

# **YELLOWKNIVES DENE FIRST NATION HOUSING NEEDS ASSESSMENT**

**FINAL REPORT:  
SUMMARY OF ACTIVITIES AND SELECTED FINDINGS**

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## EXECUTIVE SUMMARY

The Yellowknives Dene First Nation (YKDFN) housing needs assessment represents a significant step towards the development of the current YKDFN Housing Strategy, local data sovereignty and community control of the housing system. Using a robust methodology and data collection strategy, the findings of this report present a clear demonstration of housing need in the YKDFN communities of Dettah and Ndilo. The use of a locally co-created survey tool ensures that data reflects the priorities and values critical to YKDFN members' conceptualizations of home, allowing for findings to be implemented in a contextually appropriate manner.

An important commonality throughout the needs assessment project has been the identification of strengths from which housing development can proceed in YKDFN. Beginning with the development of the survey tool, and echoed in findings described in this report, is the priority placed by community members on occupying their homelands and ensuring housing is available for all members in their home communities. The existing strengths of Dettah and Ndilo are further reflected in survey findings, which demonstrate high levels of satisfaction with community life and feelings of community safety.

Survey findings demonstrate that between 50 and 75 houses are needed to meet the existing housing needs of current permanent residents of Dettah and Ndilo. It is expected that this housing need would be much higher if it also included the needs of community members currently living in Yellowknife, and beyond, who would prefer to live in a YKDFN community. However, housing development at this scale is not currently possible due to a lack of required supporting infrastructure. Significant investment in housing-supportive systems, including subdivision expansion, lot development and associated linear infrastructure, must be integrated with housing development. Only through a coordinated and integrated community development process, one that responds directly to community visions, can housing for all members be available in YKDFN.

The housing need estimates above only account for the permanent housing required to address the needs of existing residents of Dettah and Ndilo. While there is not currently formal emergency or transitional housing in either community,

survey findings also demonstrate that a significant number of community households are providing these housing services to other members in need. The frequent use of this informal backstop to formal service delivery demonstrates a need for the expansion and provision of appropriate housing-related services to YKDFN members in Dettah and Ndilo. In order to meet the housing needs of all members capital investment and long-term operational supports must be put in place across the housing spectrum, and housing needs outside of private homes must be recognized. The development of a full continuum of housing, meeting the needs of all YKDFN members, would also require breaking the siloed approach to housing which separates the physical structure from the holistic supports and services required to promote occupant wellbeing.

This report confirms the lived experience and continued assertions made by community members throughout the Housing Strategy that existing housing is often inadequate or inappropriate for its context. More than a quarter of all homes are in need of major repair, while nearly half of homes require minor repairs. Particular health and well-being concerns associated with the state of repair include inadequate heating systems, insufficient tanked water supply, and housing design which does not support the day-to-day activities of members. In order to appropriately meet existing housing need and address the well-being outcomes it creates, additional units developed must directly respond to local climate, culture and geography, and be designed with direct input from YKDFN community members.

Finally, confirming and validating the decades of advocacy for housing change undertaken by YKDFN leaders and members, this report suggests that a new approach to evidence based decision-making is required. Needs assessment findings presented throughout this report, align with the stories that have been shared and collected as part of the Housing Strategy over the past three years as well as in preceding YKDFN work. The lived experience of YKDFN members has, for decades been discounted or discredited by external agencies using existing quantitative data metrics and sources. However, this time of inaction and invalidation of lived experience has only served to deepen housing need. Listening to, believing, valuing, and reflecting the needs of community members in new housing developed in YKDFN is the clear path forward toward housing equity.



# INTRODUCTION

## PROJECT OVERVIEW

The Yellowknives Dene First Nation (YKDFN) has identified the availability of adequate, affordable and appropriate housing for their membership as a critical priority. YKDFN is looking beyond existing programs towards the creation and implementation of a community-based solution, the YKDFN Housing Strategy. The unique climatic, geographic and cultural factors of YKDFN have meant existing one-size-fits-all government interventions have failed, and continue to fail, to provide YKDFN members with homes in their communities of Ndilo and Dettah.

This research project, a partnership between YKDFN and Together Design Lab (TDL) at X University<sup>1</sup> looked to support the development of the YKDFN Housing Strategy by undertaking a housing needs assessment. Differing from existing measures of housing need, a community-based approach was used aiming to record the lived experience of community members, their struggle to obtain adequate housing, their desire for more culturally appropriate homes and the impact of a failing system on members.

