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First Nations Information Governance Centre
Le Centre de gouvernance de l'information des Premières Nations

First Nations On-Reserve Housing and Related Infrastructure Needs

Technical Report

Draft

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Assembly of First Nations

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Draft

Key Findings

Our analysis of the survey data, collected prior to the COVID19 pandemic, identifies key points about First Nations on-reserve housing and infrastructure-related needs. The key findings include:

- Almost two-thirds (63.9%) of respondents currently worked in their community as Housing Managers, 9.4% (32) as Infrastructure Managers, 7.8% (24) in Band Administration, and 2.2% (6) as Land Manager.
- Nearly sixty percent (57.9%) of respondents had over 5 years of experience, 28.4% had 2 to 5 years of experience, and 13.6% had less than 2 years of experience in housing management or housing administration.
- Over two-thirds (68.4%) of respondents have taken CMHC Training and 10.4% INAC/ISC Training.
- Seventy percent (69.6%) of respondents record repair and maintenance costs per unit. Two-thirds (65.6%) of respondents keep up-to-date housing condition assessment records.
- Less than half (46.6%) of communities have conducted a formal housing needs assessment. Of those that have, 31.8% were completed in the last 3 years.
- Sixty-four percent of respondents do not have an asset management system for housing. Over two-thirds (67.5%) of respondents do not have an asset management system for housing-related infrastructure.
- Less than half (44.8%) of respondents have a capital plan that addresses their community's current housing-related infrastructure needs. Forty percent (39.5%) of respondents have a 5-year capital plan that addresses their community's future housing-related infrastructure needs.
- Of those who have a Capital Plan, the estimated total cost of meeting the current housing-related infrastructure needs across communities is \$2,686,846,320. The average cost per community of meeting the current housing-related infrastructure needs is \$15,215,510.
- In total, there are 85,738 housing units reported by respondents across the participating regions (housing unit is a single-detached, or an individual unit in a duplex or twin house, triplex or in-row, four-plex, six-plex, an apartment unit, or a mobile home).
- Of the total housing units, 19.1% are currently under Section 95 agreement with CHMC.
- A total of 25,722 housing units are being used by multi-generational families.
- Most building types reported were Single-detached houses (91.1%), Mobiles homes (4.2%), and Duplex or twin houses (2.8%).
- There was 214 Elders lodges or Senior residence buildings reported with an average of 5.6 bedrooms per unit; there was 112 Other supportive housing reported with an average of 4.6 bedrooms per unit; and a Single-detached house has 3.0 bedrooms per unit.

- In total, there are 36,439 (43.9%) housing units that are band-owned, including rent to own. There are 29,014 (36.2%) housing units that are privately-owned.
- Three-quarters (75.2%) of Elders Lodges or Seniors residences & Other supportive housing facilities need replacing, and half of (50.1%) of Single-detached houses need replacing.
- Over one-third (34.4%) of individual housing units need minor repairs and 31.2% need major repairs.
- Nearly eighty percent (79.3%) of total housing units are on a **water service line**. Less than one tenth (9.7%) of individual units on water service line lack adequate drinking water.
- Over half (56%) of individual units are on a **sewer service line**. A total of 4,105 (5.2%) housing units lack wastewater service.
- Seventeen percent (17%) of individual units are on a **private or on-site water system**. Over one-third (35.9%) of individual units on private or on-site water system lack adequate drinking water.
- A total of 14,745 (20.3%) housing units lack adequate fire suppression.
- Average of **9.5** serviced lots are currently available for construction of new housing units per community.
- Average of **82.5** additional serviced lots per community are needed to meet current housing need.
- Estimated total cost for servicing newly required lots is **\$1,467,965,940**.
- The main three types of new buildings that are in process of being constructed / acquired include: Single-detached house (65.8%), Duplex or Twin house (10.6%), and Mobile homes (0.5%).
- The main two types of new buildings that are currently planned include: Single-detached house (71%) and Duplex or twin house (9.1%).
- Excluding planned housing units, the total number of required housing units required to meet the current housing needs across communities is 34,884. The average number of additional housing units that are required to meet community's current housing needs is 82.4.
- In considering the population growth of the community, the estimated total number of housing units required to meet the housing need in five (5) years is 33,955. The average number of estimated new units required to meet a community's housing need in five (5) years from now is 78.9.

Introduction

This report provides the results of the Assembly of First Nations (AFN) *On-Reserve Housing and Related Infrastructure* questionnaire that focused on the current housing and related infrastructure situation and future needs of First Nations on-reserve.

A questionnaire was developed to collect information on:

- Community location, access, size, and remoteness
- Existing housing and housing capacity (current housing stock - number and types of units)
- Housing subsidy and ownership
- Housing age, condition, and costs
- Major and minor repair needs
- System capacity (water and wastewater servicing, number of serviced lots)
- Construction and planned housing
- Current and future housing needs

The questionnaire also asked about the types of housing data that First Nation communities records with respect to housing and infrastructure such as:

- Housing needs assessment
- Housing condition assessment records
- Capital plan for housing or housing-related infrastructure
- Asset management plan for housing or housing-related infrastructure

BACKGROUND

The Assembly of First Nations (AFN) has an established Joint Working Group (JWG) with members from the Chiefs Committee on Housing and Infrastructure (CCoHI) and Regional Housing Technicians, Indigenous Services Canada (ISC), Canada Mortgage and Housing Corporation (CMHC), and Employment and Social Development Canada (ESDC) to co-develop a 10-Year First Nations National Housing and Related Infrastructure Strategy.

A key component of this strategy was to undertake a data gathering exercise to determine First Nations housing and related infrastructure needs on-reserve. The JWG identified a number of particular areas of concern, such as overcrowding adequate, and safe housing; and drinking water. Data gathered on these and other relevant priority issues will inform the 10-Year First Nations National Housing and related Infrastructure Strategy and the Government of Canada on what is required to fully address First Nations housing needs.

The AFN, CCoHI and the Federal Government targeted 2018-2019 to have data collected, compiled and analyzed to:

- 1) Inform future budget requests;
- 2) Support First Nations to have their own data to inform their needs and priorities for their communities;
- 3) Inform Strategy and Strategic Plan Development and implementation;
- 4) Develop an accepted sampling and collection process that will support the validity of data that First Nations, AFN and Federal Government can trust and accept; and,
- 5) Have reliable data for the longer-term in consideration of the goal of transition care and control and management.

At their April 16-17, 2019 meeting on First Nations Housing and Related Infrastructure, the JWG worked in small group sessions to discuss housing and related infrastructure indicators and information they would like to see come out of the survey. Another meeting was held on January 21, 2020 to review and provide input on the data analysis plan. The information to be collected was to address some, but not all, the data required to draw a comprehensive housing needs representation and excluded such items as mould and mould remediation. However, the survey developed was intended to collect enough high-level housing and infrastructure data to inform implementation activities and some costs of the Strategy.

The data collection effort represents an historic milestone in that it was the first time the entire process for collecting national data related to housing and related infrastructure was led by First Nations. Much was learned during the process and these lessons will make for a stronger and comprehensive housing and related infrastructure research and data collection in the near future.

FNIGC ROLE

The First Nations Information Governance Centre (FNIGC) is an incorporated, non-profit organization committed to producing quality research and information that will contribute to improving the health and well-being of First Nations across the country. At FNIGC, we envision that every First Nation will achieve data sovereignty in alignment with their distinct worldview.

Mandated by the AFNs' Chiefs in Assembly (*Resolution #48*, December 2009), FNIGC's mission is to strengthen First Nations' data sovereignty and the development of governance and information management systems at the community level. We adhere to free, prior and informed consent, respect nation-to-nation relationships, and recognize the distinct customs of nations, to achieve transformative change.

FNIGC contributed its expertise and provided technical services in the development of a nationally representative sampling strategy, with precision in estimation at a regional level of geography. FNIGC has the necessary server capacity and appropriate privacy and security framework for data warehousing.

FNIGC was responsible for providing the technical infrastructure required to warehouse data collected through the project, including secured storage of the data collected ensuring privacy and security measures are maintained. Once transferred, FNIGC completed data processing functions such as cleaning and consolidating data into a national dataset. In addition, statistical analysis and interpretation was performed by FNIGC including national-level analysis and reporting on agreed-upon key indicators on the FNHRIS data.

AFN and FNIGC formalized an agreement in which FNIGC will facilitate data warehousing including secured storage of the data collected, as well as the maintenance of privacy and security measures for the benefit of the AFN. The HRI data will be held on the premises of FNIGC or stored on any computer storage media held under its care, custody or control. The FNIGC will follow its internal policies and procedures in place for data security and protection, which are at a minimum equivalent to industry standards in the area of secured digital storage. The FNIGC will not permit any person to access, use, disclose or destroy HRI data, or any part of the data, unless it is to fill a request by a party that has received the written direction of the Director of Housing, Infrastructure and Emergency Services at the AFN. All HRI data, including related products or research derived from them, are the property of AFN.

FNIGC was not involved in the development of the research instrument, the data collection process, or input of the HRI data.

Methods

The following technical report intends to describe the state of housing and related infrastructure for a sample of First Nations reserve communities. Seven regions including Yukon (9); British Columbia (89); Saskatchewan (45); Ontario (102); Quebec (40); New Brunswick (9); Atlantic -including Nova Scotia, Prince Edward Island, and, Newfoundland and Labrador) (15) were included in the final data set, totalling 309 completed surveys. Data collection in Alberta, Manitoba and Northwest Territories was insufficient and therefore not included in the final dataset. To this end, the data presented here are not intended to be nationally representative, but rather a description of participating seven regions. The descriptive analyses, which were conducted across a wide array of variables, provides a better understanding of housing and related infrastructure in the First Nations communities in the seven participating regions. It is envisioned that these results will help inform current and future housing and infrastructure needs for First Nations communities across these seven regions.

SURVEY DEVELOPMENT AND DATA COLLECTION

The Joint Working Group facilitated and coordinated the development of a standardized approach and questionnaire to ensure the same methods were used to collect information from each First Nation and region. The primary survey strategy was to give each First Nations community the opportunity to collect housing and related infrastructure data. The most knowledgeable person, most often the Housing/Band Manager, was provided with the opportunity to participate by responding to a targeted questionnaire through a regional process informed by their regional technical representatives.

The questionnaire was intended to gauge the experience of the person providing the information (presumably the housing manager or director of the First Nation) and their data sources, basic information about the First Nation (accessibility), the current housing stock (including ownership, utilities, and condition), and anticipated future housing need. The questionnaire was informed by the *Assembly of First Nations Data Collection on Housing and Related Infrastructure – Draft Terms of Reference* (2018), the *Atlantic First Nations Housing Needs Assessment: Analysis of Findings*, published by the Atlantic Policy Congress of First Nations Chiefs Secretariat (2016) and the *Besoins en logement des Premières Nations du Québec et du Labrador/The Housing Needs of the First Nations of Quebec and Labrador*, published by St-Pierre, Gaston et associés Inc. (2014),

The questionnaire was intended to be completed by data collectors electronically (either via mobile app or web dashboard). The information in the brackets following each question conveys the type of information to be collected (decimal, integer, selection, yes/no). Once the JWG reviewed the questionnaire, the First Nations Technical Services Advisory Group Inc. (TSAG) was contracted by AFN to develop the tools. TSAG is a not-for-profit in Alberta that provides technical services and training for First Nations such as asset management, water and wastewater management, environmental management, housing support services, fire safety, information technology services and youth initiatives. FNIGC worked with AFN to establish a sampling strategy to support data collection.

