

Indigenous Labour Market Information Survey and Skills Inventory (ILMI) Initiative

**Annual Report
2023-2024**



Submitted to:

Indigenous Affairs Directorate
Employment and Social Development Canada

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1. Introduction

Aboriginal Employment Services Inc. (AES Inc.) is pleased to present this annual report that provides the results from the Indigenous Labour Market Information Survey and Skills Inventory Initiative¹ (which will be referred to as the “ILMI Initiative” throughout this document) for the fiscal years 2023-2024. The key purpose of the ILMI Initiative is to test processes and tools that will improve First Nation communities’ access to timely and useful community-level information about their local labour forces.

The fiscal year covered by this report (2023-2024) was the sixth year of implementation fifth full year of data collection for the ILMI Initiative. This report provides an update on progress that has been made in areas such as data collection, data analysis and usage, and an overview of some observed outcomes as reported by the participating communities. In addition to this brief introduction, the report consists of five main sections:

- **Section 2** provides a brief overview and context for the ILMI Initiative - outlining key activities, outputs and outcomes
- **Section 3** contains an analysis of the progress in data collection for the ILMI Initiative during 2023-2024
- **Section 4** provides an update on activities and outcomes for the data analysis and data usage for the ILMI Initiative
- **Section 5** presents a demonstration of two types of complex analyses (GBA+ modeling, and cluster analyses) of the ILMI data that can be used for understanding needs and program development on various levels.

As the ILMI Initiative has evolved, so too have the annual reports focusing on different aspects of implementation and outcomes. This year involved a heavy focus on analysis and data usage with communities demonstrating the potential usefulness of various types of analyses at different levels of program development and planning. For a fulsome understanding of the ILMI Initiative, the reader may find it useful to review previous annual reports² to observe the Initiative’s overall evolution and development.

¹ The ILMI Initiative was previously referred to as the Indigenous Labour Market Information Survey and Skills Inventory *Pilot*.

² Reports are posted at <https://indigenouslmi.ca/>

2. ILMI Initiative Description

The *Indigenous Labour Market Information Survey and Skills Inventory ILMI Initiative* (the “ILMI Initiative”)³ was initiated in 2016-17 to determine how to fill a significant gap in quality and timely local labour market information (LMI) for many First Nations communities.

2.1 ILMI Initiative Rationale and Context

It is commonly understood and supported extensively in academic literature that quality LMI is required to understand the skills and training needs, employment experiences, and educational profiles of local labour forces.⁴ It has been recognized in various reports and reviews that there is a lack of up-to-date, labour market information for Indigenous communities.^{5,6}

This has direct and immediate impacts on First Nation communities’ efforts to design effective employment and training programs, to continue to engage in economic development, and to improve service delivery for their members. LMI regarding job vacancies, skill sets, training needs, employment experiences and educational profiles across First Nation communities is integral to informed decision making. As Statistics Canada does not conduct the Labour Force Survey (LFS) for on-reserve communities⁷, the aforementioned information is notably absent from Canada’s statistical portrait.

To fill this information gap, Budget 2015 announced \$12M over five years (2016-17 to 2021-22) to conduct an on-reserve LMI survey pilot to test processes and tools to improve the level of detail and timeliness of labour market information for First Nations reserve communities. The ILMI Pilot was initiated by ESDC in 2016-17 to determine how to fill a significant gap in quality and timely local LMI for many on-reserve First Nations communities. The ILMI Initiative has evolved, increased in scope and been extended since 2016-17 while maintaining the overall goal of facilitating a pathway along which participating communities:

- Collect and analyse meaningful data, which is reliable, complete and timely
- Maintain full ownership of their data
- Use their own data and information to support policy development, program design, and service delivery in their communities

With this overall goal, the ILMI Initiative intersects with and directly supports some actions outlined in the Government of Canada’s Action Plan for the *United Nations Declaration on the Rights of Indigenous Peoples Act (2023-2029)*. Specifically, the ILMI Initiative supports:

³ The ILMI Initiative was originally titled the On-reserve Labour Market Information and Skills Inventory Project.

⁴ Gunderson, M (2018) *On-Reserve Labour Market Information Pilot Project Literature Review Report: Labour Market Information Issues for Indigenous Peoples living On-Reserve*; AES Inc.

⁵ OAG (2018) *Report 6—Employment Training for Indigenous People—Employment and Social Development Canada*

⁶ OECD (2018), *Indigenous Employment and Skills Strategies in Canada*, *OECD Reviews on Local Job Creation*, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264300477-en>

⁷ Statistics Canada (2018), *Guide to the Labour Force Survey*. <https://www150.statcan.gc.ca/n1/pub/71-543-g/71-543-g2018001-eng.htm>

- *Action 30 - Continue to support Indigenous Data Sovereignty and Indigenous-led data strategies through legislative, regulatory and policy options to help ensure that First Nations, Inuit, and Métis have the sufficient, sustainable data capacity they need to control, manage, protect, and use their data to deliver effective services to their peoples, tell their own stories, participate in federal decision-making processes on matters that impact them, and realize their respective visions for self-determination (p. 32).* The ILMI Initiative directly supports this action by working with participating communities to co-develop data collection methods, approaches and systems, and to assist with the analysis of their own data to transform it into information and evidence that can be used to guide their decision-making and priority-setting at the community and First Nation levels.
- *Action 102 - Deploy necessary efforts to support Indigenous peoples' and communities' right to self-determination on socio-economic issues including access to post-secondary education, skills training and employment (p.47).* The ILMI Initiative directly supports this action by providing the necessary LMI required by First Nations to effectively develop and deliver the programs and initiatives associated with accessing post-secondary education, skills, training and employment.
- *Guiding principle - measurable and accountable.* The ILMI Initiative works within this guiding principle by supporting data collection and reporting methods that prioritize Indigenous data governance and sovereignty.

2.2 ILMI Initiative Objectives and Scope

The ILMI Initiative's objectives are threefold:

1. To improve labour market information by supporting First Nations communities in their labour market planning and service delivery
2. To improve labour market information by supporting ESDC in policy and program design for labour market programming, including allocation of funds and decision-making
3. To provide First Nations communities with the financial and technical support required to collect and maintain labour market information and to determine ongoing requirements to maintain LMI.

The ILMI Initiative results are expected to support:

- Efforts to reduce the skills and employment gaps, including:
 - Increased participation in the labour market
 - Increased participation in education and skills training
 - Increased employment
 - Improved linkages with employers
- Assist in meeting skill needs of employers
- Steps towards self-determination
- Improved access to funding and related resources
- Policy and program design

- Decision-making processes:
 - Community development and referral services; and
 - Labour market and social programs (e.g., ISET Program, Temporary Foreign Worker Program).

The initial scope for ILMI Pilot participation included community members 15 years or older living on-reserve in one of the First Nation communities associated with various ISET Program Agreement Holders that had volunteered to participate in the ILMI Pilot. Participating communities provided feedback indicating that the restriction to community members living on-reserve did not align with their programming or overall approach to labour market development. As of April 2021, the Pilot scope was expanded to include participating communities' members who are also living off-reserve. As noted in Table 2.1 below, the participating communities, as of March 2024 in the ILMI Initiative have an estimated population of approximately 232,115 members 15 years and older living either on- or off-reserve.

After considerable expansion during 2022-2023, the number of participating Agreement Holders remained constant in 2023-2024. While in some cases the Agreement Holder for the ILMI Initiative is the ISET Program Agreement Holder which then administers the agreements to their member First Nations who would like to participate, increasingly there is a trend for individual First Nations to be established as the agreement holder for the ILMI Initiative. Overall, there were 32 agreements holders for the ILMI Initiative as of April 2024, of which 12 were agreements directly with a First Nation rather than through an ISET Agreement Holder. In total, 115 communities were participating in the ILMI Initiative as of March 2024.



Table 2.1: Estimated Population by Agreement Holder

Agreement Holder	Estimated 15+ Population of Participating Communities ¹	% of Total Estimated ILMI Initiative Participation
First Peoples Development Inc. (FPDI) – MB	58,916	25.4%
Community Futures Treaty 7 – AB	25,135	10.8%
Qalipu First Nation – NL	22,894	9.9%
Aboriginal Labour Force Development Circle (ALFDC) – ON	18,261	7.9%
Anishinabek Nation – ON	13,987	6.0%
Tribal Chiefs Employment and Training Services Association (TCETSA) - AB	10,779	4.6%
Mikmaq Employment and Training Services (METS) – NS	8,609	3.7%
Anishinabek Employment and Training Services (AETS) – ON	8,476	3.7%
Wikwemikong – ON	7,497	3.2%
Kiikenomage Kikenjigewen Employment and Training (KKETS) - ON	7,488	3.2%
Yellowhead Tribal Council (YTC) – AB	5,940	2.6%
Moose Cree First Nation – ON	4,231	1.8%
Walpole Island – ON	4,119	1.8%
Squamish Nation – BC ³	3,878	1.7%
Tlicho Government – NT	3,679	1.6%
Lillooet Tribal Council – BC	3,173	1.4%
Garden River First Nation - ON ³	2,920	1.3%
Sagamok Anishnawbek – ON ³	2,867	1.2%
Miawpukek First Nation – NL	2,724	1.2%
Innu Nation – NL	2,232	1.0%
ACCESS – BC ²	2,000	0.9%
Okanagan Indian Band – BC ³	1,983	0.9%
St. Mary's First Nation – NB ³	1,711	0.7%
Serpent River First Nation – ON ³	1,420	0.6%
Mississauga First Nation – ON ³	1,329	0.6%
Musqueam Indian Band – BC ³	1,190	0.5%
Woodstock First Nation – NB ³	1,070	0.5%
Kingsclear First Nation – NB ³	899	0.4%
Chippewa of Georgina Island First Nation	837	0.4%
Oromocto First Nation – NB ³	717	0.3%
Selkirk First Nation – YT	584	0.3%
Tsleil-Waututh Nation – BC ³	570	0.2%
Totals	232,115	100%

¹ Based on Indigenous Services Canada estimates of the age 15+ population as of December 2023 and adjusted by the ISET Program Agreement Holder in cases where this estimate was felt to be inaccurate. Note that each community is encouraged to develop their own estimates and lists to provide updated estimates.

² ACCESS is an urban ISET Program Agreement Holder so does not have specific associated communities. The estimated population number is based on clients served and not community populations.

³Agreements are made directly with the participating First Nations

2.3 ILMI Initiative Organization, Structure and Funding

The overall approach to designing and implementing the ILMI Initiative is based on the principles of co-development which has evolved over the course of the ILMI Initiative with ongoing engagement and consultation among key stakeholders at each stage of the ILMI Initiative. Extensive efforts have been made to co-develop a vision and co-implement a strategy that aligns with the principles of reconciliation and movement towards “nothing about us without us”, particularly as it relates to the collection and ownership of the LMI data for specific First Nation communities. For the ILMI Initiative, the co-development principle has been implemented via the following examples of ongoing actions and decisions within the ILMI Initiative context:

- **Determining scope and definitions** – the ILMI Initiative has relied on individual communities to determine who is a *community member* according to their own definitions and criteria. Another example of co-development is how the initial restrictive scope of only members living “on-reserve” was not serving the purpose of the ILMI Initiative in developing labour forces or addressing labour market needs so the scope was expanded to include community members living both on- and off-reserve.
- **Timing and flow of data collection** – initially the ILMI Initiative was designed to collect annual LMI with a community-based selected time period for data collection. This has evolved through co-development and now varies considerably from community to community. Some communities collect data annually from community members, while others have determined that every two years or so is sufficient for their purposes. Similarly, some communities concentrate their data collection in a specific time period, while others find it more practical and beneficial to have data collection ongoing throughout the year. Communities participate in the ILMI Initiative according to what makes sense for their community, which itself tends to evolve with changing priorities, available personnel, and leadership.
- **Type of data collected** – While the initial ILMI Initiative survey instrument was largely based on the Labour Force Survey as a starting point, this has evolved through co-development to implement changes suggested by communities to focus on various additional areas such as employment and training challenges, training needs, skill inventory components, and community services. In addition, there has been requests to develop an employer survey to better understand labour market demand.
- **Type of support offered** – Communities have very different needs regarding support to implement the ILMI Initiative resulting in the development of support that is flexible and on-demand and can be tailored to address specific requirements. This is an example of co-developing this aspect of the ILMI Initiative according to what is needed, rather than assuming every community will receive the same level or type of technical support.
- **System functionality** – The ILMI System began as a relatively rudimentary data collection system. This system has been further co-developed to include various features and functions that have been identified by communities through ongoing discussions as either necessary or desirable improvements to increase their own capacity to collect, analyse and use the ILMI Initiative data. This has included such as making linkages to their own case management systems, file

extractions, using their own servers, developing on-demand reporting, and on-line survey administration.

- **Data ownership and data sharing** – Co-development is also illustrated in the use of detailed data sharing agreements. While each community owns their own data, there are explicit data sharing agreements in each contribution agreement that permit AES and ESDC to work with the anonymized data to monitor the overall ILMI Initiative performance, undertake summary analyses, and understand overall trends and considerations in Indigenous labour market development.
- **Development of contribution agreements between AES and ILMI Initiative participants** –Initially contribution agreements used to flow funds from AES to ILMI Initiative communities were structured similar to ISET program contribution agreements, with set expenditure categories and the need to submit expense claims to advance funding. Feedback from communities was that these contribution agreements were too restrictive, and reporting requirements were too onerous. AES and ESDC incorporated this feedback in a new contribution agreement that was flexible and eliminated the need to submit claims to access funding. Funding is now automatically advanced to communities based on survey activity (completed questionnaires, enumeration, and contact attempts) which is available on demand from the ILMI Initiative survey software. As a result of a co-development approach, the new contribution agreement recognizes that each community is unique and facilitates decision-making about what works best at the community level.
- **Analyses and reporting** – Co-development has also been a guiding principle in the continued development of analyses and reporting areas for the ILMI Initiative. The development of on-demand reporting is guided by the communities' requests for summary reports, infographic requests, and tailored analyses. This area continues to evolve with ongoing input from communities as they move from a focus largely on data collection to include data usage within their priorities.
- **Feedback mechanisms** – Co-development benefits from ongoing engagements and discussions with communities participating in the ILMI Initiative. These discussions occur via the one-on-one support provided through ongoing engagement and support activities provided by AES support team members, as well as through the meetings with the ILMI Initiative working group established by ESDC, and an operations group that involves representatives from multiple communities and AES support team members.

Below are three main parties involved in the ILMI Initiative along with their roles and responsibilities:

- **Employment and Social Development Canada (ESDC)** – The ESDC team is actively working and engaging with AES Inc., ISET Program Agreement Holders, First Nations communities and other key stakeholders (e.g., Assembly of First Nations) in an ongoing manner. The main roles and responsibilities of ESDC with respect to this ILMI Initiative include:
 - Working with AES Inc., ISET Program Agreement Holders, and First Nation communities throughout the project development and data collection process to inform the overall ILMI Initiative design based on rationale and anticipated outcomes
 - Engaging with and keeping stakeholders informed of the ILMI Initiative processes and ensuring active participation

- Facilitating linkages of the Project Team, ISET Program Agreement Holders, and First Nations communities with key ESDC resources such as the Canada Job Bank, other sources of LMI, technical resources, and literature
 - Receiving and reviewing summarized (aggregate) data from the ILMI Initiative on an ongoing basis to monitor progress
 - Providing oversight of the funds allocated to AES Inc.
- **AES Inc.** – AES Inc. has been funded by ESDC to develop and implement measures, including processes and tools, which support ongoing collection of LMI that is: (1) annual at a minimum, (2) ongoing (throughout the ILMI Initiative and beyond) and (3) local (community level). AES Inc. is working closely with ISET Program Agreement Holders and First Nations collecting data over the course of the ILMI Initiative to fine-tune processes and approaches, including funding approaches. AES Inc. holds sub-agreements with all participating ISET Program Agreement Holders or First Nations communities who are participating directly in the ILMI Initiative. The main roles and responsibilities of AES Inc. include:
 - Developing funding agreements between AES Inc. and ISET Program Agreement Holders and providing funding
 - Developing privacy and confidentiality agreements between AES Inc., ISET Program Agreement Holders and First Nations
 - Engaging and conducting community consultation with participating ISET Program Agreement Holders and First Nations
 - Co-developing tools and processes with participating ISET Program Agreement Holders and First Nations communities to enhance data collection of on-reserve LMI data
 - Providing on-going support and training to the communities
 - Developing and providing participating ISET Program Agreement Holders and First Nations with access to a secure database to store and access individual-level data
 - Developing First Nations Community Job Banks with linkages to the National Job Bank
 - Conducting and supporting analysis of LMI data.
 - **ISET Program Agreement Holders and First Nation Communities** – ISET Program Agreement Holders and some First Nation communities are funded directly through agreements with AES Inc. The remainder of participating First Nation communities are funded through sub-agreements with their associated ISET Program Agreement Holders. The ISET Program Agreement Holders and First Nation communities work closely with the AES Inc. Project Team to assist with design and implementation of the ILMI Initiative. The main roles and responsibilities of the ISET Program Agreement Holders and First Nation communities include:
 - Conducting surveys of their on-reserve working-age population
 - Developing and maintaining a skills inventory of their working age community members
 - Using the skills inventory to help link community members with available jobs and/or skills development and job training
 - Providing aggregate data to ESDC to support program decision-making and design
 - Assisting in ongoing monitoring, reporting and collections of lessons learned and promising practices.