Through the development of a unique survey tool, representative of members' priorities in the housing system, a baseline description of housing need in YKDFN was collected.

The objectives of this project, co-developed through the creation of the Yellowknives Dene First Nation Housing Strategy Roadmap, are to:

1. Create a community-based housing needs assessment tool reflective of the lived experience, priorities and values of YKDFN members;
2. Measure existing housing need to allow for evidence-based decision making;
3. Create goals and identify milestones to address current housing need;
4. Advocate for policy and program change based on collected data; and
5. Implement findings, through the YKDFN Housing Strategy to work towards all YKDFN community members having adequate, affordable and appropriate housing.

This final report provides a summary of all activities undertaken, deliverables completed and lessons learned.

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<sup>1</sup> In August, 2021 the University accepted the Standing Strong (Mash Koh Wee Kah Pooh Win) Task Force final report with 22 recommendations which include renaming the university. "X University" is a placeholder until a new name is chosen. For more information visit: <https://www.ryerson.ca/next-chapter/>

## **PHASE 1: COMMUNITY METRIC CO-DEVELOPMENT**

Phase 1 focused on a literature review conducted to support the development of the needs assessment survey tool. The review was undertaken in two primary phases: the creation of a housing profile for YKDFN and a survey of existing housing indicators. Both academic and grey literature were used with the understanding that housing evaluation and assessment takes place at the intersection of theory and practice. The housing profile was created through a compilation of current and historic measures of housing in YKDFN by relevant governments and agencies including Statistics Canada, Northwest Territories Bureau of Statistics (NWT Stats) and Northwest Territories Housing Corporation (NWT HC). The global survey of indicators, focused primarily on Indigenous, northern and non-market contexts to identify emerging and best practices in housing evaluation. Looking beyond strictly physical and market-based evaluations, the review uncovered a growing focus on connecting housing with individual and community well-being.

The first community visit took place in Phase 1 and focused on recording community member priorities in housing. This work built off of existing YKDFN Housing Strategy knowledge and focused on understanding which barriers and goals in housing were not being measured currently. Learnings from the review of literature and needs assessment tools will be applied to themes and priorities identified by YKDFN members, including crowding, safety and belonging.

## **PHASE 2A: CREATION OF SURVEY TOOL**

Phase 2A took place between March and September, 2020 and was focused on the creation of a survey tool. The tool was created through a synthesis of community learnings and findings from the literature review undertaken in Phase 1. Outputs from this phase included:

1. Creation of the community survey tool;
2. Finalizing survey methods;
3. Obtaining ethics approval for the survey process;
4. Developing training materials for community surveyors; and
5. Training and implementing the designed survey tool.

### ***Impact of COVID-19 on Phase 2A***

As a result of COVID-19, changes were required to the project timeline and survey tool. Both the individual and household surveys were moved from paper to digital formats. Surveys were still conducted by local facilitators but now using a tablet. Additional small changes were made to survey questions themselves to reflect the changing context created by COVID-19. Finally, once approved by the Housing Strategy Working Group a second process of facilitator training was undertaken.

As a result of COVID-19 public health measures and travel restrictions, the project was required to shift to a model where all survey implementation was undertaken by local community facilitators. In order to ensure adequate training and the long-term success of the project, an enhanced virtual training program was developed. The original training plan

consisted of a hybrid approach with in-person, virtual and experiential training, as noted in previous reporting. In adapting the training plan, it was important to ensure that facilitators continued to receive training on both practical survey delivery and the theoretical framework that led to the survey tool's creation. Through the implementation of the survey, facilitators recruited and interviewed community members who may have had no previous experience with YKDFN's Housing Strategy. As such, community facilitators were acting as ambassadors for the Strategy, and therefore needed to understand and be able to communicate the role the survey played within the context of the strategy, as well as general Housing Strategy information.

Without the ability to provide experiential learning opportunities to facilitators it was important to create new mechanisms for support and ongoing learning. Rather than facilitators relying entirely on TDL team members, a model was created wherein facilitators could also offer peer support or look to other community members for support. Beyond community facilitators, an emphasis was placed on providing survey information to YKDFN staff and Housing Strategy Working Group members. As a result, they were able to provide in-community support to facilitators and support public messaging and information about surveys. Weekly, and later in the process biweekly, meetings between facilitators and TDL allowed for ongoing support and troubleshooting, ensuring that facilitators felt comfortable in their role.