SAMPLING STRATEGY

This sampling strategy developed by FNIGC adopted a multi-staged, complex sampling design, with the following specifications:

Design Specifications

The sample was stratified by region, remoteness, and population size of First Nations community members living on their own reserve or Crown land.

- Region: This stratum included 10 provinces and 2 territories.
- First Nations community listings were derived from the Indian and Northern Affairs Canada (INAC) 2017 Indian Registry. According to this source, the total number of communities on reserve /crown land is 633.

- The total number of households per First Nations community were estimated using the following formula, using demographic data from the Regional Health Survey Phase 3:

$$\text{Total HHs} = \sum_{\text{Pop}} \div \mu_D$$

\sum_{Pop} = Sum of community population counts

μ_D = average persons per household (Occupancy Density)

- The total number of households were used to allocate the sample within each stratum.
- The person-most-knowledgeable (i.e. housing manager/director) completed the survey.
- A completed survey per First Nations community was taken to represent the total number of households within each community.
- A weighting strategy based on actual number of households per community (as reported within the survey) was used to adjust the estimated count.
- Precision in estimation, or the level of confidence that estimates contain the true population average for each indicator. If the full sample as set out in the sample plan was achieved, the precision in estimation was set at a 5% margin of error (ME), 2 % for national ME; a 95% confidence interval was used to determine coefficient variation (CV) for national level estimates and within each stratum (i.e., within a particular region, remoteness, and size subgroup).
- AFN invited all communities to participate, beyond those in the sample plan, their data was included in the analysis.
- Due to small numbers of First Nations communities that have Extra-large population sizes or that are in the G3 remoteness zone, there were few possible replacement community options for these strata. It was therefore important to elicit the participation of as many sampled communities as possible in these subgroups.
- As with any survey, as the number of sample plan communities who refused to participate increases, so does the risk of non-response bias (i.e., participating communities may differ in **key characteristics of interest** from non-participating communities) in the results. The basic assumption is that the key characteristics in one stratum are similar. For this study, the key characteristics of interest are related to housing characteristics (e.g. Types of the buildings, number of rooms in dwellings, costs for major repairs, etc...)

Sampling Frame

The sampling frame employed was based on INAC Indian Registry counts from December 31, 2017 of those living on reserve or on Crown land. According to these counts, there were 633 communities and nearly 467,800 people living on reserve and in Northern communities.

Within the sample frame, First Nations communities were stratified by region, sub-region and community size. Regions consisted of ten provinces and two territories. Sub-regions were based on geographic remoteness as defined by INAC. INAC defines community remoteness by classifying First Nations communities into four geographical (4) zone classifications¹ ranging from least to most remote described in the box below.

Community size was defined as: small (less than 400 people), medium (400 to 999 people) large (1000 to 1999 people) and extra large (population counts greater than 2000). Extra Large communities were automatically included in the sample, while, large, medium and small communities were randomly selected with equal probability within their respective strata.

INAC Geographical Zone Classifications

G1 - Urban area: First Nation is located within 50 km of the nearest service centre to which it has year-round road access.

G2 - Rural area: First Nation is located between 50 and 350 km from the nearest service centre to which it has year-round road access.

G3 - Remote area: First Nation is located over 350 km from the nearest service centre to which it has year-round road access.

G4 - Special access area: First Nation has no year-round road access to a service centre and, as a result, experiences a higher cost of transportation.

Final Sample

The sample plan (*Appendix C - Sample plan summary by region and remoteness*) identified 297 communities that were to be prioritized for data collection in order to maximize representativeness of the data at the national, regional, remoteness, and population size levels. If “0” communities are indicated in a certain category, this means it contains no corresponding communities in the sample frame. If this sampling strategy is successfully achieved, the survey can provide valid and reliable results at the national and regional levels, and within each region, by remoteness and community size.

¹ https://www.afn.ca/wp-content/uploads/2018/07/Remoteness-report.Final_.May7-2018.pdf

Limitations

DATA LIMITATIONS

Currently, we cannot determine if missing information is a result of the question not being applicable, if the respondent did not know the response, if the respondent refused, or if the respondent meant '0' and left it blank. Unfortunately, the survey developed allowed for individuals to skip questions without providing a valid response (such as Don't Know or Refuse). Furthermore, it is unknown whether some of the missing data could have been caused by the electronic survey tool itself.

Only indicators with missing information that is less than or equal to 20% is reported. This cut-off was selected (rather than the typical 5%) otherwise there would be limited information to present in this report. For all indicators, missing cases were excluded from the analyses. For example, when looking at the percentage of new building in process of construction by building type, for Triplex or in-row, 23.3% of communities had missing values for this question. Results were not included. Total sums may be underestimated due to the exclusion of communities with missing values.

When looking at percentages at the community level, if the numerator was greater than the denominator, these communities were excluded from analyses.

Recommendation for future analyses: Due to time constraints and the quality of the data, it is recommended that future analyses be done to determine whether these missing values are random or not, and if possible, the imputation of these missing values, and the validation of unexpected values. Furthermore, it is recommended for future surveys that questions are not left blank.

Throughout the report:

^F - Signifies the statistic has been suppressed due to low cell count ($n < 5$) or very high sampling variability ($CV > 33.3\%$)

^E - Estimates can be considered for general unrestricted release but should be accompanied by a warning cautioning subsequent users of the high sampling variability associated with the estimates.

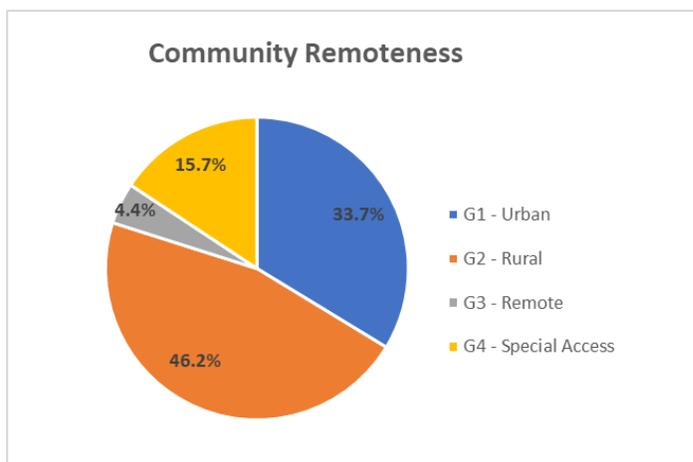
Results

COMMUNITY INFORMATION

This section includes general information about the communities such as the physical location, remoteness, population size, and construction season. In total, 360 communities were surveyed in the study. After data cleaning and removing incomplete surveys from datasets, 309 communities were included for analysis.

Our sample represents 478 out of 498 First Nations communities out of the regions that participated in the survey. Our sample is 97.7% representative. In total, seven regions (Yukon, British Columbia; Saskatchewan; Ontario; Quebec; New Brunswick; Atlantic (including Nova Scotia; Prince Edward Island; and, Newfoundland and Labrador) were included in the results. For a list of First Nations communities that participated in this study, see *Appendix B – Participating Communities*. There are no results presented for questions 2 through 6 as the respondents were not able to provide this information.

Chart 1 – Community Remoteness



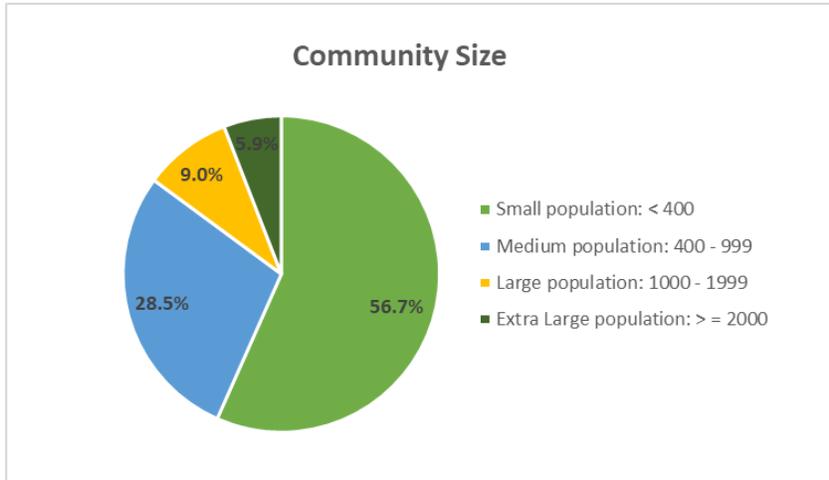
Based on INAC's geographical zone classifications for community remoteness, one-third (33.7%) of First Nation communities in the seven participating Regions are located in an G1 - Urban area, 46.2% are in a G2 - Rural area, 4.4% are in a G3 - Remote area, and 15.7% are in a G4 - Special access area (Chart 1). When asked how their community is accessed, the majority (97.2%) of respondents answered, "road all year long", 1.6% said "airplane", and 1.2% said "seasonal roads".

The size of First Nations communities is classified into the following categories based on population:

- Small population: (< 400)
- Medium population: (400 – 999)
- Large population: (1000 – 1999)
- Extra-large population: (> = 2000)

Nearly sixty percent (56.7%) of communities are Small, 28.5% are Medium, 9% are Large and 5.9% are Extra Large (Chart 2).

Chart 2 – Community Size



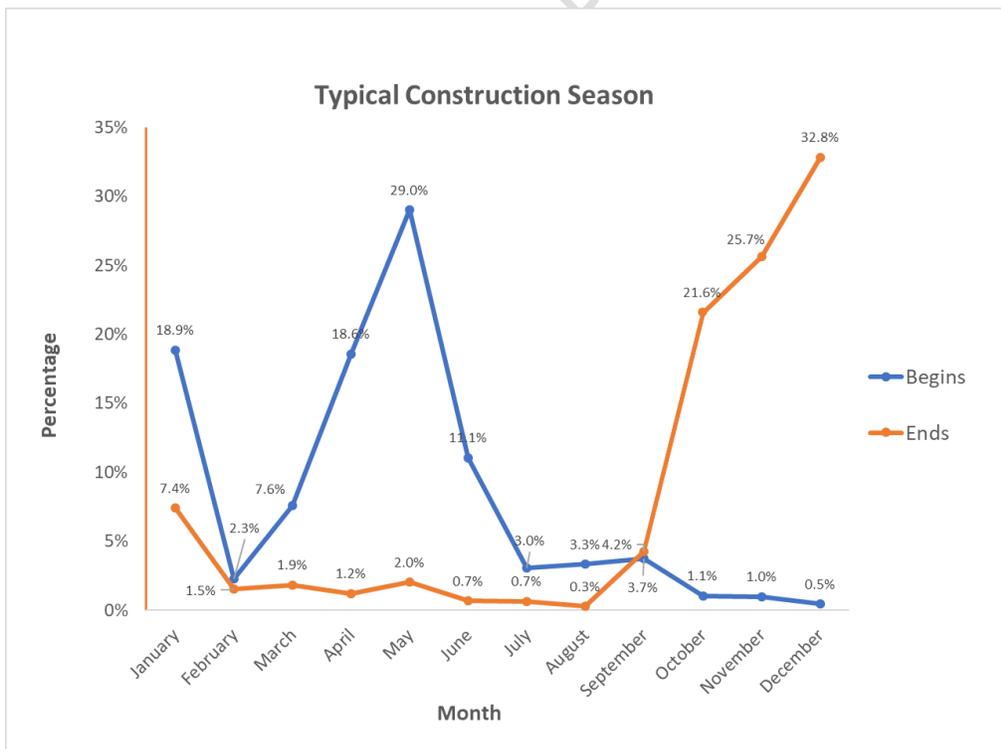
A total of 45,662 off-reserve First Nations members were reported as seeking housing on-reserve. On average, 106.3 off-reserve First Nations members are seeking housing on-reserve across the communities.