Funding for the ILMI Initiative is provided via a contribution agreement between ESDC and AES Inc. who then signs individual agreements with participating ISET Agreement Holders or directly with Indigenous communities (if they are not participating under an ISET Program Agreement Holder). Amendments to the original 2017 contribution agreement between ESDC and AES Inc. are as follows:

- Original Agreement (\$3,419,233 – signed November 2017)
- Amendment for implementation and data collection funds to communities to flow through AES Inc. (\$6,745,603 – signed January 2019)
- Amendment to extend the ILMI Initiative project end date due to pandemic (\$0 – signed November 2020)
- Amendment for ILMI Initiative expansion to include additional communities and members living off-reserve (\$8,800,000 – signed October 2021)
- Amendment to extend the ILMI Initiative project end date (\$0 – signed February 2023).
- Amendment to extend the ILMI Initiative project end date to March 31, 2025 (\$2,000,000 – signed February 13, 2024)
- In April 2024, an additional \$4.4 million over two years, starting in 2024-25, was announced in Budget 2024.

Table 2.2. outlines the ILMI Initiative funding allocation by fiscal year including extensions and expansion amounts according to signed amendments as of March 2024.

Table 2.2: ILMI Initiative Funding Allocation

	ISET Program Agreement Holders and Communities' Data Collection	Services to ISET Program Agreement Holders and Communities	Total Funds Allocated
Year 1 – 2017/18	\$0	\$288,089	\$288,089
Year 2 – 2018/19	\$1,072,986	\$966,217	\$2,039,203
Year 3 – 2019/20	\$794,609	\$1,019,477	\$1,814,086
Year 4 – 2020/21	\$871,899	\$968,513	\$1,840,412
Year 5 – 2021/22	\$3,729,732	\$1,560,543	\$5,290,275
Year 6 – 2022/23	\$1,062,965	\$1,947,923	\$3,010,888
Year 7 – 2023/24	\$2,409,065	\$1,795,140	\$4,204,205
Year 8 – 2024/25	\$657,078	\$1,820,600	\$2,477,678
TOTAL Allocation	\$10,598,334	\$10,366,502	\$20,964,836

2.4 ILMI Initiative Logic/Theory and Anticipated Results

To assist in monitoring and reporting on results for the ILMI Initiative, AES Inc. developed a logic model outlining activity groups, key outputs, and anticipated outcomes. This logic model continues to be updated and revised as the ILMI Initiative evolves.

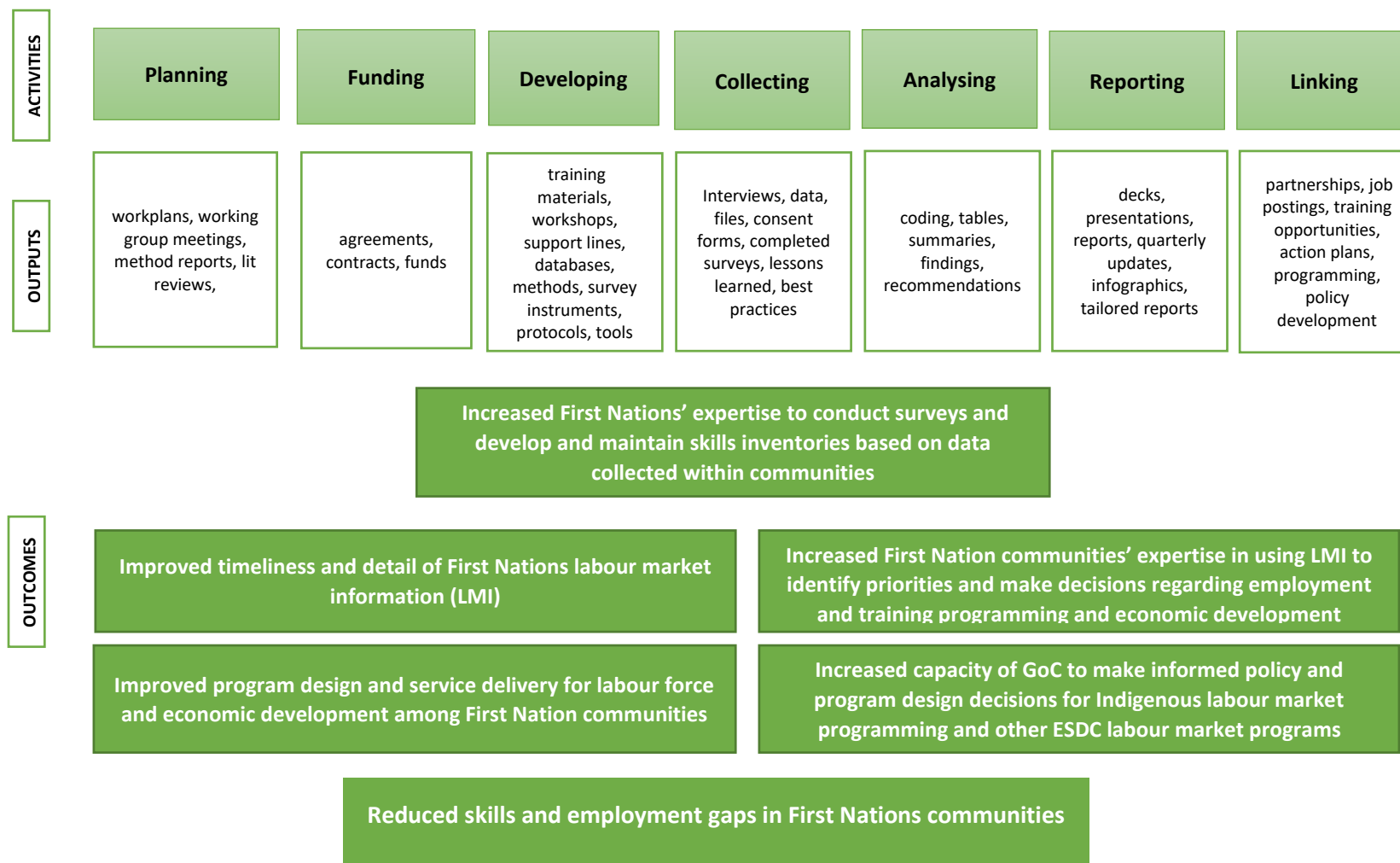
Figure 2.1 below highlights the six main anticipated outcomes of the ILMI Initiative. The more immediate or early outcome includes:

- **Outcome #1 (Immediate):** Increased First Nations' communities' expertise to conduct surveys and develop and maintain skills inventories based on data collected within communities

The anticipated mid-term and long-term outcomes include:

- **Outcome #2 (Intermediate):** Improved timeliness and detail of labour market information (LMI) for First Nations communities
- **Outcome #3 (Intermediate):** Increased First Nations' communities' expertise in using LMI to identify priorities and make decisions regarding employment and training programming and economic development
- **Outcome #4 (Longer-Term):** Improved program design and service delivery for labour force and economic development among First Nation communities
- **Outcome #5 (Longer-Term):** Increased capacity of Government of Canada to make informed policy and program design decisions for Indigenous labour market programming and other ESDC labour market programs
- **Outcome #6 (Ultimate Outcome):** Reduced skills and employment gaps within First Nations communities when compared with non-Indigenous populations.

Figure 2.1: Indigenous Labour Market Information Survey and Skills Inventory ILMI Initiative Logic

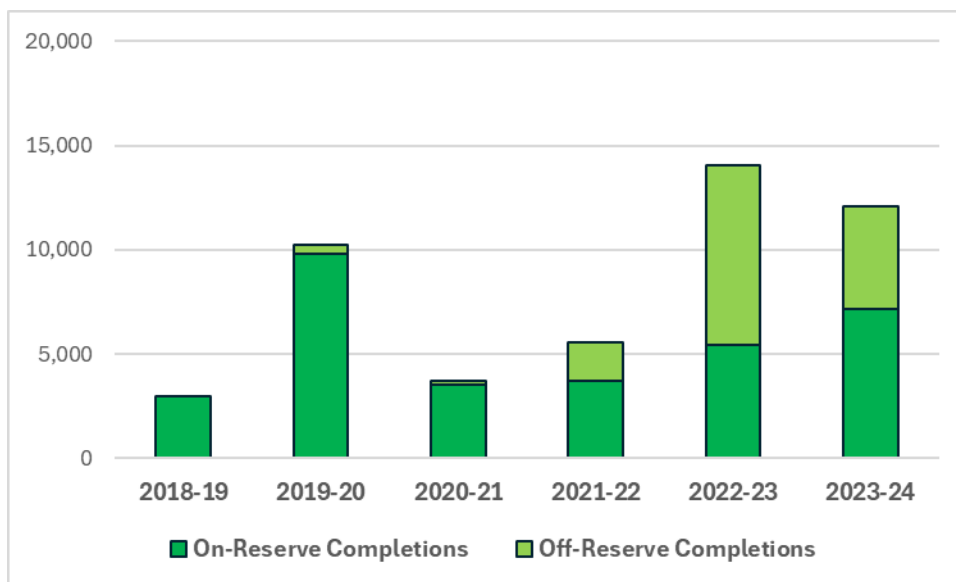


3. Overview of ILMI Initiative Progress (2023-2024)

Overall, there were 12,054 completed surveys in 2023-24, which is lower than the peak year to date of 2022-23 (14,039), but significantly higher than 2021-22 (5,556) (see Figure 3.1). Much of the growth in numbers of completed surveys in 2022-23 were the result of the rapid expansion of the ILMI Initiative in that year. Given that the data collection is set to only permit a respondent to be surveyed at a minimum 12 months after their previous survey, if there have been many completions as occurred in 2022-23, there won't be another peak expected for at least one year and likely longer. The actual period for repeat data collection is determined by each community, with many communities preferring to not necessarily collect data from the same individuals on an annual basis.

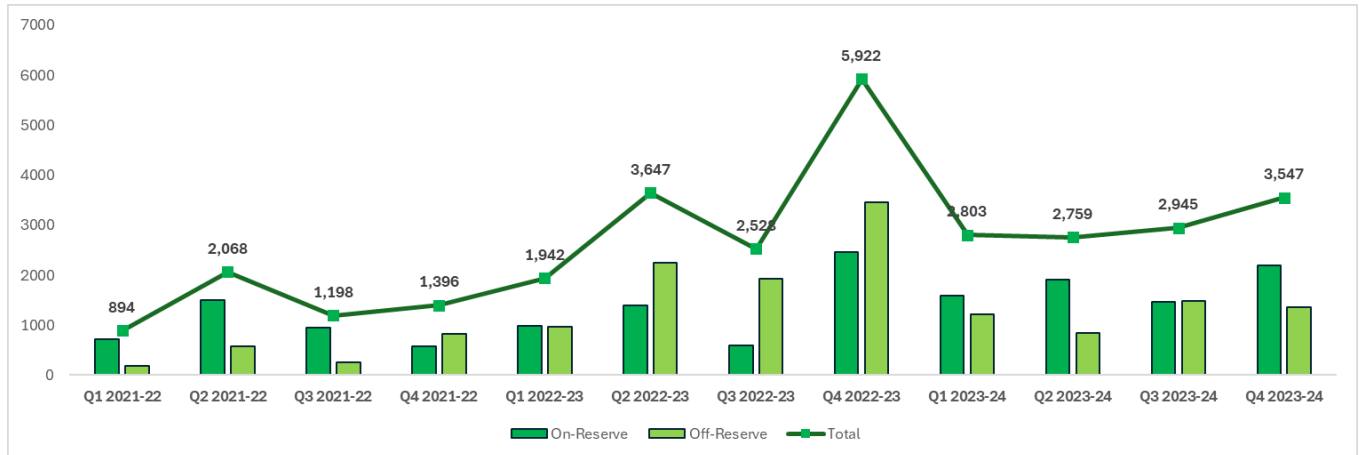
This year saw proportionally more survey completions with community members living on-reserve (7,156) compared with community members living off-reserve (4,898) which was opposite from the trend the previous year (2022-23: on-reserve – 5,439; off-reserve – 8,600).

Figure 3.1: Survey Completions by Year and Place of Residence



When examined by quarter, after the significant peak in Q4 of the previous year, there was a gradual climb in number of completions as of Q3 and Q4 of 2023-24 (see Figure 3.2). Towards Q3 and Q4, survey completions by quarter had leveled out. Overall, there was an average of approximately 3,000 surveys per quarter or roughly 1,000 surveys per month. The upcoming year may result in another peak as the Q4 respondents from 2022-23 are re-surveyed.

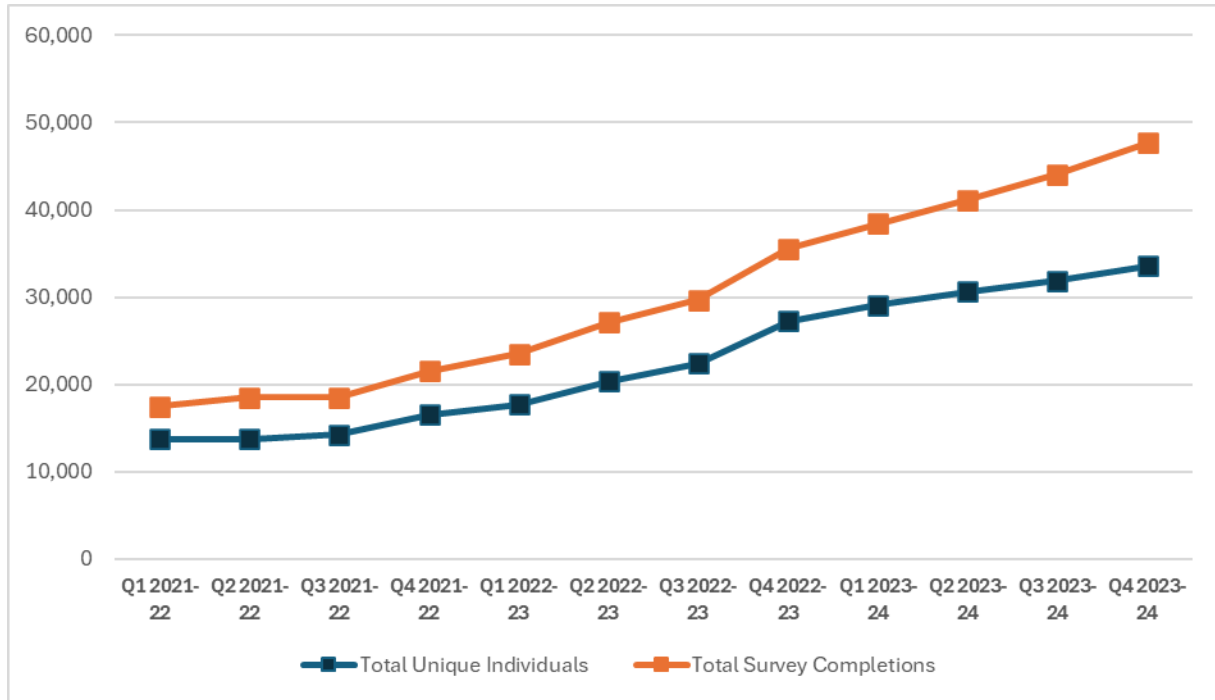
Figure 3.2: Survey Completions by Quarter



The intention built into the ILMI Initiative methods is that communities will attempt to contact community members (both on and off reserve) on a periodic basis to participate in the survey and update their information. Longitudinal data is an important component of LMI, as it allows communities to identify changes and trends occurring among their community members as they engage with the labour market and participate in training and employment programs.

As illustrated in Figure 3.3, some of the growth in survey completions is attributable to an increase in unique individuals participating in the ILMI Initiative. This is particularly the case with the continued expansions of scope (including community members living off-reserve) and new communities joining the ILMI Initiatives. As anticipated, the total number of surveys have proportionally increased more rapidly than the total unique individuals as the ILMI Initiative moves into 2023-24. This is to be expected given the number of participating communities have remained the same, while individuals are asked to complete the LMI Survey a second or third time. The growth in unique individuals participating, while still increasing, has slowed in pace with the line flattening in comparison to the rate of growth in survey completions. For example, in Q1 2021-22, the average number of surveys per individual was 1.27. By Q4 2023-24, the average number of surveys per individual is 1.42. This indicates a larger cohort that is expanding with longitudinal data points. It is anticipated that in 2024-2025, there will be sufficient data available to conduct some longitudinal analyses for this cohort.