Through a combination of pre-survey learning, ongoing in-community support and regular check-ins with TDL, the adapted training program were able to meet the goals of the original despite the significant changes required by COVID-19 protocols.

## **PHASE 2B: COLLECTION OF SURVEY DATA**

The primary objective of this phase was to implement the survey tool created in the preceding project phase and develop a preliminary housing needs assessment in YKDFN. The specific goals of this project phase were to:

1. Collect survey data following the sampling strategy created;
2. Enter, clean and analyze collected data; and
3. Report preliminary housing need findings.

### ***Impact of COVID-19 on Phase 2b***

To safely engage in the survey data collection, safety guidelines were developed that adhered to local health protocols in the Northwest Territories. The guidelines included the following:

1. Participants that were selected to participate in the surveys completed a health screening over the phone the day before their survey to check for COVID-19 symptoms. Upon arrival, participants had their temperature taken by the survey facilitator and were provided with a mask if they did not have one. Safety protocols requiring sanitation and PPE were incorporated into the project budget. Participants were also asked to read and sign a COVID-19 Risks and Procedures Consent Form in addition to the approved research ethics consent process.

2. Each interview was conducted in a designated space that ensured proper COVID-19 guidelines were maintained. In Ndilo, surveys were administered in YKDFN's Housing Department boardroom and in Dettah, the Chief Drygeese Centre boardroom. Both survey locations had sufficient space to ensure that physical distancing of two meters could be maintained between participants and the facilitator.

An additional challenge of COVID-19 was addressing participant hesitation. At the beginning of May 2021, there was a COVID-19 outbreak in Yellowknife which created some hesitancy amongst YKDFN community members and slowed down the process of survey completion. Surveying in compliance with public health protocols continued with those who were comfortable participating, and the initial goal of 30 percent survey completion was surpassed in both Ndilo and Dettah. The ability to exceed the initial target goal was largely based on developing rapport with community members, maintaining effective communication, and establishing trust amongst the project team.

### **PHASE 3: INTEGRATION INTO HOUSING STRATEGY**

This phase focused on integrating the data and learnings gained from the Housing Needs Assessment into the broader YKDFN Housing Strategy. The specific goals of this project phase were to:

1. Prepare the project's final report;
2. Identify and broader impacts of project learnings, develop theory and advocate for systemic change; and
3. Report on findings to the YKDFN community, including TDL's third trip to YKDFN

### **A NOTE ON THE YKDFN HOUSING STRATEGY**

Throughout this report references are made to the ongoing development of the YKDFN Housing Strategy. The Yellowknives Dene First Nation Housing Strategy aims to put community members in control of their housing system. Taking a wholistic approach to housing, the strategy is being developed through four pillars: data & advocacy, design, governance and community planning. All project activities rely on a community-based process of engagement that looks to removal technical barriers to participation and place the goals and aspirations of YKDFN members at the centre of housing decision making.

The process of Housing Strategy development is taking place within a context of holistic community improvement. YKDFN is already undertaking land, strategic planning, well-being initiatives which will support the improvement of housing conditions and a stronger future for YKDFN members. The Housing Strategy will work collaboratively with these teams and others in the community to ensure existing strengths are leveraged and the implementation plans can be coordinated.

Housing strategy development is ongoing and this report notes how the housing needs assessment was both part of, and will contribute to, this ongoing work.

## PROJECT ACTIVITIES

This project was undertaken using a process of co-creation that is central to the development of the YKDFN Housing Strategy. Critically, this needs assessment was rooted in the understanding that each resident of Dettah and Ndilo has an individual and important experience of housing. The objective of the project was to create a survey tool which was representative of the unique and specific lived experiences, challenges and goals of YKDFN members. Given this objective, a significant focus was placed on the pre-survey process and the development of an appropriate tool.

To create a survey tool representative of the diversity of experiences of YKDFN members, design workshops needed to prioritize participant safety and flexibility of activities for a range of technical proficiencies. Community workshops held as part of this process relied heavily on existing relationships and trust between the project team and community members for their success. Workshops were held with community members of all ages – from school children to the Elders senate– and levels of comfort with housing discussions; activities used ensured that all voices could participate in sharing their experiences and desires for their home environment. To further ensure the possibility for inclusive participation, interpretation services were offered at all appropriate workshops.

