of where his future will take him - other than back to the North - Mateo has gotten involved with initiatives across disciplines, from Strength & Conditioning coaching, to literary research and student governance. When he's not working, Mateo enjoys strength training, reading, and exploring the outdoors (which usually results in a little too much bushwhacking).

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# Executive Summary

This paper examines the outcomes of both “basic build” and more innovative approaches to public building design. The three innovative case studies: the Manitoulin Hotel and Conference Centre, the Squamish-Lil' Wat Conference Centre, and the Timmins Public Library and Coalition Centre, all identified a need for improved facilities to address local circumstances. The communities identified needing spaces for tourism, to increase cultural and community visibility, and to expand services and resources. Through innovative public building design, such as incorporating locally sourced materials like lumber, using local design and construction crews, incorporating environmentally friendly building requirements and technologies, and community-identified needs-based discussions, infrastructure emerged that filled each community's unique requests.

This paper identifies common problems with basic build infrastructure, and illuminates examples of successful and best practices in the Canadian-Indigenous and non-Indigenous context.

The **best practices** identified through this case study analysis include:

- The use of locally available construction materials.
- The use of design and construction firms local to the community, and where not possible, offering training and capacity-building opportunities to community members.
- A focus on the community's specific requirements and requests (ex. cultural and traditional elements), as identified through community discussions; and,
- Environmentally friendly design and construction practices.

The case studies also revealed what, when possible, should be **avoided**:

- The attempt to implement a design external to the community on the assumption that culture and needs between communities are synonymous; and,
- The exclusion of a community's cultural and traditional practices in public building design and construction.

# Introduction

Successful infrastructure development goes hand-in-hand with economic and social success, and will be of utmost importance for Indigenous and non-Indigenous communities across Canada as they set their sights on recovery and prosperity in a post-COVID world. However, conversations around Indigenous public building infrastructure development in Canada take place against a backdrop of failures largely fostered by the “basic build” approach to infrastructure funding and construction. Basic build infrastructure often follows a “blanket approach” to funding, design, and construction, without accounting for a community’s unique needs and circumstances, which will be demonstrated by looking at the cases of Attawapiskat and Long Point First Nations.

Although the basic build approach can sometimes allow for quicker infrastructure development with lower up-front costs, it often leads to negative project outcomes. In some cases, lack of funding results in communities never building public places for gathering. The significant benefits associated with more innovative methods of design, on the other hand, far outweigh its disadvantages—emphasizing the importance to shift away from the historically-used basic build approach towards more innovative methods.



# The Basic Build Approach

## Attawapiskat First Nation, James Bay, Ontario

This “public building” infrastructure category spans a wide variety of building types, including schools, community centres, cultural buildings, economic-use buildings, health centres, libraries, community services offices, and hospitals. Historically, funding for these projects has come through INAC, by means of the First Nations Infrastructure Fund, and the Capital Facilities and Maintenance program administered by AANDC. While these programs now make an effort to encourage innovative designs in public infrastructure (ISC, 2016), historically, the development of buildings for First Nations communities have mirrored the designs and construction methods of non-Indigenous buildings. According to prominent Indigenous architect David Fortin, the centralization of project design has historically led to limiting design options and individual community agency (Sandals, 2018). Much like housing, public building design has historically focused on keeping up-front costs low and delivering infrastructure in a timely manner.

Attawapiskat's J.R. Nakogee Primary School faced similar problems because of basic build infrastructure not tailored to meet the community's environmental circumstances. Attawapiskat is a remote First Nations community located between Attawapiskat River and James Bay, Ontario. It is connected to nearby communities via seasonal winter/ice roads but is largely a fly-in/out community. The community's elementary school opened its doors in 1976. Three years later, in 1979, a pipeline supplying diesel to the school ruptured and spilled 95,000 litres of fuel, soaking into the surrounding soil (Kielburger, 2014). Despite promised attempts to remedy the spill, nothing but Band-Aid solutions<sup>1</sup> were attempted. The federal government eventually closed the school on May 11, 2000, because of site contamination from the diesel leak and possible health problems attributed to it.

Basic build infrastructure decisions, such as using diesel pipes to supply the school's heat in this location, are responsible for the continuous problems faced by communities in which they are implemented. As Charlie Angus, Member of Parliament for Timmins-James Bay, explains, “Laying pipe in the subarctic ground requires an understanding of the impacts of continually shifting ground” (2015, 56). In addition, Attawapiskat's location on the James Bay lowlands proved to be of added difficulty due to the swampy nature of the area. What works in some communities will not work in others due to the diverse environmental realities of the land. First-hand accounts mention the pipe was laid only at a depth of two feet in some areas, and no insulation was used (Angus, 2015, 56). What happens next should not come as a surprise: when winter hit, the ground began to shift, causing the pipe to crack and spill fuel under the school grounds. Complaints of severe headaches and nausea, from both teachers and students, increased every year (Angus, 2015, 57). Basic build public infrastructure, such as on-reserve schools, significantly hinder the health and development of the community. Without an attempt to involve community members and tailor infrastructure projects to different environments, these projects will continue to do more harm than good. While Attawapiskat First Nation is but one example, it does highlight an important point: build it right the first time.

<sup>1</sup> Suggestions such as “cleaning the base of the foundation and wall studs with detergent, hauling the contaminated soil out from under the school's crawl space, and putting an interceptor drain near the building in an attempt to divert the fuel” (Angus, 2015, 57).

## Long Point First Nation, Winneway, Quebec

Long Point First Nation's Primary and Secondary School faced similar problems because of basic build infrastructure not tailored to meet the community's environmental circumstances. Long Point First Nation is an Anishinabeg community located in the unceded territory of Anishnabe Aki. The community is comprised of approximately 800 members, of which an estimated half live within the community of Winneway, located in the region of Abitibi-Temiscamingue in Western Quebec (approximately eight hours northwest of Montreal). In 2008 the local First Nation School was shut down due to mould. The construction of the original school lacked proper ventilation, insulation, and maintenance necessary for a building in the environmental conditions of northwestern Quebec (Blackburn, 2014). The mould forced the school to shut down a significant portion of the building and create temporary classrooms inside the gymnasium. These temporary classrooms were made from six-foot-tall temporary divider walls for kindergarten through grade 12 classrooms (Blackburn, 2014). These classrooms lacked the necessary supplies for many subjects and encouraged high absentee rates among students. Furthermore, the situation also limited physical activity, cultural ceremonies, and community programming due to the loss of the gymnasium space.