Figure 3.3: Individuals Surveyed by Quarter



4. Focus on Analysis and Data Usage

One of the key intermediate outcomes anticipated for the ILMI Initiative is:

- **Outcome #3 (Intermediate):** Increased First Nations' communities' expertise in using LMI to identify priorities and make decisions regarding employment and training programming and economic development

As outlined in the previous biennial report, up until 2022-23 participating communities have invested considerable effort and focus on data collection such as developing community appropriate recruitment methods, participating in various types of training (e.g., interviewing, coding and data collection techniques), hiring staff, installing data systems, and monitoring implementation. As of 2023-24, some of the effort and focus has shifted towards analysis and data usage. It should be noted that given the different stages of entry into the Initiative, in particular the large expansion in 2022-23, and various levels of expertise within communities regarding surveying and quantitative data analyses, it is expected that not all the participating communities are necessarily at the same stage of data usage. This increased interest and level of effort and focus on data usage is expected to evolve over the upcoming two years of the Initiative, in a similar manner to the evolution of the data collection processes and approaches.

The AES Inc. team and the ILMI system supports analysis and data usage in various ways:

- **System-generated on-demand reports** that communities can access for their data within the ILMI system. These tend to focus on one or two compilations of data or crosstabulations that can then link the results directly to individuals in the database. This might be used for something like searching for individual community members that have an interest in training in the construction trades.
- **Building tailored queries** for specific simple analyses of a community's data – this is a function that can be used directly by the community or with some assistance from the AES team to pull certain fields, summaries or individuals from the data based on a specific request (e.g., youth under 30 who have skills in gaming).
- **Results reports** are comprehensive tabular examinations of a community's data. These can be produced on request on a quarterly basis (example using all ILMI data is included as Appendix A).
- **Infographics** are developed upon request. To date the AES team has designed templates that can be used to highlight various aspects of a community's ILMI results such as overall results, housing, training and employment.
- **Tailored reports and decks** – In addition, AES has been working with communities to develop various analyses and results in the form of tailored reports and decks that emphasize data usage, key questions that communities want to answer with their data, and specific issues or themes such as youth employment, challenges and barriers to training, and entrepreneurship.
- **Data usage workshops** – referred to as “data diving” workshops, the AES team has started working directly with communities either in-person or over virtual platforms to go through their ILMI data with them to demonstrate how it can be used for decision-making, priority

identification, strategic planning, program development and performance measurement. These workshops are adapted and tailored according to participants (e.g., Directors, Leadership, Program Staff, Analysts), and areas of particular interest.

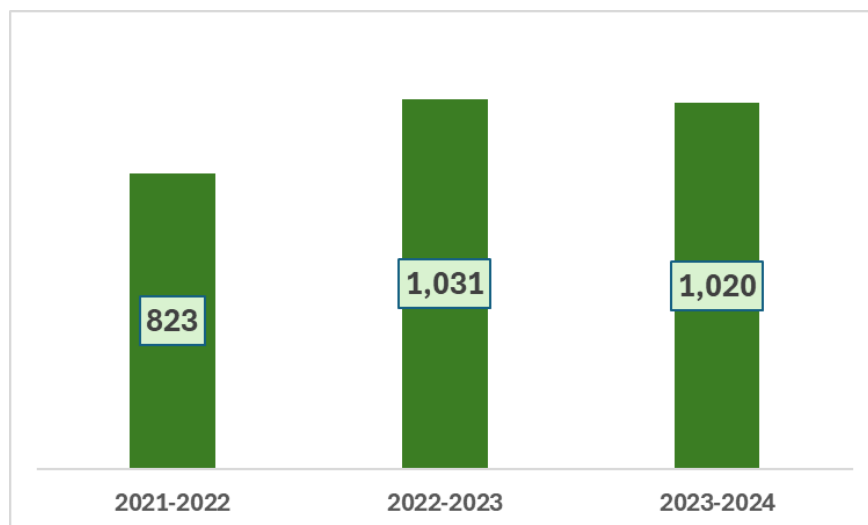
- ***XML extracts*** – A community is also able to extract their “raw data” from the ILMI system via XML files. This is particularly useful for communities that have in-house analysts or are working with analytic teams on specific projects.

The increased focus on analysis, reporting and data usage is evident from the examination of trend analysis over the past three years for the various types of products and activities undertaken by the AES team members with various communities and agreement holders.

As illustrated in Figure 4.1, the number of downloaded system-generated on-demand reports increased in 2022-23 and then leveled off in 2023-24. These numbers refer to the analytic “content-based” reports in this series and not those that are primarily used for data collection, monitoring and survey implementation (e.g., participant checklist, completion summaries, surveys to be imported). In total, ILMI Initiative communities downloaded over 18,000 on-demand reports from this three time periods, of which, approximately 2,000 were “content based” reports with the remaining reports associated with supporting and monitoring data collection. The five top downloaded on-demand “content-based” reports in 2023-2024 were:

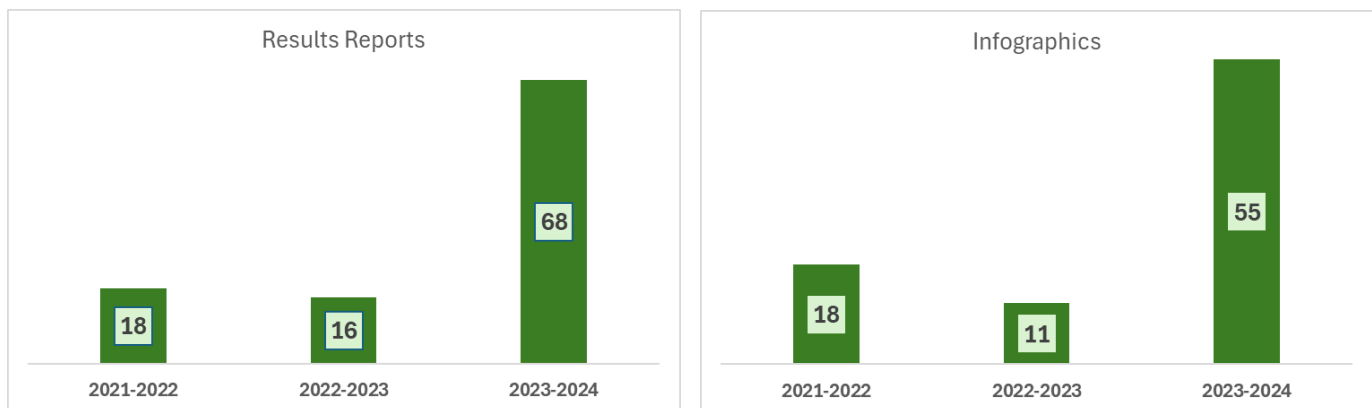
- Employment Interest Report (201 downloads)
- Training Interest Report (158 downloads)
- Age Group and Gender Report (120 downloads)
- Challenges to Attaining Job/Training (74 downloads)
- Certificates and Training Report (73 downloads)

Figure 4.1: System-generated on-demand reports “content-based”



Another main grouping of reports and products that serve as indicators of data usage are the more involved Results Reports and Infographics that the AES analytics team provides upon request to communities and ISETS. These are offered on a quarterly basis as the overall dataset is extracted from the ILMI system, cleaned, and programmed to generate analytic, tabular-based reports for each community with their own data. Similarly, infographics are developed upon request according to various templates that have been designed. As illustrated in Figure 4.2, this year saw a significant increase in the number of reports and infographics requested by communities that summarized their own survey results.

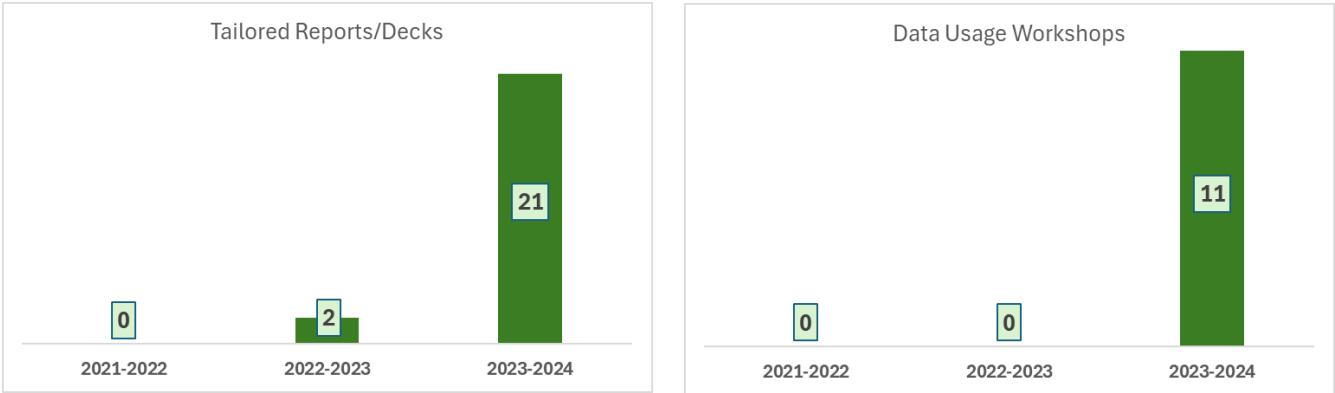
Figure 4.2: Results reports and infographics requested by communities



The other main grouping of reports and products that serve as indicators of data usage by communities is a series of tailored decks and reports often combined with workshops provided by the AES analytics team in conjunction with the engagement and support team. These are provided upon request from communities and are undertaken to address specific questions or usage of the community's own data. This area of support and analysis was a main area of focus for the AES team this year as communities' datasets grew from data collection efforts and were engaging to request assistance in developing the next steps with their data.

As illustrated in Figure 4.3, the number of requests grew rapidly once these types of reports and products were offered to communities. We anticipate that the demand for these will continue to grow over the upcoming two years once communities become familiar with this type of support and the benefits that they can derive from the systematic use of their data.

Figure 4.2: Tailored reports/decks and data usage workshops



5. Demonstration of Potential Data Usage – GBA+ Analysis

GBA+ is a specific form of intersectionality analysis. Intersectionality involves understanding how multiple characteristics for individuals interact in a multiplicative (rather than simply additive or independent) fashion for individuals to affect their outcomes. That is, the combined effects of, say, two aspects of specific characteristics are different from the sum of their parts. In general, the perception is that the effects of different aspects of characteristics are *greater* than the sum of their parts as they mutually reinforce each other to potentially affect outcomes.⁸ GBA+ is a particular form of intersectionality that requires gender to be considered as the *first* factor, with the “+” indicating other intersecting categories of characteristics to be added depending upon the focus of the analysis (e.g., education levels, age, visible minority status).

One main challenge with undertaking more complex quantitative-based intersectionality analyses such as GBA+ analyses is that the statistical modelling involved requires large sample sizes. Obtaining sufficient sample sizes to conduct these types of analyses is often challenging to do at an individual program or community level. The ILMI Initiative with the expansion and increased amount of data collection by communities in recent years is beginning to have a compiled data set that can support these more complex types of analyses to identify trends and results for the overall sample.

In 2023-24, the AES analytic team with support from Dr. Gunderson⁹ (labour economist from University of Toronto) started working with the compiled anonymous data to determine to what extent it could be used to support more complex analyses such as GBA+. While preliminary, the results from this early work demonstrate the potential use of the unique ILMI dataset for understanding how individual characteristics such as gender can intersect with additional characteristics such as education levels, volunteering, disability status, and others, to impact employment outcomes for First Nations. It should be noted that given that this example is working with a sample of Indigenous people, the example does not test the intersectionality of gender with ethnicity which would require a sample of both Indigenous and non-Indigenous people.

5.1 Overview of Methods

The data extracted for this set of analyses included those ILMI participants between ages 20-64 (core working age) who had some previous employment experience and were living on-reserve at the time of their most recent survey completion. This included data collected under the ILMI Initiative over a 3-year period between July 2020 and August 2023. The total sample size extracted for this analysis was 7,060 with relatively equal distribution among men (45.5%) and women (54.5%) (see Table 5.1).

The team undertook the analysis using Ordinary Least Squares (OLS) regression techniques that focused on **employment status as the outcome or predicted variable**. The definition of “employed” that was used for the regression analyses is more expansive than usual to include regular paid-employment, self-employment or those working in traditional skill activities, and those who were away from a job they normally held that week because they were on sick leave, maternity leave, parental leave or on temporary layoff. Engaging in traditional skill activities was included as being employed because such

⁸ Theoretically there can be offsetting factors so that their combined effect is less than the sum of their parts.

⁹ <https://www.cirhr.utoronto.ca/people/directories/all-faculty/morley-gunderson>

activities are important labour force activities for Indigenous persons. The definition of “*not employed*” included those unemployed and searching for work, students, retired people, household workers and those not actively searching for work perhaps because they feel there is no work in the community.

The regression model then included a small number of **explanatory variables** including:

- **Gender:** men and women (only a very small proportion of individuals reported identifying as non-binary which was not sufficient from a statistical perspective to run as a separate gender category). This model being used as an example focuses on the intersectionality for women.
- **Person with a disability:** a well-documented vulnerability and often strongly identified as a disadvantage with respect to employment outcomes.
- **Education:** formal education including secondary and postsecondary education which has a strong relationship with employment outcomes.
- **Occupational license or certification:** licensing or certification provides an independent signal of the quality of a trade or profession as well as the initiative to acquire such a credential.
- **Volunteering:** helping others either formally or informally may be particularly important for Indigenous persons given their often strong ties to their community, development of skills from volunteering, and establishment of networks.
- **Age:** while the sample selected is restricted to the common working age cohort of 20 to 64, within this age group there are often various employment outcomes at different age groups.

In conducting intersectionality analyses using multiple regression techniques, the main component or analytic tool of interest is the extent to which there are ***significant interactions between gender and any of the explanatory variables*** that can explain incremental variance in the predicted variable (i.e., employment status) beyond main effects. Statistically significant interactions can be considered to represent the amount of intersectionality or how individuals’ ***gender and other characteristics interact in a multiplicative manner***.

The descriptive statistics overall and according to women and men (see Tabel 5.1) illustrate the differences that can be observed by gender when only reviewing one dimension at a time. For example, while the employed rates are similar (57.4% for men vs. 62.0% for women), the education rates, in particular for post-secondary, are quite different when examined by gender. Disability rates are similar across genders, but the intersectionality question can then be posed as do women with disabilities have different employment outcomes than men with disabilities? What about if we also consider volunteering rates? These are the types of more detailed, multi-dimensional questions that can be answered with a more complex intersectionality analysis using regression.

Table 5.1: Descriptive Statistics for Dependent and Explanatory Variables

	Men	Women	Total
DEPENDENT Variable (Predicted Outcome)			
Not employed (unemployed 10.6% + 29.5% not in labour force)	42.6%	38.0%	41.1%
Employed	57.4%	62.0%	59.8%
EXPLANATORY Variables			
a) Disability			
No disability (<i>reference category</i>)	90.2%	88.7%	89.4%
Disability	9.8%	11.3%	10.6%
b) Education			
No HS Diploma or GED (<i>reference category</i>)	48.9%	28.9%	38.0%
High School Diploma or GED	20.1%	18.8%	19.4%
Some post-secondary training	6.9%	9.2%	8.2%
Apprenticeship, or trades certificate, or diploma	10.0%	4.0%	6.7%
College, CEGEP, or other non-university diploma	9.3%	23.0%	16.8%
University graduate	4.9%	16.1%	11.0%
c) Occupational License or Certificate			
No license/certificate (<i>reference category</i>)	44.4%	44.2%	44.2%
License/certificate	55.6%	55.8%	55.8%
d) Volunteering/Helping Others			
No volunteering (<i>reference category</i>)	56.0%	48.8%	52.1%
Volunteering	44.0%	51.2%	47.9%
e) Age			
20 to 29) (<i>reference category</i>)	30.1%	27.3%	28.6%
30 to 44	35.2%	36.8%	36.1%
45 to 54	20.9%	19.7%	20.3%
55 to 64	13.8%	16.2%	15.1%
Number of Respondents	3,212 (45.5%)	3,848 (54.5%)	7,060 (100%)

Categories may not sum to 100% due to rounding.