Further, activities looked to embody the ‘by us, for us’ spirit for the YKDFN Housing Strategy by looking to build capacity in the local housing strategy team. With support from project partners TDL, local facilitators were trained in data collection methods, survey implementation and analysis looking to ensure that skills were transferred to allow for the survey to be undertaken again in the future without institutional support. Creating self-determination in the housing system was also created through the integration of needs assessment learnings into the housing strategy and the creation of a localized database of findings for future comparison and to ensure YKDFN’s data sovereignty.

### **PHASE 1: COMMUNITY METRIC CO-DEVELOPMENT**

#### *Creation of housing profile for YKDFN*

A review of all existing housing indicators and metrics collected by relevant governments and agencies were synthesized. Meetings were held with GNWT Stats and representatives of other relevant organizations to ensure all data available was being accessed. The housing profile was used to demonstrate the existing knowledge of YKDFN housing and used as a tool in engagement to identify gaps between existing metrics and community members understandings, experiences and goals for their housing system.

## *Survey of housing indicators being used globally*

A review of academic and grey literature was undertaken to identify alternative housing metrics, housing evaluation methods and establish a pool of housing-related questions which may be used as resources in the development of YKDFN's survey tool. The literature review focused, where possible, on evaluation undertaken with Indigenous communities, northern communities and non-market communities for greatest relevance to YKDFN. In addition, the inclusion of both academic and grey literature recognized that housing evaluation and metrics exist at the intersection of theory and practice.

## *Community engagement - to understand themes and priorities identified by YKDFN members for inclusion in Needs Assessment*

The first in-community sessions of this project had the TDL team engage community in workshops wherein they identified the housing challenges and goals most relevant to their experience. The focus of these sessions was to understand the breadth of issues relevant to individuals with diverse housing experiences. This contextually-based understanding of housing forms the framework from which survey materials were created. Open community workshops were held in both Dettah and Ndilo with additional targeted sessions held with the housing strategy working group, Elders Senate, chiefs and council and the schools in both Dettah and Ndilo.

## **PHASE 2A: CREATION OF SURVEY TOOL**

### *Create a community survey tool/method for surveying*

Design of data collection tool and methodology based on a synthesis of Phase 1 community workshops and survey of housing metrics. Review draft of survey and methodology including housing strategy working group (February 2020, trip 2), presentations to Chiefs and Council, Elders Senate, and senior leadership. Working group tested the survey tool, validated the survey tool questions and, addressed concerns about language and appropriateness throughout the tool. Edits were made to the survey and its methodology based on feedback from community engagement - final drafts sent back to Working Group for final review/sign off.

Following the onset of the COVID-19 pandemic, the project was paused to determine travel would be possible for project team. When it was determined that the project would have to continue without the TDL team being in YKDFN in person, survey methods were redrafted to accommodate for COVID-19 protocols. COVID-19 related changes were reviewed with and approved by Working Group in virtual working session

Training materials were developed for community surveyors. Community members were recruited for survey facilitation during TDL to YKDFN Trip 2, and those who were hired at this time attended a training session with TDL team. Following final survey methods being altered to accommodate COVID-19 protocols, additional community members/staff were hired and trained by TDL team remotely to facilitate surveys with community members

## **PHASE 2B: COLLECTION OF SURVEY DATA**

### *Collect survey data following the sampling strategy created*

Using the methodology created and confirmed in Phase 2a local facilitators supported by the project team collected survey data. 42% of households were surveyed.

### *Enter, clean and analyze collected data*

Through a collaborative process with community facilitators, the project team undertook an analysis of both individual and household surveys. Analysis included comparison with the housing profile created in Phase 1.

### *Report preliminary housing need findings*

Using analyzed data, the project team and facilitators created a preliminary report of findings from the housing needs assessment. Findings were presented to Chiefs and Council, housing strategy working group and community in the September 2021 TDL visit to YKDFN. Reporting was then refined to be most appropriately presented for community in the future.

## **PHASE 3: INTEGRATION INTO HOUSING STRATEGY**

### *Identification of needs assessment priorities*

Working collaboratively with the housing strategy working group, learnings from the preliminary reporting were integrated into the ongoing development of the YKDFN housing strategy. This process included a prioritization of issues and identification of possible next steps.

### *Final reporting, advocacy materials and database development*

After integrating learnings into the larger housing strategy working plan the project team began creating public facing materials to support the advocacy work deriving from the housing needs assessment. Final reporting was produced and shared with YKDFN to support housing strategy development and other community priorities (including wellness program delivery, skills training and infrastructure development). As well, a local database was created to ensure YKDFN's data sovereignty and to support the future implementation of additional iterations of the housing survey.