The use of a basic build approach regarding the original school had costly long-term effects on generations of young people growing up in the community. Although at the time of originally constructing the school, the option of basic building was seen as more cost-effective, it was more costly in the long-term, extending beyond physical impacts and making an environment un conducive to learning (Blackburn, 2014). Learning from this basic build approach the new school was constructed both with the environmental situation, cultural relevance, and community need taken into consideration. A critical piece to the success of construction was design which was done by an Indigenous architect. Although this process was lengthier due to delays on permit processing by the Provincial Government in Quebec, they knew it would be worth it in the long run to have a space that would be beneficial to generations of children in the community still to come.



## Outcomes

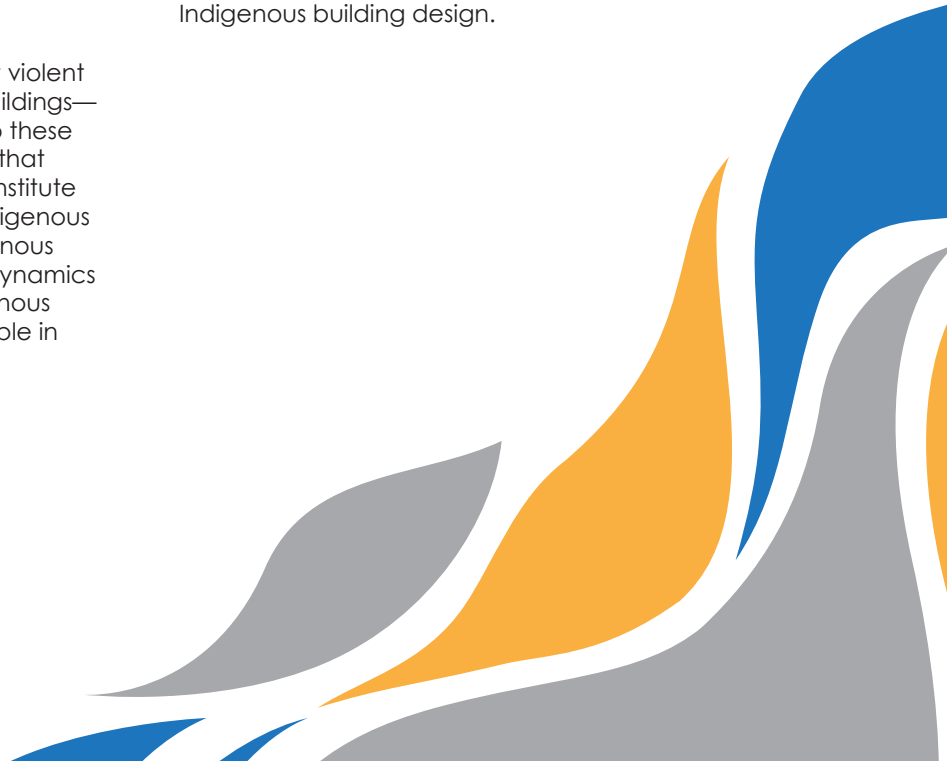
Discourse around the basic build approach for public buildings in an Indigenous context focuses on the cultural dimensions of building developments, as well as their ability to effectively serve Indigenous populations. On the service delivery front, it is no secret that the design of spaces fundamentally affects their functionality and their ability to serve as effective spaces for service delivery to target populations. Buildings that have been designed with non-Indigenous populations in mind, as many public Indigenous buildings—such as schools—have been historically, will often experience significant shortcomings in service delivery to Indigenous populations. Indigenous peoples often have ways of interacting, socializing, healing, and learning that are unique to their specific group, ways that are not always facilitated by “western” or “basic” building design (Grant, 2011). For example, a study of Indigenous hospital patients in Australia found that the physical design of hospitals may significantly impact how comfortable Indigenous peoples are receiving services from that hospital, and how well they feel that their needs are addressed by it (Haynes et al, 2019). Indigenous patients often attract a larger number of caretakers and visitors throughout their stay in hospitals. Many “western” hospital designs, however, can only accommodate a few visitors at a time, therefore negatively affecting the Indigenous healing experience (Haynes et al, 2019). The hospital setting serves as but one example of the broader conclusion—Indigenous peoples often have unique needs that are not addressed by “basic” building design.

What is more, public buildings can carry significant historical connotations, as many of Canada’s most violent colonial tactics were carried out through public buildings—like residential schools. As such, buildings that echo these designs may carry forward the negative history of that time—an issue echoed by the Royal Architecture Institute of Canada (RAIC) Indigenous Task Force (RAIC Indigenous Task Force, 2017). The design of buildings for Indigenous groups in this manner not only reinforces colonial dynamics and policies of assimilation, but can lead to Indigenous peoples feeling alienated, stressed, or uncomfortable in these spaces (Haynes et al, 2019).

Given their public visibility to both their Indigenous communities and non-Indigenous populations around them, these buildings can serve to reaffirm Indigenous identities, cultures, and practices (Lommerse, 2009). The basic build model, however, precludes Indigenous communities from showcasing their cultures and traditions and instead suppresses them by enforcing a “western” building design. It should be no surprise then, that, amidst a widespread movement of cultural revival, many Indigenous groups are rejecting the imposition of the basic build model towards Indigenous-directed architecture (Lommerse, 2009).

Finally, similar to housing infrastructure, buildings that follow the basic model can often run into quality and durability issues, given that they sometimes do not directly address the particularities of local climates and Indigenous ways of life (Angus, 2015, 56). This can lead to the buildings quickly falling into disrepair or becoming unusable, as seen in the examples above (Angus, 2015, 57-8).

Thus, we can see that the basic build model for public building development has multiple shortcomings, in an Indigenous context. While it may have allowed for buildings to be put up cheaply and quickly, it is evident that this method for building development falls short on its ability to maximize service delivery to Indigenous groups and lacks the cultural considerations that are integral to Indigenous building design.



# Case Studies: Innovation in Practice

## Manitoulin Hotel & Conference Centre – Little Current, Ontario<sup>2</sup>

### Project Overview

**Community Specifics:** Partnership between seven First Nations—Wikwemikong Unceded Indian Reserve, Sagamok Anishinabek, Whitefish River, Sheshegwaning, M'Chigeeng, and Aundeck Omni Kaning First Nation. The Hotel and Conference Centre is located in Little Current on Manitoulin Island.

