



MUCLEAR WAST MANAGEMENT ORGANIZATION SOCIÉTÉ DE GESTION DES DÉCHETS NUCLÉAIRES

Ignace area community well-being studies
A summary of key findings

## Land acknowledgment

The Nuclear Waste Management Organization (NWMO) acknowledges that we have worked in many different Indigenous territories since the inception of the organization. We are grateful to the Indigenous and municipal communities that have worked with us over the past 20 years.

We further acknowledge that today we are working in northwestern Ontario in the traditional territory of Wabigoon Lake Ojibway Nation with the community of Wabigoon Lake Ojibway Nation and the Township of Ignace.

In southern Ontario, we are working in the traditional territory of Saugeen Ojibway Nation (SON) with the two SON communities – Chippewas of Nawash Unceded First Nation and Chippewas of Saugeen First Nation – and the Municipality of South Bruce.

We further acknowledge that in both the northwest and the south, we have the privilege of working with other First Nations and organizations, with Métis communities and the Métis Nation of Ontario, and many municipal communities that have all expressed an interest in learning about our work.

As part of our commitment to Reconciliation, we recognize both the historic and current injustices far too many Indigenous communities endure. We pledge to do our part to encourage well-being in communities with which we work.

# **Table of contents**

Executive summary	2
Introduction	
People	
Community and culture	
Municipal infrastructure and housing	
Economics and finance	28
Summary and conclusion	35
Appendix	36

## **Executive summary**



The Wabigoon Lake Ojibway Nation (WLON)-Ignace area is one of two potential host areas remaining in the Nuclear Waste Management Organization's (NWMO) siting process for a deep geological repository to store Canada's used nuclear fuel.

In 2020, Ignace together with the NWMO, gathered public input on a project vision that summarizes community aspirations, interests and questions should the project be sited in the area. The vision includes the following four organizing themes: people, community and culture, infrastructure, and economics and finance. In 2022, a series of social, cultural, economic and infrastructure community studies was implemented to explore and provide information on how the project might align with the community vision. This report summarizes these community studies to help the community of Ignace learn more in order to make an informed decision about the project.

Some key study highlights for each of the four vision themes follow below.

## **PEOPLE**

Ignace aspires to grow its population to between 2,500 and 3,000 residents. With attraction and retention of the workforce associated with the project and business growth, the Township of Ignace could see a population increase of about 80 per cent over and above the existing population by the operations phase of the project that is currently planned for 2043. This growth could include an inflow of new residents of diverse age, culture and interests. The project would create additional career opportunities over a long period of time, especially for northwestern Ontario Indigenous and non-Indigenous youth, who could both live and work in areas where they have grown up. Over the many project phases, surrounding community population growth outside the immediate Ignace area would also occur.

## **COMMUNITY AND CULTURE**

Ignace aspires to be a livable and vibrant small-town community that shapes its own unique character by enhancing its innovative capacity and the quality of place, while maintaining its connections to nature and a northern lifestyle. Studies were completed to assess the potential effects that the project could have on social, cultural, recreational and health infrastructure and services of the community. To date, social infrastructure is built to serve a large population and has adequate facility space, but with need for

ongoing maintenance. In the event of project siting, it is expected that services would need to be expanded for a growing and changing population. As an example, daycare services would be needed to support workers and families. With proactive planning, new residents could be integrated into a more vibrant community, while preserving and celebrating existing principles and values and connection to the environment.

## **INFRASTRUCTURE AND HOUSING**

The community vision calls for the maintenance and improvements of existing infrastructure to meet the needs of residents. Municipal infrastructure (i.e., water, wastewater, roads, etc.) and housing were constructed during the resource-based era expansion of the 1970s and 1980s, supporting former mining and larger-scoped forestry activities. As these industries reduced in the 2000s, infrastructure within the Township of Ignace did not need to operate at its full capacity. While water and wastewater infrastructure are assessed as fair and in good working conditions/order, upgrades to the wastewater plant will be required in the medium term (in 10 years). A preliminary assessment has determined that the water treatment plant may require enhancements, and both systems will see additional demand as the project builds a new Centre of Expertise in Ignace and new housing is constructed. A range of new houses and higher density accommodations would need to be built for project employees and short-term workers due to current limited supply. Emergency services may require planning to accommodate changing population dynamics. Housing for seniors and vulnerable groups is an active existing concern, and the existing fire hall requires relocation.

## **ECONOMIC: LOCAL AND REGIONAL BENEFITS**

Ignace aspires to sustainable long-term development that is both fiscally and financially sound. This includes the diversification of local businesses, increased household income and the growth of the tax base. Other communities in the local area such as the City of Dryden also aspire to grow and diversify their economies. Presently, challenges to labour supply and demand exist for both the local and the surrounding region.

Studies assess how the project could create economic opportunities. The project would attract a new labour force that will be sustained over several decades. A growing population helps to support new businesses and services and a more diversified economy. The Centre of Expertise could be a catalyst for enhanced tourism and associated businesses. Communities and others within the region would need to work together to leverage the economic growth opportunities associated with the project.

The project could provide positive economic stimulus with timely planning and collaboration that ensures both the NWMO and the WLON-Ignace area communities are adequately prepared. Based on experiences and lessons learned outlined from numerous case examples, potential negative economic consequences could be both either avoided or mitigated through reasoned and targeted actions.

The community studies offer a series of potential readiness options for consideration. The NWMO, working with the Township of Ignace, is reviewing the options to determine which options should be implemented, how they could be implemented and when they should be implemented as part of the discussions informing the potential partnership agreement. Further, these studies are not all inclusive. Over the long time period of the project, new options to support the enhancement of the community well-being will be jointly identified by Ignace and the NWMO, should the WLON-Ignace area ultimately become the selected site.

It should be noted that the interests of the local Indigenous communities were not captured in this work. These studies focus on the municipalities that are in proximity to the potential deep geological repository site.

The community studies are publicly available on the Ignace Community Nuclear Liaison Committee website at <a href="https://www.nwmonwopenhouse.ca">www.nwmonwopenhouse.ca</a>. For more information about the project, please visit the NWMO website at <a href="https://www.nwmo.ca">www.nwmo.ca</a>.

## Introduction

In 2022, the Township of Ignace and the NWMO completed a series of socio-economic studies (Appendix A) that explored a range of community well-being topics designed to respond to concerns, questions and aspirations laid out in the Ignace project vision<sup>1</sup>. Figure 1 illustrates the suite of aspirations identified by Ignace residents should the project be sited in the area. This report provides a summary of the studies undertaken in response to the Ignace vision community well-being themes of: people, infrastructure, community and culture, and economics and finance. The environment theme is being studied and will be reported separately.

Figure 1: Ignace project vision aspirations



#### **ENVIRONMENT**

To be mindful of Ignace and the NWMO's strong connection to the outdoors and natural resources being environmental stewards who protect and enhance the local surrounding areas, as well as support a variety of economic and recreation activities.



## PEOPLE

 To promote community growth that celebrates a rural sense of place that embraces both current and new residents with varying backgrounds, cultures, people and age groups.



#### INFRASTRUCTURE

 To co-ordinate planned and integrated infrastructure and services that support both Ignace and the NWMO by enhancing, completing and investing in new and present community facilities and developments.



## COMMUNITY AND CULTURE

 To appreciate and celebrate Ignace's "small-town" charm, heritage and culture, whereby the NWMO is now a chapter of our ongoing story.



## **ECONOMICS AND FINANCE**

 To sustain and complement local businesses while supporting growth and mixed development opportunities for our local economy, as well as maximizing local opportunities for training and skills development.

#### **KEY QUESTIONS**

- 1. How the preferred site will be selected and willingness assessed?
- 2. What are the project opportunities?
- 3. How will infrastructure expansion and improvements be planned and financed?
- 4. What public safety measures will be taken in the community, in the area and along the transportation route?
- 5. What measures will be in place to protect water, including drinking water, groundwater and surface water?
- 6. Where will individual project facilities be located?

IGNACE
PROJECT
PRIORITIES

SAFETY AND SECURITY OF PEOPLE AND THE ENVIRONMENT
SOLID UNDERSTANDING OF THE PROJECT, INCLUDING RISKS AND BENEFITS

### Each of the community studies:

- Described current and future baseline conditions without the project;
- Identified the potential changes in the project, which could result in socio-economic impacts on the Township of Ignace, neighbouring communities in the local area, and the broader region; and
- Identified and assessed possible actions to leverage potential benefits and mitigate potential negative impacts.

These studies provide for community learning about topics of interest. Study findings are not intended to be conclusive, but rather to lay out a series of options for consideration to inform ongoing dialogue between the Township of Ignace and the NWMO prior to the conclusion of the site selection process.

Studies consider community knowledge and local information collected through interviews and the Ignace Area Working Group, that not only acted as an advisory body, but also ensured local perspectives were considered throughout the process.

<sup>&</sup>lt;sup>1</sup> InterGroup, 2020. Ignace Project Visioning – Community Conversations. A report prepared for the NWMO. October 2020.