5.2 Overview of Regression Results - Example

The detailed statistics results of the OLS regression analysis are presented in Table 5.2. The top portion of the table contains the results from the various steps of regression modelling as specific explanatory variables are added in, one at a time. As variables are added in, the coefficients (numbers in tables cells) will shift around to consider unique variance and shared variance among each of the explanatory variables. This type of analysis enables an identification of the “**main effect**” that a particular explanatory variable has for the overall dependent variable or outcome. Main effects are in some ways the opposite of an intersectionality analysis in that they attempt to single out the variance in the employment rate that is unique to that explanatory variable (e.g., gender, education, volunteering)

when all other explanatory variables in the model are held constant. The following steps will demonstrate how this works for OLS regression (referring to Table 5.2):

- In Column 1, when we add in the first explanatory variable of **Gender** (comparing women with men), then we obtain a coefficient of 0.046. This simply means that women’s employment rate is **4.6 percentage points higher** than men’s employment rate when the only thing we consider is gender.
- Column 2 contains the results of the model once **Disability** is added in. Examining the coefficients in Column 2, we can see that this has a very large main effect on employment. The coefficient of -.200 indicates that employment rate for people with a disability is **20.0 percentage points lower** when compared with people with no disability when “holding gender constant”.
- Column 3 contains the coefficients when the various **levels of education** are added into the regression model. A couple of things important to note here are:
 - Relatively **large coefficients for post-secondary education** levels mean that these are having correspondingly large impacts on employment. For example, being a university graduate produces a coefficient of 0.345 which indicates that **employment rates among university graduates are 34.5 percentage points higher** than non-high school graduates when holding gender and disability status constant. This indicates that education is very important to understanding employment rates.
 - Another important thing to note in Column 3 is that the **coefficient for gender has actually decreased and become negative**. This means that once education is considered in the model, the differences we saw previously in Column 1 that were attributed to gender are largely erased (and actually go in the reverse direction with women). This is one of the considerable powers of regression analyses that can demonstrate the “unique variance” or “main effects” attributable to an explanatory variable. So, for this example, differences in employment rates among men and women are much more attributable due to their respective differences in education levels, and less to do uniquely with their gender. That is why it is important when examining gender differences to go beyond simple frequencies and start to include additional explanatory variables that actually might be more accountable for what we perceive as gender differences in things like employment rates.
- Columns 4 through 6 contain the results as we add in additional **explanatory variables in steps including licences/certifications, volunteering, and age**. By examining the coefficients at each step we can determine how much explanatory power or unique variance in employment rates is attributable to a single explanatory variable (when all other variables in the model are held constant). By reviewing the change in coefficients, we can see how the explanations change as new variables are added to the model. For example, **what looked like a significant gender difference in employment of 4.6 percentage points favouring women in Step 1 is actually a negative difference of 2.1 percentage points favouring men by Step 6 when other variables are added into the regression model** (particularly post-secondary education).



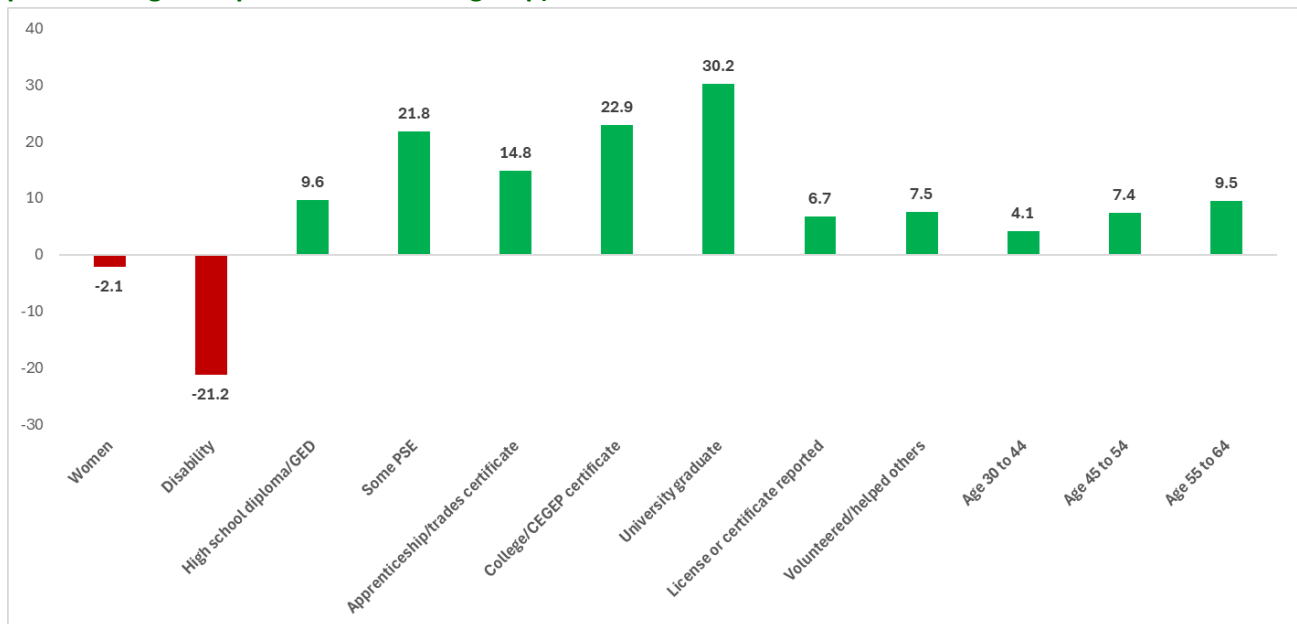
Table 5.2: OLS Coefficients for Model Predicting Employed with Main Effects

MODEL COMPONENT	REGRESSION STEPS						
	1	2	3	4	5	6	7
<i>Constant</i>	.573	.593	.498	.460	.439	.397	.406
Women	.046	.048	-.020	-.018	-.021	-.021	-.041
Disability		-.200	-.199	-.188	-.195	-.212	-.238
High school diploma/GED			.092	.087	.086	.096	.112
Some PSE			.238	.230	.220	.218	.167
Apprenticeship/trades certificate			.175	.162	.156	.148	.121
College/CEGEP certificate			.258	.247	.237	.229	.237
University graduate			.345	.334	.315	.302	.251
License or certificate reported				.078	.064	.067	.082
Volunteered/helped others					.078	.075	.076
Age 30 to 44						.041	.028
Age 45 to 54						.074	.061
Age 55 to 64						.095	.073
Interactions with Gender (Women)							
Women x PWD							.046
Women x High school /GED							-.026
Women x Some PSE							.086
Women x Apprenticeship/trades							.075
Women x College/CEGEP							-.006
Women x University grad							.069
Women x License or certificate							-.028
Women x Volunteered/helped							-.002
Women x Age 30 to 44							.025
Women x Age 45 to 54							.027
Women x Age 55 to 64							.041
R²	.002	.018	.077	.083	.089	.094	.096
R² Change	.002	.016	.060	.006	.006	.004	.002
F Change Significance	.000	.000	.000	.000	.000	.000	.119

The second half of Table 5.2 outlines the results for the preliminary GBA+ intersectionality analysis with Column 7 containing coefficients for the “**interaction**” of Women with each of the other explanatory variables. These interactions explain the amount of variance in employment rates that are uniquely attributable to being a woman who is disabled (.046) or a woman with a high school education (-0.26) or a woman who volunteers (-.002). Of interest for this model is that none of the interactions for women are statistically significant at traditional levels of probability (e.g., $p < .05$). Interpreted within the overall concept of GBA+ intersectionality analyses, this would indicate that **there are not multiplicative effects for gender when examined with common labour market characteristics such as disability, education, licenses/certifications, volunteering or age.**

The summary of main effects attributed to the explanatory variables is presented in Figure 5.1, understanding that the interactions tested with gender were not significant. As previously noted, one of the more commonly identified interactions with gender is ethnicity or race. Given the sample used for this example consisted entirely of Indigenous people, the interaction between gender and ethnicity was not tested. This would require a sample that contained both Indigenous and non-Indigenous respondents. Similarly, the outcome selected is employment rates; however, there may be significant interactions when examining various types of outcome variables such as income or wage levels.

Figure 5.1: Summary of Main Effects of Explanatory Variables for Employment Rates (percentage points change compared to reference group)



* Reference groups in order are Men, Non-disabled, No HS diploma, No Certificate/License, Age 20-29

6. Demonstration of Potential Data Usage – Data Mining with Cluster Analysis

The ILMI Initiative’s dataset is sufficiently large to start to work with data mining techniques and methods to examine patterns and relationships between variables. A common data mining technique to understand underlying data structure is cluster analysis. Cluster analysis explores the naturally occurring groups within a data set known as clusters. Cluster analysis doesn't need to group data points into any predefined groups, which means that it is an “*unsupervised learning method*”. Unsupervised learning is a framework in machine learning where algorithms learn patterns exclusively from unlabeled data. Machine learning itself is a field of study in artificial intelligence (AI) concerned with the development and study of statistical algorithms that can learn from data and generalize to unseen data and thus perform tasks without explicit instructions.

To develop an example, the AES analytic team undertook an initial k-cluster analysis to demonstrate the different ways that the ILMI Initiative’ dataset could be used to develop information that could be applied to improving labour market programming for Indigenous communities. This example focused on better understanding the various challenges and barriers that respondents identified related to undertaking training and/or finding employment.

The objective of cluster analysis is to find similar groups of respondents, where the “similarity” between each pair of respondents represents a unique characteristic of the group vs. the larger population/sample. Once the clusters or “groups” are established, then each group can be described according to not only their specific scores on cluster variables, but also demographics or other measured characteristics. This goes beyond examining each challenge/barrier independently, and instead starts to weave in how people’s scores on these can cluster together and intertwine to provide a more complete picture of labour market challenges for Indigenous communities. This can be a valuable analysis for labour market program development and implementation, as programming can potentially be adjusted according to clusters or groups and outcomes maximized thus increasing the overall effectiveness of interventions.

6.1 Overview of Methods

Respondents to the ILMI Initiative’s survey are asked to rate a list of potential challenges and barriers to their training and/or employment. Each challenge or barrier presented is provided with a rating range from 0 – “No Challenge”, 1 – “Small Challenge”, 2 – “Medium Challenge” to 3 – Large Challenge. The types of challenges and barrier included initially in the analysis are outlined in Table 6.1.



Table 6.2: List of Challenges and Barriers Included in Initial Step of Analysis

Type of Challenge or Barrier
Challenges finding and getting a job
Challenges keeping a job
Challenges finding appropriate training
Challenges staying in training
Not having enough work experience to get a job
Not having the skills that employers are looking for
Not having enough or right type of education/training to get a job
Not having education requirements for training or education programs
Living in a community that is far away from jobs
Living in a community that is far away from training opportunities
Challenges getting to and from work or training (transportation)
Challenges speaking language used at work or training program
Challenges finding money needed to apply for jobs and go to interviews
Challenges finding money needed for training program
Looking after people who are dependent
Challenges with physical health
Challenges with emotional or mental health
Challenges with substance use or addictions

The initial analyses demonstrated that many of the 18 individual challenges were highly correlated which makes it difficult to interpret cluster analysis results. As a result, the AES analytic team conducted a Principal Components Analysis (PCA). PCA is a common analytic method that is used to reduce the dimensionality of large data sets by transforming a longer list of variables (e.g., 18 challenges/barriers outlined in Table 6.1) into a smaller set that still contains most of the information in the longer list. The PCA resulted in 8 components that then served as the main variables for the overall cluster analysis (see Table 6.2).

The AES team used SPSS® K-Means software to conduct the cluster analysis using the data from 16,356 unique respondents with valid data in the ILMI dataset for all variables as outlined in Table 6.2.

Table 6.2: PCA Components Results used as Main Variables for Cluster Analysis

#	Challenge-Barrier Components
1	Composite measure for challenges related to training, skills and experience - Challenges finding and getting a job - Challenges finding appropriate training - Not having enough or right type of education/training to get a job - Not having enough work experience to get a job - Not having the skills that employers are looking for - Not having education requirements for training or education programs
2	Composite measure for challenges related to distance from jobs and training - Living in a community that is far away from jobs - Living in a community that is far away from training opportunities
3	Single measure for challenges related to getting to and from work (<i>transportation</i>)
4	Composite measure for challenges related to staying in job or training - Challenges keeping a job - Challenges staying in training
5	Single measure for challenges related to speaking the language used at work or training program
6	Composite measure for health-related issues - Challenges with physical health - Challenges with emotional or mental health - Challenges with substance use or addictions
7	Composite measure for challenges related to financial issues - Challenges finding money needed to apply for jobs and go to interviews - Challenges finding money needed for training program
8	Single measure for challenges related to looking after dependents

6.2 Overview of Cluster Analysis Results - Example

The most interpretable and useful solution from the various cluster analyses was a seven-cluster solution as outlined in Figure 6.1 (overview) and Table 6.3 (details). The titles provided for clusters generally focus on the key variable(s) that make the cluster unique, so in this example the challenges or barriers to employment and training. The solution used for interpretation for this example has just under one-half of the sample (42%) in Cluster #1 with minimal challenges. These are people that generally don't perceive themselves as having challenges or barriers to training or employment at the time they completed the survey. Three of the remaining clusters tend to focus on a specific challenge or barrier (e.g., #2 with a focus specifically on looking after dependents with very few other challenges; #3 geographic challenges; #4 language challenges). The remaining three clusters (#5, #6 and #7) are more complex involving multiple or many challenges and some distinctions between whether there are challenges in supporting dependents.



Figure 6.1: Overview of Clusters for Indigenous Challenges and Barriers to Training and Employment

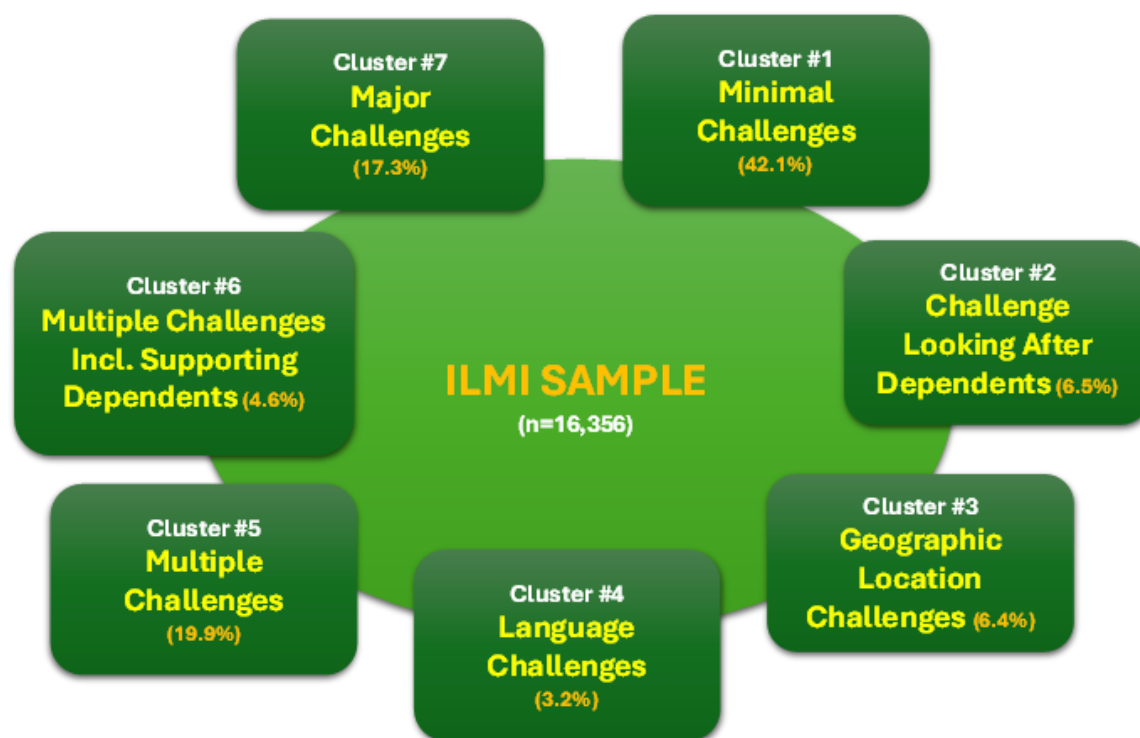


Table 6.3: Cluster Center (Mean Rating) Results for 7-Cluster Solution for Indigenous Challenges and Barriers to Training and Employment

CHALLENGE/BARRIER COMPONENT	OVERALL	Cluster #1	Cluster #2	Cluster #3	Cluster #4	Cluster #5	Cluster #6	Cluster #7
		Minimal Challenges	Looking After Dependents	Geographic Location Challenges	Language Challenges	Multiple Challenges	Multiple Challenges including Dependents	Major Challenges
Training, skills and experience challenges	0.95	0.15	0.65	1.16	1.22	1.35	1.59	2.28
Distance from jobs and training	0.92	0.10	0.53	2.29	0.93	1.05	2.44	2.02
Transportation challenges	0.78	0.05	0.25	0.35	0.62	1.27	1.64	2.14
Staying in job or training challenges	0.55	0.04	0.22	0.34	0.45	0.63	0.59	1.90
Speaking language at work or training	0.57	0.03	0.16	0.24	2.45	0.45	0.56	1.94
Health-related challenges	0.54	0.11	0.42	0.33	0.49	0.58	0.69	1.64
Financial issues	0.97	0.09	0.73	0.93	1.22	0.41	1.97	2.39
Looking after dependents	0.78	0.09	2.43	0.33	0.65	0.36	2.56	2.03
Number of cases	16,356	6,880	1,068	1,043	530	3,257	751	2,827
Percent of cases	100.0%	42.1%	6.5%	6.4%	3.2%	19.9%	4.6%	17.3%
Overall Average	0.76	0.08	0.67	0.75	1.01	0.89	1.51	2.04

Interpreting clusters can also be undertaken by examining some of the demographic and characteristics of interest for the clusters and developing cluster profiles. **Cluster profiles are a useful tool for visualizing cluster results, especially when seeking to understand the distinct characteristics that differentiate clusters.** As illustrated in these the following series of figures (Figure 6.2-6.8) each cluster has some interesting characteristics that could be considered when developing labour market programs according to different clients within and across various clusters.