**Challenges:** Tourism was being negatively impacted by the lack of room capacity on the Island.

**Solution:** A hotel and conference centre that has 58 rooms and can host conferences for up to 300 people.

**Funding sources:** Money was received from private, federal, and provincial sources. Half of the development cost was shared between the owner communities and the Great Spirit Circle Trail (GSCT); a loan from the Northeastern Ontario Investment Pool was facilitated by the Waubetek Business Development Corporation to help secure commercial financing for the project. Additional funds were received from Aboriginal Business Canada, Aboriginal Affairs and Northern Development Canada, and the Northern Ontario Heritage Fund.

**Cost:** \$12.5 million.

**Project length:** Ground broken in 2011; doors opened in May 2013.

**Outcomes:** A public building with a subtle Indigenous design that was able to tell the story of the area's First Nations. The hotel employs 55 full-time staff, 80 percent of which were Indigenous as of 2018. Overnight motor coach stays on the island have also increased.

The Manitoulin Hotel & Conference Centre, opened in May of 2013, is a 58-room hotel located in Little Current, on Manitoulin Island. One hundred percent First Nations owned and operated, it serves as a regional hub for tourism activities and can host conferences attended by up to 300 people. It incorporates subtle Indigenous elements throughout its design and serves as a tool to help the owner communities tell their story on their terms.



<sup>2</sup> Unless otherwise indicated, information for this case study was provided to the authors via two interviews in June 2020.

## Initial Stages

In the early 2000s, the Great Spirit Circle Trail (GSCT)—an Indigenous Tourism Organization—identified the need for increased room capacity on the Island, the lack of which had placed a ceiling on the island's tourism industry. A hotel had not been built on the Island in over a century, and the only other existing hotel had only a ten-room capacity. In order to build the hotel, the GSCT sought to create an innovative and unique partnership structure between the First Nations communities in the area. Community elections and political turnover, among other reasons, led to the creation of the partnerships being a lengthy, difficult process. After a year and a half of work, the partnership between the seven First Nations—Wiwemikong Unceded Indian Reserve, Sagamok Anishinabek, Whitefish River, Sheshegwaning, M'Chigeeng, and Aundeck Omni Kaning First Nation—was formed. The communities were organized into a limited partnership agreement, with the GSCT functioning as an eighth managing partner. Due to past experience working with the groups and having an intimate knowledge of partner dynamics, clauses were built into ownership and contract agreements to protect project from being derailed by conflict.

In total, the project would cost \$12.5 million (ISED, 2018). Funding for the project came from multiple levels, with money received from private, federal, and provincial sources. Half of the development cost was shared between the owner communities and the GSCT (Kelly, 2013), and a loan from the Northeastern Ontario Investment Pool was facilitated by the Waubetek Business Development Corporation to help secure commercial financing for the project (ISED, 2018). Additional funds were received from Aboriginal Business Canada, Aboriginal Affairs and Northern Development Canada, and the Northern Ontario Heritage Fund.

Although the initial idea was to build the project on-reserve in one of the partner communities, this was quickly deemed not feasible as critical infrastructures were lacking in the communities to support the building. In the end, the site in Little Current was selected to take advantage of already-existing infrastructure and capitalize on its position as a main entry-point to the island. Further, the hotel is also located near historical meeting grounds for the Indigenous peoples of the region, adding significance to the project for the communities.

## Design and Construction Process

The design process sought to maximize engagement with the partner communities. While data collected by the GSCT informed the technical aspects of the design like room number and room types, broader design considerations were decided on by the communities involved. A steering committee was formed that included Elders from the communities, and multiple focus groups and meetings were held—an effort was made to include the region's First Nations youth in the design process. This process lasted twice as long as the typical duration for this phase of a construction project but had overwhelmingly positive outcomes.

At the start of construction in 2011, the partners held a traditional ceremony to break ground, which helped give significance and meaning to the project. Indigenous contractors, companies, and employees were sought to help, and non-Indigenous contractors were encouraged to hire First Nations individuals. Partner communities also placed members interested in construction at the hotel to give them on-job experience to transfer to further opportunities. As a result of having to work through multiple different funding arrangements, construction spanned two years. Having to undergo two winter construction phases drove up costs, and a lack of technical expertise in leadership positions during construction brought the project team close to burning out. Nevertheless, the hotel opened for business in May 2013.



## Design Elements

The design of the hotel incorporates traditional elements, shapes, and materials throughout the building. The goal, set by the Elders, was to pursue a subtle First Nations design that was able to tell the story of the area's First Nations. Most obvious is the incorporation of wood, a traditional material, throughout the building and the design of the lobby in the shape of a teepee, a traditional building form of the Anishinaabe peoples. Natural materials for construction were collected with the help of the member communities from their traditional lands (Kelly, 2013). The lobby further incorporates more understated First Nations elements in its design. It is larger than usual, to accommodate First Nations ways of interacting when hosting conferences, wherein much of the networking occurs outside of the meetings in less formal settings. Upon entering the lobby, there are large windows facing north that allow for an initial view of the nearby hills and the North Channel, important landmarks for the region's First Nations, in order to help tell the story of the resident First Nations peoples. There are six pillars in the lobby, representing six Grandfather Teachings, with the seventh Teaching of Wisdom, tied to old age, represented by the fireplace—which in itself represents a passage to the spirit world in local cultures. The six pillars are also visible in the ceiling of one of the meeting rooms, with the seventh teaching represented by the meeting itself.

There are three meeting rooms in the hotel, three feathers on the south side of the building, and three pillars at the back of the hotel, all of which are a nod to the Three Fires Confederacy that the local peoples are a part of. Four other pillars are visible in the hotel that represent the Four Directions and the Medicine Wheel Teachings. In addition to the design, Indigenous art is displayed throughout the building.

In the name of Indigenous stewardship of the land, environmentally sound choices were made throughout construction, including the addition of a geothermal heating system. The result of the design considerations is a sustainable building that allows any worker to give a tour of the hotel and use the building itself to tell the story of the First Nations peoples and teach about Anishinaabe culture.

## Project Completion and Outcomes

The project, and its full ownership, has become a source of pride among the partner communities. After construction was completed, youth from the communities were brought on tours through the hotel in an effort to build pride and instill a sense of ownership of the project. The integration of culture into the design and construction has made it more meaningful to the communities and their members, with the innovative nature of the partnership model, the design, the location, and the success of the business all being important catalysts for pride.