## THE DEEP GEOLOGICAL REPOSITORY

The project features a deep geological repository where used nuclear fuel will be received, repackaged into purpose-built containers, and then transitioned into a secure underground storage facility. The deep geological repository would consist of a network of placement rooms that would store the used nuclear fuel and would be constructed more than 500 metres below ground<sup>2</sup>. This approach aligns with international best practices. The deep geological repository site would have on-site emergency response services, including site security, medical evacuation, fire and medical services. Accidents at or near the site could be accommodated by these services. In addition, it is expected that all on-site worker health and emergency needs, fire control and other emergencies would be managed with on-site resources.

Figure 2 shows a conceptual layout for the surface facilities, as well as an approximate area of 1,500 acres (600 hectares) for the underground services area and placement rooms in the deep geological repository, at the proposed site with crystalline rock. This design will continue to evolve as the project progresses.

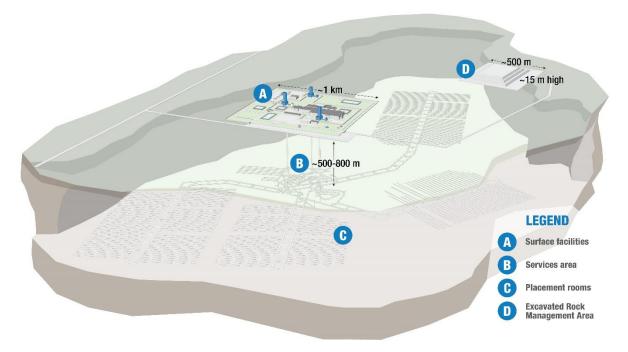


Figure 2: A conceptual layout of the deep geological repository

5

<sup>&</sup>lt;sup>2</sup> Nuclear Waste Management Organization (NWMO), 2022. Implementing Adaptive Phased Management 2022-2026.

## **SURFACE FACILITIES**

There will be facilities at the surface where the used fuel is received, inspected and repackaged into purpose-built containers encased in a buffer box of bentonite clay, before being transferred to the main shaft for underground placement. Other facilities would also be built to support the ongoing operation of the site, including administration, quality control, security, services and processing of sealing materials. The surface level facilities would be approximately 250 acres. Certain areas of the site would have restricted access, and the entire site will be surrounded by perimeter security fencing. These facilities would process some 120,000 used nuclear fuel bundles per year for about 42 years. Once the used fuel arrives at the site, it will be repackaged into durable, corrosion-resistant used fuel containers. After which, these bundles would be transferred to the underground repository for final placement.

An Excavated Rock Management Area (ERMA) would be designated for the storage of the rock that is excavated from the site during construction. This area could require a surface area of about 460 metres by 380 metres, with a height of 15 metres. The remaining rock may have a public or commercial use as aggregate for construction. The location, size and height of the ERMA will be determined in collaboration with the host communities and surrounding area. The ERMA is currently assumed to be located off-site.

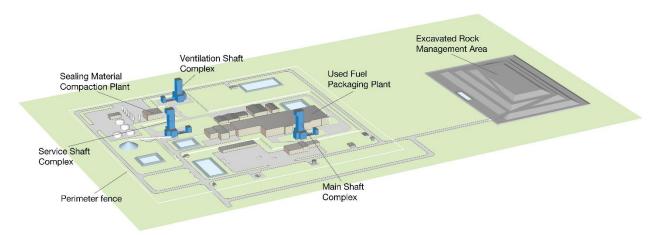


Figure 3: Layout of surface facilities for the deep geological repository

## **CAMP**

A construction camp is currently planned to be on or near the deep geological repository site to accommodate temporary workers during the construction period. The conceptual design for the camp is described in section 3.15.2 of the Conceptual Design Report<sup>3</sup>. The construction camp would be a self-contained, controlled environment with priority on a strong health, safety and security culture. Camp residents would work on a rotation basis such as 12-hour shifts up to seven days per week on a two-week in/out rotation. The camp complex will include accommodations, health care, food services, recreation facilities and all forms of emergency services for workers<sup>4</sup>. Further, the NWMO will strive to work collaboratively with local Indigenous partners to address outstanding concerns and ensure that shared values are intrinsically weaved through the camp's overall operation and design.

<sup>&</sup>lt;sup>3</sup> Taylor, A., 2021. Deep Geological Repository Transportation System Conceptual Design Report Crystalline / Sedimentary Rock. NWMO Report No. APM-REP-04400-0209 R001.

<sup>&</sup>lt;sup>4</sup> Nuclear Waste Management Organization (NWMO), 2021. Community Studies Planning Assumptions.

## THE CENTRE OF EXPERTISE

A Centre of Expertise will be established as a domestic and international destination for knowledge sharing and exchange. The Centre of Expertise will be constructed during the pre-construction phase of the project. It may house tourism assets and visitor services, educational activities and demonstrations, offices and research facilities, spaces for community events, and other facilities to offer a complete experience. Final design will be established in collaboration with the Ignace community.

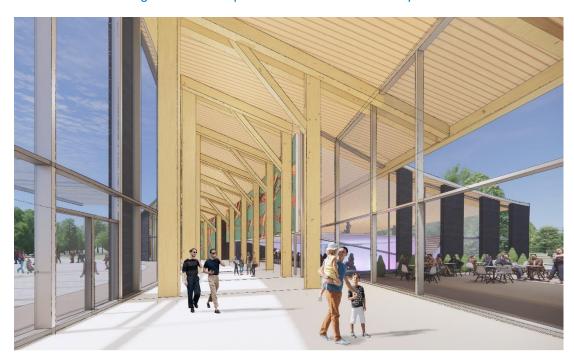


Figure 4: A conceptual view of the Centre of Expertise

## PROJECT PHASES AND WORKFORCE

The studies consider three phases of the project that span many decades. The three phases are preconstruction (2024-32), construction (2033-42) and operations (2043-88).

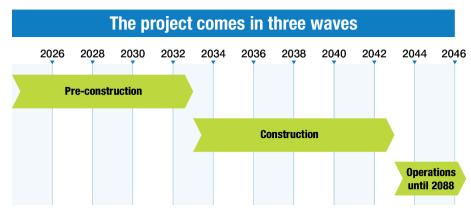


Figure 5: Project phases

Figure 6 illustrates the workforce assumptions that have been made for purposes of the studies. Preconstruction activities include site preparation, licensing, the construction of the Centre of Expertise and the gradual mobilization of 200 staff. Construction activities involve building the surface facilities, underground excavation, and 640 staff and labour trades. The project is expected to become operational by the mid-2040s, at which time, there would be 700 workers.

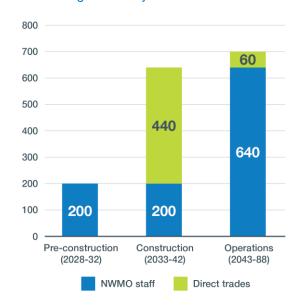


Figure 6: Projected workforce

## **STUDY AREAS**

The studies use two geographical areas, local and regional, with varying degrees of consideration depending on the topic. The local study area focuses on Ignace and nearby communities, including Dryden, Sioux Lookout, the Municipality of Machin, Local Service Board of Wabigoon and the Local Service Board of Melgund (including Dyment and Borups Corner). The regional study area includes all northwestern Ontario, and in some cases (e.g., economic development and workforce studies), extends to Winnipeg and northeastern Ontario.



## **People**

To promote community growth that celebrates a rural sense of place that embraces both current and new residents with varying backgrounds, cultures, people and age groups.

## **PROJECT VISION**

The Ignace vision supports continuation of a small town feel while allowing growth up to 2,500-3,000 residents.

Cities, towns and villages in the surrounding area share aspirations to retain young people and expand their populations by maintaining a variety of business and employment opportunities that better insulate them against boom-and-bust cycles.

This chapter summarizes key findings from the *Growing the Population and Opportunities* study, the *Ignace and Area Health Services* study, and selected topics covered in the *Workforce Development* study, including youth development.

## **IGNACE AREA TODAY: DEMOGRAPHICS AND HEALTH SERVICES**

## **Population**

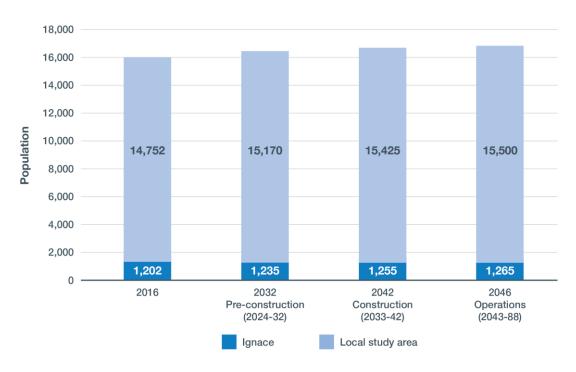
The Township of Ignace had 1,206 residents in 2021 (Statistics Canada, 2022). While this is a decrease from 2,314 residents in 1986, the population has remained flat since 2016 (1,202 residents)<sup>5</sup>. The population decrease in the township is a result of an aging population, mine closures, forestry-sector decline and residents leaving the community to pursue employment, training and education. Most residents that leave do not return because of limited opportunities back home.