For example, Cluster #1 respondents are unlikely to be ongoing ISET clients given that they have limited barriers to training and employment, have higher education levels and higher levels of employment when compared to the overall sample. Overall, this likely low intervention group is the largest cluster with 42.1% of the sample.

In contrast, those in Clusters #5, #6 and #7 are likely to benefit from ISET interventions that offer more wrap-around support systems that can simultaneously address multiple, likely interconnected complex series of challenges and barriers. Reviewing the cluster profiles in Figures 6.2-6.8, one can see that these clusters have multiple challenges at different levels of rated severity.

Cluster #5 made up of approximately 20% of the sample identifies multiple, smaller challenges that may be interrelated. An important consideration for this cluster is that there is a larger proportion of youth under 30 in this group that are identifying these multiple smaller barriers. This may be “signaling” the need for support as they are at the beginning of their transition into potentially advanced training and/or into the labour market. Effective interventions at this stage in addressing some of these challenges are especially conducive to future educational and labour market success outcomes.

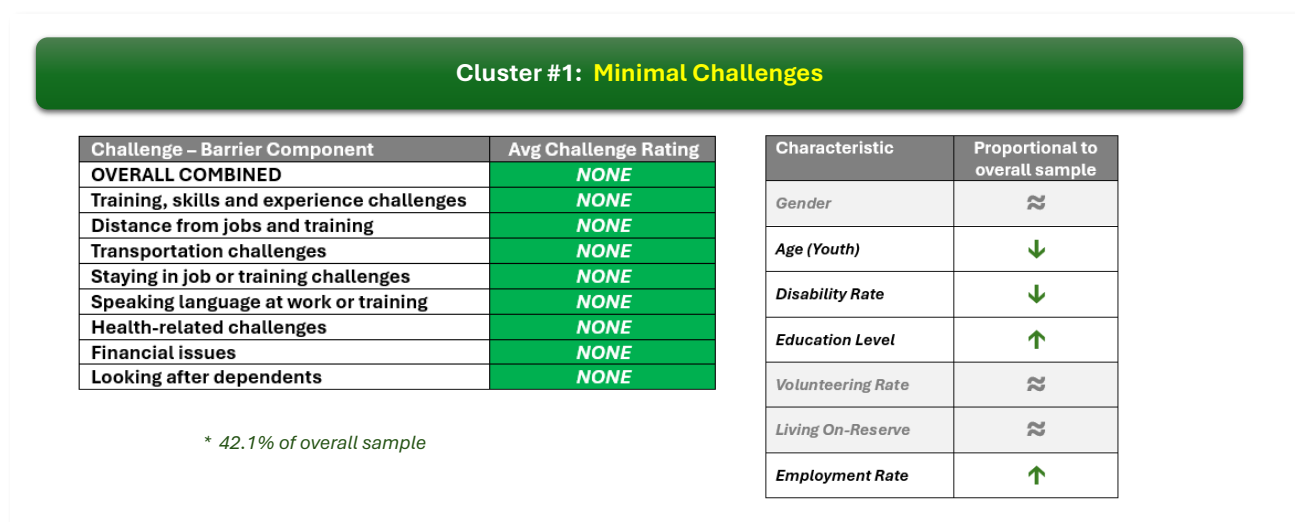
Respondents in Cluster #6 (younger women with dependents) and, even more so, those in Cluster #7 are indicating significant, multiple barriers to training and employment. These two groups are likely in need of considerably more complex supports to address the identified challenges and barriers at the levels indicated. Combined these two clusters make up nearly one-quarter of respondents (21.9%) which equates to over 3,500 respondents potentially requiring significant supports through ISETS for the participating communities.

An example of how it is important to understand the various ways that identified challenges and barriers intertwine and how they can be addressed through relatively complex support structures or in some cases, relatively simple solutions is found in comparing Cluster #2 with Cluster #6. Cluster #2 respondents will more likely a single-issue type of support such as quality daycare, after school care or senior care. These are primarily highly educated, younger women who are employed and are identifying only one significant challenge which is supporting dependents. In comparison, Cluster #6 also identified significant issues and challenges supporting dependents in combination with multiple other challenges which may (or may not) be related and intertwined. While both may require greater access to affordable quality daycare, context is important when trying to identify the who, what, where and when of providing this particular support.

Another interesting demonstration of how cluster analysis results can be considered in developing and targeting programming is with respect to youth. The diversity of youth challenges and an aligned response is illustrated by reviewing clusters #3 and #5, each of which is characterized by a higher proportion of youth (under 30 years of age). The youth presenting the key challenge of living in more geographically isolated communities (Cluster #3) are very engaged it would appear (higher education,

higher employment, higher volunteering). Interventions for this group of engaged, active youth might be quite different from say youth who make up a higher proportion of Cluster #5. Youth in Cluster #5 seem to have multiple challenges and barriers, lower levels of education and employment, and struggling to engage and connect with the community and labour market. Their issues are likely more complex and would require different types of supports and programming, while Cluster #3 respondents are likely looking for opportunities to continue on their selected pathways to achieve additional successes whether it be leadership, career advancement, community involvement or advanced education.

Figure 6.2: Cluster Profile #1 – Minimal Challenges¹⁰



¹⁰ Categorization of average size of challenge based on mean was: 0.00 to 0.49 = *None or no challenge*; 0.50 to 1.49 = *Small Challenge*; 1.5 to 2.49 = *Medium Challenge*; 2.5 and above = *Large Challenge*.



Figure 6.3: Cluster Profile #2 – Challenge Looking After Dependents

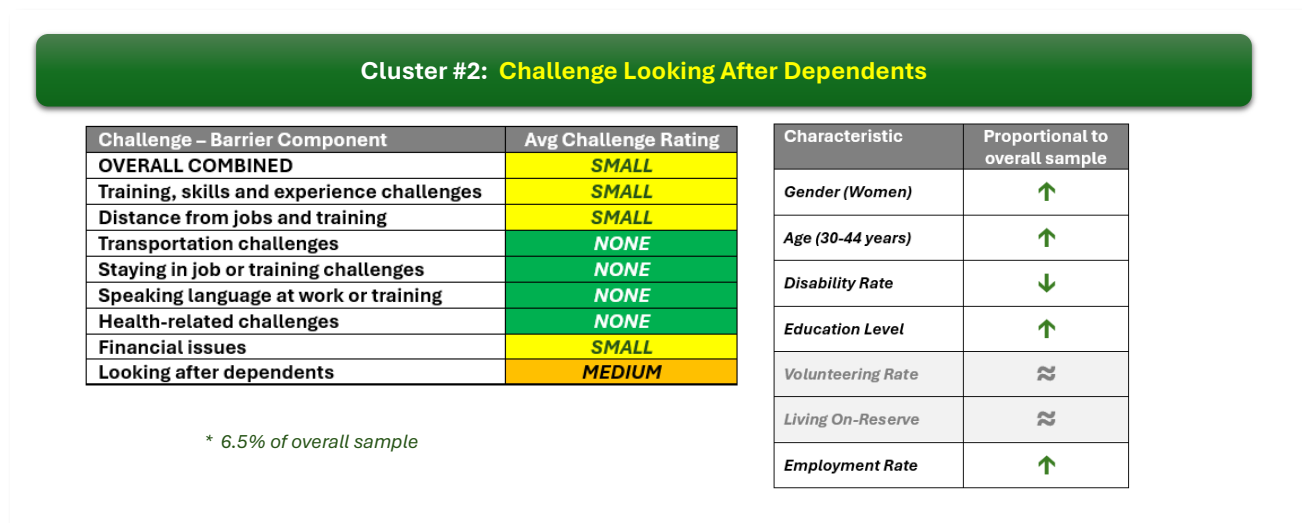


Figure 6.4: Cluster Profile #3 – Geographic Location Challenges

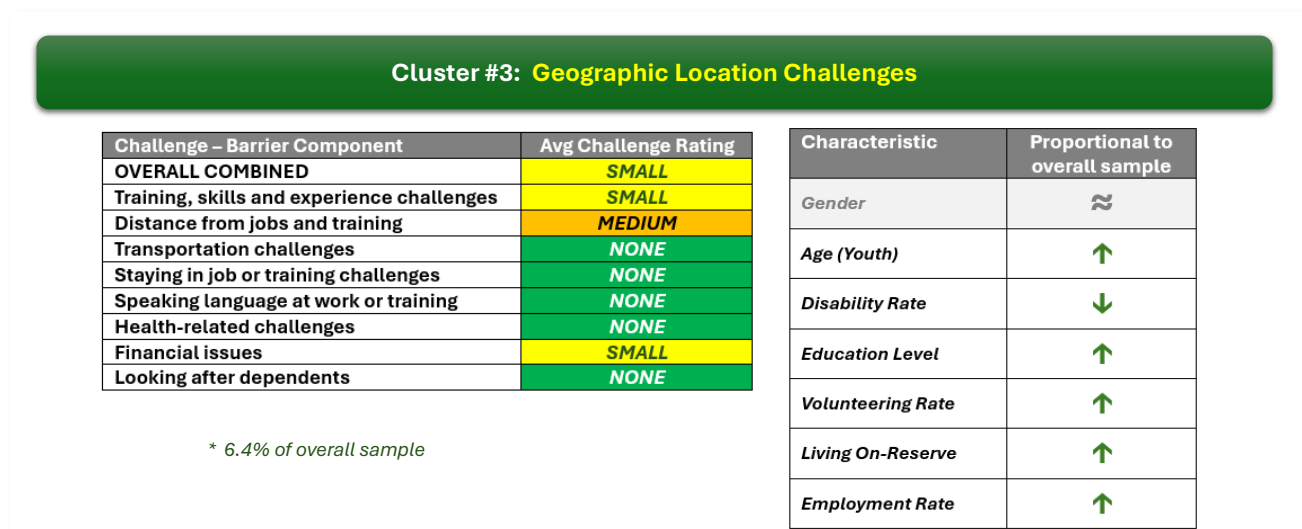




Figure 6.5: Cluster Profile #4 – Language Challenges

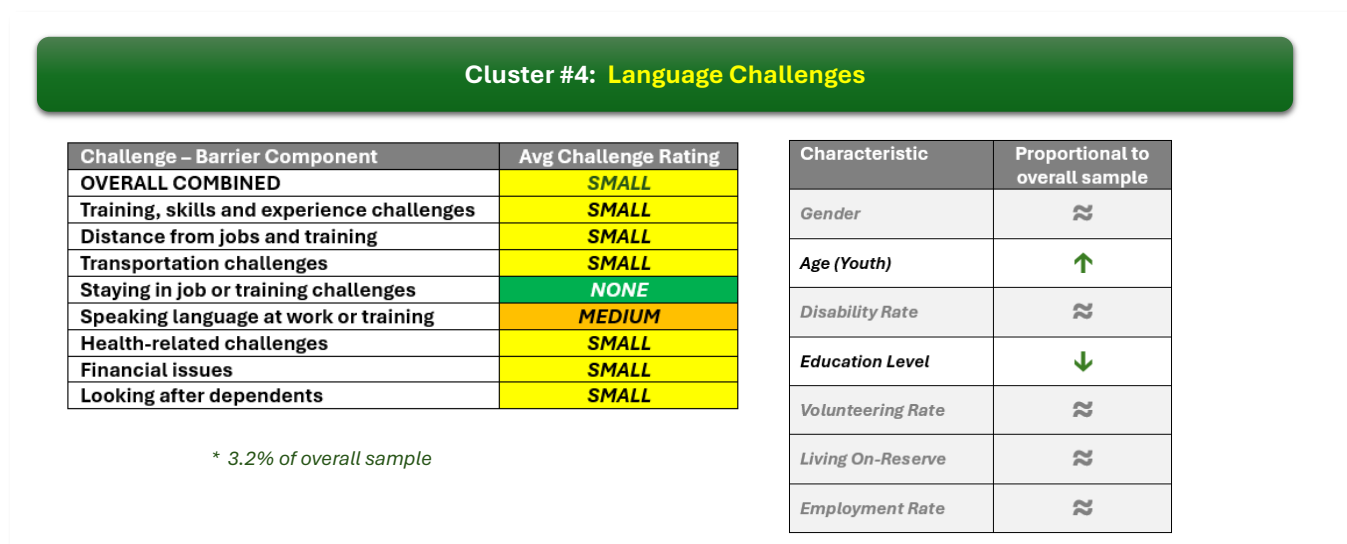


Figure 6.6: Cluster Profile #5 – Multiple Challenges but no Dependents

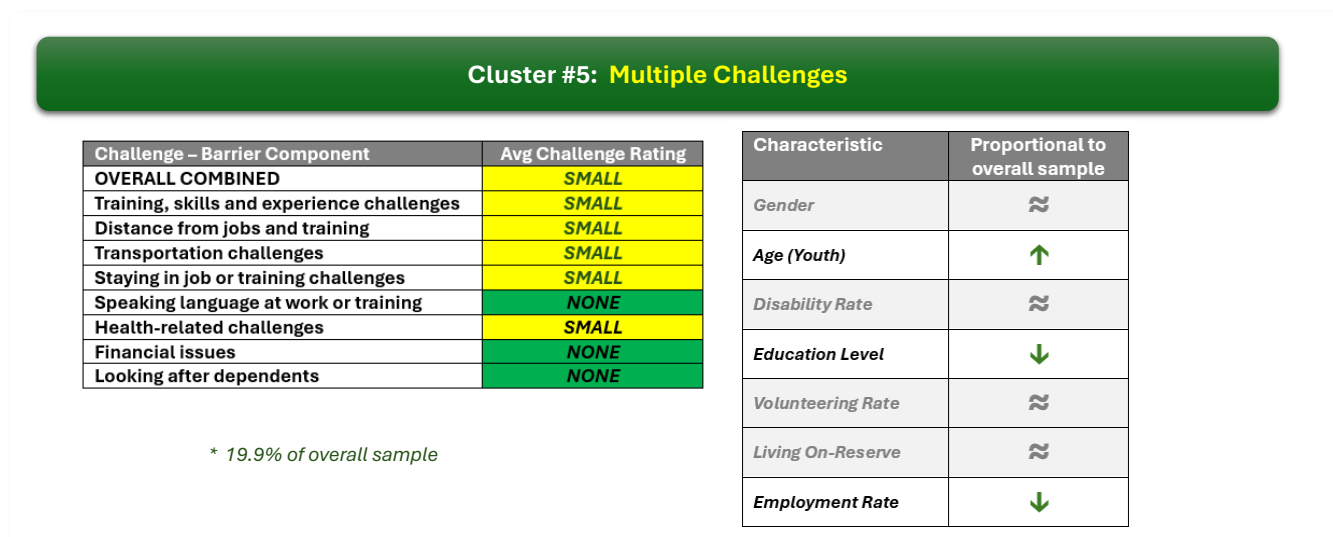




Figure 6.7: Cluster Profile #6 – Multiple Challenges Including Supporting Dependents