Efforts were made to build capacity in the partner First Nations throughout the project. The investing partner communities ran programs to educate, and train interested members in the hospitality and tourism sector. Part of this training included allowing the opportunity to go through the Ontario Tourism Education Corporation's food and beverage program (Anselmi, 2013). Individuals were also able to transfer jobs from the construction process into long-term careers. The hotel project, combined with capacity-building efforts, has resulted in lasting employment for the communities—the hotel employs 55 full-time staff, 80 percent of which were Indigenous as of 2018 (ISED, 2018). The project has become a steppingstone for the communities towards further development and projects.

Since it opened, the hotel has become a hub for tourism activities on the island. Overnight motor coach stays on the island have increased, whereas the buses (that can carry upwards of 50 tourists) used to simply pass through the area. This has allowed those on motor coach tours to do activities and engage with other service providers on the island, providing a boost to local tourism operators. In fact, the GSCT used the hotel to market packages to tour operators that bundled local activities from local businesses with stays at the hotel (Kelly, 2013). This has helped develop the Indigenous tourism sector on the island. The oversized conference centre compared to the number of rooms available has led to conference overflow benefitting motels, bed and breakfasts, cabins, and lodges in the area (Kelly, 2013). The indigeneity of the design and ownership of the hotel has played a role in its appeal, especially for international travelers, and its success, according to an industry professional in the area.

## Squamish Lil'Wat Cultural Centre – Whistler, British Columbia

### Project Overview

**Community Specifics:** The Lil'Wat and Squamish peoples, whose traditional lands overlap at Whistler, have a long history of collaboration.

**Challenges:** Both First Nations communities wanted to be more visible on their land, Whistler, as it was beginning to gain international attention. The broader Whistler community also wanted to showcase the local First Nations,

**Solution:** The creation of a 2,880-square-metre centre at the Whistler Ski Resort using green building technologies and environmentally sound techniques

**Funding sources:** Vancouver Olympic Bid Corporation, INAC, the provincial government, their Band governments, the Whistler municipal government, and private corporations like Bell.

**Cost:** \$30 million

**Project length:** The construction agreement was signed in 2001; the design process lasted five years; the construction took three years, beginning September 2005 and lasting until the Centre's opening in 2008.

**Outcomes:** The multi-use building includes exhibits from both Nations, hosts performances and guided forest walks, has a theatre, a First Nations gift shop, and an Indigenous-inspired eatery. Both First Nations and Whistler townspeople come together for activities in this space.

The Squamish Lil'Wat Cultural Centre is a 2,880-square-metre centre at the Whistler Ski Resort. The first joint cultural project between two separate First Nations in North America, it serves to showcase and preserve the culture and traditions of the local Squamish and Lil'Wat Nations (Bower, 2017). The building includes exhibits from both Nations, hosts performances and guided forest walks, has a theatre, a First Nations gift shop, and an Indigenous-inspired eatery called the Thunderbird Café. The Centre is not-for-profit, with all proceeds reinvested in training and cultural revitalization programs for its two owner Nations (O'Conner, 2010).



## Initial Stages

There exists a long history of collaboration between the Lil'Wat and Squamish peoples, whose traditional lands overlap at Whistler (Atkins 2019a, 2). As the resort at Whistler began to gain international acclaim and attention, there was a desire from both First Nations to be more visible on their land (Atkins 2019a, 2). Similarly, Whistler wanted to better showcase the local First Nations cultures (Atkins 2019a, 2), so interests from all parties were aligned. An agreement to pursue the construction of a cultural centre was signed in 2001. A critical moment in the life of the project was Vancouver's Olympic bid, which planned to hold multiple events at the Whistler Ski Resort. To make a bid for the Olympics, support from First Nations groups had to be secured—which provided substantial leverage to Squamish and Lil'Wat to bargain for funding. Lil'Wat and Squamish agreed to sign on to an agreement with the Bid Corporation that included commitments to provide funding to the Cultural Centre (Atkins 2019a, 2). When Vancouver won the bid, the First Nations capitalized on their newfound leverage to secure funding from INAC, the provincial government, and their own band governments. The Whistler municipal government provided the land in-kind, and the project received substantial funding from private companies—one of the most notable being Bell, who contributed \$3 million to the project (Atkins 2019a, 2). The project was innovative even in its initial stages, as it was to be the first cultural project co-owned and led by two distinct First Nations in North American history (Bower, 2017).

## Design and Construction Process

A project steering committee was formed shortly after the signing of the official agreement at the start of the project. This committee was made up of First Nations chiefs and representatives, lawyers, accountants, museum and cultural experts, and representatives from the funding partners (Atkins 2019a, 3). This committee would help guide the final design of the building, privileging input from the two participating Nations (Atkins 2019a, 3). They then hired Indigenous architect Alfred Waugh, who—while not from the community—had experience designing other Indigenous projects (Atkins 2019a, 3). Waugh then hired two Indigenous interns, to give them the opportunity to both design in an Indigenous context, and to gain valuable experience working on complex projects (Atkins 2019a, 3). The design process was extended over a five-year period, which is much longer than is typical, due to both the iterative nature of the design process with the steering committee and because of pauses until more funds were raised to support the initiative (Atkins 2019a, 4). At steering committee meetings, Waugh would use significant imagery to easily communicate concepts with his First Nations partners, mixing photos of traditional longhouses and pit-houses with design drawings (Atkins 2019a, 3). The design was mainly guided by the natural elements of the site, the vision of the participating First Nations, and the intended business plan for the building (Atkins 2019a, 3).

Terry Ward, who had a long history of work with the local Indigenous communities, was hired as the construction leader for the project (Atkins 2019a, 6). Both the Lil'Wat and Squamish Nations wanted to be involved in the build, so Ward made sure that tradespeople from each community took on contract pieces themselves like excavation, foundation building, and framing (Atkins 2019a, 6). There had been a significant emphasis on building construction capacity during past projects within the Squamish Nation, so much so that the Nation used these projects to create a construction company called the Newhaven Projects Limited Partnership, which took on a significant proportion of the building's construction (Atkins 2019a, 5). Lil'Wat created its own group as a result of this project, to be able to officially take on construction contracts (Atkins 2019a, 6). During construction, a mother bear and cub wandered through the building. In the stories and culture of the two Nations, this was understood to mean that the bear had blessed the building, an auspicious sign (Naturally:Wood, 2010). Construction took place over nearly three years, spanning from September 26th 2005, until the Centre's opening on Indigenous Peoples' Day in 2008 (O'Conner, 2010). In the end, the cost of the project would come in at \$30 million (BKL, n.d.).