Since 1996, the proportion of Ignace residents who identify as Indigenous has increased from five per cent in 1996 (90 residents) to 19 per cent in 2016 (230 residents). The increase mirrors similar population trends noted by Statistics Canada (2021). Specifically, Indigenous population in Canada will increase at a faster rate than non-Indigenous population through 2041 in part due to a difference in age structure relative to the overall population.

In the surrounding communities, similar population trends have occurred, except in Sioux Lookout, which experienced about 27 per cent growth since 1986. Its population growth is attributed to the availability of jobs within the municipality and members of First Nations with reserves north of the municipality moving to the community.

In the absence of the project, Ignace's and the local study area's population is expected to grow modestly with some variation by community (Figure 7).

Figure 7: Ignace and the local study area baseline population projections without the project, by project phase (2016-46)



10

<sup>&</sup>lt;sup>5</sup> InterGroup, 2022. Northwest Community Studies: Growing the Population and Opportunities. Report prepared for the NWMO and Township of Ignace. June 2022.

## Youth

Youth is defined as residents who are in the labour force and younger than 30 years old (i.e., ages 15 to 29). Ignace has experienced a 51 per cent decline in the number of youths between 1996 to 2016 (355 youths in 1996 to 175 in 2016). Other communities in the local study area experienced a 10 per cent increase in the total number of youths over the same time frame.

Ignace has one secondary school, Ignace Public School, which offers co-op programs, Specialist High Skills Major Programs, the Ontario Youth Apprenticeship Program, and dual credit courses that can be used towards an eligible post-secondary certificate or diploma. Ignace Public School currently has 160 students, with less than 60 enrolled in grades 9 through 12. With 14 teaching staff, Ignace Public School has a low teacher-to-student ratio that enables the ability to offer more personalized lesson plans and one-on-one teaching to the students.



## Health-care services

In Ignace, the main health-care provider is the Mary Berglund Community Health Centre Hub, which offers primary care and other medical services through their tenants. The centre employs roughly 20 staff, including one nurse practitioner and five physicians holding temporary positions. For some general and specialized health services and treatment, residents must travel to Dryden, Kenora, Sioux Lookout, Thunder Bay and Winnipeg. For in-patient hospital care and emergency visits, Ignace residents go to Dryden Regional Health Centre, Regional Health Sciences Centre in Thunder Bay, Sioux Lookout Meno Ya Win Health Centre or other locations. Existing gaps in health care in the area include residential addictions treatment, adequate mental health services, senior services and crisis response. Barriers such as transportation, hours of operation and lack of knowledge on how to navigate the health-care system affect access to health care in Ignace.

## POTENTIAL CHANGES WITH THE PROJECT: PEOPLE

## Labour-driven growth

Both direct labour requirements and indirect employment associated with other business activity would support population growth. The project will require a highly skilled labour force throughout its various development stages. Table 1 illustrates the assumptions that have been made about the types of labour by project phase.

Construction Pre-construction Operations (2024-32)(2033-42)(2043-88)200 NWMO staff 210 NWMO staff 630 NWMO staff Construction of Centre of 300 site construction trades + 10 site construction trades + 130 underground trades (miners) Expertise in Ignace (180 staff) 60 underground trades (miners) Workers at deep geological Most trades would come from Managers repository site (20 staff) outside local area and reside at **Professionals** site construction camp Underground trades Majority of workers would be managers and professionals Maintenance trades **Technicians Transportation** 

Table 1: Labour projections by project phase

For these studies, the Township of Ignace's residency planning assumptions identify the total number of direct employees that would be required for the project and the desired number of direct employees to move to Ignace during each project phase<sup>6</sup> as follows:

- Over the course of the pre-construction phase, the Centre of Expertise in Ignace would become the
  place of work for 180 NWMO staff. 160 of the 200 direct employees are assumed to reside in Ignace
  and 30 employees in area communities. Work to supply accommodation and the revitalization of
  community services and amenities would be needed to support this first wave of workers and their
  families;
- In the construction phase, direct employees who would reside in Ignace are assumed to increase by 20 to 180, 70 more employees (100 total) would reside in other areas, and 360 employees would travel from communities outside the region to work on rotation and would be assumed to reside at a fully serviced camp; and
- In the operations phase, 120 more direct employees are assumed to settle in Ignace, bringing the total
  to 300 direct employees, and 150 more employees (250 total) would likely reside in other area
  communities. Some temporary accommodations could be required for an ongoing non-local workforce
  in this phase, although over time, more and more trades may settle locally given the long duration of
  the project.

These planning assumptions may evolve based on the continued refinement of workforce needs and mobilization.

<sup>&</sup>lt;sup>6</sup> InterGroup Consultants and Hardy Stevenson & Associates, 2022. Northwest Community Studies: Workforce Development. Report prepared for the NWMO and Township of Ignace. June 2022.

## Population growth projections with the project

Ignace community aspirations for growth could be supported by the project. Other area communities' growth aspirations could also be supported, particularly over time and during construction and operations.

The authors of the *Growing the Population and Opportunities* study<sup>7</sup> estimate the possible change in Ignace's population with the project would be significant when compared to the population projection without it. Without it or any other major project, the population of Ignace could remain flat throughout the time period that would be covered by the project's three-phase period. In comparison, with the project, the population of Ignace could increase over 40 per cent to about 1,700 residents during pre-construction, by just under 50 per cent to about 1,850 residents during construction, and by about 80 per cent to about 2,200 residents during operations.

Figure 8 illustrates baseline growth projections both without and with the project for Ignace. These projections are determined by multiplier growth effects<sup>8</sup> that increase population growth beyond the direct NWMO staff that would be locating to the area.

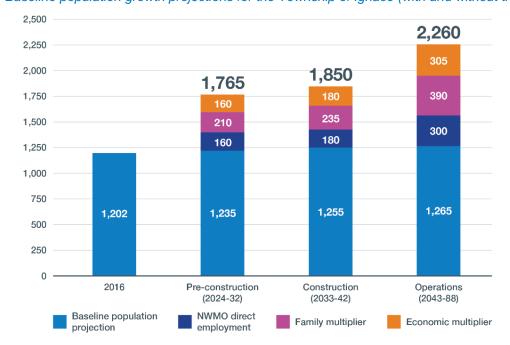


Figure 8: Baseline population growth projections for the Township of Ignace (with and without the project)

<sup>8</sup> The family and economic multipliers are assumed to have an interaction where the creation of a job and ensuing migration of the employee with their family (i.e., family multiplier) will generate an increase in demand for private and public services (i.e., economic multiplier). In other words, both the new worker and the additional family members are subject to the economic multiplier. For example, 300 new jobs will result in the migration of 570 residents (given a family multiplier of 1.9) and will demand an increase in private and public services, which will result in a total of 821 residents (given an economic multiplier of 1.44).

One limitation to this assumption is it assumes the new jobs created from the economic multiplier will be resourced exclusively by residents living outside Ignace or the local study area. This creates an upward bias for the number of residents migrating to Ignace or the local study area by assuming all new jobs will be filled by residents not currently residing in the respective area. The economic multiplier is applied only to the direct employees and their families, and is not applied to the new economic migrants to avoid overestimating growth and representing a downward bias.

<sup>&</sup>lt;sup>7</sup> InterGroup, 2022. Northwest Community Studies: Growing the Population and Opportunities. Report prepared for the NWMO and Township of Ignace. June 2022.

Some implications of this growth include the following:

- Rapid in-migration could change the demand for health-care services provided by the Mary Berglund
  Community Health Centre Hub (MBCHCH). Currently, the MBCHCH is operating near capacity and
  does not have space to dedicate to additional service provision. However, there are several multi-use
  facilities that are currently underused that may provide some added spaces that could be used for
  health services (i.e., multi-purpose rooms in churches, school gyms, recreation facilities, etc.) It is
  expected that proactive dialogue with health-care professionals across the region will support the use
  of potential new facilities and services with the affirmation of the site selection process;
- The change in population dynamics could increase the proportion of youth and working age residents relative to seniors, and thus could divert resources to this increasing demographic if not planned;
- Population growth could be a catalyst for increasing housing stock, enhancing facilities and services, and stimulating economic diversification;
- The project has a long life cycle, which would provide economic opportunities for individual residents
  and for local study area communities. Individuals could take advantage of employment and
  entrepreneurial opportunities. For communities, the presence of the project and new facilities and
  services could be a catalyst for economic diversification through sustainable private-sector and publicsector services. The project's multi-generational life cycle could provide a stable economic generator
  that might attract further business development and growth, which may diversify the economy;
- Small communities that experience substantial and rapid population growth often require proactive
  planning to socialize newcomers and existing residents to one another, thus maintaining social
  cohesion during dynamic population change (see the Community and Culture section);
- The construction camp, which may have up to 400 workers and is planned as a self-contained facility near the deep geological repository site, may create some interaction of workers within area communities; and
- Vulnerable groups<sup>9</sup> and residents within the Ignace area could experience more pressure on existing
  constraints, including for example, availability of affordable housing, increased homelessness and
  access to social and health services unique to their needs.