# PROJECT DELIVERABLES

## PHASE 1: COMMUNITY METRIC CO-DEVELOPMENT

### *YKDFN Existing Housing Profile*

In order to create an existing housing profile of YKDFN, data from all publicly available statistical data on housing in YKDFN have been gathered and analysed, to highlight key existing statistics on the communities of Dettah and Ndilo, contextualized by comparing these statistics with those of the neighbouring urban centre Yellowknife, the Northwest Territories, and Canada as available and/or appropriate.

Across these government organizations, the data being collected includes general statistics on the housing that exists, unit type, tenure, occupancy, etc., as well as measures related to Core Housing Need. This measure is the primary indicator of whether housing is acceptable in Canada, and is measured using a two factor approach, first determining if “1. the household lives in acceptable housing”, and then if “2. the before-tax income is sufficient to access acceptable local housing”, with acceptable housing being defined using three key variables: adequacy, suitability, and affordability (CMHC, 2019).

In the Northwest Territories, the variables that measure core housing need have been defined as:

*Adequate housing must have running water, an indoor toilet, bathing and washing facilities and must not require major repairs. Suitability is defined as having the appropriate number of bedrooms for the characteristics and number of occupants as determined by the National Occupancy Standard requirements. Affordable housing costs less than 30% of household income where shelter costs include utilities, water, heat, insurance, property taxes land lease costs and rent or mortgage payments.*  
(NWTTC, 2017)

The National Occupancy Standard (NOS), set by Canada Mortgage and Housing Corporation (CMHC), is set around number of required bedrooms based on the number and makeup of occupants:

*Enough bedrooms based on NOS requirements means one bedroom for:*

- *each cohabiting adult couple;*
  - *unattached household member 18 years of age and over;*
  - *same-sex pair of children under age 18;*
  - *and additional boy or girl in the family, unless there are two opposite sex children under 5 years of age, in which case they are expected to share a bedroom.*
- A household of one individual can occupy a bachelor unit (i.e. a unit with no bedroom). (CMHC, 2020)*

## KEY TAKEAWAYS

### Core Housing Need measures

1. According to both the Census and NWT Community Survey, rates of community members in Ndilo and Dettah paying more than 30% of their income on housing are lower than in Yellowknife or the Canadian average. This is likely due to many residents living in public housing, where rent geared to income (RGI) ratios are structured to maintain housing costs below the 30% threshold. However, community members who wish to live in Ndilo or Dettah but aren't able to find housing are often pushed out to living in Yellowknife, where affordability is a significant issue (29.3% of residents pay more than 30% of their income for housing, according to the 2019 NWT Community Survey).
2. Both the Census and Community Survey show that Ndilo and Dettah have much higher rates of both major repairs required as well as unsuitable houses than Yellowknife, the Northwest Territories, and Canadian averages. Because the communities rely heavily on public housing built by the Northwest Territories Housing Corporation, it is logical that more houses would require major repairs and households would have more residents in units when compared with a market driven housing market, where homes are owned privately and construction follows demand.

### Data consistency

1. Data between sources is not consistent, with Stats Canada and NWT Bureau of Stats reporting different numbers for the same or similar questions. Many of the housing questions asked by Stats Canada are within the long form census, only asked of 25% of respondents, while GNWT Stats confirmed their goal is to complete a full census of 100% of households (although their response rate isn't available). This may explain many of the differences.
2. NWT HC notes very high Unit Condition Ratings (UCR) in both Ndilo and Dettah (89% and 92% respectively) while GNWT Stats bureau reports 29.7% of households in Ndilo and 57.6% of households in Dettah require major repairs. The long form census (25% sample data) reported 38.89% of houses in Ndilo and 33.33% of houses in Dettah as needing major repairs.

It is important to note that while the factors that make up core housing need are released for YKDFN, Stats Canada has not released numbers on the variable for the territory, so it is not possible to speak directly to it. NWT Stats has released the factors that contribute to Core Housing Need as well as the number of households that have one of the three housing problems, but doesn't indicate whether or not these houses are experiencing Core Housing Need for the 2019 Community Survey. We understand that this information may be released in the future, so will update our statistics if more information becomes available.