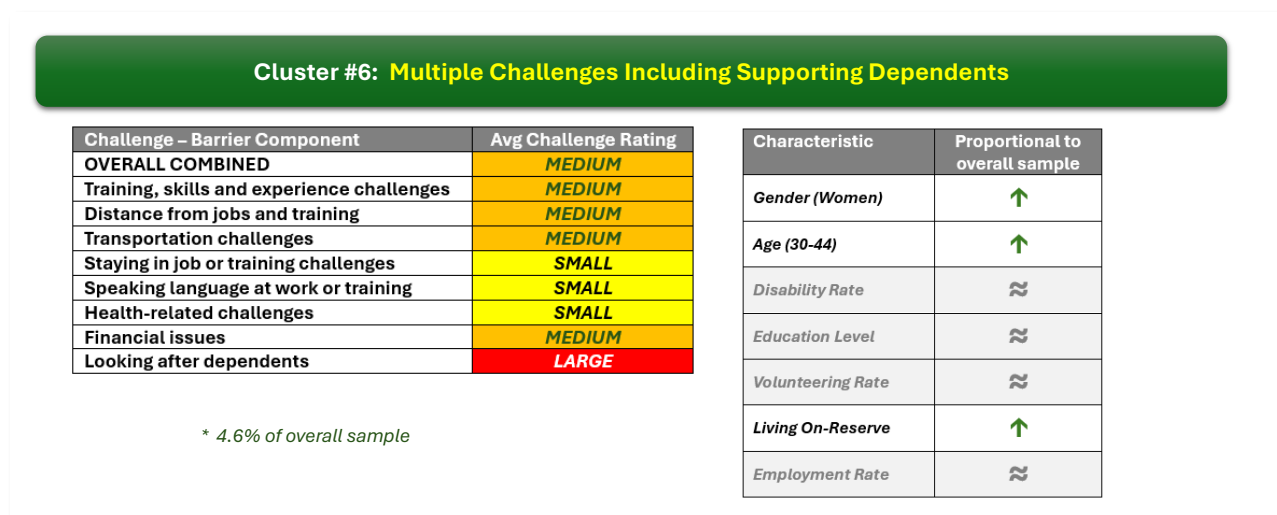


Figure 6.8: Cluster Profile #7 – Major Challenges

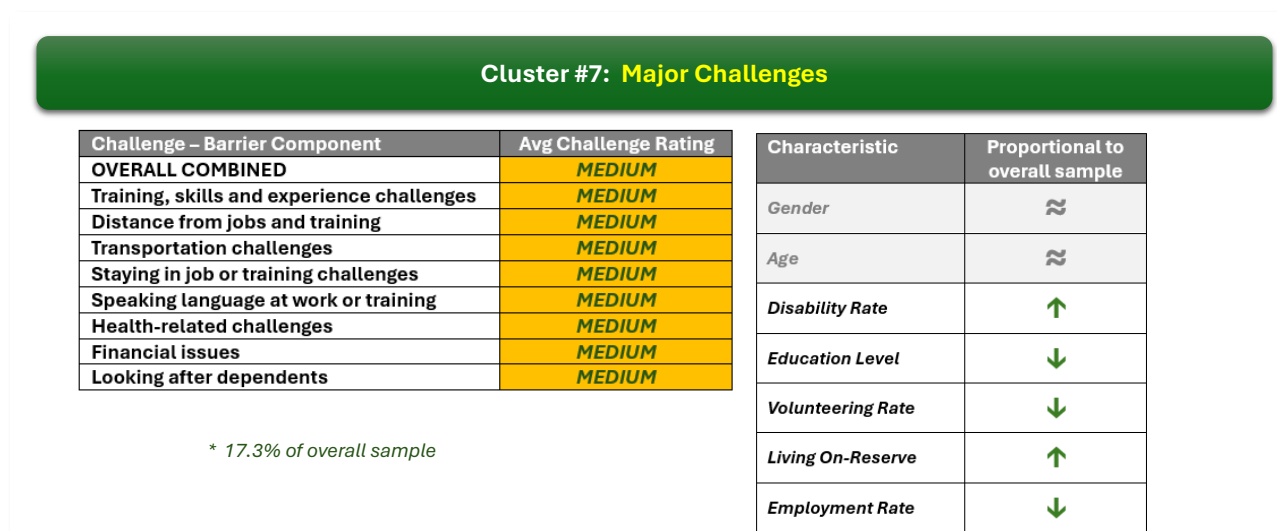




Table 6.4: Profile Details 7-Cluster Solution for Indigenous Challenges and Barriers to Training and Employment

Characteristic	Overall	#1	#2	#3	#4	#5	#6	#7
		Minimal Challenges	Looking After Dependents	Geographic Location Challenges	Language Challenges	Multiple Challenges	Multiple Challenges Including Dependents	Major Challenges
Gender								
Men	42.1%	41.3%	28.0%	45.5%	39.1%	46.0%	38.4%	45.2%
Women	57.9%	58.7%	72.0%	54.5%	60.9%	54.0%	61.6%	54.8%
Age								
Under 20	11.2%	9.6%	2.8%	11.5%	15.6%	16.1%	6.3%	13.0%
20 to 29	24.2%	19.6%	26.1%	30.4%	25.3%	31.2%	25.7%	23.6%
30 to 44	31.1%	28.7%	47.3%	28.0%	29.9%	27.3%	43.6%	33.2%
45 to 54	16.5%	18.2%	14.3%	15.6%	17.0%	14.4%	14.7%	16.6%
55 to 64	11.6%	15.2%	7.3%	11.2%	9.5%	8.3%	6.8%	10.1%
65 plus	5.4%	8.7%	2.3%	3.3%	2.7%	2.7%	2.9%	3.4%
Education								
No HS Diploma or GED	40.2%	33.2%	25.2%	31.4%	41.4%	46.1%	38.5%	60.6%
Secondary School / High School Diploma or GED	17.9%	16.5%	14.8%	20.6%	20.6%	21.0%	19.8%	16.8%
Some post-secondary	7.5%	7.1%	8.8%	8.0%	7.2%	8.4%	8.8%	6.2%
Apprenticeship, or trades certificate, or diploma	5.8%	6.4%	6.6%	7.5%	6.8%	4.9%	7.6%	3.3%
College, CEGEP, or other non university certificate or diploma	16.1%	18.8%	25.5%	18.9%	15.8%	12.4%	15.4%	9.2%
Some University or degree	12.5%	18.0%	19.1%	13.6%	8.2%	7.1%	9.9%	4.0%
Persons With Disabilities								
No	86.3%	90.7%	90.1%	90.8%	89.6%	85.0%	86.4%	71.9%
Yes	13.7%	9.3%	9.9%	9.2%	10.4%	15.0%	13.6%	28.1%
Living On-Reserve								
No	38.3%	40.3%	48.0%	34.1%	36.3%	40.4%	30.5%	31.2%
Yes	61.7%	59.7%	52.0%	65.9%	63.7%	59.6%	69.5%	68.8%
Labour Force Status								
Employed	48.7%	59.0%	59.3%	57.6%	50.2%	39.7%	48.6%	25.6%
Unemployed	12.6%	6.5%	11.0%	16.2%	16.0%	21.2%	15.1%	16.0%
Other LF status	38.7%	34.5%	29.8%	26.2%	33.9%	39.1%	36.3%	58.4%

7. Appendices

Appendix A – Results Report Example (All Agreement Holders)

ALL AGREEMENT HOLDERS COMBINED

LMI Pilot STUDY Analysis Highlights **Based on January 2019 to March 2024 Data** **Extract**



April 19, 2024

A1 - Respondent Profile

The analysis in this Interim Report is based on a data extract from the First Nations Labour Market Information (LMI) Survey and Skills Inventory Pilot Project. It includes all questionnaires entered from January 01, 2019, to March 31, 2024.

An individual can complete the survey multiple times; however, for this analysis, only their most recent survey has been used¹¹. This ensures that each respondent is only counted once in the analysis.

Table 1 shows a basic profile for the current sample; cases with no response, or refused to answer, are not included in the analysis.

Table 1: Sample Profile

Variable	Number of respondents	Percentage
ALL ISETS	33,568	100.0%
Total	33,568	100.0%
Reserve status of respondents		
On-reserve	22,041	67.1%
Off-Reserve	10,819	32.9%
Total	32,860	100.0%
Specified phone number		
Provided phone number	29,591	88.2%
Provided no phone number	3,977	11.8%
Total	33,568	100.0%
Specified email address		
Provided email address	24,302	72.4%
Provided no email address	9,266	27.6%
Total	33,568	100.0%
Age of respondent		
Under 20	3,785	11.4%
20 to 29	7,449	22.3%

¹¹ An individual is typically resurveyed once a year, so that the database has the most up-to-date information on their LMI.



Variable	Number of respondents	Percentage
30 to 44	9,607	28.8%
45 to 54	5,405	16.2%
55 to 64	4,352	13.1%
65 plus	2,737	8.2%
Total	33,335	100.0%
Gender of respondent		
Male	14,278	42.8%
Female	18,954	56.8%
Non-binary/Other	139	0.4%
Total	33,371	100.0%
Highest educational attainment by respondent		
Grade 10 or less	6,884	21.9%
Grade 11-12 (Sec IV-V)	6,750	21.5%
Secondary School/High School Diploma/GED	5,371	17.1%
Some post-secondary training	2,246	7.2%
Apprenticeship, or trades cert or diploma	1,833	5.8%
College/CEGEP/non-university cert/diploma	4,735	15.1%
University Diploma or degree	3,551	11.3%
Total	31,370	100.0%

Values may not add up to 100% due to rounding error.

The sampling errors with and without a correction for the coverage of the population demonstrate the improvement in the estimated precision of the survey as the percentage of the population surveyed approaches 50%.

Table 2: Example Sampling Error Rates with/without Population Size Adjustments

Sample Size	Sampling Error Without Adjustment (Most surveys)	Sampling Error if 50% of the Population Responded	Sampling Error if 80% of the Population Responded
1000	3.1%	2.2%	1.4%



Sample Size	Sampling Error Without Adjustment (Most surveys)	Sampling Error if 50% of the Population Responded	Sampling Error if 80% of the Population Responded
500	4.4%	3.1%	2.0%
200	6.9%	4.9%	3.1%
100	9.8%	7.0%	4.4%
50	14.0%	9.9%	6.3%
25	20.0%	14.1%	8.9%
10	32.7%	23.1%	14.6%

Table 3 provides the highest educational attainment for the sample by age group, since the educational attainment profile is highly related to the age profile.

Table 3: Educational Attainment by Age

Highest Educational Attainment \ Age	Under 20	20 to 29	30 to 44	45 to 54	55 to 64	65 Plus	Total
Grade 10 or less	43.1%	15.0%	15.9%	18.6%	25.3%	34.0%	21.9%
Grade 11-12 (Sec IV-V)	38.6%	25.0%	19.7%	15.8%	14.8%	15.7%	21.5%
Secondary/High School diploma or GED	14.4%	27.4%	16.6%	13.6%	11.8%	10.1%	17.2%
Some post-secondary training	2.4%	8.7%	7.4%	8.3%	7.2%	6.5%	7.2%
Apprenticeship, trades certificate, or diploma	0.6%	4.5%	7.8%	7.1%	6.6%	6.5%	5.8%
College, CEGEP, or other non-university certificate or diploma	0.8%	11.1%	18.7%	21.1%	20.3%	13.7%	15.1%
Some university or degree	0.2%	8.2%	14.1%	15.6%	14.0%	13.4%	11.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number of cases	3,596	7,046	8,978	5,042	3,988	2,504	31,154

Values may not add up to 100% due to rounding error.

Table 4 provides the highest educational attainment for the sample by gender.

Table 4: Educational Attainment by Gender

Highest Educational Attainment \ Gender	Male	Female	Non-binary/Other	Total
Grade 10 or less	26.9%	18.2%	28.6%	22.0%
Grade 11-12 (Sec IV-V)	25.3%	18.6%	19.0%	21.5%
Secondary/High School diploma or GED	17.8%	16.6%	15.9%	17.1%
Some post-secondary training	6.1%	7.9%	8.7%	7.2%
Apprenticeship, trades certificate, or diploma	8.4%	3.9%	1.6%	5.8%
College, CEGEP, or other non-university certificate or diploma	9.0%	19.8%	11.1%	15.1%
Some university or degree	6.4%	15.0%	15.1%	11.3%
Total	100.0%	100.0%	100.0%	100.0%
Number of cases	13,358	17,706	126	31,190

Values may not add up to 100% due to rounding error.

Table 5 provides the respondents' reported total personal income for the past 12 months. The distribution in this table applies only to individuals, not to the total household/family income, which is often much higher. Another important caveat is due to the sensitive nature of this question, the number of cases missing for the income question tends to be higher than some other variables. As such, these numbers should be interpreted with caution since there is potential for non-response bias.

Table 5: Personal Income for the past 12 Months

Variable	Total Number of respondents	Percentage
Respondents' past year's income		
Less than \$10,000	5,658	30.0%
\$10,000 to less than \$20,000	3,887	20.6%
\$20,000 to less than \$30,000	2,712	14.4%
\$30,000 to less than \$40,000	1,927	10.2%
\$40,000 plus	4,704	24.9%
Total	18,888	100.0%

Values may not add up to 100% due to rounding error.

Respondents were asked what their main sources of personal income were in the previous 12 months.

Table 6: Main Source of Personal Income

Variable	Total Number of respondents	Percentage
Source of personal income for the past 12 Months (n = 26,481)		
Employment Insurance (EI)	2,997	11.3%
Employment income (e.g., salary, wages, self-employed)	14,667	55.4%
Social Assistance	6,962	26.3%

Values may not add up to 100% due to rounding error.

A2 - Labour Force Status Classification

Past analysis of the data stressed that the collection of information should include traditional skill activities. The omission of this information was found to understate the nature and extent of labour force activity for community members.

The first category in the labour force classification, *Employed/Have a Job*, identifies individuals who were either working at a job or self-employed in the previous work (including traditional skill activities) or were away from a job they held that week; this would include individuals who were on sick leave, maternity leave, parental leave and even respondents who were on a temporary layoff. The second category, *Unemployed*, included all respondents who were not employed or did not have a job at the time of the survey and had looked for work in the previous 4 weeks. All remaining respondents were allocated to the *Other Labour Force Status*. This would include those who have not looked for a job due to their status, such as students, homemakers, those with disabilities hindering them from working, etc.

Table 7 provides information related to labour force activity among community members, including traditional skills.

Table 7: Labour Force Status Classification with Traditional Employment

Variable	Number of respondents	Percentage
Labour force classification with traditional employment		
Employed/Traditional Skills/Employment	15,538	47.6%
Unemployed	3,411	10.5%
Other labour force status	13,667	41.9%
Total	32,616	100.0%

Values may not add up to 100% due to rounding error.

Survey respondents were also asked their current work situation and how closely their current or most recent work situation (job, self-employment) was related to their education, experience, and skills.

Table 8: Current Work Situation and Whether Related to Past Experience and Education

Variable	Number of respondents	Percentage
What is your work situation?		
Permanent or fixed term 1 year or more	9,616	64.8%
Casual, seasonal, or short-term less than 1 year	4,167	28.1%
Self-employed	1,052	7.1%
Total	14,835	100.0%
How close your current or most recent work situation (job, self-employment) related is to your education, experience, and skills.		
Closely related	5,655	47.3%
Somewhat related	3,365	28.2%
Not at all related	2,929	24.5%
Total	11,949	100.0%
Full-time or part-time weekly work		
Full-time (30 or more hours per week)	12,284	81.2%
Part-time (Less than 30 hours per week)	2,847	18.8%
Total	15,131	100.0%

Values may not add up to 100% due to rounding error.

All respondents were asked if they had worked for pay or been self-employed at any time in the past 12 months.

Table 9: Worked for Pay or Been Self-employed

Variable	Number of respondents	Percentage
In the previous 12 months, have you worked for pay, or been self-employed?		
Yes	19,357	66.8%
No	9,602	33.2%
Total	28,959	100.0%

Values may not add up to 100% due to rounding error.



Table 10 displays labour force classification by age.

Table 10: Labour Force Classification by Age

Labour Force Classification \ Age	Under 20	20 to 29	30 to 44	45 to 54	55 to 64	65 Plus	Total
Employed/Have a job	27.4%	46.3%	54.9%	59.1%	51.4%	24.9%	47.6%
Unemployed	13.3%	14.8%	11.4%	8.6%	6.1%	2.0%	10.5%
Other labour force	59.4%	38.9%	33.7%	32.3%	42.5%	73.1%	41.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number of cases	3,645	7,184	9,356	5,287	4,243	2,674	32,389

Values may not add up to 100% due to rounding error.

Table 11 displays labour force classification by the 6 highest attained education categories.