14

<sup>&</sup>lt;sup>9</sup> Vulnerable populations include low socio-economic status, individuals experiencing homelessness or are precariously housed, individuals experiencing barriers to employment, and individuals experiencing mental health and/or addictions. For a complete assessment, see: InterGroup, 2022. Northwest Community Studies: Ignace and Area Health Services. Prepared for the NWMO. August 2022.

## **OPTIONS TO REALIZE THE PEOPLE VISION**

Many ideas and options were put forward for consideration on what could be done towards meeting the Ignace vision respecting people. Which ideas and options to pursue would be determined through additional dialogue between the NWMO and Ignace.

- 1. **Capture the first wave of in-migration**: The township could develop and implement a co-ordinated plan with appropriate partners to ensure that Ignace is ready to attract new residents.
- 2. Promote operations employment opportunities early: Each phase of the project represents an opportunity to attract the workforce to reside either in Ignace or other local communities over the long term. This is particularly true towards the end of the construction phase, whereby a portion of the non-local workforce could transition to long-term operations employees if they are qualified, trained and interested in making Ignace and surrounding area their home. It can also be extended to local area youth to excite them about local career opportunities as part of the advancement of the project. Planning and co-ordination between many area industry players and local study area communities may drive wider value for the region in attraction of new pools of labour and residents.
- 3. Proactively engage youth in preparation for local employment opportunities: With the lead time before construction and operations, there is an opportunity for the NWMO to work with other appropriate local and regional stakeholders (e.g., school boards, post-secondary, government, other industry partners) to promote local education and training to support workforce needs. Science, technology, engineering and mathematics (STEM) skills would increasingly become a valuable local resource. In addition, fostering entrepreneurial skills among youth may provide a basis for long-term local business development to service the project and the changing population demographic of the area.
- 4. Plan for diversity: The Township of Ignace and other communities could work with partner organizations to support safe and inclusive municipalities with programs and policies to support diverse populations that foster social cohesion. Attracting a diverse population may result in the need for more culturally sensitive and appropriate services and facilities that may not be available locally, including programming to support newcomers to Canada and their successful integration into the community. Factors affecting retention in small population centres and rural areas include a lack of religious and cultural amenities, social isolation, the absence of settlement services, and racism and intolerance.
- 5. Initiate health-care planning: A community health and well-being plan for the life of the project could be prepared to guide the township, the NWMO and other agency activities during all project phases to address health-care needs for existing and new residents. This would include an adequate monitoring program to continually assess how health-care needs are satisfied. As noted in Option 1, the first wave of workforce is critical to the overall transition, and in turn, health-care planning is important for the long-term retention of employees.
- 6. Establish a participatory social monitoring committee: Health outcomes and health-care and social services are complex. The project has potential to be a catalyst for growth while adding to existing pressures (i.e., health care and social services at near capacity now). By creating a participatory social monitoring committee, project-related impacts and consequences could be identified early and acted upon effectively.
- 7. **Create a community wellness fund**: A separate fund could be established (i.e., leveraging resources from multiple sources) to research and evaluate possible practices and sponsor solutions to a variety of community issues, including for example, affordable housing, seniors care and housing, and mental health.



## Community and culture

To appreciate and celebrate Ignace's "small-town" charm, heritage and culture, whereby the NWMO is now a chapter of our ongoing story.

## **PROJECT VISION**

The community and cultural themes that are expressed in the Ignace project vision are multi-faceted. People aspire to a complete, livable and vibrant small-town community that can:

- Shape and direct its own competitive character by enhancing its innovative capacity and the quality of place;
- Provide opportunities for personal health and wellness through physical activity, social engagement and artistic expression;
- Enhance the quality of life at every stage by meeting the needs of residents of all ages; and
- Foster and maintain inter-connectedness, both within the community and with the surrounding environment. A sense of caring for one another, the community and the natural environment support sustainable growth and strengthen the bond between residents and the places they share.

This chapter summarizes key findings from the *Community and Culture* study<sup>10</sup>, *Social Services Facilities* study<sup>11</sup>, *Community Recreation Facilities* study<sup>12</sup> and selected topics covered in the *Tourism* study<sup>13</sup>.

.

<sup>&</sup>lt;sup>10</sup> Scatliff + Miller + Murray Inc., 2022. Ignace Area Community Studies: Community and Culture Study. A Report prepared for the NWMO and Township of Ignace. October 2022.

<sup>&</sup>lt;sup>11</sup> WSP Canada, 2022. Ignace Area Infrastructure: Social Services Facilities Study. Report prepared for the Township of Ignace and the NWMO. October 2022.

<sup>&</sup>lt;sup>12</sup> WSP Canada, 2022. Ignace Area Infrastructure: Community Recreation Facilities Study. Report prepared for the Township of Ignace and the NWMO. September 2022.

<sup>&</sup>lt;sup>13</sup> Urban Systems. 2022. Ignace Area Tourism Study. Report prepared for the NWMO and Township of Ignace. September 2022.

## **IGNACE AREA TODAY: COMMUNITY AND CULTURE**

Ignace residents celebrate their connections to the surrounding outdoors and connections within the community through recreation programs, cultural events and community services. Typical of northern living, there is a strong volunteer culture. Protecting its small-town charm is the foundation of its unique heritage.

#### Connections to the natural environment

Ignace and the surrounding area are dominated by rolling surfaces of Canadian Shield bedrock, numerous lakes and rivers, and conifer and mixed forest that provide habitat for various forms of wildlife. This natural environment provides a sense of place and a way of life that residents are keen to preserve. It provides for fishing, forestry, hunting/trapping and tourism, all of which are key elements of the region's history. It is common for local residents to have "camps" where they spend time. Local businesses draw visitors from the United States and Canada, primarily to fish, followed by hunting. Others are drawn to camping, swimming, hiking, biking, wildlife viewing, boating, canoeing and berry picking that can be accessed through several provincial parks and conservation areas.



#### Recreation services and infrastructure

Residents currently benefit from a variety of recreation programs. These include informal activities, organized sports and community events. Both Ignace and Dryden have many complementary organized sports (e.g., hockey, soccer), informal activities (e.g., ice fishing, skating, snowmobiling) and community events (e.g., carnivals, music fests, winter fests). Ignace residents often attend activities/programs in Dryden since it has more selection of programs and facilities such as competitive swimming, gymnastics, curling and squash.

The Township of Ignace has a solid base of community recreation infrastructure, both indoor and outdoor, and community recreation opportunities are plentiful throughout the study area. Currently, the most significant issue facing community recreation facilities/infrastructure is the need for maintenance to address wear and tear. Some existing facilities are not universally accessible.

## Other challenges include:

- Underused resources: Some missed opportunities to enhance usage of existing facilities and to expand recreation program offerings such as at the skatepark or municipal beaches;
- Underserved demographic groups: Limited organized sports programs and informal recreation activities offered for certain demographics such as seniors (i.e., 65+ years old) and pre-teens (i.e., 11-13 years old); and
- Volunteer burnout: Many volunteers are routinely depended upon to support programs.

## Social services

Ignace residents currently benefit from a variety of social service programs available through a number of agencies, including:

- Mary Berglund Community Health Centre Hub (e.g., medical/mental health);
- Crossroads Employment Services (e.g., skills training, career planning, placement services); and
- Ignace Silver Tops (e.g., exercise classes, meal programs, social events).

People come together in community spaces and at community events to celebrate connections and culture. The following area groups/facilities are examples that enable such interactions:

- Ignace Lions Club;
- Ignace Public Library;
- · Ignace Golf Course; and
- Ignace Heritage Centre (the Dennis Smyk Heritage Centre).

Desired additional social services include mental health services, holistic wellness (e.g., yoga classes, mindfulness workshops and meditation sessions), preventative health services, addictions treatment and daycare. There is a licensed nursery school; however, there are currently no licensed full-time child-care spaces. At the time of this report, there are plans for a 20-unit seniors housing complex. The development of this facility would close a significant gap for seniors in the township, allowing the community's seniors the ability to age-in-place.

Some travel to nearby communities is necessary to access specialized services. Programs located outside Ignace serving many in the local area communities include the following:

- · Dryden Regional Mental Health;
- Northwestern Health Unit (e.g., nutrition, heart health, healthy babies);
- Hoshizaki House Dryden District Crisis Shelter (domestic violence);
- Firefly (e.g., counselling and therapy, family and caregiver skills);
- Tikinagan Child and Family Services (e.g. foster parenting, child protection);
- Kenora-Rainy River Districts Child and Family Services (e.g., youth mental health);
- Patricia Area Community Endeavours (e.g., business counselling); and
- Community Living Dryden-Sioux Lookout (e.g., employment services).

Dryden has the largest amount of social service offerings and Indigenous support services of all communities within the local study area. There are also multiple spaces (e.g., schools and churches) that could be used in all communities outside Ignace.

Key social services challenges include:

- Seniors: More seniors facilities and accessibility needed;
- Transportation: Limited transportation options for area residents needing to travel to Dryden, Kenora
  or further, with many relying on infrequent bus transportation or family and friends for transport;
- Limited Indigenous-focused programming: While there are social programs offered through the Dryden Native Friendship Centre, there are limited programs in Ignace; and
- Limited youth-focused cultural programming: There are limited options for youth of all ages and their families who are seeking cultural programming such as dance, music, arts, film and others.