When broken down by community size, the total numbers of off-reserve First Nations members that reported

seeking housing on-reserve include: Small – 14,222; Medium – 18,978; Large – 7,278; and Extra-Large – 5,183.

Chart 3 below shows the typical month when the construction in communities begins and ends. The main three months respondents answered when the typical construction season begins are May (29%), January (18.9%), and April (18.6%). The main three months respondents answered when the typical construction season ends are December (32.8%), November (25.7%), and October (21.6%). The average length of a typical construction season is 7.2 months.

Chart 3 – Beginning and Ending of Typical Construction Season

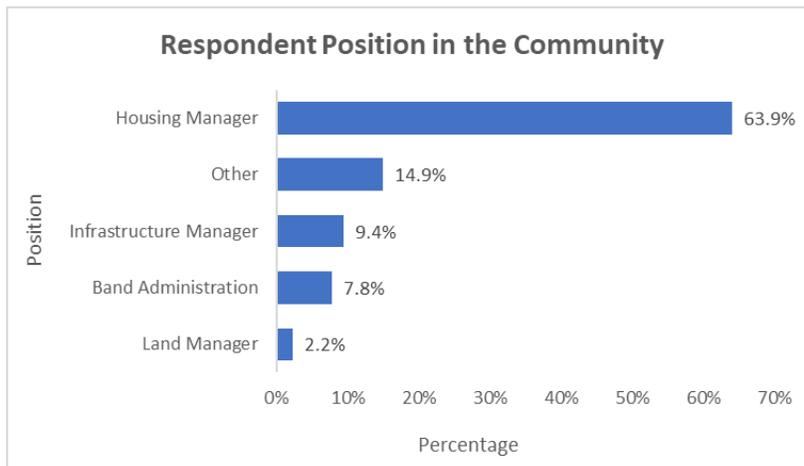


DATA SOURCE INFORMATION

The source of information for this study was an individual, person-most-knowledgeable, from each of the First Nations community in the seven participating regions. This individual participated by responding to a targeted questionnaire on their community's housing and related infrastructure needs on-reserve.

This section identifies the respondent's position in the First Nations community, their work experience, and the record-keeping practices used. Information was also collected on the training accessed and professional development needs of housing managers and administrators.

Chart 4 – Respondent Position in the Community



With respect to their current position, nearly two-thirds (63.9%) of respondents worked as a Housing Manager, 9.4% as an Infrastructure Manager, 7.8% in Band Administration, and 2.2% as Land Manager in their community (Chart 4).

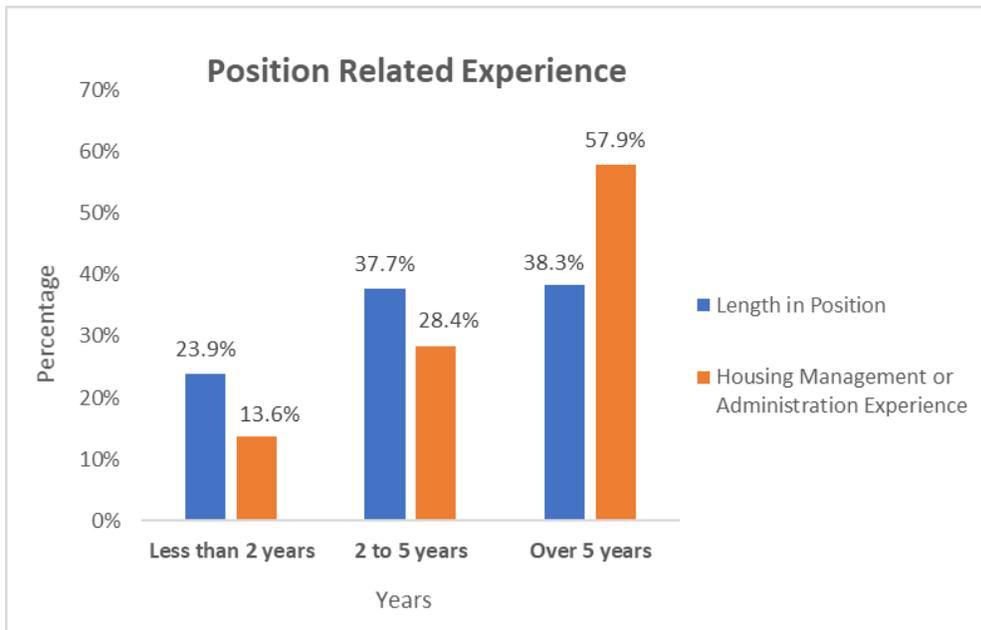
When asked how long they had been in their current position at the First Nation community, 38.3%

of respondents had over 5 years of experience, 37.7% had 2 to 5 years of experience, and 23.9% had less than 2 years of experience (Chart 5).

Housing management is generally considered a senior position and is defined as providing oversight to a housing program, including budgeting and decision-making around repairs and maintenance, builds, and associated resources. Housing administration is defined as administration of housing programming, including filing, reporting, or data entry. Including previous employment experience, respondents were asked how many years of experience they had in housing management or housing administration.

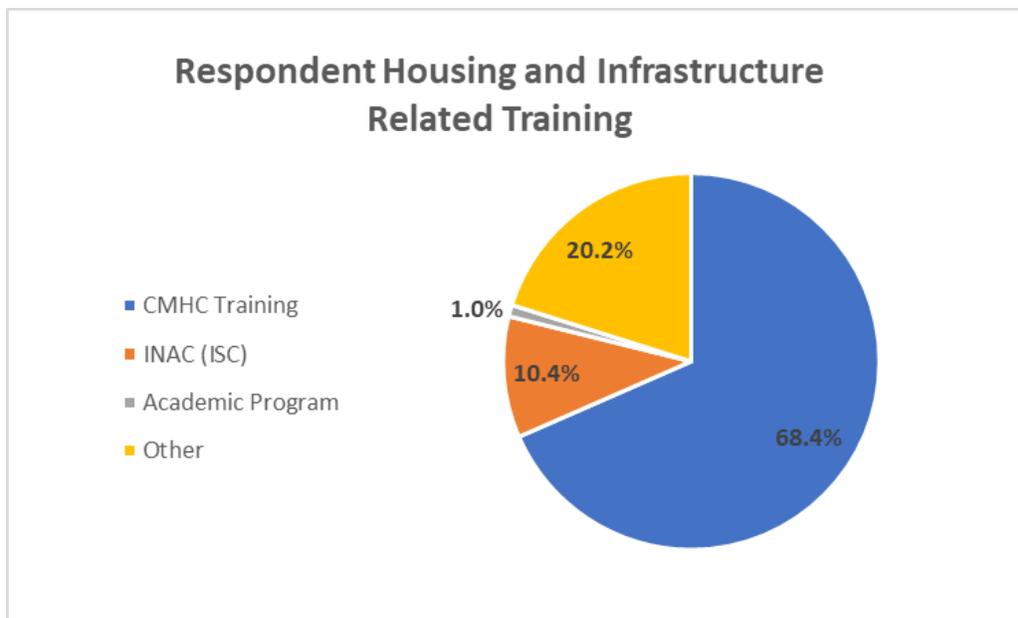
Nearly sixty percent (57.9%) of respondents had over 5 years of experience, 28.4% had 2 to 5 years of experience, and 13.6% had less than 2 years of experience in housing management or housing administration (Chart 5).

Chart 5 – Position Related Experience



To better understand their access to different training opportunities, respondents were asked if they have ever taken housing and infrastructure related training. Chart 6 shows that over two-thirds (68.4%) of respondents have taken CMHC Training; 10.4% ISC Training, 1% Academic Program, and 20.2% have taken other training. The other training includes: Attestation of Collegial Studies in Housing for First Nations; Tribal Council Training; On the job training; Home maintenance; Housing Conferences; Education; Housing Agent; and, National Aboriginal Lands Manager Association Training.

Chart 6 – Respondent’s Housing and Infrastructure Related Training

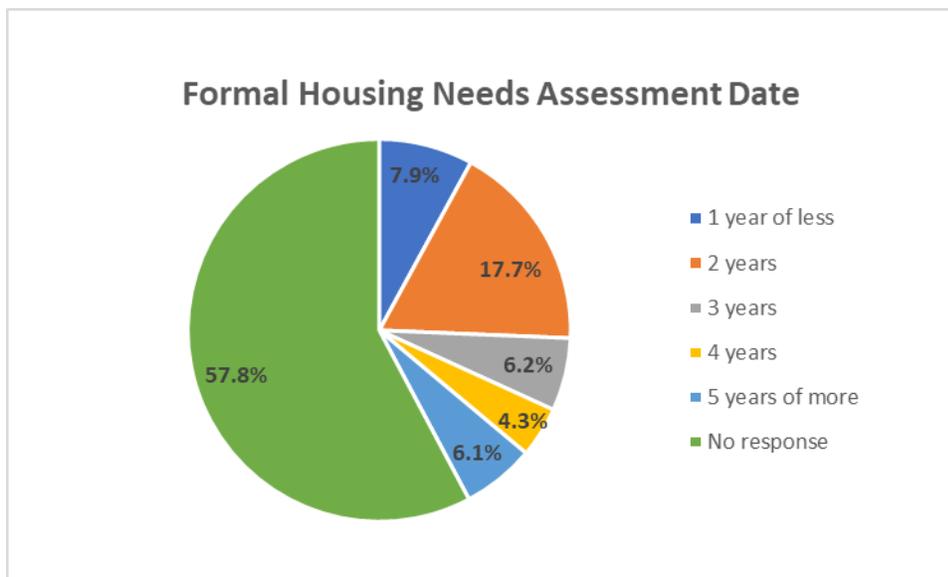


Respondents were asked about having a system, either written or digital (on a computer), for tracking the costs of repairs and general maintenance on your housing units. Nearly 70% (69.6%) of respondents answered “yes” to recording repair and maintenance costs per unit, while 30.4% answered “no”.

Housing condition assessment records are formal inspections that provide information on the state of a housing unit, including condition (example: good, fair, poor, etc.) and the required repairs. These assessments are done unit-by-unit. When asked whether they keep up-to-date housing condition assessment records, two-thirds (65.4%) of respondents answered “yes” while 34.6% answered “no”.

In this report, a housing needs assessment is a study to understand what the current (and often future) housing issues and needs are for a community, over and above mandatory federal, provincial, or territorial government reporting. Over half (53.4%) of respondents answered “no” to their community having conducted a formal housing needs assessment, while 46.6% answered “yes” to having had one conducted (Table 1). Of those that answered “yes” to having conducted a formal housing needs assessment, 31.8% were completed in the last 3 years (Chart 7).

Chart 7 – Formal Housing Needs Assessment Date



An asset management system (AMS) is described as a process used to monitor and maintain infrastructure, in this case, housing stock. It includes the management of the entire lifecycle of the units—including design, construction, maintaining, repairing, modifying, replacing and decommissioning/disposal—of the assets. Sixty-four percent of respondents said that they did not have an asset management system for housing, while 36% said “yes” (Table 1).