Key data collected from these agencies has been combined for YKDFN, to create an existing profile of need. This will be used as a point of comparison with the data that will be collected as part of our Housing Needs Assessment created for the YKDFN communities. Key statistics are included on the following pages, with a full list of housing related statistics included as Appendix A. The housing profile has also been used as a tool for engaging with community members in identifying metrics for the Needs Assessment by allowing them to reflect on what issues are not currently being recorded.

## *Literature Review*

A review of academic, peer reviewed sources was undertaken in order to understand how the survey and sharing circles should be developed, building on research done in the fields of housing, Indigenous knowledge, and best practices around ensuring that community input is effectively reflected in the project outputs.

### Continued Colonial History of Indigenous Housing Metrics in Canada

As discussed, governments in Canada rely on a single standard housing metric, Core Housing Need, and have sought to bring housing in First Nations to a Canadian Standard (Canada Mortgage and Housing Corporation, 1985; Carter, 1993; RCAP, 1996) thereby justifying intervention. The cyclical marginalization of First Nations peoples through housing is also reflective of an inadequate and contextually-inappropriate system (McCartney, 2017; Ross, 2006). Many First Nations have become a site of suburban grid-style housing imported from southern Canada in ignorance of local geography, climate and culture (McCartney, 2016; Ross, 2006). Altered family structures, imposed gender roles, and the installation of the single-family homes and the nuclear family as the basic economic unit are results of the imposition of western values through the vehicle of housing (Perry, 2003).

Research, including projects completed by Together Design Lab, has found that while existing literature recognizes a range of conceptual understandings and meanings of housing across disciplines and cultures, First Nations housing evaluations continue to be conducted in a rigid and homogeneous manner, with alternatives remaining underutilized (McCartney, 2017). As a result, Canada does not have a First Nations-focused housing evaluation framework. Our partnership with YKDFN is informed by global learnings and seeks to develop and test culturally-appropriate housing evaluation processes for YKDFN's communities as a way of informing possible system-wide change.

Intervention through the colonial framework of development is evident in the housing in Ndilo and Dettah, the two communities of the Yellowknives Dene First Nation (YKDFN). Suburban-style, single family units built by the Northwest Territories Housing Corporation (NWT HC) are the dominant form found in YKDFN, as is common for many First Nations throughout Canada. This housing type is imposed on First Nation communities, and is based-on the Western principle of the nuclear family as the normalized household formation. The result is the ongoing need for a change in the housing system that continuously creates a mismatch between YKDFN members, their land, and their homes (McCartney, 2017).

### Learning to Integrate Indigenous Knowledge into Planning Processes

Given this historical and ongoing oppression on Indigenous peoples by state-based planning processes, a clear theme in the research identified that it is critical that emerging theoretical and methodological approaches be sensitive to this reality (King, 2010; Simpson, 2001). Indigenous Planning theorists are committed to a decolonization of place-making disciplines, emphasizing process over outcome, and "a renegotiation of values, knowledge, meaning, agency and power between planning and Indigenous peoples" (Porter, 2010, p. 153). Validity of action results from its basis in Indigenous knowledge and local control, requiring that

interventions and solutions be developed in-community, and not by an outsider looking in (Mannell et al., 2013). The right to self-determination is inherently held by Indigenous peoples (Coulthard, 2007; Dorries, 2012; UNDRIP, 2007).

As part of the project research, we have also examined both Indigenous research methods (Drawson, Toombs, & Mushquash, 2017; Kovach, 2010; Lavallee, 2009; Simpson, 2001; Wilson, 2001) and participatory action research (PAR) (Kemmis, McTaggart & Nixon, 2014) as these are two research methodologies identified as being the most appropriate to use for this project. In addition to incorporating Indigenous knowledge, Indigenous methodologies centre values, spirituality, and beliefs of the community (Lavallee, 2009). Indigenous research and PAR complement each other in that the interaction between researcher and participants is based on equality, aiming to produce research that is of interest and value to the community, and is experiential in nature through involving participants (Drawson, Toombs, & Mushquash, 2017; Lavallee, 2009). In order to produce the most useful data, it is important to involve the community in all stages of research design and application (Anderson, 2008).

Indigenous Planning theory privileges community-based solutions over state-based planning and holds that Indigenous voices do not require translation; Indigenous peoples and ways of knowing are enablers of their own communities (Hibbard & Lane, 2004; Jojola, 2013; Anderson, 2008).