## POTENTIAL CHANGES WITH THE PROJECT: COMMUNITY AND CULTURE

## Potential changes to community cohesion

The project would bring changes and growth in demographics placing new demands on cultural, recreational and social (community) services and infrastructure. Community studies indicate that it is the nature of the demographic change that may have the greatest potential effect, including:

- An influx of a new workforce and their families from other regions of Canada and internationally would result in greater diversity (age, skills, cultural backgrounds), and introduce new and different values and connections to the environment; and
- Changes in community demographics (e.g., age distribution, family incomes, language) may require refocused/redirected community services and programs.

Unless managed, challenges arising from rapid in-migration could occur. The infusion of new residents to the area from different locations, cultural backgrounds and values could create some tension between new and existing residents and impact community cohesion<sup>14</sup>. Scenarios involving tensions are more likely to occur in instances where service, programming and infrastructure provision has not kept pace with the demands of changing population dynamics and the diversity of needs. For example, younger families with children may desire different recreational facilities/programs and social services than seniors or low-income families. Both sets of needs require attention simultaneously.

Well-managed, this diversity of new residents would be an opportunity, adding a new dimension to the existing culture, services and social vitality (spirit) of the community. Preparing to welcome new residents to the community to help them settle in and become part of the township will help ensure overall community cohesion.

## POTENTIAL CHANGES TO COMMUNITY SOCIAL SERVICES

Population growth could provide not only a larger pool of volunteers and additional revenue, but also opportunities to enhance the variety and richness of programs offered in the community. It is expected that community services and their infrastructure would develop and expand, creating additional venues for social connection and community building.

Growth and diversity of the population could add further strains in areas with existing limitations (e.g., extended waiting lists for child care, mental health counselling, etc.) if new social service resources are not added commensurate with this changing population dynamic. Child daycare spaces would be in demand for families moving to Ignace for work at the project.

## Potential changes to connections to nature

It is suggested in other sections of this report for the Centre of Expertise to become a hub for environmental protection, respectful use and enjoyment of the environment, and a place to connect various people with environment/culture programs. The project may attract a diversity of national and international visitors to the area which would create demand for some social and cultural amenities and infrastructure such as washrooms and parking at beaches, lakes and trailheads (as outlined in the *Ignace Area Infrastructure: Community Recreation Facilities Study*).

New residents and workers may not be accustomed to the extent of natural environment available and the proper ways in which to be respectful of the land, potentially creating tension between new and existing residents.

<sup>&</sup>lt;sup>14</sup> A cohesive community is one where there is common vision and a sense of belonging for all communities; the diversity of people's different backgrounds and circumstances are appreciated and positively valued; those from different backgrounds have similar life opportunities; and strong and positive relationships are being developed between people from different backgrounds in the workplace, in schools and within neighbourhoods.

## OPTIONS TO REALIZE THE COMMUNITY AND CULTURE VISION

Based on the study consultants' experience and lessons learned from numerous case examples, there are many options that could be taken to manage the successful inclusion of new people into Ignace while not changing its sense of community and culture. The following ideas for action will be further discussed by the NWMO and Ignace.

With advanced planning and management of potential consequences from a larger and more diverse population, the small-town feel of the community, including its heritage and connection to the natural environment, could be celebrated and maintained. Social plans with related monitoring in place to gauge demand and sentiment throughout project phases might be important to realign actions and strategies that enhance community culture aspirations. A larger and more diverse population might foster participation and contribution to recreational and social services.

A summary of options outlined in the three studies follows:

- Develop and implement a recreation and culture master plan that would allocate available resources in support of developing a thriving, diverse and cohesive community that would also be more attractive to new residents and businesses by: (a) addressing the recreation and cultural services needs of current and future residents; and (b) promoting the richness of the community's recreation and cultural resources;
- 2. Diversify and optimize the Centre of Expertise with specific attention to leveraging the Centre of Expertise to create space and foster more opportunity for community events and social gatherings that build community cohesion;
- 3. Develop a social safety net plan that would inform and guide actions relating to changing social services demands, be inclusive of Indigenous peoples and the elderly, and create shared benefits for all residents in Ignace and area communities. This could include ongoing monitoring to assess outcomes and adjust as needed over the life of the project;
- 4. Expand support for child care to meet changing needs of current and future residents. This suggestion is linked to a similar one in the health care and social services, and people sections of this report; and
- 5. Expand support for community environmental stewardship through ongoing planning with area residents and Indigenous peoples to learn and implement best practices that protect natural resources for future generations.



## Municipal infrastructure and housing

To co-ordinate planned and integrated infrastructure and services that support both Ignace and the NWMO by enhancing, completing and investing in new and present community facilities and developments.

#### **PROJECT VISION**

The Ignace project vision<sup>15</sup> identifies several key infrastructure priorities. Supporting an aspiration to "help maintain and improve existing infrastructure, including services, to meet the needs of residents," these include:

- Co-ordinated and integrated infrastructure and services planning;
- Expanded real estate development to support managed growth;
- Improved transportation infrastructure and services;
- Improved aesthetics along the highway corridor; and
- Enhanced recreational facilities.

The vision calls for infrastructure improvements that both maintain existing facilities and develop new infrastructure necessary to attract and retain new and existing residents.

Municipal infrastructure themes are explored across four community studies (Transportation and Emergency Response study<sup>16</sup>, Social Services Facilities study<sup>17</sup>, Community Recreation Facilities study<sup>18</sup> and Municipal Infrastructure study<sup>19</sup>) and are summarized in this chapter. Of note, the infrastructure studies focused largely on Ignace.

<sup>&</sup>lt;sup>15</sup> InterGroup, 2020. Ignace Project Visioning – Community Conversations. A report prepared for the NWMO. October 2020. Pages 7-9.

<sup>&</sup>lt;sup>16</sup> WSP Canada, 2022. Ignace Area Infrastructure: Transportation and Emergency Response Study. Report prepared for the Township of Ignace and the NWMO. October 2022.

<sup>&</sup>lt;sup>17</sup> WSP Canada, 2022. Ignace Area Infrastructure: Social Services Facilities Study. Report prepared for the Township of Ignace and the NWMO. October 2022.

<sup>&</sup>lt;sup>18</sup> WSP Canada, 2022. Ignace Area Infrastructure: Community Recreation Facilities Study. Report prepared for the Township of Ignace and the NWMO. September 2022.

<sup>&</sup>lt;sup>19</sup> WSP Canada, 2022. Ignace Area Infrastructure: Municipal Infrastructure Study. Report prepared for the Township of Ignace and the NWMO. September 2022.

## **IGNACE TODAY: MUNICIPAL INFRASTRUCTURE**

Generally, Ignace's existing municipal infrastructure has "good bones", having been originally built for a much larger population than currently exists. In anticipation of several potential large-scale resource and industrial projects in the area, including the NWMO project, the *Township of Ignace's Official Plan*<sup>20</sup> establishes a vision and policies to manage and direct development and change within the township to 2045. The *Township of Ignace Community Capacity Study*<sup>21</sup> provides a long-term view looking 20 years ahead to proactively plan for a population growth to 4,000 people.

The Ignace Area Infrastructure: Municipal Infrastructure Study<sup>11</sup> describes current conditions:

**Water treatment and distribution:** The water treatment plant and distribution systems are in good condition with considerable remaining life. The treatment plant has a capacity of 2,730 m³/day and was designed to serve a population of 2,400. Currently, the operational capacity of the facility is limited to serving a population of approximately 1,870 people or approximately 2,000 m³/day.

**Sewage treatment and conveyance:** Built in the 1980s with design capacity for a population of 2,400, the sewage treatment plant is nearing the end of its 50-year lifespan. The performance and age of the facility has limited its ability to achieve full design capacity, and it has limited capacity to accommodate future growth. Independent of the project, it will need upgrades or replacement over the next 10 years. For example, upgrades to its chemical storage and chemical process are currently required.

**Stormwater management:** There is limited documentation about these systems. Ignace currently has no stormwater management policy in place. Based on qualitative information, the existing system may be adequate for a few more decades of useful life. However, this needs to be confirmed with inspection.

**Local roads:** The local road network is generally underused, approximately 70 per cent of it is in fair or good condition, and approximately 60 per cent of the road network has a remaining service life of six to 10 years<sup>22</sup>. Currently, the township is having difficulty keeping up with annual road maintenance. Most roads have never been touched (other than maintenance needed to fix localized potholes) since original subdivision construction in the 1970s.

**Solid waste management:** The Township of Ignace manages its own curbside garbage collection and operates the Ignace Waste Disposal site. The current landfill has approximately 63 years of remaining capacity, assuming waste compaction is operationalized. The site is used by several adjacent unorganized townships in the surrounding area for an estimate of approximately 5,000 resident users served by the landfill<sup>21</sup>.

<sup>&</sup>lt;sup>20</sup> WSP Canada. 2020. Township of Ignace Final Draft Official Plan. Report prepared for the Township of Ignace. October 2020.