## Design Elements

Given the values of environmental stewardship among the two Nations, a heavy emphasis was placed on green building technologies and environmentally sound techniques (Atkins 2019a, 4). The building, and its construction, left much of the surrounding area undisturbed, and involved planting native plant species all around the building, to emphasize its connection to nature (Green Building Brain, n.d.). Furthering the theme of connection to the natural world, the main roof of the pit-house and the parts of the main roof are green roofs planted with local species (Green Building Brain, n.d.). Innovative low-emissivity windows and advanced insulation technology help to reduce heating and cooling energy demands, which are further reduced through a design that facilitates natural ventilation (Atkins 2019a, 4). A number of other smaller modifications, like efficient lighting and plumbing, and using recycled materials, helped the building achieve a LEED Gold environmental certification—a prestigious distinction demarcating special achievement in environmental construction (Green Building Brain, n.d.).

The design of the building mimics the traditional built forms of both the Squamish and Lil'Wat peoples. The main portion of the building is in the form of the traditional cedar plank longhouse of the Squamish people, while the other aspect takes on the traditional pit-house form of the Lil'Wat. The latter is made of traditional materials and is remarkably close to historical architectural proportions (Atkins 2019a, 5). In keeping with the theme of traditional building design, the glass wall in front of the longhouse portion of the building is laid as overlapping planks in the same way that cedar planks were laid in traditional longhouses (Atkins 2019a, 5). As is tradition, the building is oriented along the four cardinal directions, with the main door opening to the east (Atkins 2019a, 5). At the main entrance, guests are welcomed by carved house posts and carved cedar doors (Atkins 2019a, 5).

Keeping the nature of local First Nations activities and gatherings in mind, the architects created multi-use spaces that can be used for both economic purposes and to host cultural gatherings for the communities (Atkins 2019a, 6). Traditional art and tools are displayed throughout the building, reifying the two cultures (Green Building Brain, n.d.).

Perhaps the most marking aspect of the building's construction is the use of wood. Locally sourced Douglas Fir and Western Red Cedar are used throughout the building, both of which are traditional materials used by the First Nations in most of their construction (Naturally: Wood, 2010). Not only is the wood inherently sustainable, being renewable and carrying a low embodied energy, it helps fulfill the need to carry First Nations customs and traditions into the future, serving to showcase the historical practices of two communities (Naturally:Wood, 2010).

## Project Completion and Outcomes

The Culture Centre has had a far-reaching impact on the two Nations. In terms of the building design itself, it has allowed these two First Nations to tell their story in their own way, avoiding a euro-colonial museum-style historical display of artifacts (McIntyre, 2008). A focus on traditional arts in the Centre has helped revive and preserve traditional knowledge, culture, and spiritual teachings. It has helped revive interest in ancestral languages, as well as in Indigenous arts like beading, basket-making, weaving, and carving (Atkins 2019a, 6). In order to weave the blankets featured across the building, one of the community's master weavers had to work to pass on the art form to multiple new apprentices, helping to preserve the practice. The art was nearly dead until the building came along and provided substantial incentive to help revive it (McIntyre, 2008). Sharing art and First Nations culture throughout the building concept and design has had the effect of inspiring greater understanding and respect across cultures (Atkins 2019a, 6).

Showcasing the art, history, and culture of the Squamish and Lil'Wat Nations in such an innovative way has helped inspire pride among the community members (McIntyre, 2008). Due to multi-use considerations in its design, the building has come to serve as a community space wherein the First Nations and Whistler townspeople come together for activities, strengthening the bonds between the communities (Atkins 2019a, 6). There is a perception among those involved in the project that heavily involving community members in the construction has led to very high levels of care and maintenance of the building going forward (Atkins 2019a, 6).

Efforts to build capacity through the project are also paying off. The experience with the Cultural Centre project helped inspire Squamish to establish an Indigenous trade school in 2011 (Atkins 2019a, 6). Thus far, over 1,000 Indigenous individuals have attended the school. The Cultural Centre also created a Youth Ambassadors Program, wherein youth from the communities receive hospitality and tourism training through a partnership with Capilano University. The official certification they receive can help serve as a gateway to pursue further studies or a career in the industry (Atkins 2019a, 6). To date, 410 youth have been through the program (Planeterra, n.d.). Through these initiatives, the two Nations have been able to capitalize on the massive boom in tourism in the region (McIntyre, 2008). The project has also inspired future development at Whistler in partnership with the two Nations, where they plan on building staff houses in the ski community (Atkins 2019a, 7).

## Timmins, Ontario – Timmins Public Library and Judy A. Shank Integrated Services Building

### Project Overview

**Community Specifics:** Timmins is a regional hub with a population of 41,145 people, but the City provides services to approximately 100,000 people. Forestry is a large industry in Timmins.

**Challenges:** The Library's collection and members were outgrowing its space.

**Solution:** The creation of the Judy A. Shank Integrated Services Building, housing both the Timmins Public Library and community service providers.

**Funding sources:** City of Timmins and the Canadian Mental Health Association.

**Cost:** \$13 million.

**Project length:** Planning started in 2001. Doors opened on April 20, 2005.

**Outcomes:** Increase in library usage; improved facilities for services (library and other community services).

### Initial Stages

Though Timmins has a population of around 41,000 people, its location in northeastern Ontario, and status as the fourth largest population hub in the region, means the City acts as a service hub for around 100,000 residents in total. That being said, the City identified the need for a new centre that would house both the Public Library and the Canadian Mental Health Association's Cochrane-Timiskaming Regional Offices, along with several other service offices.

Timmins has had a public library since 1924, though the location has changed multiple times throughout its lifespan. The original Timmins "Free" Public Library was formally opened in the summer of 1924 in the basement of a building. Prior to its current location, the library was housed in a crowded, two story building that served as a former post office (Giorno, 2015). The library remained in this location from 1960 to 2005, when the new building opened. Motivating factors behind the creation of a new library building included needing more space to provide a stimulating learning environment and room for new technology used to engage young people (CWC, 2019 2). The Canadian Mental Health Association also needed more space to provide assistance to the region (ibid).