Respondents were asked about having an asset management system in place for housing related infrastructure, such as water, wastewater and utilities. Over two-thirds (67.5%) of respondents answered “no” to having an asset management system for housing-related infrastructure compared with 32.5% who said “yes” (Table 1).

For the purposes of the questions on capital plans, “housing-related infrastructure” is defined as all infrastructure required to access and service a housing unit (streets, street lighting, sidewalks, hydro line extensions, water and sewer extension lines, electrification, natural gas, internet and telephone connections). A “capital plan” is defined as a document that budgets the resources required (expenditures) to acquire and maintain current capital assets, such as infrastructure.

- Less than half (44.8%) of respondents answered “yes” to having a capital plan that addresses their community’s current housing-related infrastructure needs, while 55.2% said “no” (Table 1).
- Forty percent (39.5%) of respondents answered “yes” to having a 5-year capital plan that addresses their community’s future housing-related infrastructure needs, while 60.5% said “no” (Table 1).

| Table 1 – Community Plans by Respondent Position | | | | | | | | | | |
|---|--|--------------|--------------------|------------|---|--------------|---------------------|--------------|----------------------------|--------------|
| Position | Formal Housing Needs Assessment | | Housing AMS | | Housing-related Infrastructure AMS | | Capital Plan | | 5-Year Capital Plan | |
| | Yes | No | Yes | No | Yes | No | Yes | No | Yes | No |
| Housing Manager | 47.8% | 52.2% | 32.8% | 67.2% | 30.8% | 69.2% | 41.4% | 58.6% | 37.5% | 62.5% |
| Infrastructure Manager | 67.6% | 32.4% | 55.3% | 44.7% | 31.4% | 68.6% | 67.5% | 32.5% | 69.7% 26 | 30.3% |
| Lands Manager | 32.5% | 67.5% | 0% | 100% | 13.8% | 86.2% | 13.8% | 86.2% | 13.8% 1 | 86.2% |
| Band Administration | 40.6% | 59.4% | 37.6% | 62.4% | 33.4% | 66.6% | 32.2% | 67.8% | 28.4% | 71.6% |
| Other | 39.3% | 60.7% | 44.1% | 55.9% | 44.2% | 55.8% | 58.1% | 41.9% | 39.5% | 60.5% |
| Missing | 0 | 6 | 1 | 5 | 1 | 5 | 2 | 4 | 2 | 4 |
| Total | 46.6% | 53.4% | 36% | 64% | 32.5% | 67.5% | 44.8% | 55.2% | 39.5% | 60.5% |

Table 1 shows the availability of community plans and assessments by the respondent’s position.

- Over two-third (67.6%) of respondents who identified as being the Infrastructure Manager answered “yes” to their community having conducted a formal housing needs assessment.
- Over half (55.3%) of respondents who identified as being the Infrastructure Manager answered “yes” to having an asset management system for housing in their community.

- One-third (33.4%) of respondents who identified as being in a Band Administration position answered “yes” to having an asset management system in place for housing-related infrastructure in their community.
- Over two-thirds (67.5%) of respondents who identified as being the Infrastructure Manager answered “yes” to having a capital plan in their community.
- Seventy percent (69.7%) of respondents who identified as being the Infrastructure Manager answered “yes” to having a 5-year capital plan in their community.

HOUSING CAPACITY

A “housing unit” refers to housing for band members and does not include teacherages or residences set aside for employees. A housing unit is defined as a single-family residence such as a house (single-detached, or an individual unit in a duplex or twin house, triplex or in-row, four-plex, six-plex, an apartment unit, or a mobile home). For the purposes of this study, “communal housing” refers to a room (s) within a larger structure that are purposely built to provide a space for occupants to live and eat such as an Elder’s lodge, a senior’s residence, shelters, or transitional housing.

In total, there are 85,738 housing units reported by respondents across the participating regions. Some of the housing units, meant for one family, have more than two generations living in a single unit, for example, children, parents, and grandparents or great-grandparents. Approximately 32.3% (25,722) of housing units, meant for one family, are used by multi-generational families. Some multi-generational households may be more overcrowded than single generational households however, this is not always the case and should not be used as an indicator/measure for overcrowding. The fact that about one-third of households are reported as being occupied by multi-generations reflects the urgency of building new houses on-reserve.

The total apartment housing units reported was 1,386.

The different building types in communities include:

- Single-detached house
- Duplex or twin house
- Triplex or in-row
- Four-plex
- Six-plex
- Mobile home
- Apartment building
- Elders lodge or Seniors residence (communal housing)
- Other supportive housing (communal housing)
- Shelters or transitional housing

An Elders lodge or Seniors residence is designed to support the elderly. It is a communal housing building with multiple bedrooms, often intended for single occupancy, that share cooking and/or recreational

space. Elders or Seniors lodges also often have supportive services or assisted living services for the elderly, such as healthcare and meals provided.

Supportive housing provides **permanent or semi-permanent** living facilities to high need populations often requiring support services for mental or physical health, developmental disabilities, or substance use. The buildings often have communal living areas, such as a shared kitchen or recreational area.

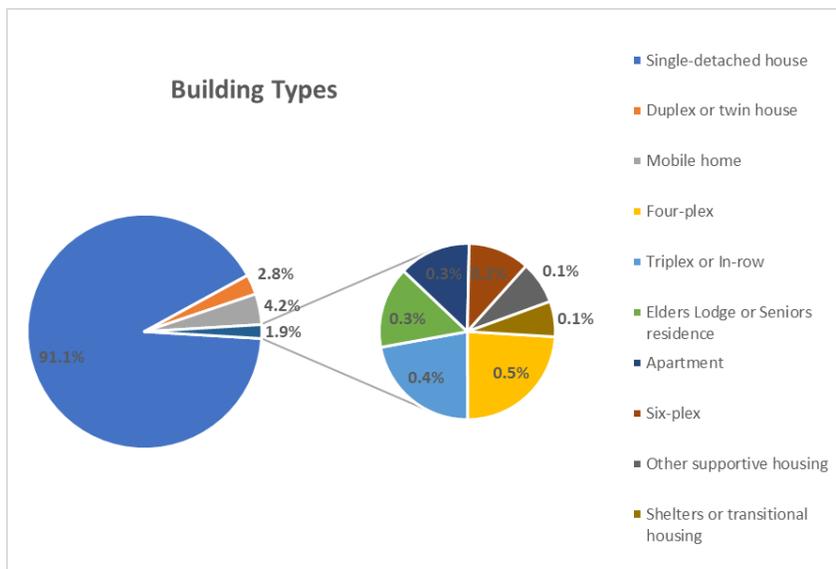
Shelters or transitional housing provide temporary living quarters for individuals in need of a more permanent housing situation, such as homeless individuals, individuals fleeing violence. The living quarters are often shared bedrooms, with multiple beds in one room. Examples include women’s shelters, homeless shelters, or youth emergency shelters.

In total, there were 75,599 buildings reported. The most common building types in the community reported by respondents were Single-detached houses (91.1%), Mobiles homes (4.2%), and Duplex or twin houses (2.8%) (Chart 9).

The reported numbers for other building types include:

- 318 (0.4%) - Triplex or in-row
- 344 (0.5%) - Four-plex
- 162 (0.2%) - Six-plex
- 190 (0.3%) – Apartment building
- 214 (0.3%) - Elders lodge or Seniors residence
- 112 (0.1%) - Other supportive housing
- 93 (0.1%) - Shelters or transitional housing

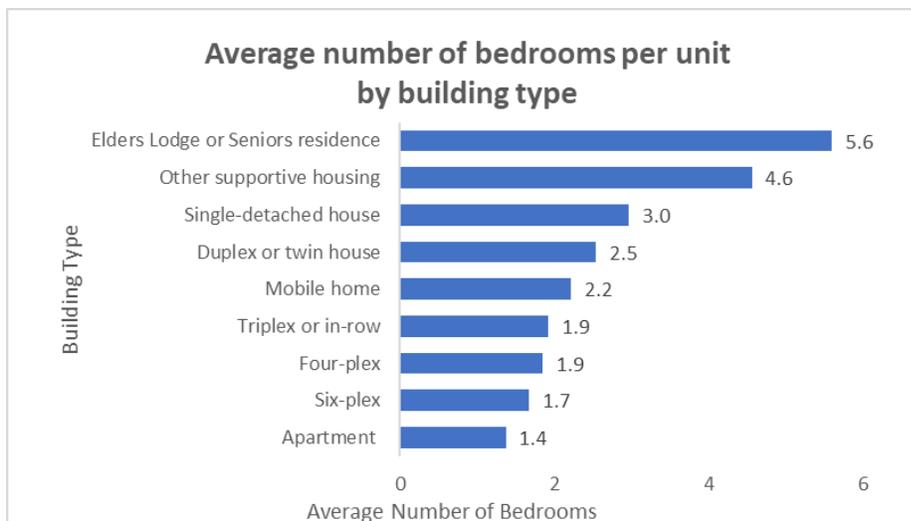
Chart 8 – Proportion of Building Types



The average number of bedrooms per housing unit by building type is shown in Chart 9. On average, an Elders lodge or Seniors residence has 5.6 bedrooms per unit; Other supportive housing has 4.6 bedrooms

per unit; and a Single-detached house has 3 bedrooms per unit. This may be due to respondents looking at entire building as a unit and not separate units within the residence.

Chart 9 – Average Number of Bedroom per Unit by Building Type



Apartment buildings have on average 1.4 bedrooms per unit. Among the communities who reported having shelters or transitional housing, the average number of beds is 4.5.

HOUSING SUBSIDY AND OWNERSHIP

Of the total 85,738 housing units reported by respondents, 19.1% (16,406) of housing units are currently under Section 95 agreement with Canada Mortgage and Housing Corporation (CMHC). The On-Reserve Non-Profit Rental Housing Program provides low-cost mortgage financing from CMHC under Section 95 of the *National Housing Act*.

In total, there are 36,439 (43.9%) housing units that are band-owned, including rent to own. There are 29,014 (36.2%) housing units that are privately-owned.