Table 11: Labour Force Classification by the Six Highest Attained Education Categories

Labour Force Classification \ Six Highest Education Categories	No High School Diploma or GED	Secondary School/High School Diploma or GED	Some Post-secondary Training	Apprenticeship, or Trades Certificate, or Diploma	College, CEGEP, or Other Non-university Certificate or Diploma	Some University or Degree	Total
Employed/Have a job	31.0%	47.8%	58.0%	59.1%	66.8%	74.1%	47.8%
Unemployed	11.7%	13.3%	10.9%	12.1%	8.1%	5.3%	10.6%
Other labour force	57.4%	38.9%	31.1%	28.8%	25.1%	20.6%	41.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Number of cases	13,269	5,231	2,209	1,804	4,668	3,531	30,712

Values may not add up to 100% due to rounding error.

A3 - Job Search Activities

Respondents were asked what sources they used to find work in the past 12 months. Table 12 provides the sources they used to find work.

Table 12: Sources Used to Find Work in the Past 12 Months

Variable	Total Number of respondents	Percentage
Sources used to Find Work (n = 9,556)		
Internet searches online	4,585	48.0%
Looked at ads	4,486	46.9%
Friends and relatives	4,232	44.3%
Talked with employers directly	2,939	30.8%
Public Employment Agency	1,824	19.1%
Placed and answered job ads	1,729	18.1%
Community Agency or ISET	904	9.5%
Other sources	887	9.3%
Private Employment Agency	440	4.6%
Union	327	3.4%

Values may not add up to 100% due to rounding error.

Respondents, who were not currently working, were asked whether they could have started a job or new self-employment during the last four weeks.

Table 13: Could have Started Job or New Employment in Past 4 Weeks

Variable	Total Number of respondents	Percentage
Could have Started Job in Past 4 Weeks (n = 12,019)		
No, already had a job	4,332	36.0%
Yes, could have started a job	1,928	16.0%
No, going to school	1,243	10.3%
No, because of personal or family responsibilities	1,073	8.9%
No, because of temporary illness or disability	852	7.1%
No, retired	834	6.9%
No, other reasons	1,757	14.6%

Values may not add up to 100% due to rounding error.

A4 - Skills Inventory

Military Service

Respondents were asked if they have served in the Canadian Military. Table 14 displays the components of the Canadian military in which respondents have participated.

Table 14: Participation Status by Military Service

Status	Regular Force	Primary Reserve Force	Supplementary Reserve	Canadian Rangers	Cadet Organizations Administration and Training Service
Yes, currently serving	0.2%	0.1%	0.1%	0.2%	0.2%
Yes, but no longer serving	0.8%	0.7%	0.3%	0.3%	2.7%
No	99.0%	99.2%	99.7%	99.5%	97.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Number of cases	11,368	11,334	11,299	11,299	11,357

Values may not add up to 100% due to rounding error.

Identified Employment History

Table 15 shows the frequencies of the respondents that reported a job in their history. Respondents were able to list up to five of their most recent jobs. Of those that indicated they had at least one job in their employment history, the following is a summary of the results.

Table 15: Frequency of Respondents with Employment History

Variable	Number of respondents	Percentage
Number of jobs in their employment history		
1	12,694	60.6%
2	4,723	22.6%
3	2,119	10.1%
4 or more	1,401	6.7%
Total	20,937	100.0%

Values may not add up to 100% due to rounding error.

Table 16 displays the number of jobs that have been coded with a 2021 NOC code and the number of jobs that have not been coded with a 2021 NOC Code.

Table 16: Employment History Summary

Variable	Number of respondents	Percentage
Coded employment history		
Jobs coded with a NOC code	30,917	88.5%
Jobs with no NOC code available	4,029	11.5%
Total jobs	34,946	100.0%

Values may not add up to 100% due to rounding error.

In 2022, a 2-digit NOC code was introduced to organize and describe occupations. A detailed listing of the number of respondents with each of these 2-digit codes is presented in Appendix A - Identified Employment History.

On November 16, 2022, there was a transition to the 2021 version of the National Occupational Classification (NOC). The 2021 National Occupational Classification (NOC) system is based on 5 digits (versus the previous 4-digit system) and is used to identify and categorize jobs (occupations) based on their training, education, experience, and responsibilities (TEER) they require. The TEER categorization system of the 2021 NOC replaced the skill type and level structure of the 2016 NOC system. Each respondent's highest skill rating was identified and is displayed in Table 17.

Table 17: Highest TEER Skill Rating

Variable	Number of respondents	Percentage
TEER skill rating		
TEER 0	2,371	12.8%
TEER 1	2,794	15.0%
TEER 2	4,385	23.6%
TEER 3	3,012	16.2%
TEER 4	2,689	14.5%
TEER 5	3,322	17.9%
Total	18,573	100.0%

Values may not add up to 100% due to rounding error.

Interest in Being Notified of Job Opportunities

All respondents were asked if they would be interested in being notified about jobs that matched their skills and areas of interest. They were also asked if they had interest in receiving email notices that match their skills and areas of interest, and if they wanted to make contact and resume information available to potential employers for direct contact.

Table 18: Interested in Being Notified of Job Opportunities

Variable	Number of respondents	Percentage
Interested in being notified of any job opportunities that match your skills and areas of interest		
Very interested	12,793	53.9%
Somewhat interested	4,821	20.3%
Not interested	6,132	25.8%
Total	23,746	100.0%

Interested in receiving email notices		
Yes	10,989	69.0%
No	4,948	31.0%
Total	15,937	100.0%
Interest in sharing personal information		
Yes	9,169	61.6%
No	5,716	38.4%
Total	14,885	100.0%

Values may not add up to 100% due to rounding error.

Labour force status with traditional employment, and respondent's interest in being notified of any job opportunities that match their skills and areas of interest are displayed below.

Table 19: Interest in Being Notified by Labour Classification with Traditional Jobs Included

Interest of Being Notified \ LMS Classification with Traditional Employment	Employed/ Have a job	Unemployed	Other Labour Force	Total
Very Interested	53.3%	79.4%	46.3%	53.9%
Somewhat Interested	22.2%	14.1%	19.7%	20.2%
Not interested	24.5%	6.4%	34.0%	25.9%
Total	100.0%	100.0%	100.0%	100.0%
Number of cases	11,478	2,958	8,913	23,349

Values may not add up to 100% due to rounding error.

Identified Employment Preferences

Respondents were asked how interested they were in exploring (other) employment opportunities or looking for (other) jobs; as well as if they would be interested in exploring (other) employment opportunities or looking for (other) jobs within the next 12 months.

Table 20: Identified Employment Preferences

Variable	Number of respondents	Percentage
At this point, how interested are you in exploring (other) employment opportunities or looking for (other) jobs?		
Very interested	7,550	27.7%
Somewhat interested	7,247	26.5%
Not interested	12,500	45.8%
Total	27,297	100.0%
Do you think you will be interested in exploring other employment opportunities or looking for other jobs in the next 12 months?		
Yes	796	8.8%
Maybe	2,140	21.5%
No	10,579	69.6%
Total	13,515	100.0%

The respondents that expressed interest were asked to list the types of employment they preferred.

Table 21: Frequency of Respondents with Employment Preferences

Variable	Number of respondents	Percentage
Frequency of employment preference		
1	7,829	84.8%
2	979	10.6%
3	338	3.7%
4 or more	83	0.9%
Total	9,229	100.0%

Values may not add up to 100% due to rounding error.

The following table displays the number of job preferences that have been coded with a NOC code, and those that have no codes available.

Table 22: Employment Preferences Summary

Variable	Number of respondents	Percentage
Coded employment preferences		
Employment preferences with NOC code	8,610	77.1%
Employment preferences with no NOC code available	2,560	22.9%
Total employment preferences	11,170	100.0%

Values may not add up to 100% due to rounding error.

A detailed listing of the number of respondents with each of these 2-digit codes is presented in Appendix AB - Identified Employment Preference.

Working with Unions

Respondents who completed the survey after June 2020 were asked a new question regarding if they were a member of a union.

Table 23: Union Members

Variable	Number of respondents	Percentage
Are you a member of a union?		
Yes	2,292	9.5%
No	21,777	90.5%
Total	24,069	100.0%

School Attendance and Training

Table 24 presents the percentage of respondents who stated they had attended a school, college, or university in the previous week and whether they were full-time or part-time students.

Table 24: School Attendance

Variable	Number of respondents	Percentage
Attended school in the past 12 months		
Yes	2,809	22.3%
No	9,806	77.7%
Total	12,615	100.0%
Attended school last week?		
Yes	4,092	12.6%
No	28,294	87.4%
Total	32,386	100.0%
Student Status		
Full-time student	4,021	80.5%
Part-time student	973	19.5%
Total	4,994	100.0%

Values may not add up to 100% due to rounding error.

Identified Formal Education History

Respondents were asked whether they had received any education, other than high school, which could be counted towards a degree, certificate, or diploma from an educational institution.

Table 25: Frequency of Respondents with Other Education

Variable	Number of respondents	Percentage
Received other education that can be counted toward a degree, certificate, or diploma from an educational institution?		
Yes	12,323	43.6%
No	15,966	56.4%
Total	28,289	100.0%

Table 26 shows the frequency of respondents that reported a formal education entry in their history.

Table 26: Frequency of Respondents with Formal Education History Entries

Variable	Number of respondents	Percentage
Number of formal education history entries		
1	6,845	60.4%
2	2,721	24.0%
3 or more	1,769	15.6%
Total	11,335	100.0%

Values may not add up to 100% due to rounding error.

The following table displays the number of those training history entries that have been coded with a CIP code, and those that have no codes available.

Table 27: Training History Summary

Variable	Number of respondents	Percentage
Coded formal education history		
Formal education history with a CIP code	15,266	80.9%
Formal education history with no CIP code available	3,615	19.1%
Total formal education history records	18,881	100.0%

Values may not add up to 100% due to rounding error.

Appendix AC provides the listing of CIPS and the number of respondents with this formal education.

Certifications & Courses

All respondents were asked if they had any current licenses or certifications, or if they have any other training or courses to highlight. Table 28 shows that, in addition to their highest educational attainment.

Table 28: Licenses, Certificates, and Other Training

Variable	Number of respondents	Percentage
Have Licenses or Certificates to Highlight		
Yes	14,055	47.4%
No	15,580	52.6%
Total	29,635	100.0%
Have Other Training or Courses to Highlight		
Yes	3,050	10.7%
No	25,481	89.3%
Total	28,531	100.0%

Values may not add up to 100% due to rounding error.

The following table displays the frequency of respondents with Certifications.

Table 29: Frequency of Respondents with Certifications

Variable	Number of respondents	Percentage
Number of Certifications		
1	5,526	45.8%
2 to 3	4,311	35.8%
4 or more	2,221	18.4%
Total	12,058	100.0%

Values may not add up to 100% due to rounding error.

The following table displays the number of those certifications that have been coded code, and those that have no certification codes available.

Table 30: Certification Summary

Variable	Number of respondents	Percentage
Coded certifications		
Certifications with code	21,700	79.9%
Certifications with no code available	5,458	20.1%
Total certification records	27,158	100.0%

Values may not add up to 100% due to rounding error.

Appendix AD provides the listing of the certifications and the number of respondents with this certification.

Other Training

Table 31 provides the percentage of respondents who participated in either learning traditional skills or other training and skills upgrading.

Table 31: Learning Traditional Skills and Other Training or Skills Upgrading

Variable	Number of respondents	Percentage
In the past 12 months, were you participating in any training that involved learning traditional skills?		
Yes	3,909	12.3%
No	27,925	87.7%
Total	31,834	100.0%
In the past 12 months, were you participating in any other form of training, or skills upgrading?		
Yes	3,675	11.6%
No	28,014	88.4%
Total	31,689	100.0%

Values may not add up to 100% due to rounding error.

Important Skills to Highlight

The community members responding to the survey represent a diverse and skilled workforce. In addition to formal education, licenses and certificates, as well as additional training and courses outlined above, most respondents provided information on other important skills that should be highlighted in their skills

inventory. Table 32 shows the total number of respondents per skill that they feel they have mastered, and the percentage who identified a skill worth highlighting to potential employers. The total number of respondents varies because the skills listed in this module have changed over time.

Table 32: Important Skills to Highlight

Other Important Skills	Percentage of Respondents with Skills
Using social media	69.6%
Cook and preserve food	65.6%
Indoor maintenance	64.3%
Outdoor maintenance	62.6%
Crafts and arts	50.1%
Hunting, fishing, trapping	46.5%
Use boats, snowmobiles, and ATVs	45.8%
Teaching, mentoring, and coaching	45.3%
Typing, word processing, and using software	44.5%
Sports and athletics	39.4%
Communications and presentations	39.2%
Building and constructing	35.0%
Music, playing instruments, and dancing	32.1%
Storytelling; writing, stories, poems, and songs	31.6%
Identify and harvest local plants	27.9%
Computer gaming	25.1%
Navigation and guiding	24.5%
Repair appliances, small engines, and motors	19.7%
Computer programming and using applications	14.3%
Indigenous language speaker, teacher, and writer	14.1%

Volunteer Experience

Not all work experience and skills are attained because of paid employment. The following displays the frequency of respondents who have obtained experience through volunteering.

Table 33: Community Assistance or Volunteer Experience and Skills

Variable	Number of respondents	Percentage
Community Assistance or Volunteer Experience and Skills		
Yes	12,239	42.6%
No	16,516	57.4%
Total	28,755	100.0%

Intent to return to school and Interest in Other Training or Certification

Table 34 shows the percentage of survey respondents who plan to attend an educational institution in the next 12 months and the percentage interested in taking other training or certification.

Table 34: Intent to Return to an Educational Institution and Interest in Other Training or Certification

Variable	Number of respondents	Percentage
Plans to return to an educational institution within the upcoming 12 months		
Yes	7,097	22.8%
Maybe/Not Sure	7,534	24.2%
No	16,560	53.1%
Total	31,191	100.0%
Are you interested in taking any other types of training or acquiring other certifications?		
Yes	11,146	35.8%
Maybe	7,866	25.3%
No	12,123	38.9%
Total	31,135	100.0%

Values may not add up to 100% due to rounding error.

Identified Training Interests

The respondents were asked if they were interested in taking other types of training and certification.

Table 35: Frequency of Respondents with Training Interests

Variable	Number of respondents	Percentage
Number of training interests		
1	4,564	82.3%
2	616	11.1%
3 or more	367	6.6%
Total	5,547	100.0%

Values may not add up to 100% due to rounding error.

The following table displays the number of those training preferences entries that have been coded with a CIP code, and those that have no codes available.

Table 36: Training Interests Summary

Variable	Number of respondents	Percentage
Coded training interests		
Training interests with CIP code	4,617	65.2%
Training interests with no CIP code available	2,469	34.8%
Total training interests	7,086	100.0%

Values may not add up to 100% due to rounding error.

Appendix AE provides the listing of training interests, CIPS and the number of respondents interested in this training.

Driver's Licenses

Having a valid driver's license is crucial for the attainment of employment, training, and retainment of employment.

Prior to June 2020, information on driver's licenses could be provided under a general question on licenses and certificates that respondents chose to highlight.

Responses to this question were searched to identify individuals with driver's licenses who participated in the pilot prior to June 2020. If a respondent did not answer or was not asked the question whether they had a valid driver's license but

reported a driver's license in the general question on licenses and certificates, this was included as a "Yes" in Table 37. But if they reported something other than driver's license in the general question on licenses and certificates, this was coded as a "No" in Table 37.

Table 37: Valid Drivers Licenses

Variable	Number of respondents	Percentage
Valid Drivers License		
Yes, as identified in either the drivers license or as a certificate	17,597	64.4%
No, never had a valid drivers license	8,035	29.4%
No, it is an expired driver's license	815	3.0%
No, it is a suspended drivers license	890	3.3%
Total	27,337	100.0%

Values may not add up to 100% due to rounding error.

Respondents that indicated they did have a driver's license provided a description of the license they held. These license types have been classified into three categories: 1) those who hold a driver's license for road vehicles and potentially multiple passenger vehicles only, 2) those who hold a license for vehicles other than road or passenger vehicles (such as heavy equipment, forklifts, long haul trucks, etc.), and 3) those who hold both licenses. This is critical for not only knowing the population of drivers for employment purposes but for travelling distances for job search, training, and employment.

Table 38: Types of Driver's License

Variable	Number of respondents	Percentage
Types of Drivers Licenses		
Road Drivers and Passenger Drivers	14,834	84.3%
Other than Passengers Only	450	2.6%
Both Passenger and Other	375	2.1%
Did not Specify	1,938	11.0%
Total	17,597	100.0%

Values may not add up to 100% due to rounding error.

A4 - Challenges and Impacts

Employment and Training Challenges

All respondents were asked if they faced challenges or barriers when trying to get jobs or participate in training and allowed respondents to specify the magnitude of these challenges/barriers. The challenges are rated as small, medium, or large challenge, with respondents also given the option to identify no challenge at all.