## Design and Construction Process

In April 2001, the campaign for a new library building began. Between 2001 and 2005, many meetings, design proposals, and fundraising campaigns took place before the building's doors eventually opened to the public on April 25, 2005. When discussing design and materials, the City of Timmins highlighted forestry products as a vital part of the City's heritage, culture, and economy. For this reason, the City desired, wherever economically justifiable, to incorporate wood products into the appearance and structure of the Library (CWC, 2019, 3).

In terms of the costs associated with using wood materials, the Canadian Wood Council did a material cost comparison between wood and steel materials (see Appendix 1 for breakdown). The Council concluded that the cost for wood is \$176.43/m<sup>2</sup>, while the steel option would be \$209.80/m<sup>2</sup> (CWC, 2019 6). Thus, while wood is also culturally and historically appropriate, it is also the more economical choice; the wood construction materials provided better value and lower cost (CWC, 2019 11). The analysis proved to skeptics the ability for wood to provide an equal or better value than comparable concrete or steel construction systems (CWC, 2019 7).

In addition, all the design elements – architecture and engineering – was done by organizations local to Timmins. The architecture firm was Ano Architects/Architectes Inc., and the engineering firm was B.H. Martin Consultants Ltd. Similarly, the construction was completed by Cy Rheault Construction Ltd., another business local to Timmins. The benefit of using local labour and design people is the local knowledge they bring to the projects. Operating in this community, the businesses recognize the importance of integrating wood into the structure, as well as the community's needs. Moreover, the money for the project planning meetings and completion stay in the community, while also building local capacity to carry out such projects.

## Design Elements

As mentioned, the Timmins Public Library shares a structure with community service agencies. The library itself is a one-story, 32,000ft<sup>2</sup> unit, and the office complex is two stories; it houses local services agencies and is 69,00ft<sup>2</sup> (Cy Rheault, n.d.). The Library and Coalition Centre share a common entrance that welcomes guests with sunlight from the windows and skylights, as well as the use of light wood finishes (CWC, 2019 3).

Even the shelves used in the library were specifically selected to complement the open layout of the building while also maximizing display and storage space. Natural light was able to flow through the shelves, and the colours selected blended into the interior aesthetics (Ergo, n.d.). Paired with high ceilings, the minimal use of walls, and low furniture heights all create a welcoming, open, unobstructed view of the building (CWC, 2019 5).

The architectural style of the building is "contemporary" with the most distinguishing feature of the Timmins Public Library being its extensive incorporation of wood materials. As mentioned previously, the City wanted local wood to be used as an ode to the region's forestry sector. Thus, the library construction prioritized the use of locally manufactured products (i.e. wood) for the main structural material. Not only did the use of local wood showcase the city's culture, history, and large forestry sector, but it also made efficient use of Timmins' natural resources and reduced construction waste (Tourism Timmins, n.d.). Glulam columns and beams, designed to mimic trees, provide the main structural support for the library; there are 26 columns that spread across the Library (CWC, 2019 5). Some of the wood used for the columns and beams include 40- to 60-year-old red pine (Cy Rheault, n.d.).

For the side of the building with offices, the partition walls are wood-framed and constructed to provide a high level of "acoustical privacy," or soundproofing, making it possible for busy offices and a quiet library setting to coexist under one roof (CWC, 2019 5). The use of wood meets all code requirements, provides functional, positive indoor environments, and provides library and office facilities that have a low environmental impact (CWC, 2019 11). The low environmental impact can be attributed to the fact that there is low energy input required to manufacture wood products. Also, wood products can be recycled or reused, and are ultimately biodegradable (ibid).

In fact, the eco-friendly design of the facility was recognized by the Green Building Initiative, with the building achieving a 3 Green Globes rating for its efficient use of resources and sustainable development (Tourism Timmins, n.d.). The building was also awarded the Wood Works Award (Cy Rheault, n.d.).

### Project Completion and Outcomes

The new library space now houses an expanded reference library, a larger periodical space, improved areas for computers and internet access, meeting rooms, and an improved children's library section (CWC, 2019 5). The building has become a source of pride for the community, as well as becoming a tourist attraction. The library hosts an array of events, both in-person<sup>3</sup> and virtually.

Today, the library has over 45 public workstations, a training area with 10 workstations, multiple study rooms, meeting rooms and a 3D theatre. The library provides access to over 50 databases and more than 100,000 print and audio-visual material. In addition, the facility is entirely wheelchair accessible (TPL, n.d.). Additionally, since the new library opened in 2005, its use has increased 33 percent (CWC, 2019 5). Both the library and the adjacent building provide an improvement in facilities for library services and the essential community services offered next door (CWC, 2019 11).

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<sup>3</sup>In-person events did not occur during the COVID-19 pandemic.

# Advantages of Innovative Public Spaces Design

## Improved Service Delivery and Functionality

Both of the conference centres and the public library experienced improved functionality on account of their innovative design. The First Nations elements—including not only traditional materials and arts, but the very shape of the buildings and strategic use of various structural components—incorporated throughout the building's design allows them to provide customer and tourism experiences that are more holistic in nature, facilitating a more immersive and educative experience. This has proven to be a big attraction for many non-Indigenous and international visitors at the Manitoulin Hotel and Conference Centre, helping them attract tourists seeking this kind of experience. Similarly, Timmins' library has become a tourist attraction due to its innovative design elements and events hosted in the facility. By adding these elements to its design, the building itself can become an attraction, and a resource from which to educate and share cultural information.

Both conference centres also take into account First Nations ways of interacting and gathering, making them more functional for their owner communities and partners. At the Manitoulin Hotel & Conference Center, lobbies are designed to facilitate First Nations networking, and the pillars representing the grandfather teachings are visible from a meeting room—providing a way to add significance to gatherings, should that be desired. At the Squamish Lil'Wat Cultural Centre, multi-use rooms were designed to facilitate First Nations cultural gatherings. There is significant evidence in the literature that designing spaces with Indigenous peoples in mind (or better—with Indigenous peoples!) leads to improved outcomes for the Indigenous groups that use the space. This has been seen with hospitals, schools, and, in particular, learning centres (Nash & O'Rourke, 2019; Grant, 2011). This is due not only to better tailoring spaces to serve Indigenous needs, but because it allows the spaces to rid themselves of the colonial connotations that come with western design and can negatively affect Indigenous comfort and perception of spaces (Carr, 2011). On the other hand, the Timmins Library and Coalition Centre provides a modernized facility to house the library and community service providers, also allowing the library to expand its offerings and better serve the community overall.