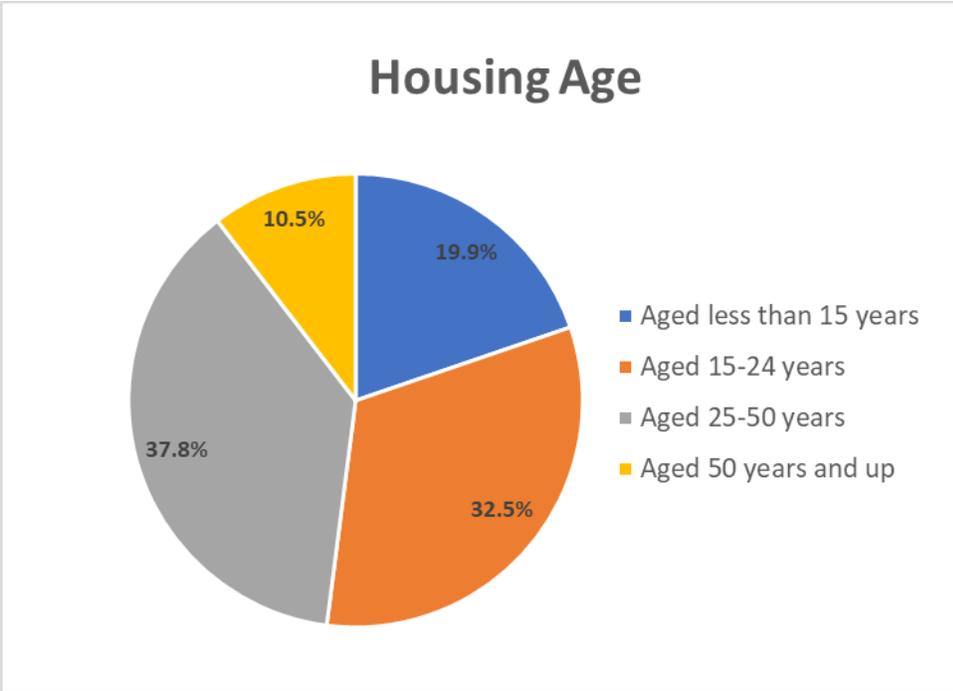
HOUSING AGE, CONDITION, REPLACEMENT NEEDS AND COSTS

Information was collected to assess the number of aging buildings in the following four (4) categories: less than 15 years old; 15-24 years old; 25-50 years old; and, 50 years old and over. This does not include counting individual units. The number of housing buildings, both single household and communal living, in each of these age categories include:

- 15,462 (19.9%) housing buildings are less than 15 years old
- 25,305 (32.5%) housing buildings are 15-24 years old
- 29,429 (37.8%) housing buildings are 25-50 years old
- 8,144 (10.5%) housing buildings are 50 years old and over

The proportion of housing units by the four age categories is shown in Chart 10.

Chart 10 - Proportion of Housing Units by Age Categories



Respondents were asked to provide information on the number of individual units that need replacing in each of the building types. “Replacement” assumes that was or is an existing structure that was or will be removed, and therefore the lot has already been serviced and a new unit is needed on that lot. Table 2 shows the number of individual units that need replacing for each of the building types.

Respondents were asked how much it costs to replace a single unit, on average, for each building type. Due to the quality of the data, an estimated (average) replacement cost of individual units for each building type was not possible.

| Table 2 - Number of individual units that need replacing | | |
|---|--------|----------------|
| Building Type | Number | Ratio Estimate |
| Single-detached house | 8826 | 50.1% |
| Duplex or twin house | 166 | 4.4% |
| Triplex or in-row | 27 | 3.6% |
| Four-plex | 38 | 3% |
| Six-plex | 37 | 2.5% |
| Mobile home | 887 | 0.3% |
| Apartment building | 83 | 2.5% |
| Elders Lodge or Seniors residence & Other supportive housing facilities | 289 | 75.2% |
| Shelters or transitional housing | 77 | 6.7% |

Housing units consist of a single-detached house or mobile home, or units within a duplex or twin house, triplex (in-row), four-plex, six-plex, or apartment building, or room in a communal living facility. A minor renovation project usually limits itself to the renewal of certain components of the dwelling. The replacement of windows and doors, the roof coating and the exterior cladding and various interior works (ex. floor covering) are the main interventions made in the scope of the minor renovation projects. Major repairs usually consist of the renewal of many components of a dwelling (for example, windows and doors, roof, floor covering, exterior cladding, plumbing, electricity, heating, insulation, etc.).

Over one-third (34.4%) of individual housing units need minor repairs and 31.2% need major repairs. The estimated average cost for minor and major repairs per unit was not possible to calculate based on the data quality.

WATER & WASTE SYSTEM CAPACITY & CONDITION

For this section, estimates with an “E” must be used with caution as there is a high sampling variability. A water service line is a pipe that brings drinking water directly to the housing unit. A sewer service line is a direct pipe extending from that house that carries wastewater to larger sewer line or system (as opposed to an on-site sewer system).

“Adequate” drinking water refers to both a sufficient amount of water (volume) and that is also of a high enough quality to safely drink. “Adequate” wastewater treatment means that wastewater is effectively removed from the housing unit and is treated to acceptable regulatory standards.

Out of 85,738 individual housing units, nearly eighty percent (79.3%) are on a **water service line** (Chart 11). The average number of individual units on a water service line per community is 154.8 (Chart 12). Less than one tenth (9.7%) of individual units on water service line lack adequate drinking water (Chart 11). On average, there are 16.4 individual units on a water service line that lack adequate drinking water per community (Chart 12).

Over half (56%) of individual units are on a **sewer service line** (Chart 11). The average number of individual units on sewer service line per community is 103.8 (Chart 12). Less than three per cent (2.6%^E, 1,038^E) of units on a sewer service line lack adequate wastewater treatment (Chart 11). On average, there are 4.3^E individual units on a sewer service line that lack adequate wastewater treatment per community (Chart 12).

Private (on-site) systems deliver drinking water to a housing unit that is not connected to a larger water system via a pipe. Examples include cisterns with “trucked water” or private water wells. Private or on-site wastewater systems remove wastewater from a housing unit but are not connected to a central wastewater pipe. Private systems generally serve only one or two units. For example, septic tanks, septic fields or shoot outs.

Seventeen percent (17%) of individual units are on a **private or on-site water system** (Chart 11). The average number of individual units on private or on-site water system per community is 32.6 (Chart 12). Over one-third (35.9%) of individual units on private or on-site water system lack adequate drinking water (Chart 11). On average, there are 18.5 individual units on a private or on-site water system that lack adequate drinking water per community (Chart 12).

Nearly one-third (32.7%) of individual units are on a **private or on-site sewer system** (Chart 11). The average number of individual units on a private or on-site sewer system per community is 62.2 (Chart 12). Nearly one quarter (21.7%) of individual units on a private or on-site sewer system lack adequate wastewater treatment (Chart 11). On average, there are 19.8 individual units on a private or on-site sewer system that lack adequate wastewater treatment per community (Chart 12).

Chart 11 – Water & Wastewater System Capacity by Individual Units

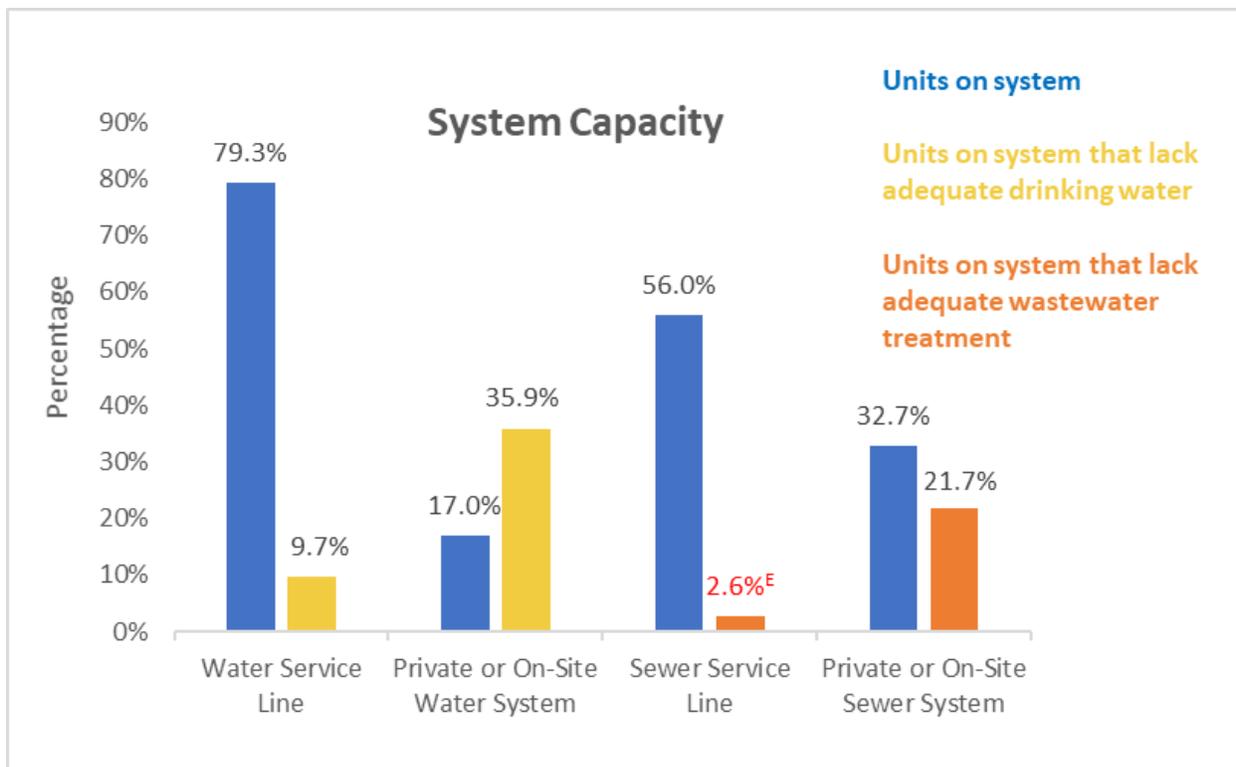
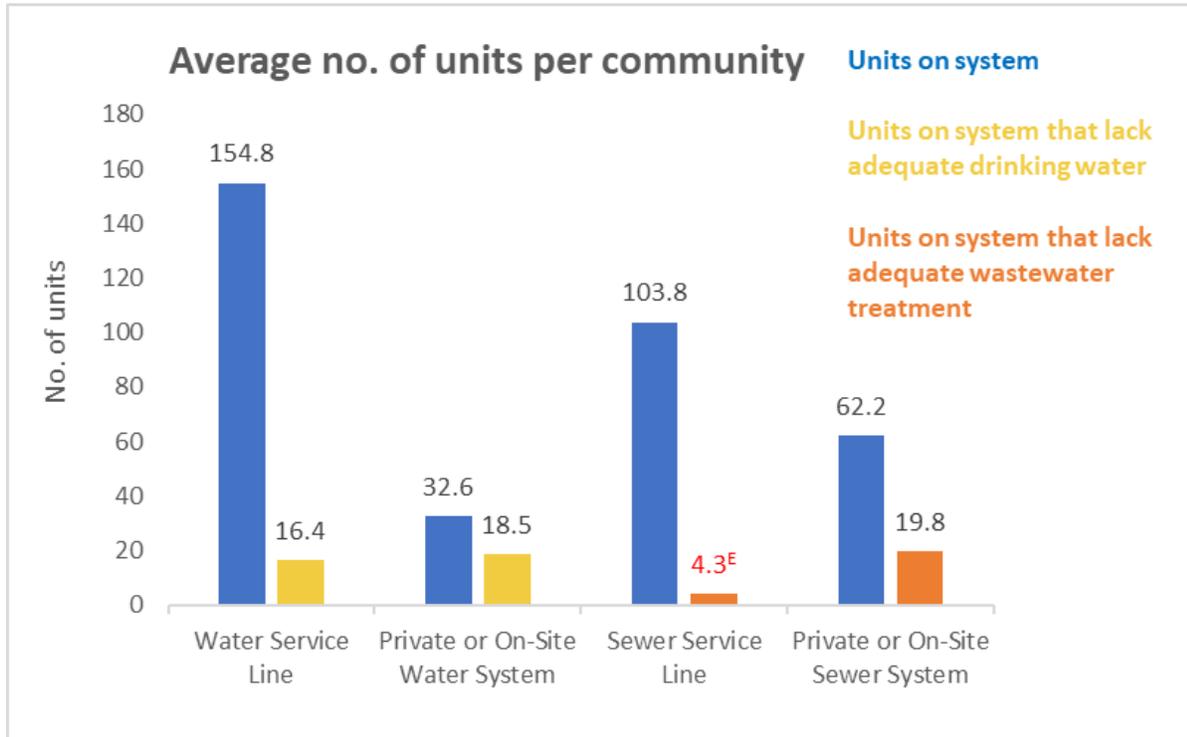


Chart 12 – Water & Wastewater System Capacity by Average Number of Individual Units per Community



“Water service” means that the unit has adequate infrastructure for water to be delivered to the unit’s plumbing, either via pipe or to a private/onsite water system or well. If water is only delivered via jugs, that is not considered “water service” for the purpose of this questionnaire.