<sup>&</sup>lt;sup>21</sup> Urban Systems Ltd. 2021. Township of Ignace Community Capacity Study. Report prepared for the Township of Ignace.

<sup>&</sup>lt;sup>22</sup> WSP Canada, 2022. Ignace Area Infrastructure: Municipal Infrastructure Study. Report prepared for the Township of Ignace and the NWMO. September 2022.

## **IGNACE TODAY: HOUSING**

Figure 9 shows the determinants that were used in the study to understand the current supply of housing. There are not enough homes in Ignace currently available or planned to accommodate project-related population growth. Throughout northwestern Ontario, lack of housing is a challenge for attracting workers. Homes within the community are aging, and compared to housing across the province, a higher percentage of homes need repair. Rental housing is limited, particularly in Ignace<sup>23</sup>.

A high percentage of residents in the local study area are paying more than they can afford for housing. Affordability is not unique to Ignace or the region. Population growth may result in less accessible affordable housing options, particularly for vulnerable populations (i.e., low-income residents and seniors). Dryden and Sioux Lookout have more housing than Ignace, although both communities have similar affordability challenges. In Ignace, 13 per cent of homeowners and 41 per cent of renters are living in unaffordable housing. In other local area communities, about 11 per cent of homeowners and 37 per cent of renters are living in unaffordable housing. In addition, at the time of the 2021 census, 77 individuals in the Ignace area were experiencing homelessness.



Figure 9: Determinants of housing supply

23

<sup>&</sup>lt;sup>23</sup> Hardy Stevenson and Associates. 2022. Ignace Area Community Studies: Economics and Finance – Housing. Report prepared for the NWMO and Township of Ignace. July 2022.

Ignace and other local study area communities have designated lands for development of new housing and commercial businesses<sup>24</sup>.

## Ignace:

- It has 63.9 hectares of vacant unconstrained residential land<sup>25</sup>; and
- The township has stated that its growth plan for the project estimates a minimum of 3,500 residents, but can support a maximum of 5,000 residents<sup>26</sup>.

## Dryden:

- The city also expressed the capability to accommodate a total population of 9,000 residents and 4,090 households, and has designated sufficient land to meet these growth projections<sup>27</sup>; and
- It has identified 38 acres of development lands adjacent to Wabigoon Lake.

## **Sioux Lookout:**

• Based on density requirements set out in its 2019 Official Plan, 92 hectares of land in Urban Sioux Lookout can accommodate over 1,678 housing units<sup>28</sup>.



<sup>&</sup>lt;sup>24</sup> Hardy Stevenson and Associates. 2022. Ignace Area Community Studies: Economics and Finance – Housing. Report prepared for the NWMO and Township of Ignace. July 2022.

<sup>&</sup>lt;sup>25</sup> Township of Ignace. (2019). Official Plan and Zoning By-Law Review 2018-2019.

<sup>&</sup>lt;sup>26</sup> Township of Ignace. (2022). Knowledge Holder Interview. (HSAL, Interviewer).

<sup>&</sup>lt;sup>27</sup> The City of Dryden. (2012). City of Dryden Official Plan.

<sup>&</sup>lt;sup>28</sup> Municipality of Sioux Lookout. (2019). Municipality of Sioux Lookout Official Plan – Adopted November 2018.

## **IGNACE TODAY: EMERGENCY RESPONSE AND TRANSPORTATION**

Police, fire and paramedic services (EMS) generally meet the needs of the existing population<sup>29</sup>. EMS staffing is primarily based on call frequency as opposed to population, and the capacity of each crew is approximately 2,500 calls per year. The typical emergency medical services call volume for Ignace per year has been approximately 300 calls with no significant changes experienced over the past few years. There is considerable capacity within the existing service to accommodate any population increase. If the number of calls were to increase, they could be accommodated at the existing base with current crews before an extra crew and/or vehicle would be required.

Since there is no hospital located within Ignace, residents are served by the regional hospital in Dryden. Many residents in Ignace do not want to be transported by ambulance to the hospital in Dryden since they would not have return transportation.

Upgrades to the fire hall in Ignace are required, as is the relocation to be outside the rail line disaster zone. Dryden Airport has protocols in place to manage mass evacuation for forest fires. It is reasonable to assume that without the project, the existing EMS infrastructure and services meet current and projected needs.

It is common for Ignace residents to travel outside the community for shopping, health care and entertainment services, therefore placing reliance on the main highway as its lifeline. Highway 17 traffic conditions and volumes have changed little in recent years, while the incidence of collisions from 2017 to 2021 has declined with most collisions caused by wildlife, inclement weather conditions and poor lighting. Annual growth rates for traffic volumes from 2006 to 2016 are very low or decreasing throughout the region. There is a general seasonal increase in traffic volume during the summer months of approximately 22 per cent.

\_

<sup>&</sup>lt;sup>29</sup> In addition, the Dryden Regional Airport is a certified airport, located at 1012 Highway 601, approximately six kilometres northeast of the City of Dryden, that can host regular commercial service and has five full-time staff and one seasonal staff member, who are employed by the City of Dryden. Dryden Regional Airport is the closest certified airport to the Township of Ignace and proposed site and has an Instrument Landing System that allows aircraft to land in any weather condition.

## POTENTIAL CHANGES WITH THE PROJECT: MUNICIPAL INFRASTRUCTURE AND HOUSING

The project would do little to negatively impact the state of current infrastructure in the township<sup>30</sup>. The project would require forward planning and preparation to ensure projected growth is managed and aligned with existing infrastructure capacities and readiness. In some cases, changes could be significant (e.g., construction of the Centre of Expertise and supporting road, water, sewage, housing and infrastructure), all requiring prior planning in collaboration with Ignace and area communities. It is noted that several upgrades and infrastructure investments are required regardless of the project.

Project-related population growth and infrastructure build-out could result in:

- **Housing for new residents:** Additional and diverse housing would be needed to accommodate new residents:
- Water and sewage conveyance upgrades: New accommodations and the Centre of Expertise would require an expansion of water and wastewater conveyance systems and the sanitary collection system;
- Water treatment plant upgrades: Enhancements to the existing water treatment plant in time for the operational phase of the project may be required; and
- Local road maintenance: Expected growth in local traffic may increase wear and tear on roads, possibly accelerating the need for upgrades and reconstruction. However, costs associated with maintenance may be offset with increased municipal revenues from a larger and more diverse tax base under the assumption that current services levels continue <sup>31</sup>.

The Centre of Expertise would be a relatively large building complex in Ignace. Its presence could stimulate enhancements to community aesthetics. Road improvements, particularly along Highway 17, might incorporate aesthetics (enhancement of view scape), safety enhancements for pedestrians and cyclists, and traffic calming investments along main streets.

Traffic on the roads outside the deep geological repository site would be mostly staff and contractors commuting to work. The Trans-Canada Highway 17 corridor (to/from the deep geological repository site and throughout Ignace) has the capacity to handle additional traffic volumes. During peak hours (i.e., when hourly traffic volumes are the highest), the added number of vehicles are expected to be between 80 to 125 per day for the construction phase, and 70 to 110 per day for the operations phase. Less than 10 per cent of the traffic leaving the deep geological repository site would be heavy vehicles, during both construction and operations. It should be noted that the NWMO's corporate safety culture (associated with the nuclear industry standards) drives staff behaviours to address many forms of people-driven risks such as traffic accidents.

.

<sup>&</sup>lt;sup>30</sup> WSP Canada, 2022. Ignace Area Infrastructure: Municipal Infrastructure. Report prepared for the NWMO and Township of Ignace. September 2022.

<sup>&</sup>lt;sup>31</sup> See the *Economics and finance* section of this summary report.

## OPTIONS TO REALIZE THE MUNICIPAL INFRASTRUCTURE AND HOUSING VISION

Options were put forward by the study authors for consideration respecting meeting the Ignace vision for municipal infrastructure and housing. Through ongoing discussion, Ignace and the NWMO will work towards the selection of the ideas that could be undertaken.

Project-related changes would have minor impacts on municipal infrastructure, fire emergency response and traffic management, and no impact on medical emergency response services. Population growth aspirations for the project would require considerable new housing and related infrastructure. Studies examining infrastructure present ideas to advance co-ordinated and integrated readiness planning. Key readiness options are summarized below.

- Prepare an integrative urban growth plan: This plan would incorporate infrastructure and housing
  planning and investment to lay the groundwork for how development would occur and in what
  sequence. The plan would guide the township to plan financing and supportive service requirements.
  Should the project be sited in the area, making housing available in the near term would be a critical
  need.
- 2. **Incentivize housing:** This entails reducing risks for developers to ensure near-term and diverse accommodation needs are met. Planning for additional affordable housing and senior care facilities should also be considered.
- 3. **Plan for road maintenance:** Maintenance planning should immediately align with plans for the Centre of Expertise and new housing developments in the pre-construction phase.
- 4. **Implement monitoring and adaptation:** Emergency response investments should be monitored and adjusted to match changing population dynamics. The water treatment plant may require expansion by the time operations would begin (around 2043), should projected population targets be realized. Therefore, monitoring population growth would be important.