## Cultural Showcases in a Culturally-Appropriate Way

Engaging in culturally appropriate design has allowed for the communities involved with the projects to showcase their cultures. In other words, the buildings allow the communities to tell their stories in their own way, representing an important opportunity for cultural self-determination and fostering cross-cultural understanding. By incorporating cultural elements and First Nations art forms throughout their design, the buildings are a radical departure from colonial museum-style cultural showcases that allow communities to take agency over their own image, affecting how they are perceived not only by others but by their own communities as well. For example, the Manitoulin Hotel and Conference Centre has been used to create community pride in local youth through its representation of local cultures, its scale, and its innovative nature. The Timmins Library and Coalition Centre also showcases a natural resource that is at the forefront of Timmins' history and economic development. The usage of local wood showcases the reliability of the product, and its ability to surpass environmental and cost considerations.

Museum-style approaches to cultural showcases often serve to relegate Indigenous cultures to the past—depicting them as pre-modern or even already extinct (Kwan, 2020). By diverging from this narrative, communities are able to establish that their cultures are still very much alive and thriving in a modern world. In doing so, the buildings can help foster cross-cultural understanding and respect with outsiders in a way that communities are able to direct (Atkins, 2019b).



## Local Materials and Local Benefits

All three of these buildings make heavy use of local materials and art in their design. Primarily, locally sourced timber makes up a significant proportion of the materials in all three buildings. This wood was harvested by local tradesmen in the three instances, providing valuable employment and capacity-building opportunities within the communities. Using local wood in building construction also helps to reduce the buildings' environmental footprint and construction costs, while also serving as another opportunity to showcase local building traditions (Yard, 2016).

The use of local art in Squamish Lil'Wat centre has also had remarkable local benefits. By focusing on implementing traditional art forms in the building, the community was able to revive many historical practices, like blanket-weaving and carving, that were in danger of being lost to time. Post-construction, the presence of these art forms in the centre has also contributed to reviving interest in them within the community. By showcasing these practices in hyper-visible buildings such as these, it seems that communities are able to help ensure that their traditional arts and practices are maintained through time.

## Environmentally-Sustainable Buildings

Much like the other innovative infrastructure projects mentioned in the other related series' volumes, these buildings also meet higher environmental standards than most of their peers. The Squamish and Lil' Wat Conference Centre does this through the heavy use of wood and recycled materials throughout the building, passive heating techniques, and a high-quality building envelope. For its efforts, the building was awarded a prestigious LEED Gold Energy Certification. The Timmins Library and Coalition Centre also relied heavily on locally sourced wood to construct their facilities, again lowering the environmental footprint. In fact, wood was found to be both more economical and environmentally friendly than alternative materials like steel or concrete. The Manitoulin Hotel and Conference Centre, on the other hand, makes a number of smaller environmentally-sound choices throughout its design, like high-efficiency fixtures, the use of wood, and a geothermal heating system to achieve improved environmental outcomes. This is further evidence that putting design agency in the hands of First Nations and community members will likely result in environmentally sustainable projects, through the use of various technologies and techniques.

## Sociocultural Impacts

These buildings have become important catalysts for pride within their owner communities. They have been used as tools through which communities are able to showcase their culture and capabilities to both their own membership and to others, through the project's size, innovative elements, and emphasis on local cultures and arts. A feeling of pride seems to go hand-in-hand with a sense of ownership of the resulting buildings, which has been shown to increase maintenance and long-term durability of infrastructure projects (Atkins, 2019a).

These projects, as previously mentioned, were able to help preserve traditional practices through their incorporation in project designs. Providing substantial incentive to spread them throughout the community and help ensure their long-term health. Also, the First Nations communities are motivated to continue to take on innovative development projects on account of the success of the earlier projects. Projects such as these seem to instill confidence and a sense of capability within communities that can help push them towards further development.

# Disadvantages of Innovative Building Design

## Extended Construction and Design Processes

Taking on an innovative project like these buildings seems to result in extended design and construction processes. The co-design processes for these buildings were very long, involved processes that collected input from across communities—designing the Manitoulin Hotel and Conference Centre took approximately twice as long as typical, while the Squamish Lil' Wat Conference Centre design took approximately five years to complete. This is due both to the iterative nature of co-design processes and the work that needs to be done to adequately capture the needs and desires of all community members while simultaneously meeting functional requirements and being technically sound (Atkins, 2019a). It should be noted that, despite the extended timeframes, there were no complaints from the communities about the design process, indicating the importance of community engagement in the infrastructure design process.

The construction phases of both projects also wound-up taking place over an extended period of time—three years for the Squamish Lil' Wat Conference Centre, and two for the Manitoulin Hotel & Conference Centre. This issue is related to the funding complications that these projects dealt with, as will be discussed in the next section. This is especially the case for the Manitoulin project. The heavy emphasis on building capacity within communities for the B.C. conference centre may have also served to delay that project, or at least extend its construction phase. Moreover, incorporating novel technologies or building methods into a build, like geothermal at the hotel, also contributes to extending construction. When taking on innovative building projects, one should be aware that construction delays, or at the very least an extended construction phase, is likely.

## Funding Complications

Due to a multitude of factors, including extended design periods, high quality materials, and the extensive integration of alternative innovative designs, these buildings proved to be expensive endeavors. The Manitoulin Hotel and Conference Centre cost approximately \$12.5 million to build, the Timmins facility around \$13 million, while the Squamish Lil' Wat Conference Centre was a near-\$30 million project.

Due to low capital resources held by their owner First Nations, and the piecemeal nature of much federal infrastructure funding, the conference centre projects required funds from multiple different sources including government, Indigenous, and the private sector. This led to a few negative consequences for the project. First, working under multiple different funding timelines and requirements led to project and construction delays. Projects also needed to be paused at times, while waiting for more funding to arrive. Furthermore, this posed a significant administrative burden on community project leaders, especially for the Manitoulin Hotel and Conference Center, where there was little experience of project management at this scale. This led to feelings of burnout and significant stress among project leadership. Without significant changes to infrastructure funding models for Indigenous communities, this poses complications to future projects of this nature.