“Wastewater service” means that the unit has infrastructure to remove wastewater via plumbing, such as a private (onsite) system like a septic field or is connected to a wastewater (sewer) pipe.

The following includes information on housing units that lack water service or wastewater service:

- A total of 3,773^E (4.8%^E) housing units lack water service.
- The average number of housing units per community that lack water service is 9.2^E.
- A total of 4,105 (5.2%) housing units lack wastewater service.
- The average number of housing units per community that lack wastewater service is 10.

Fire suppression refers to the infrastructure required to extinguish a major fire. This could include fire hydrant and fire truck system, sprinkler system, or chemical suppression. A total of 14,745 (20.3%) housing units lack adequate fire suppression. The average number of housing units per community that lack adequate fire suppression is 36.2.

HOUSING-RELATED INFRASTRUCTURE NEEDS

This section includes information on serviced lots that are currently available for construction of new housing units and additional ones needed to meet current housing need. A serviced lot refers to a parcel of land that has the required utilities for a housing unit (water, wastewater, sewer, power).

The following are results of the survey:

- A total of **4,161** service lots are currently available for construction of new housing units.
- Average of **9.5** service lots are currently available for construction of new housing units per community.
- A total of **34,284** serviced lots is needed to meet current housing need.
- Average of **82.5** additional serviced lots across communities is needed to meet current housing need.
- Estimated average cost of servicing a new lot is **\$51,500** per community (rounded to the nearest multiple of 10).
- Estimated total cost for servicing newly required lots is **\$1,467,965,940**.
- Estimated average of servicing new required lots is **\$3,886,180** per community (rounded to nearest multiple of 10).

Current Capital Plan

Nearly half (44.8%) of respondents answered “yes” to having a Capital Plan that addresses their community’s current housing-related infrastructure needs. Of those who responded “yes” to having a Capital Plan, the estimated total cost of meeting the current housing-related infrastructure needs across communities is **\$2,686,846,320** (rounded to nearest multiple of 10). The average cost per community of meeting the current housing-related infrastructure needs is **\$15,215,510** (rounded to the nearest multiple of 10).

5-Year Capital Plan

Forty percent (39.5%) of respondents answered “yes” to having a 5-year capital plan that addresses their community’s future housing-related infrastructure needs. Of those who responded “yes” to having a 5-year Capital Plan, the estimated total cost of meeting the housing-related infrastructure needs across communities in five (5) years from now is **\$2,006,610,296^E**. The average cost per community of meeting the housing-related infrastructure needs is needs in five (5) years from now is **\$12,667,270^E** (rounded to the nearest multiple of 10).

CONSTRUCTION AND PLANNED HOUSING

This section provides information on buildings that are currently under construction and planned for construction in communities.

Respondents were asked about the number of new buildings that are in the process of being constructed/acquired. Units that are currently under construction in the First Nation or are otherwise confirmed new units (such as a mobile home that will be delivered).

The main three types of new buildings that are in process of being constructed / acquired include: Single-detached house (65.8%), Duplex or twin house (10.6%), and Mobile homes (0.5%) (Table 3).

| Table 3 - New buildings in process of being constructed / acquired | | | |
|--|-----------------|------------------------------|---------------------------|
| Building type | Total sum | % of total buildings planned | Average no. per community |
| Single-detached house | 1121 | 65.8% | 2.7 |
| Duplex or twin house | 181 | 10.6% | 0.5 |
| Triplex or in-row | F | F | F |
| Four-plex | 37 ^E | 2.2% ^E | 0.1 ^E |
| Six-plex | F | F | F |
| Mobile home | 171 | 10% | 0.5 |
| Apartment | F | F | F |
| Elders Lodge or Senior's residence | 62 ^E | 3.6% ^E | 0.2 ^E |
| Other supportive housing facilities | 10 ^E | 0.6% ^E | 0.02 ^E |
| Other communal living facilities | 16 ^E | 1% ^E | 0.04 ^E |
| <p>E = Denotes that the estimate must be used with caution as there is a high sampling variability/suppressed data because variation is high and not very reliable coefficient of variation. Therefore, data not as reliable.</p> <p>F = Not reliable data</p> | | | |

Under the new buildings in process of being constructed /acquired section, due to missing values, it was not possible to report estimates on the following:

- No. of bedrooms Elders Lodge or Senior's residence.
- No. number of bedrooms in supportive housing facilities.
- No. of beds in communal living facilities.

The total sum of housing units that are having additions constructed to relieve overcrowding is 896^E (1.4%^E). Additions may include basement suites, additions to the main floor, or the building of a second floor. Over-crowding refers to more people living in a single unit than the maximum number of people the unit was designed for. The average number of housing units per community that are having additions constructed to relieve overcrowding is 2.3^E.

Housing units that are currently planned for construction, but for which construction has not yet begun. These planned units may or may not adequately address the current housing need. The main two types of new buildings that are currently planned include: Single-detached house (71%) and Duplex or twin house (9.1%) (Table 4).

| Table 4 - New Buildings Currently Planned | | | |
|--|------------------|------------------------------|---------------------------|
| Building type | Total sum | % of total buildings planned | Average no. per community |
| Single-detached house | 2051 | 71% | 5.1 |
| Duplex or twin house | 262 | 9.1% | 0.7 |
| Triplex or in-row | 83 ^E | 2.9% ^E | 0.2 ^E |
| Four-plex | 71 ^E | 2.5% ^E | 0.2 ^E |
| Six-plex | 70 ^E | 2.4% ^E | 0.2 ^E |
| Mobile Home | 118 ^E | 4.1% ^E | 0.3 ^E |
| Apartment | 41 | 1.4% ^E | 0.1 |
| Elders Lodge or Senior's residence | 101 ^E | 3.5% ^E | 0.3 ^E |
| Other supportive housing facilities | 62 ^E | 2.1% ^E | 0.2 ^E |
| Other communal living facilities | 29 ^E | 1% ^E | 0.1 |
| <p>E = Denotes that the estimate must be used with caution as there is a high sampling variability/suppressed data because variation is high and not very reliable coefficient of variation. Therefore, data not as reliable.</p> <p>F = Not reliable data</p> | | | |

Under new buildings currently planned section, due to missing values, it was not possible to report estimates on the following:

- No. of planned apartment units.
- No. of bedrooms in Elders Lodge or Senior's residence.
- No. of bedrooms in supportive housing facilities.
- No. of beds in communal living facilities.

Excluding planned housing units, the total number of required housing units required to meet the current housing needs across communities is 34,884. The average number of additional housing units that are required to meet community's current housing needs is 82.4.

In considering the population growth of the community, the estimated total number of required housing units required to meet the housing need in five (5) years across communities is 33,955. The average number of estimated new units required to meet community's housing need in five (5) years from now is 78.9.

SURVEY ADMINISTRATION

Survey participants were asked what could be done to improve this survey process in the future. For the full list of responses, see *Appendix D - Respondent comments on improving this survey process in the future*.

References

Assembly of First Nations. (2018). *Data Collection on Housing and Related Infrastructure – Draft Terms of Reference*.

Assembly of First Nations. (2019). *Respondent’s guide to the National Data Collection Exercise for Housing and Related Infrastructure*.

Assembly of First Nations. (April 2018). *Remoteness Indicators and First Nation Education Funding*. Moazzami Economic Consultants Inc. Retrieved from: https://www.afn.ca/wp-content/uploads/2018/07/Remoteness-report.Final_May7-2018.pdf

Assembly of First Nations Quebec-Labrador and St-Pierre, Gaston et associés inc. (2014). *Besoins en logement des Premières Nations du Québec et du Labrador (2014). The Housing Needs of the First Nations of Quebec and Labrador*. Québec.

MacKinnon, J., J. DiCicco, Z. Asyyed. (2016). *Atlantic First Nations Housing Needs Assessment: Analysis of Findings*. Published by the Atlantic Policy Congress of First Nations Chiefs Secretariat.

Appendix A: Housing and Related Infrastructure Questionnaire

COMMUNITY INFORMATION

This section will ask for information about the physical location of the First Nation and about the population numbers. Questions with no numbers will be filled in by the data collectors prior to contacting the respondent

Region (select one from dropdown, options are: Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland, Nova Scotia, Northwest Territories, Nunavut, Ontario, Prince Edward Island, Quebec, Saskatchewan, Yukon)

What is the name of your First Nation? (select one)

1. How is your community accessed? (multi-select, options are: a. road all year long; b. seasonal roads; c. boat; d. airplane)
2. What is the travel time to the nearest service centre? (decimal ≥ 0 in hrs)
3. How far is it to the nearest service centre (kms)? (integer ≥ 0)
4. What is your total on-reserve population? (integer ≥ 0)
5. How many band members (Status Indians) do you service? (integer ≥ 0)

How many band members (Status Indians) do you service in each of the following age categories? (integer ≥ 0)

- a) 0-14 (integer ≥ 0)
 - b) 15-19 (integer ≥ 0)
 - c) 20-29 (integer ≥ 0)
 - d) 30-64 (integer ≥ 0)
 - e) 65-74 (integer ≥ 0)
 - f) 75 & more (integer ≥ 0)
6. How many non-band members do you service on reserve (or on community)? (integer ≥ 0)
 7. How many people living off-reserve are seeking housing on-reserve?
 8. When does your construction season typically begin? (select, options are: January, February, March, April, May, June, July, August, September, October, November, December)
 9. When does your construction season typically end? (select, options are: January, February, March, April, May, June, July, August, September, October, November, December)

DATA SOURCE INFORMATION

The following questions will ask about the respondent's current job and relevant experience in housing.

10. What is your current position? (multi-select, options are: band administrator, housing manager, capital manager, public works manager, lands manager, other (type response))
11. How long have you been in your position? (decimal ≥ 0 in years)
12. How many years of experience do you have with housing management or housing administration? (decimal ≥ 0 in years)
13. Have you taken any of the following types of housing and infrastructure related training? (multi-select, options are: a. CMHC training, b. INAC(ISC) training, c. academic program, d. other)
14. Over and above mandatory government reporting, has your community ever conducted a formal **housing needs assessment**? (yes / no)
 - a) If yes, when (date)
15. Do you record repair and maintenance costs per unit? (yes / no)
16. Do you keep up-to-date housing condition assessment records? (yes / no)
17. Do you have an asset management system for housing? (yes/no)
18. Do you have an asset management system for housing-related infrastructure (yes/no)

EXISTING INFORMATION

This section poses questions to better understand the current housing and related infrastructure situation in the community. For the remainder of the questionnaire, "Housing unit" refers to housing for band members (Status Indians) and does not include teacherages or residences set aside for employees. Please only include units that are currently in use, not under construction (planned and units under construction are covered in a later section)

Housing Capacity (single family units)

For the purposes of this section, a housing unit is defined as a single family residence such as a house (single-detached, or an individual unit in a duplex or twin house, triplex or in row, fourplex, sixplex), an apartment unit, or a mobile home)

19. How many total housing units do you have? (integer ≥ 0)
20. How many housing units, meant for one family, are used by multi-generational families? (integer ≥ 0)
21. Please list how many of each of the following building types are in your community:
 - a) Single- detached house (integer ≥ 0)
If >0 , on average, how many bedrooms per unit
 - b) Duplex or twin house (integer ≥ 0)

- If >0, on average, how many bedrooms per unit
- c) Triplex or in-row (integer >= 0)
 - If >0, on average, how many bedrooms per unit
- d) Four-plex (integer >= 0)
 - If >0, on average, how many bedrooms per unit
- e) Six-plex (integer >= 0)
 - If >0, on average, how many bedrooms per unit
- f) Mobile homes (Integer >=0)
 - If >0, on average, how many bedrooms per unit
- g) Apartment Building (integer >= 0)
 - i. If >0, how many total apartment housing units do you have? (integer >=0)
 - ii. If >0, on average, how many bedrooms per unit (integer >= 0)

Housing capacity (communal living)

For the purpose of this section, communal housing refers to room(s) within a larger structure that are purposely built to provide a space for occupants to live and eat such as elder's residence and shelters.