### Beyond Physical Housing Evaluation

An important theme identified was the need for quality of life and subjective well-being indicators as a complement to objective, quantitative housing metrics to fully illustrate lived experiences (Diener & Suh, 1997; Osborne & Taylor, 2009; Taylor & Osborne, 2010). This points to a significant gap in existing data for YKDFN because as demonstrated above, existing understandings of housing in Dettah and Ndilo are limited to objective measures-failing to capture how these objective measures impact the lives of community members.

Further, particularly when undertaking housing research in an Indigenous context, it is necessary to confirm which measures are appropriate (Kruse et al., 2008; Parlee, 2016; Duhaime et al., 2002). Existing housing measures which may be reflective of norms and values dominant in southern, non-Indigenous Canadian culture may not have the same implications when used out of context. This holds especially true for research conducted specifically with northern Indigenous peoples (Kruse et al., 2008; Duhaime et al., 2002).

In addition to academic literature, other housing surveys conducted with Indigenous peoples or in the Canadian north were reviewed to understand both research methods and measures used. These surveys include Stats Canada's Aboriginal Peoples Survey (2017), the Survey of Living Conditions in the Arctic (SLiCA, 2006), Housing in the Canadian Arctic Survey (Perreault, Riva, Dufresne & Fletcher, 2020), and the Together Design Lab's previously completed surveys (McCartney and Herskovits, forthcoming) which are all surveys completed in Northern Canada with First Nations and Inuit people. They include questions around housing quality and satisfaction as well as both objective and subjective measures of crowding within a household and its impacts, which allowed the researchers to compare objective housing measures with the lived experience of residents (McCartney, 2016).

In addition to subjective survey questions, sharing circles were also identified in the research as being appropriate to provide a platform for sharing stories and life experiences (Lavallee, 2009). Rooted in the oral tradition of First Nations peoples, they provide a tangible alternative to the Western hierarchical reliance on textual data, placing clear value on other ways of knowing (Barry & Porter, 2011). The circle also recognizes the interconnectedness of all knowledge—the connections between physical, emotional and spiritual worlds— which is critical to the understanding of housing (Lavallee, 2009).

### Understanding Community Scale And Social Infrastructure In Housing Evaluation

Another theme identified in the research was around the need to understand not only the housing unit itself, but also the units context (Corburn, 2009; Cummins et al, 2005; Frumkin, 2005; Hood, 2005). This context includes the location within the community or neighbourhood, including an understanding of the residents' access to transportation, employment, parks and recreation and services (Corbourn, 2009), which has been correlated with the health and wellbeing of community members (Cummins et al, 2005). Public health research has studied the effects of the built environment on both physical and mental health, including both the impacts of environmental factors on physical health (such as contaminated soil or building materials), but also the impacts that the neighbourhood and community structures have on individual physical and mental health (Frumkin, 2005). Studying the neighbourhood context has confirmed that where people live relates to the likelihood they will live in poverty, a strong health determinant (Frumkin, 2005), and that the availability of social infrastructure and design at the neighbourhood level impacts the health and well-being of residents (Hood, 2005).

## **PHASE 2A: CREATION OF SURVEY TOOL**

### *Overview of Housing Needs Assessment Tools*

Two survey tools were created: household and individual. The household survey can be complete by any one adult (15+) currently living in the house. Individual surveys can be completed by all adults (15+) currently living in the house. Below is an overview of the research questions being answered within each section of both surveys. Similar themes are often explored in both surveys, having both objective and subjective understanding of particular issues/goals may allow for a deeper understanding of housing lived experience in Dettah and Ndilo. In particular, the demographic profile in the individual survey may allow for relationships between particular housing outcomes and groups within YKDFN to be better understood.

#### *Household Survey*

The household survey is made up of four section: demographic information of residents, household profile, condition of house, and affordability. Questions are objective and therefore should yield the same response regardless of respondent from a given household.

## Demographic Household information

This section looks to understand who is living in each home. This includes information on permanent residents and their use of the house as well as patterns of visitors and guests who stayed in the home in the past year. Research questions answered in this section include:

- What is the regular density Of permanent residents?
- Do houses meet Canadian National Occupancy Standards?
- What are patterns of non-permanent residents (guests/visitors)?
- Do houses permanently or occasionally experience family doubling?
- Are there members of the community who don't have a fixed address? If so, how many and what are their demographic profiles?
- How does residential hypermobility impact density? And how does this differ across demographic groups?