# Successful Practices

## Co-Design Processes

Co-designing the building projects with Indigenous communities appears to be essential in developing appropriate public building infrastructure. It is a strong symbolic shift away from the historical approach to infrastructure development towards one that gives Indigenous groups power for self-determination, and agency over the process. Even allowing the Timmins community to identify a culturally significant building material to highlight in design and construction led to more positive outcomes. Further, it ensures that buildings are culturally appropriate, and fill the needs identified by the community. In doing so, it enables the community to choose how it will represent itself to its own community members and to the outside world—allowing them to control their image. More generally, co-design has been widely recognized as a best-practice for architecture in an Indigenous context (RAIC, 2017).

## Self-Construction

Taking on a self-construction model allows for multiple ancillary benefits to be reaped from the infrastructure project. To adopt a self-construction model, broadly speaking, is to encourage maximal community involvement in the construction process. This can be done by employing community members and community firms and allowing community representatives to take an active role in leading construction. This provides employment to community members and Indigenous companies during the construction process, which carries the added benefit of helping keep project spending within the community. These employment opportunities are an invaluable chance for skill transfer and capacity building within each community. These skills, in conjunction with the experience working on the project, can then be transformed into new jobs after the project is completed. There seems to be a feeling among the communities involved with the case studies examined here that engaging in the self-construction process helps to increase the pride felt within the community upon project completion and motivates a high level of care and maintenance once the project is complete.





## Integrating Local Arts and Materials

The incorporation of local materials into the building projects facilitates the achievement of several desirable project outcomes. First, using local and traditional building materials, like locally sourced wood, enhances the cultural appropriateness of the buildings, while simultaneously helping reduce each project's environmental footprint. Similarly, integrating local arts into the building projects furthers the cultural appropriateness of the project. Additionally, these can be used to help showcase local cultures through the building, facilitating cross-cultural understanding and the construction of a self-directed community image. Finally, putting an emphasis on local arts and materials can help to revive traditional practices within the communities. By providing opportunity and incentives to local craftsmen, artists, and tradespeople, it encourages the continuation of these practices, as well as their sharing with other community members. As seen with the Squamish Lil' Wat Conference Centre, this can provide a critical opportunity to sustain practices that might have otherwise been lost. Project budgets should include room for their integration. In some cases, such as the Timmins Library construction, local materials might even be more economical than their alternatives.

## Capitalizing on Local Opportunities

Both conference centre projects fit a niche that had long been identified in each locale. The Squamish Lil' Wat Conference Centre addressed the growing tourism industry in the Resort Municipality of Whistler and a simultaneous lack of visibility for the local communities. Moreover, the project was able to capitalize on the local opportunity presented by the Olympics to garner additional funding from both private and public partners.

On the other hand, the Manitoulin Hotel and Conference Centre filled a regional gap identified by local tourism professionals, informed by both research and business connections. The development of the buildings was then used as a catalyst to develop education and certification opportunities for local youth, which have proven very successful. Likewise, the Timmins Library and Coalition Centre was created on the need for more room to house these crucial community services.

These opportunities have allowed for each community to maximize the benefits that they receive from the construction of these buildings. The development of such projects should look to capitalize on the opportunities presented by the economic and social realities of the moment for project development. In addition to this, it should be recognized that these projects in-and-of-themselves represent significant opportunities for further development of local capacity, talent, and jobs.



## Conclusion

Though unique community circumstances and funding complications can lengthen the design and construction process, the above case studies prove community involvement is essential when rolling out large-scale infrastructure projects in these First Nations, and even non-Indigenous infrastructure projects. Quickly done, basic build infrastructure projects are not conducive to long-term growth or success; specifically tailored designs must be sought through community participation, and when possible, built through community-led construction using local materials. As demonstrated above, public buildings that improve service delivery and functionality, are culturally appropriate, and environmentally-conscious are obtainable for communities. Though the process may result in longer project timelines, the long-term benefits of innovative infrastructure should far outweigh project-related obstacles.



## Appendix 1: Steel/Wood-Frame Cost Comparison (per bay)

Source: Canadian Wood Council, 2019 6

**TABLE 1 STEEL / WOOD-FRAME COST COMPARISON (per bay)**

<b>Steel Option</b>	<b>Cost</b>	<b>Wood Option</b>	<b>Cost</b>
HSS columns: supply and install	\$1,822	Glulam columns and connectors: supply	\$1,136
WF Beams 21WF55: supply and install	\$3,362	LVL support beams: supply	\$2,160
Joists: supply and install	\$4,464	Wood I floor joists, hangers, web stiffeners: supply	\$1,609
Bridging: supply and install	\$176	OSB 15.9 mm (5/8") sub-flooring: supply	\$569
Steel floor decking: supply and install	\$706	Insulation: supply and install	\$275
Wire mesh reinforcement: supply and install	\$318	2 layers type X gypsum w resilient channels: supply	\$769
Concrete: purchase	\$900	Wood I floor joists, sub-flooring ,columns and beams: install	\$4,215
Concrete: place and finish	\$847	Gypsum board and channels: install, tape and fill	\$846
Concrete: hoisting	\$175		
Insulation: supply and install	\$275		
Gypsum board: supply, install, tape and fill	\$724		
<b>TOTAL Steel Option</b>	<b>\$13,769</b>	<b>TOTAL Wood Option</b>	<b>\$11,579</b>
Cost per m <sup>2</sup> (ft. <sup>2</sup> )	\$209.80 (\$19.50)	Cost per m <sup>2</sup> (ft. <sup>2</sup> )	\$176.43 (\$16.40)
<i>Notes:</i>			
STC	54	STC	55
IIC	47	IIC	49
Fire rating not required - gypsum ceiling installed for acoustics.		45 min fire rating required	

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*Northern Policy Institute is Northern Ontario's independent, evidence-driven think tank. We perform research, analyze data, and disseminate ideas. Our mission is to enhance Northern Ontario's capacity to take the lead position on socio-economic policy that impacts our communities, our province, our country, and our world.*

*We believe in partnership, collaboration, communication, and cooperation. Our team seeks to do inclusive research that involves broad engagement and delivers recommendations for specific, measurable action. Our success depends on our partnerships with other entities based in or passionate about Northern Ontario.*

*Our permanent offices are in Thunder Bay, Sudbury, and Kirkland Lake. During the summer months we have satellite offices in other regions of Northern Ontario staffed by teams of Experience North placements. These placements are university and college students working in your community on issues important to you and your neighbours.*

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