22. How many of each of the following building types are in your community?
- h) Elders lodge or seniors residence (integer >= 0)
 - 1. If > 0, on average, how many bedrooms per building? (integer >=0)
 - i) Other supportive housing?
 - 1. If >0, on average, how many bedrooms per building? (integer >=0)
 - j) Shelters or transitional housing (integer >= 0)
 - 1. If >0, on average, how many beds per building? (integer >= 0)

HOUSING SUBSIDY AND OWNERSHIP

- 23. How many housing units are currently under Section 95 agreement with CMHC? (integer >= 0)
- 24. How many housing units are band-owned, including rent-to-own? (integer >=0)
- 25. How many housing units are privately owned? (integer >= 0)

How many units are owned by individuals and are therefore not the responsibility of the band?

HOUSING AGE, CONDITION, AND COSTS

Housing Age

The three questions below are to assess how many buildings are aging. The respondent should answer how many buildings are in each age category, not individual units.

26. How many housing buildings, both single household and communal living, are 15-24 years old?
(integer \geq 0)
27. How many housing buildings, both single household and communal living, are 25-50 years old?
(integer \geq 0)
28. How many housing buildings, both single household and communal living, are 50+ years old?
(integer \geq 0)

Replacement Needs

The questions below are asking about the number of individual units that need replacing in each building type. "Replacement" assumes that there was or is an existing structure that was/will be removed, therefore the lot is already serviced and a new unit is needed on that lot.

29. How many single-detached houses need replacement? (integer \geq 0)
30. How many twin / duplex units need replacement? (integer \geq 0)
31. How many triplex / row-house units need replacement? (integer \geq 0)
32. How many four-plex units need replacement? (integer \geq 0)
33. How many six-plex units need replacement? (integer \geq 0)
34. How many mobile home unit need replacement? (integer \geq 0)
35. How many apartment units need replacement? (integer \geq 0)
36. How many elders lodges, seniors residences or other supportive housing facilities need replacement? (integer \geq 0)
37. How many other communal living facilities need replacement? (integer \geq 0)

Replacement Costs

38. What is the average replacement cost of a single-detached house? (decimal \geq 0 in \$)
39. What is the average replacement cost of a twin / duplex unit? (decimal \geq 0 in \$)
40. What is the average replacement cost of a triplex / row-house unit? (decimal \geq 0 in \$)
41. What is the average replacement cost of a four-plex unit? (decimal \geq 0 in \$)
42. What is the average replacement cost of a six-plex unit? (decimal \geq 0 in \$)

43. What is the average replacement cost for mobile home unit? (decimal ≥ 0 in \$)
44. What is the average replacement cost for an apartment building? (decimal ≥ 0 in \$)
45. What is the average replacement cost for an elders lodges, seniors residences or other supportive housing facilities? (decimal ≥ 0 in \$)
46. What is the average replacement cost for other communal living facilities? (decimal ≥ 0 in \$)

Repair Needs and Costs

47. How many individual housing units need major repairs? (integer ≥ 0)
48. What is your average major repairs cost per unit? (decimal ≥ 0 in \$)
49. How many individual units need minor repairs? (integer ≥ 0)
50. What is your average minor repair cost per unit? (integer ≥ 0 in \$)

WATER AND WASTE SYSTEMS CONDITION

51. How many individual units are on a water service line? (integer ≥ 0)
 - a) If > 0 , how many individual units on the water service line lack adequate drinking water? (integer ≥ 0)
52. How many individual units are on a sewer service line? (integer ≥ 0)
 - a) If > 0 , how many individual units on the sewer service line lack adequate wastewater treatment? (integer ≥ 0)
53. How many individual units are on a private or on-site water system? (integer ≥ 0)
 - a) If > 0 , how many individual units on private water systems lack adequate drinking water? (integer ≥ 0)
54. How many individual units are on a private or on-site sewer system? (integer ≥ 0)
 - a) If > 0 , how many individual units on a private sewer system lack adequate waste water treatment? (integer ≥ 0)
55. How many housing units lack water service? (integer ≥ 0)
56. How many housing units lack wastewater service? (integer ≥ 0)
57. How many units lack adequate fire suppression? (integer ≥ 0)
58. How many serviced lots are currently available for the construction of new housing units? (integer ≥ 0)

59. How many additional serviced lots are needed to meet your community's current housing need? (integer ≥ 0)
60. What is the average cost of servicing a new lot? (decimal ≥ 0 in \$)
61. Do you have a capital plan that addresses your community's current housing-related infrastructure needs? (Y/N)
- a) If yes, what is the estimated cost of meeting the current housing-related infrastructure needs? (decimal > 0)
62. Do you have a 5 year capital plan that addresses you community's future housing-related infrastructure needs?"(Y/N)
- a) If yes, what is the estimated cost of meeting your community's housing-related infrastructure needs in 5 years from now? (decimal >0)

CONSTRUCTION AND PLANNED HOUSING

63. How many new buildings of each of the following type are in process of being constructed/acquired?
- a) Single-detached house (integer ≥ 0)
- b) Duplex or twin house (integer ≥ 0)
- c) Triplex or in-row (Integer ≥ 0)
- d) Four-plex (integer ≥ 0)
- e) Six-plex (integer ≥ 0)
- f) Mobile Home (integer ≥ 0)
- g) Apartment (integer ≥ 0)
- i. If >0 , how many apartment units total? (integer ≥ 0)
- h) Elders lodges or seniors residences facilities (integer ≥ 0)
- i. If > 0 , how many bedrooms in total? (integer ≥ 0)
- i) Other supportive housing facilities (integer ≥ 0)
- i. If >0 , how many bedrooms in total? (integer ≥ 0)
- j) Other communal living facility (shelter or transitional housing facilities) (integer ≥ 0)
- i. If >0 , how many beds total? (integer ≥ 0)
64. How many housing units are having additions constructed to relieve over-crowding? (integer ≥ 0)
65. How many new buildings of each of the following type are currently planned?
- a) Single-detached house (integer ≥ 0)

- b) Duplex or twin house (integer ≥ 0)
- c) Triplex or in-row (Integer ≥ 0)
- d) Four-plex (integer ≥ 0)
- e) Six-plex (integer ≥ 0)
- f) Mobile home (integer ≥ 0)
- g) Apartment (integer ≥ 0)
 - i. If > 0 , how many apartment units total? (integer > 0)
- h) Elders lodges or seniors residences facilities (integer ≥ 0)
 - i. If > 0 , how many bedrooms in total? (integer ≥ 0)
- i) Other supportive housing facilities (integer ≥ 0)
 - i. If > 0 , how many bedrooms in total? (integer ≥ 0)
- j) Other communal living facilities (shelter or transitional housing facilities) (integer ≥ 0)
 - i. If > 0 , how many beds total? (integer ≥ 0)

66. Excluding planned housing units, how many additional housing units are required to meet your community's current housing need?

67. How many new units do you estimate will be required to meet your community's housing need in 5 years from now?

SURVEY ADMINISTRATION

68. What can we do to improve this survey process in the future? (written)

Appendix B: Participating Communities

YUKON

Carcross/Tagish First Nations
Champagne and Aishihik First Nations
First Nation of Nacho Nyak Dun
Liard First Nation
Little Salmon/Carmacks First Nation
Selkirk First Nation
Ta'an Kwach'an
Teslin Tlingit Council
Tr'ondëk Hwëch'in

BRITISH COLUMBIA

?aqam
?Esdilagh First Nation
Aitchelitz
T̓s̓ideldel First Nation (Alexis Creek)
Beecher Bay
Burns Lake
Cayoose Creek
Chawathil
Cheam
Coldwater
Cook's Ferry
Cowichan
Douglas
Dzawada'enuxw First Nation
Ehattesaht
Esk'etemc
Gitsegukla
Gitxaala Nation
Gwa'Sala-Nakwaxda'xw
Hagwilget First Nation Government
Haisla Nation
Halalt
Heiltsuk
High Bar
Homalco
Kitasoo
Kitsumkalum
Klahoose First Nation
K'ómoks First Nation
Kwantlen First Nation

Kwaw-kwaw-Apilt
Kwikwasut'inuxw Haxwa'mis
Lheidli T'enneh
Lhoosk'uz Dene Nation
Lil'wat Nation
Lower Nicola
Lower Similkameen
Lyackson
Malahat Nation
Nadleh Whuten
Namgis First Nation
Nanoose First Nation
Nisga'a Village of Gingolx
Nisga'a Village of Gitwinksihlkw
N'Quatqua
Okanagan
Pacheedaht First Nation
Pauquachin
Penelakut Tribe
Penticton
Qualicum First Nation
Saik'uz First Nation
Sechelt
Shuswap
Simpco First Nation
Skawahlook First Nation
Skeetchestn
Skidegate
Skowkale
Snuneymuxw First Nation
Songhees Nation
Soowahlie
Splatsin
Spuzzum
Sq'éwlets
Squamish
Stellat'en First Nation
Stz'uminus First Nation
Tahltan
Takla Nation
Tla'amin Nation
Tl'azt'en Nation

Tobacco Plains
Tsal'alh
Tsartlip
Tsawout First Nation
Tsawwassen First Nation
Tsay Keh Dene
Tseycum
Tsleil-Waututh Nation
T'Sou-ke First Nation
Uchucklesaht
Ulkatcho
Upper Nicola
West Moberly First Nations
Williams Lake
Witset First Nation
Yakwekwioose
Yale First Nation

SASKATCHEWAN

Ahtahkakoop
Big River
Birch Narrows First Nation
Black Lake
Buffalo River Dene Nation
Canoe Lake Cree First Nation
Clearwater River Dene
Cowessess
Cumberland House Cree Nation
Day Star
English River First Nation
Fishing Lake First Nation
Flying Dust First Nation
Fond du Lac
George Gordon First Nation
Hatchet Lake
Kawacatoose
Keeseekoose
Kinistin Saulteaux Nation
Lac La Ronge
Little Pine
Lucky Man
Makwa Sahgaiehan First Nation
Ministikwan Lake Cree Nation
Mistawasis Nêhiyawak
Moosomin
Mosquito, Grizzly Bear's Head, Lean Man FNs
Muskeg Lake Cree Nation #102
Muskoday First Nation