## **Economics and finance**

To sustain and complement local businesses while supporting growth and mixed development opportunities for our local economy, as well as maximizing local opportunities for training and skills development.

#### **PROJECT VISION**

The Township of Ignace's economic aspirations associated with the project include a desire to:

- Increase business activity and employment opportunities;
- Enhance strategies to sustain and support local businesses;
- Grow tax base through managed population growth;
- Enhance local training programs;
- · Increase household income;
- · Develop strategies to diminish the need for social assistance; and
- Support the growth of tourism through community enhancements.

Generally, the Kenora District municipal communities aspire to grow and diversify their economies and share economic commonalities with Ignace such as a reliance on the resource sector and tourism.

Four studies<sup>32</sup> combine to illustrate how the project could benefit Ignace and the broader region as a catalyst for:

- Growth in Ignace and the region over a long period of time;
- Economic diversification and skills training benefiting all; and
- Tourism enhancements.

Studies conclude that it would be fundamentally important to work together on shared interests to leverage opportunities with the project to maximize economic benefits in the region.

<sup>&</sup>lt;sup>32</sup> These studies include: 1) InterGroup Consultants and Hardy Stevenson & Associates, 2022. Northwest Community Studies: Workforce Development. Report prepared for the NWMO and Township of Ignace. June 2022; 2) Hardy Stevenson & Associates, 2022. Ignace Area Community Studies: Labour Baseline. Report prepared for the NWMO and Township of Ignace. June 2022; 3) Hardy Stevenson and Associates, 2022. Ignace Area Community Studies: Economic Development. Report prepared for the NWMO and Township of Ignace. July 2022; 4) Urban Systems, 2022. Ignace Area Tourism Study. Report prepared for the NWMO and Township of Ignace. September 2022.

## **IGNACE AND REGION TODAY: ECONOMICS**

#### Labour

The northwest region of Ontario draws skilled workers from a wide area generally bounded by Winnipeg to Thunder Bay for general construction services and expands to Sudbury/Timmins for mining operations<sup>33</sup>. This region has a large diversity of labour skills and business providers that collectively could service most of the project construction and mining requirements. The local labour base (defined as Ignace, Dryden, Sioux Lookout and Machin) is much smaller in comparison and could service only a small portion of the project needs. At either level, the demand for labour (particularly skilled labour) far exceeds supply. The project would have to compete for this labour.

Within the local study area are several factors/challenges that impact employment potential:

- Attracting youth back to work in the area after they pursue post-secondary education elsewhere;
- Attracting young couples to work in the area given its remoteness and employment challenges for dual career households aspirations;
- Addressing challenges around transportation and lack of opportunities in some communities regarding employment, business development, education and training;
- Availability of suitable (i.e., quantity and types) housing in some locations; and
- Competition for labour and how the project may exacerbate an already tight labour market.



<sup>&</sup>lt;sup>33</sup> Hardy Stevenson & Associates, 2022. Ignace Area Community Studies: Labour Baseline. Report prepared for the NWMO and Township of Ignace. June 2022.

## **Business activity**

The regional study area has a more diversified economy, a higher concentration of companies and a range of academic resources. Local area businesses and associated workforce form a much smaller concentration of activity, and focus on the resource sector (i.e., forestry, mining and tourism), retail and public services (i.e., education, health/mental care and public administration). Within Ignace itself, the labour force is also engaged in transportation, accommodation and food services businesses. Local area businesses would have some, but limited, capacity to supply goods and services to the project without readiness. Table 2 shows the top 10 employment sectors in the local and regional study areas and offers perspective on business activity.

Table 2: Top 10 industries in the Ignace local communities and regional study area<sup>34</sup>

Ignace and area comn	nunities	Regional area		
Industry sector	Employment in 2017	Industry sector	Employment in 2017	
Health care and social services	1,767	Health care and social services	89,938	
Retail trades	1,257	Retail trades	69,361	
Accommodation and food services	1,128	Public administration	50,033	
Education	1,039	Education	45,856	
Public administration	784	Accommodation and food services	45,262	
Transportation and warehousing	780	Manufacturing	43,662	
Manufacturing (dominated by the Dryden mill)	441	Finance and insurance	31,397	
Resource extraction (forestry, hunting, fishing)	342	Transportation and warehousing	29,975	
Other services	314	Construction	29,708	
Construction	308	Other services	24,312	

<sup>&</sup>lt;sup>34</sup> Hardy Stevenson and Associates, 2022. Ignace Area Community Studies: Economic Development. Report prepared for the NWMO and Township of Ignace. July 2022. The regional study area includes the Kenora District, Town of Atikokan, Town of Marathon, City of Greater Sudbury, City of Thunder Bay, City of Steinbach, City of Winnipeg and the communities within the local study area.

In the context of skills development, there are post-secondary institutions in the local area, including:

- Confederation College (Dryden, Sioux Lookout);
- · Seven Generations Education Institute (Sioux Lookout); and
- Sioux Lookout Mining Centre of Excellence (Sioux Lookout).

The following organizations in the local area provide support and counselling to labour and entrepreneurs<sup>35</sup>:

- Contact North;
- Northwest Employment Works;
- Seven Generations Education Institute;
- · Patricia Area Community Endeavours; and
- Crossroads Employment Training.

## **Tourism**



Tourism in the northwestern Ontario region is marketed and promoted by two organizations<sup>36</sup>. Prior to the pandemic, tourism in northern Ontario was growing, and it sustained many businesses catering to a diverse suite of amenities such as outfitters, accommodations, food and retail services. In the post-pandemic years, it is expected that tourism will rebound and expand<sup>37</sup>.

Visitors and tourists from multiple sources (Ontario, rest of Canada, United States, overseas) consume goods and services in both areas. Of note is the focus on outdoor activities in northern Ontario. Part of the "draw" for Canadian visitors is to connect with friends and relatives. In 2021, a Destination Northern Ontario survey of visitors indicated that the top activities that respondents would participate in are outdoor activities (e.g., paddling, cycling, hiking) (34 per cent), road, trails and waterways (e.g., motorcycling, ATVing, RVing, road trips, snowmobiling, boating) (22 per cent), and fishing or hunting (19 per cent). Seven per cent of respondents were interested in culture and history (e.g., museums, attractions, events and galleries).

<sup>35</sup> For details, see: InterGroup Consultants and Hardy Stevenson & Associates, 2022. Northwest Community Studies: Workforce Development. Report prepared for the NWMO and Township of Ignace. June 2022.

<sup>&</sup>lt;sup>36</sup> **Sunset Country:** Ontario's Sunset Country is a travel association focused on promoting northwestern Ontario tourism and outdoor experiences. Within its boundaries, far right side of northwest Ontario, it markets the approximately 70,000 lakes and rivers to visitors from around the world with a special focus on American visitors who are important to the fishing and hunting industries.

**Northern Ontario Tourist Outfitters Association (NOTO):** NOTO is primarily an industry association representing the tourism and outfitter operators. It advocated on behalf of its members to governments with the objective of protecting their livelihoods and the natural environment they rely on.

<sup>&</sup>lt;sup>37</sup> For details, see: Urban Systems. 2022. Ignace Area Tourism Study. Report prepared for the NWMO and Township of Ignace. September 2022.

In 2020 and 2021 at the height of the pandemic, tourism in northern Ontario generated 9.2 million visits and \$1.6 billion tourism receipts.

Based on the 2016 census data, it is estimated that roughly 24 per cent of employed people in the Kenora District were involved in the tourism industry, while almost 28 per cent of employed people in Ignace were involved in tourism. These proportions are significant and highlight the importance tourism plays in northwestern Ontario.

#### POTENTIAL CHANGES WITH THE PROJECT: ECONOMICS AND FINANCE

The project would create opportunities for northwestern Ontario to advance aspirations in relation to economic development, workforce enhancement and tourism. Key drivers of change include project workforce and supply chain demand and the Centre of Expertise located in Ignace.

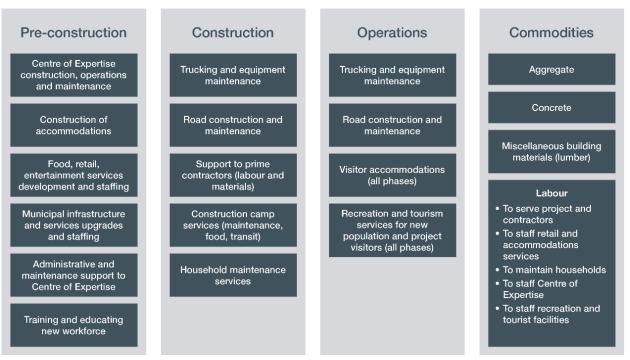
The project's direct workforce would likely become residents in the area given the longevity of the positions. The project would need to focus on building a local workforce, providing opportunities to educate and train young people on career opportunities, and ultimately retain youth in the community. The project would be a stable source of skilled employment that could support resident workers and become a catalyst for new training. The skilled labour needed for construction would largely be rotating shift travellers from the anchors of Winnipeg and Thunder Bay or beyond.