Employment Challenges and Barriers

Table 39 displays the analysis of responses for employment challenges and barriers.

Table 39: Rating of Employment Challenges and Barriers

Type of Challenge or Barrier	No Challenge	Small Challenge	Medium Challenge	Large Challenge	Number of Respondents
Challenges finding and getting a job	43.7%	18.4%	19.8%	18.1%	18,222
Living in a community that is far away from jobs	50.5%	17.8%	14.4%	17.3%	17,767
Not having enough or the right type of education or training to get a job	46.2%	20.15	16.8%	16.9%	17,821
Not having enough work experience to get a job	49.9%	18.9%	15.3%	15.9%	17,926
Challenges finding money needed to apply for jobs and go to interviews	52.1%	18.7%	14.1%	15.1%	17,657
Not having the skills that employers are looking for	49.4%	21.0%	15.6%	13.9%	17,803
Challenge finding money to pay for things related to job (e.g., uniforms, boots, safety equipment)	55.6%	18.6%	12.4%	13.5%	9,592
Challenges keeping a job	66.8%	16.2%	9.8%	7.2%	17,965

Values may not add up to 100% due to rounding error.

Training Challenges and Barriers

Table 40 displays the analysis of responses for training challenges and barriers.

Table 40: Rating of Training Challenges and Barriers

Type of Challenge or Barrier	No Challenge	Small Challenge	Medium Challenge	Large Challenge	Number of Respondents
Challenges finding money for training program	45.2%	18.7%	15.9%	20.3%	17,665
Not having the educational requirements for training or education programs	51.7%	18.2%	13.9%	16.1%	17,708
Living in a community that is far away from training opportunities	49.15	19.7%	15.4%	15.8%	17,621
Challenges finding appropriate training	48.2%	21.6%	17.8%	12.4%	17,828
Challenges staying in training	66.9%	16.2%	9.9%	7.1%	17,522

Values may not add up to 100% due to rounding error.

Health and Safety Challenges and Barriers

Table 41 displays the analysis of responses for health and safety challenges and barriers.

Table 41: Rating of health and Safety Challenges and Barriers

Type of Challenge or Barrier	No Challenge	Small Challenge	Medium Challenge	Large Challenge	Number of Respondents
Challenges with emotional or mental health	60.2%	18.3%	11.6%	9.9%	17,403
Challenges with physical health	65.1%	16.0%	9.7%	9.2%	17,460
Health and safety concerns related to COVID-19	72.2%	13.6%	7.1%	7.1%	9,474
Challenges with substance use or addictions	79.8%	9.6%	5.5%	5.1%	17,037

Values may not add up to 100% due to rounding error.

Other Challenges and Barriers

Table 42 displays the analysis of responses for other challenges and barriers.

Table 42: Rating of Other Challenges and Barriers

Type of Challenge or Barrier	No Challenge	Small Challenge	Medium Challenge	Large Challenge	Number of Respondents
Challenges getting to and from work or training (transportation)	57.3%	17.1%	12.1%	13.5%	17,720
Looking after people who are dependent	57.7%	16.6%	12.6%	13.1%	17,390
Challenges speaking language used at work or training program	67.2%	15.2%	8.7%	8.9%	17,316
Challenges with using or accessing computers or internet	70.1%	13.8%	8.2%	7.9%	9,517
Challenges balancing traditional lifestyle (e.g., hunting, picking berries, cultural activities) with demands from job or training requirements	67.0%	15.8%	9.4%	7.8%	9,391

Values may not add up to 100% due to rounding error.

Physical, Emotional, or Psychological Challenges

The respondents who completed the survey after June 2020 were asked if they have difficulties performing certain activities as specified in Table 43 below. The difficulties or long-term conditions considered were those that have lasted, or are expected to last, for six months or more.

Table 43: Difficulties and Inability to Perform Certain Activities

Difficulties	No	Sometimes	Often	Always	Number of cases
Difficulty seeing (even when wearing glasses or contact lenses)	69.8%	20.4%	4.4%	5.3%	20,049
Difficulty hearing (even when using a hearing aid)	82.8%	12.0%	2.7%	2.4%	19,850
Difficulty walking, using stairs, using hands or fingers, or doing other physical activities	79.2%	12.6%	3.6%	4.6%	19,953
Difficulty learning, remembering, or concentrating	70.3%	21.8%	4.8%	3.1%	19,866
Emotional, psychological, or mental health conditions (e.g. anxiety, depression, bipolar disorder, substance abuse, anorexia, etc.)	65.9%	20.4%	7.2%	6.5%	19,860
Other health problem or long-term condition that has lasted or is expected to last six months or more	77.1%	9.8%	4.1%	9.1%	19,351

The respondents were further asked if they considered themselves a person with a disability. Table 44 below summarizes the results.

Table 44: Self-reported Person with a Disability

Variable	Number of respondents	Percentage
Do you consider yourself a person with a disability?		
Yes	3,285	14.4%
No	19,482	85.6%
Total	22,767	100.0%

COVID Impacts

COVID-19 Impact Questions were added to the LMI Survey in October 2020. This series of questions provides the means to record the impact of COVID-19 on community labour markets as well as individual community members. The following four topics are discussed:

Economic Impacts

Respondents were asked what the impact of COVID-19 was on their ability to meet financial obligations or essential needs, such as rent or loan payments, utilities, and groceries.

Table 45: COVID-19 Impact Rating: Ongoing Impacts of COVID

Variable	Number of respondents	Percentage
Ongoing Impacts of COVID		
Major Impact	4,191	21.4%
Moderate Impact	4,439	22.7%
Minor Impact	3,861	19.8%
No Impact	7,051	36.1%
Total	19,542	100.0%

Values may not add up to 100% due to rounding error.

Employment Impacts

Respondents were also asked, from the start of the pandemic until now, if they had lost a job or source of income due to COVID-19, and whether they were able to regain their employment since.

Table 46: COVID-19 Impact: Loss/Regain of Source of Income

Variable	Number of respondents	Percentage
Loss or Regain of Source of Income (n = 13,298)		
Not applicable – did not lose a job or source of income due to COVID-19	3,694	27.8%
Yes, found a new permanent job	334	2.5%
Yes, rehired/recalled at previous job permanently	325	2.4%
No, searching for new job	267	2.0%
Yes, found a new temporary job	224	1.7%



Variable	Number of respondents	Percentage
Loss or Regain of Source of Income (n = 13,298)		
Yes, found a new temporary job more than once	136	1.0%
Yes, rehired/recalled at previous job temporarily	129	1.0%
No, awaiting recall to previous job	51	.04%
Yes, rehired/recalled at previous job temporarily more than once	50	.04%

Values may not add up to 100% due to rounding error.

Respondents who completed the survey after October 15, 2020, were asked in what ways COVID-19 had changed their employment/job situation or job search. The following table displays the results.

Table 47: Covid-19 Impact: Job Search

Variable	Total Number of respondents	Percentage
Covid-19 Impact (n = 3,105)		
Harder to find a job or work	1,583	51.0%
No impacts due to COVID-19 pandemic	1,075	34.6%
Easier to find a job or work	114	3.7%
Employment offices and support were not available to help with search	105	3.4%
Did not have access to computers or Internet for search, sending applications, etc.	54	1.7%
Other impacts on looking for work	174	5.6%

Values may not add up to 100% due to rounding error.

Appendix AA: Identified Employment History

The following table displays up to 20 of the most frequent Employment History Descriptions with their appropriate 2-digit NOC codes as cited by respondents.

Job History Description with NOC

Variable	Number of respondents	Percentage
Job History Description with 2-Digit NOC		
65 Sales and service support occupations	3,376	18.2%
41 Professional occupations in law, education, social, community and government services	2,004	10.8%
75 Helpers and labourers and other transport drivers, operators and labourers	1,860	10.0%
42 Front-line public protection services and paraprofessional occupations in legal, social, community, education service	1,709	9.2%
72 Technical trades and transportation officers and controllers	1,567	8.4%
64 Sales and service representatives and other customer and personal services occupations	1,566	8.4%
14 Administrative and financial support and supply chain logistics occupations	1,539	8.3%
13 Administrative occupations and transportation logistics occupations	1,177	6.3%
73 General trades	900	4.8%
44 Care providers and legal and public protection support occupations	854	4.6%
63 Occupations in sales and services	760	4.1%
12 Administrative and financial supervisors and specialized administrative occupations	695	3.7%
22 Technical occupations related to natural and applied sciences	644	3.5%
43 Assisting occupations in education and in legal and public protection	632	3.4%
10 Specialized middle management occupations in administrative services, financial and business services and communication	619	3.3%
33 Assisting occupations in support of health services	562	3.0%



Variable	Number of respondents	Percentage
Job History Description with 2-Digit NOC		
60 Middle management occupations in retail and wholesale trade and customer services	514	2.8%
85 Harvesting, landscaping and natural resources labourers	500	2.7%
00 Legislative and senior managers	498	2.7%
31 Professional occupations in health	478	2.6%

Appendix AB: Identified Employment Preferences

The following table displays up to 20 of the most frequent Employment Preference Descriptions with their appropriate 2-Digit NOC codes as cited by respondents.

Employment Preferences Description with NOC

Variable	Number of respondents	Percentage
Employment Preferences Description with 2-Digit NOC		
41 Professional occupations in law, education, social, community and government services	821	11.5%
72 Technical trades and transportation officers and controllers	784	11.0%
75 Helpers and labourers and other transport drivers, operators and labourers	586	8.2%
65 Sales and service support occupations	550	7.7%
42 Front-line public protection services and paraprofessional occupations in legal, social, community, education service	507	7.1%
64 Sales and service representatives and other customer and personal services occupations	365	5.1%
73 General trades	351	4.9%
13 Administrative occupations and transportation logistics occupations	337	4.7%
14 Administrative and financial support and supply chain logistics occupations	333	4.7%
21 Professional occupations in natural and applied sciences	291	4.1%
31 Professional occupations in health	283	4.0%
22 Technical occupations related to natural and applied sciences	254	3.6%
10 Specialized middle management occupations in administrative services, financial and business services and communication	227	3.2%
63 Occupations in sales and services	219	3.1%
00 Legislative and senior managers	195	2.7%
33 Assisting occupations in support of health services	188	2.6%
12 Administrative and financial supervisors and specialized administrative occupations	176	2.5%



Variable	Number of respondents	Percentage
Employment Preferences Description with 2-Digit NOC		
44 Care providers and legal and public protection support occupations	173	2.4%
53 Occupations in art, culture and sport	157	2.2%
85 Harvesting, landscaping and natural resources labourers	150	2.1%

Appendix AC: Identified Formal Education History

The following table displays up to 20 of the most frequent Formal Education History Descriptions with their appropriate CIP codes as cited by respondents.

Training History Description with CIP

Variable	Number of respondents	Percentage
Training History Description with CIP Code		
520201 Business administration and management, general	646	6.7%
130101 Education, general	443	4.6%
131210 Early childhood education and teaching	438	4.6%
440701 Social work, general	397	4.1%
240102 General studies	249	2.6%
460201 Carpentry/carpenter	223	2.3%
513801 Registered nursing/registered nurse (RN, ASN, BSN, BScN, MSN, MScN)	220	2.3%
50202 Aboriginal studies	212	2.2%
490202 Construction/heavy equipment/earthmoving equipment operation	194	2.0%
240101 Liberal arts and sciences/liberal studies	160	1.7%
513805 Primary health care nurse/nursing and family practice nurse/nursing	152	1.6%
420101 Psychology, general	152	1.6%
520301 Accounting	150	1.6%
520408 General office occupations and clerical services	148	1.5%
520401 Administrative assistant and secretarial science, general	137	1.4%
512602 Home health aide/home attendant	131	1.4%
480508 Welding technology/welder	123	1.3%
120407 Hair styling/stylist and hair design	117	1.2%
511501 Substance abuse/addiction counselling	112	1.2%
460000 Construction trades, general	111	1.2%

Appendix AD: Identified Certifications

The following table displays up to 20 of the most frequent Certification Descriptions as cited by respondents.

Certification List

Variable	Number of respondents	Percentage
Certification List		
First Aid	7,500	53.2%
Workplace Hazardous Materials Information System (WHMIS)	3,831	35.3%
Driver's License	1,642	15.1
Driver's License Class 5 - Vehicle with Up to 2 Axles	1,080	9.9%
Safe Food Handling	815	7.5%
H2s Alive	494	4.5%
Confined Space	426	3.9%
Forklift Operator	398	3.7%
Transportation Of Dangerous Goods	341	3.1%
Fall Prevention and Protection	312	2.9%
Chainsaw Safety	279	2.6%
Foodsafe Level 1	200	1.8%
Working At Heights	177	1.6%
Heavy Equipment Operator License	167	1.5%
Occupational Health and Safety (OHS)	163	1.5%
Non-Violent Crisis Intervention	145	1.3%
Serving It Safe	143	1.3%
Fire Safety Training	132	1.2%
Ground Disturbance	122	1.1%
First Aid - Emergency	122	1.1%

Appendix AE: Identified Training Preferences

The following table displays up to 20 of the most frequent Training Preference Descriptions with their appropriate CIP codes as cited by respondents.

Training Preferences Description with CIP

Variable	Number of respondents	Percentage
Training Preferences Description with CIP Code		
490202 Construction/heavy equipment/earthmoving equipment operation	173	4.7%
460201 Carpentry/carpenter	136	3.7%
520201 Business administration and management, general	106	2.9%
320111 Workforce development and training (not for credit)	103	2.8%
460000 Construction trades, general	94	2.5%
511508 Mental health counselling/counsellor	75	2.0%
490205 Truck and bus driver/commercial vehicle operator and instructor	72	1.9%
440701 Social work, general	68	1.8%
150701 Occupational safety and health technology/technician	61	1.6%
130101 Education, general	55	1.5%
470302 Heavy equipment maintenance technology/technician	51	1.4%
320110 Basic computer skills (not for credit)	50	1.3%
50202 Aboriginal studies	49	1.3%
520301 Accounting	46	1.2%
512601 Health aide	43	1.2%
469999 Construction trades, other	43	1.2%
480508 Welding technology/welder	41	1.1%
131210 Early childhood education and teaching	41	1.1%
513801 Registered nursing/registered nurse (RN, ASN, BSN, BScN, MSN, MScN)	38	1.0%
439999 Security and protective services, other	38	1.0%

Appendix B – Infographic Example (All Agreement Holders)



All ISETS

First Nations LMI Project

Summary of survey data -
January 2019 to March 2024

Community Survey

33,568
individuals have
completed a survey



15%
of the On- and Off-
Reserve 15+ population

As more of the
population is surveyed
- the more precise the
information becomes

Current Skills and Employment

Education



39% completed at least some Post-secondary

47% reported other licenses or certificates

64% currently have a valid Driver's License

Job Status



48% have a job when taking into account **traditional** jobs

(**Traditional skills** jobs include things like fishing, hunting, crafts, guiding)

47% have a job that is closely related to their education, experience and skills

Most Common Training

- 1 Business administration and management, general
- 2 Education, general
- 3 Early childhood education and teaching
- 4 Social work, general
- 5 General studies



Most Common Jobs

- 1 Sales and service support occupations
- 2 Professional occupations in law, education, social, community and government services
- 3 Helpers and labourers and other transport drivers, operators, and labourers
- 4 Front-line public protection services and paraprofessional occupations in legal, social, community, education service
- 5 Technical trades and transportation officers and controllers



Based on the current number of respondents, the accuracy of the data is within + or - 0.5 percentage points.



All ISETS

First Nations LMI Project

Summary of survey data -
January 2019 to March 2024

Future Skills and Interests

Education



23% plan to go back to school in the next year

36% are interested in future training

Job Interests



54% are very interested in receiving job notifications matching their skills and interests

28% are interested in exploring other job opportunities/ looking for other jobs

Most Common Training Interests

- 1 Construction/heavy equipment/earthmoving equipment operation
- 2 Carpentry/carpenter
- 3 Business administration and management, general
- 4 Workforce development and training (not for credit)
- 5 Construction trades, general



Most Common Job Preferences

- 1 Professional occupations in law, education, social, community and government services
- 2 Technical trades and transportation officers and controllers
- 3 Front-line public protection services and paraprofessional occupations in legal, social, community, education service
- 4 Helpers and labourers and other transport drivers, operators, and labourers
- 5 Sales and service support occupations



Barriers to Training

Living in a community that is far away from training opportunities

Challenges finding money for training program

Not having the educational requirements for training or education programs

Not having enough or the right type of education or training to get a job

Challenges finding and getting a job

Barriers to Employment

Living in a community that is far away from jobs

A better picture of the experience, training interests and skills of community members and the challenges faced will help to connect people to available jobs and help those that want to get new skills and qualifications.