Muskowekwan
Ochapowace
One Arrow First Nation
Pelican Lake
Pheasant Rump Nakota
Poundmaker
Red Earth
Red Pheasant
Saulteaux
Sweetgrass
The Key First Nation
Waterhen Lake
White Bear
Whitecap Dakota First Nation
Witchehan Lake
Yellow Quill

ONTARIO

Aamjiwnaang
Albany
Alderville First Nation
Algonquins of Pikwakanagan First Nation
Aniibiigoog Zaagi'igan Anishinaabek
Aroland
Atikameksheng Anishnawbek
Attawapiskat
Batchewana First Nation
Bearskin Lake
Beausoleil
Biigtigong Nishnaabeg
Biinjitiwaabik Zaaging Anishinaabek
Bingwi Neyaashi Anishinaabek
Caldwell
Cat Lake
Chapleau Ojibway
Chippewas of Georgina Island
Chippewas of Kettle and Stony Point
Chippewas of Nawash First Nation
Chippewas of Rama First Nation
Chippewas of the Thames First Nation
Constance Lake
Couchiching First Nation
Deer Lake
Dokis
Eabametoong First Nation
Eagle Lake
Fort Severn
Fort William

Garden River First Nation
Ginoogaming First Nation
Gull Bay
Henvey Inlet First Nation
Hiawatha First Nation
Iskatewizaagegan #39 Independent First Nation
Kasabonika Lake
Kee-Way-Win
Kingfisher
Kitchenuhmaykoosib Inninuwug
Lac Seul
Long Lake No. 58 First Nation
Magnetawan
Martin Falls
Matachewan
Mattagami
McDowell Lake
M'Chigeeng First Nation
Michipicoten
Mississauga
Mississaugas of Scugog Island First Nation
Mississaugas of the Credit
Mitaanjigamiing First Nation
Mohawks of Akwesasne
Mohawks of the Bay of Quinte
Moose Deer Point
Moravian of the Thames
Munsee-Delaware Nation
Naicatchewenin
Neskantaga First Nation
Nibinamik First Nation
Nigigoonsiminikaaning First Nation
Nipissing First Nation
North Caribou Lake
North Spirit Lake
Washagamis Bay
Niisaachewan Anishinaabe Nation
Oneida Nation of the Thames
Pays Plat
Pic Mobert
Pikangikum
Poplar Hill
Rainy River First Nations
Red Rock
Sachigo Lake
Sagamok Anishnawbek
Saugeen
Seine River First Nation

Serpent River
Shawanaga First Nation
Sheshegwaning
Shoal Lake No.40
Six Nations of the Grand River
Slate Falls Nation
Taykwa Tagamou Nation
Temagami First Nation
Thessalon
Wabaseemoong Independent Nations
Wabauskang First Nation
Wabigoon Lake Ojibway Nation
Wahgoshig First Nation
Wahnapiatae
Wahta Mohawk
Walpole Island
Wapekeka
Wasauksing First Nation
Wawakapewin
Webequie
Whitefish River
Whitesand
Wikwemikong
Wunnumin

QUÉBEC

Algonquins of Barriere Lake
Atikamekw d'Ojibciwan
Bande des Innus de Pessamit
Communauté anicinape de Kitcisakik
Conseil de la Première Nation Abitibiwinini
Conseil des Atikamekw de Wemotaci
Cree Nation of Chisasibi
Cree Nation of Mistissini
Cree Nation of Nemaska
Cree Nation of Wemindji
Kebaowek First Nation
Eastmain
Innu Takuaikan Uashat Mak Mani-Utenam
Innu Essipit
Kitigan Zibi Anishinabeg
La Nation Innu Matimekush-Lac John
La Nation Micmac de Gespeg
Les Atikamekw de Manawan
Les Innus de Ekuanitshit
Listuguj Mi'gmaq Government
Long Point First Nation
Micmacs of Gesgapegiag

Mohawks of Kahnawá:ke
Mohawks of Kanesatake
Montagnais de Pakua Shipi
Montagnais de Unamen Shipu
Première Nation des Pekuakamiulnuatsh
Naskapi Nation of Kawawachikamach
Nation Anishnabe du Lac Simon
Nation Huronne Wendat
Odanak
Oujé-Bougoumou Cree Nation
Première Nation de Whapmagoostui
Première Nation des Abénakis de Wôlinak
Première Nation des Innus de Nutashkuan
Première Nation Wolastoqiyik (Malécite)
Wahsipekuk
The Crees of the Waskaganish First Nation
Timiskaming First Nation
Waswanipi
Wolf Lake

NOVA SCOTIA

Acadia
Annapolis Valley
Eskasoni
Glooscap First Nation
Membertou
Millbrook

Paqtnkek Mi'kmaw Nation
Pictou Landing
Potlotek First Nation
Sipekne'katik
Wagmatcook
We'koqma'q First Nation

NEW BRUNSWICK

Buctouche MicMac
Elsipogtog First Nation
Fort Folly
Indian Island
Kingsclear
Madawaska Maliseet First Nation
Saint Mary's
Tobique
Woodstock

NEWFOUNDLAND & LABRADOR

Miawpukek
Sheshatshiu Innu First Nation

PRINCE EDWARD ISLAND

Lennox Island

Appendix C: Sample plan summary by region and remoteness

| Alberta | |
|-----------------------|------------------|
| Remoteness | # of Communities |
| G1 | 12 |
| G2 | 11 |
| G3 | 0 |
| G4 | 3 |
| Regional Total | 26 |

| Northwest Territories | |
|-----------------------|------------------|
| Remoteness | # of Communities |
| G1 | 4 |
| G2 | 5 |
| G3 | 1 |
| G4 | 7 |
| Regional Total | 17 |

| British Columbia | |
|-----------------------|------------------|
| Remoteness | # of Communities |
| G1 | 26 |
| G2 | 26 |
| G3 | 8 |
| G4 | 15 |
| Regional Total | 75 |

| Ontario | |
|-----------------------|------------------|
| Remoteness | # of Communities |
| G1 | 16 |
| G2 | 21 |
| G3 | 1 |
| G4 | 15 |
| Regional Total | 53 |

| Manitoba | |
|-----------------------|------------------|
| Remoteness | # of Communities |
| G1 | 5 |
| G2 | 16 |
| G3 | 0 |
| G4 | 10 |
| Regional Total | 31 |

| Prince Edward Island | |
|-----------------------|------------------|
| Remoteness | # of Communities |
| G1 | 1 |
| G2 | 1 |
| G3 | 0 |
| G4 | 0 |
| Regional Total | 2 |

| New Brunswick | |
|-----------------------|------------------|
| Remoteness | # of Communities |
| G1 | 7 |
| G2 | 5 |
| G3 | 0 |
| G4 | 0 |
| Regional Total | 12 |

| Quebec | |
|-----------------------|------------------|
| Remoteness | # of Communities |
| G1 | 9 |
| G2 | 8 |
| G3 | 6 |
| G4 | 5 |
| Regional Total | 28 |

| Newfoundland & Labrador | |
|-------------------------|------------------|
| Remoteness | # of Communities |
| G1 | 1 |
| G2 | 1 |
| G3 | 0 |
| G4 | 1 |
| Regional Total | 3 |

| Saskatchewan | |
|-----------------------|------------------|
| Remoteness | # of Communities |
| G1 | 7 |
| G2 | 19 |
| G3 | 2 |
| G4 | 2 |
| Regional Total | 30 |

| Nova Scotia | |
|-------------|------------------|
| Remoteness | # of Communities |

| Yukon Territories | |
|-------------------|------------------|
| Remoteness | # of Communities |

| | |
|-----------------------|-----------|
| G1 | 7 |
| G2 | 3 |
| G3 | 0 |
| G4 | 0 |
| Regional Total | 10 |

| | |
|-----------------------|-----------|
| G1 | 2 |
| G2 | 4 |
| G3 | 3 |
| G4 | 1 |
| Regional Total | 10 |

Draft

Appendix D: Respondent comments on improving this survey process in the future

- Add an option to provide comments to questions in the survey and an option to provide comments after providing an answer.
- Add more input features e.g., allow to add a comma to reflect figures in the thousands or millions.
- Advisors in Northwest Territories said that all housing data should be kept by the NWT Housing Corp.
- All First Nations require housing for young and old populations. Communities are growing rapidly, and we need help with accommodating this growth. Communities should establish relationships to share funding to build more homes within multiple communities.
- Allow for the survey to be completed online in a fillable form and provide logins for participants to complete on their own time.
- Assistance with population projections.
- Attach housing funds to this survey.
- Based on a past consultation with Band Members, a project to create a village with permanent installations (housing, services, etc.) could possibly be considered.
- Better engagement and better consultation with all First Nations, the survey needs to more reality related to cost to northern rural areas and remote areas.
- Clarify and have more detailed questions on questions like #20.
- Clarity on the questions, too many similar questions.
- Come from an isolated area, we need many facilities for our youth.
- Conduct survey in person.
- Create a range to select from for questions relating to costs.
- Create a respondent guide for next survey.
- Definitions and clarity around costs.
- Do not deal with housing and infrastructure I don't manage housing or infrastructure or social housing. Our community owns their property and rent out at market value.
- Don't know membership specifics (e.g., age category), should categorize in another way.
- Found survey repetitive, in the future eliminate repetitive questions.
- Give advance notice to research and gather information.
- I found the survey long, but serves its purpose regarding the questions that I have answered. Thank you!
- I found this vey helpful with explaining what each question was asking and what each unit meant because everyone has a different interpretation of what they refer to their units as.

- If we were to do another survey in the future, have it prefilled with what you already know so we can just update numbers. Also have definitions hyperlinked. Also have math done automatically in some areas. would make it easier.
- In reviewing the information please be aware that the statistics provided will not include private builds by individuals as they are not required to provide or go through our office.
- Include a question on how many Band members live off-reserve who also require. renovations and require housing.
- Include project management costs, inspection costs, and related engineering costs.
- In-person representative from Nishnawbe-Aski Nation or phone call to discuss survey or etc.
- It took about half a day to number crunch & review the housing stock. Making half day appointments with our infrastructure rep would have gotten faster results.
- It would be helpful to reflect on information that has already been compiled, to make that available and ask questions about the information that the FNIIP and HSG report doesn't provide.
- Keep a database and only update major changes.
- Know who you are sending to and if the organization rents or owns units before asking all the questions.
- Mail-out survey.
- Make it a bit shorter.
- Make sure to include in the next survey the desired outcome process of survey.
- Need more funding to support housing needs within my community.
- Next survey should be Department specific e.g., membership/public works/administration should receive surveys that reflect their knowledge.
- Next survey should include questions relating to unfinished basements.
- One question that would have been valuable is "have you completed a population projection for the next 20 - 25 years?"
- Provide copy of completed report to communities.
- Provide funding to support communities who do not have a housing needs assessment.
- Provide more information on what a capital plan is.
- Question #5 could be expanded to include the number of Status Indians that are Band members of a different Band that currently live in this community. In this instance, 286 = 264 + 22 (belonging to other Bands, living here).
- Survey is vague. To clarify, planned units do not represent actual lots, just potential lots.
- The survey is lengthy and some bands have little or almost no time to complete these surveys. If AFN would like to utilize each Nations data, they should have a representative come to each survey community and assist bands to help complete the survey (this would be more than the writing, it might require going to inspect the homes and provide estimates and scope of repairs determining house age and determining water and sewer, just a few examples).