The project would provide a catalyst for new business opportunities:

- Businesses to directly serve the needs of the project (e.g., trucking and equipment maintenance, food services, visitor accommodations, construction camp services, facility/grounds maintenance); and
- Businesses to serve the needs of an increased local population (e.g., retail and entertainment, household maintenance).

There is a suite of possible local business opportunities (Figure 10). These opportunities would offer a springboard from which to enhance and diversify the local area economy and the community tax base en route to contributing to a more resilient economic base for communities in the area.

Figure 10: Potential business and employment opportunities in the Ignace area with the project



The *Tourism* study authors conclude that the development of the Centre of Expertise would present the most immediate and impactful change to tourism in the Ignace area, notably within Ignace itself, because the Centre of Expertise would be a hub of activity with a variety of features that would attract a diversity of people throughout the project. As a new and unique focal point of activity and interest, the Centre of Expertise would have the opportunity to facilitate a revitalization of tourism and nurture synergies between existing tourism operators and help to generate new businesses that build off and support the



Centre of Expertise activities. Importantly, the Centre of Expertise is expected to attract a new demographic of visitors to Ignace, who are specifically drawn to the area to visit the Centre of Expertise and the deep geological repository.

## OPTIONS TO REALIZE THE ECONOMIC AND FINANCE VISION

Based on consultants' experience and examples from other projects, a series of options are being discussed by Ignace and the NWMO towards optimizing the potential economic and finance benefits from the project.

Many ideas emerged from the community studies to prepare local study area communities for employment and business development opportunities. The following are ideas put forward by studies<sup>38</sup>.

- 1. **Create a comprehensive economic development plan:** Together with leadership from regional, municipal and Indigenous communities, the township could spearhead the preparation of a project-specific economic development plan. The goals of such a plan may include, but not be limited to: business readiness training and certification strategies; supply chain development strategies; support for entrepreneurs; and investment readiness and area marketing.
- 2. **Get ready for household spending:** With population growth comes an increase in household spending creating new or expanded opportunities for local businesses. The township could work collaboratively with others to ensure plans, infrastructure and services are in place to encourage/incentivize business expansion into the area.
- 3. **Foster local procurement:** The NWMO would have an opportunity to enhance the local supply chain through business activities. As such, we could review and update our local and Indigenous procurement policies to align with distinct project phases for advanced communications of upcoming supply and service opportunities. In addition, we could establish local supply chain outreach and support activities and monitor local procurement impacts on an ongoing basis.
- 4. Leverage synergies with the Centre of Expertise: As a hub for multiple uses, the Centre of Expertise could include the provision of space for business services and activities and entrepneurship support. The notion of a hub for innovation and training for both project and non-project related opportunities may stimulate spinoff employment and supporting business opportunities to service users such as accommodations, food and retail amenities.

\_

<sup>&</sup>lt;sup>38</sup> For more detail, refer to studies listed in prior footnotes.

- 5. **Form alliances:** Existing regional economic development networks and regional education/training programs offer initiatives and funding sources that could support workforce development. The township and the NWMO could form an industry/post-secondary institution/community (municipal and Indigenous) relationship to plan for and implement skills development in trades and other occupations.
- 6. **Promote science, technology, engineering and mathematics (STEM) throughout the educational cycle:** To contribute to a locally based labour market for key NWMO positions, emphasis should be given to promoting and supporting STEM-based education from primary through post-secondary education.
- 7. **Foster youth entrepreneurship:** The township and the NWMO could work with local entrepreneurial organizations (e.g., Patricia Area Community Endeavours) and secondary and post-secondary institutions (e.g., Keewatin Patricia District School Board, Confederation College) to integrate entrepreneurship (business management) into the curriculum at the secondary level. In doing so, youth's knowledge and understanding of the potential opportunities would increase, along with helping to foster youth entrepreneurship.
- 8. Attract and retain labour: The project would be a catalyst for employment in the area. It is possible that some labour would move into the local area from other regions of Ontario and Manitoba. While there are benefits to attracting individuals who are familiar with northwestern Ontario, this alone may not be sufficient for meeting the project's labour demands given the critical shortage of skilled labour everywhere in Canada. Attracting newcomers to Canada is seen as one strategy to address labour shortages. One idea put forward involves establishing a *Northwest Labour Attraction Task Force*, with industry and government partners, to begin attracting skilled workers.
- 9. **Enhance tourism:** The Centre of Expertise as a visitor destination would foster both niche and general tourism. In addition to educational activities related to the project and its science, the Centre of Expertise could possibly host or promote complimentary tourism offerings related to the natural environments, recreational outfitters, and community and Indigenous peoples' culture and history.

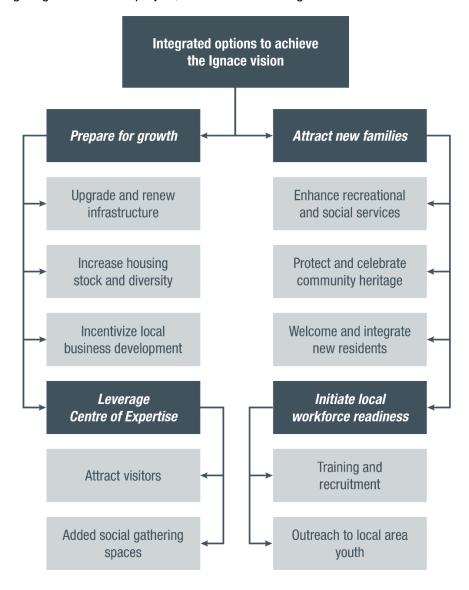
## **Summary and conclusion**

The community studies helped the NWMO and Township of Ignace better understand the current conditions, the potential interactions between the project and the Township of Ignace, neighbouring communities and the region, and the options that can be further discussed, and eventually planned for, if the WLON-Ignace area is ultimately selected.

Overall, the studies show that the change arising from the project could create a positive outcome for Ignace and help it move towards its vision. With careful prioritization and planning, the changes could be managed, and the benefits optimized.

The options presented cannot be considered in isolation – they need to be considered together to understand how each potential action fits with and supports the other actions that could be taken. The following diagram illustrates how the individual options identified in the studies could come together into an integrated series of actions.

The Township of Ignace and the NWMO will engage in more dialogue towards preparing the township and surrounding neighbours for the project, should the WLON-Ignace area be selected.



# **Appendix**

Appendix A: Community studies undertaken to assess implications for Ignace and area communities

Community impact study	Description of Ignace area community study
Growing the population	Looks at the challenges and opportunities with anticipated population growth and identifies options to leverage possible benefits and mitigate potential negative impacts in Ignace and the local study area.
Ignace area health services	Assesses the potential impact of the project on community health services and options to mitigate project-related consequences. This includes identification of options for both the incremental expansion of community health services and infrastructure, if required, and the mitigation of potential changes of concern to communities.
Community and culture	Describes the cultural, social and recreational services in the Ignace area, outlines the communities' aspirations relative to these services, and develops scenarios and ideas in response to projected population and residency changes and impacts associated with the project. Investigates the current and prospective implications of the project on community values and culture and aspirations for a sustainable and resilient community of Ignace and area.
Labour baseline	Assesses the local study area labour supply and demand, including trends and issues. This information supports a better understanding of the workforce related to the project.
Workforce development	Characterizes the workforce within the local study area and regional study area and provides options to meet direct employment needs of the project.
Housing	Evaluates housing in terms of the supply and demand, the potential for development, and possible impacts of the project in Ignace and the local study area. It also looks at options to enhance benefits and address possible negative impacts.
Economic development	Describes and characterizes the individuals, businesses and educational institutions that form part of the economy and supply chain network within the local study area and regional study area that might support the project.
Ignace municipal infrastructure	Evaluates the required expansion or enhancement of municipal infrastructure to support population growth in the Township of Ignace. Municipal infrastructure consists of the Township of Ignace's water treatment and distribution system, wastewater treatment and conveyance system, stormwater management network, solid waste management systems, roads and power/telecommunications network.
Transportation and emergency response	Conducts a systematic review of existing transportation networks within Ignace and the surrounding area that relates to all forms of vehicle traffic and pedestrian uses, as well as emergency response capacity (fire, EMS, police). It then assesses the consequences of the project on each of these services.
Recreation and social infrastructure	Explores the current range, use and state of recreation and social infrastructure serving the Ignace area. Demand projections with and without the project are then balanced against the need for service infrastructure renewal. Ideas and strategies are presented for such improvements.
Tourism	Describes characteristics, trends and key attractions for tourists in the region surrounding the prospective project near Ignace. It then assesses the possible impacts of the project to the industry. This study is linked to the economic development study.

## For more information, please contact:

Nuclear Waste Management Organization 22 St. Clair Avenue East, Fourth Floor Toronto, Ontario M4T 2S3, Canada

Tel.: 416.934.9814 Toll free: 1.866.249.6966

Email: contactus@nwmo.ca Website: www.nwmo.ca f @ mwmocanada in /company/nwmocanada



MANAGEMENT ORGANIZATION

NUCLEAR WASTE SOCIÉTÉ DE GESTION DES DÉCHETS NUCLÉAIRES

© 2023 Nuclear Waste Management Organization