## General household Questions

This section gathers basic information on the home, including: age, tenure, basic appliances and household items, drinking water access, and heating source. Some of the questions can be independently verified, so will also be used to gauge comfort with the current housing system and housing terminology to assist with the development of training capacity building programs within the community. Research questions in this section include:

- What is the diversity and mix of housing types that exist within the community?
- What is the diversity and mix of housing tenures that exist within the community?
- Do houses contain basic/essential features and what is their working condition?
- What is the diversity and mix of heating sources and how effective are they?
- What is the diversity and mix of drinking water sources and are they trusted?
- What are the relationships between the above factors and the profile of residents?

## Housing Quality

This section is focused on the existing state of repair of the house. This section also interrogates common repairs or accessibility upgrades needed to allow YKDFN to have a clear and specific understanding of immediate minor and major housing changes needed. Research questions in this section include:

- What is the State of Good Repair (SOGR) of houses in the community?
- What are common major repairs required to bring housing into a SOGR (if any)?
- What are common minor repairs required to bring housing into a SOGR (if any)?
- What are common upgrades required ensure housing accessibility for all current residents (if any)?

## Household Socioeconomic Status

Questions in this section examine the household's ability to afford housing and other essential costs of living. This is the final section of the household survey to avoid biasing other responses. Research questions in this section include:

- What is the ability of households to pay for all basic daily needs?
- What is the ability of households to pay for rent/mortgage + utilities for this unit?

## *Individual Survey*

The individual survey is a subjective evaluation of the respondents current home. This survey recognizes that each individual within a home experience it differently as a result of their context. By allowing all individuals to complete the survey, findings will represent the diversity of views, goals and experiences across YKDFN members. Below is an overview of the research questions being interrogated with each section of both surveys.

## Demographic information

Questions in this section will generate a standard demographic profile of the respondent and allow for relationships between groups and housing outcomes to be better understood.

## Perceived household conditions

This section includes an inventory of household rooms and components and asks respondents to rate their level of satisfaction with them. This section also asks participants a series of questions on how their home makes them feel, interrogating relative levels of privacy and control within a home. Learnings can inform demographic specific spatial/feature requirements as well as overall spatial/feature requirements within homes. Research questions in this section include:

- What relationships exist between demographic profile and satisfaction with the size/ space of specific rooms within a house?
- What is the overall level of satisfaction with the size of specific rooms within a house?
- What relationships exist between demographic profile and satisfaction with the condition of specific rooms/features within a house?
- What is the overall level of satisfaction with the condition of specific rooms/features within a house?
- What relationships exist between demographic profile and satisfaction with the space for traditional activities within/around a house?
- What is the overall level of satisfaction with the space for traditional activities within/ around a house?
- What relationships exist between demographic profile and perceived levels of privacy/ control? How do these relationships impact overall satisfaction in housing?
- What relationships exist between demographic profile and perceived levels of crowding? How do these relationships impact overall satisfaction in housing?
- What relationships exist between demographic profile and residential mobility?

## Perceived community/neighbourhood conditions and design preferences

Similar to the previous section, this section explores both specific and general relationships between individuals and community/neighbourhood conditions, infrastructure and preferences for the future. Research questions in this section include:

- What relationships exist between demographic profile and overall satisfaction with their community?
- What is the overall level of satisfaction with the community in general? What relationships exist between demographic profile and perceived levels of safety? And how do these relationships impact overall satisfaction in housing?

## Food Security and Income

This section explores relationships between access to resources and housing satisfaction outcomes. Questions on food security explore access and affordability of both traditional and non-traditional foods, as well as affordable and reliable access to other foods. Employment and income sources will also act as a lens through which to understand an individual's perception of their housing condition. Research questions in this section include:

- What relationships exist between employment status/income and food security? What relationships exist between demographic profile and access to traditional/non traditional foods?
- What relationships exist between employment status/income and overall housing satisfaction?
- What relationships exist between employment status/income and specific housing outcomes (including: safety, control, privacy)?

## Overall Housing Satisfaction/Wrap Up Questions

Finally, participants are asked to reflect on larger points which have caused them to continue living in their community as well as those which may have caused them to consider living elsewhere. Research questions answered in this section include:

- What are the core community assets which cause individuals to want to stay/leave YKDFN?

## ***Sampling Strategy***

The surveying method selected will collect accurate, representative data of the housing experiences of community members currently living in Dettah and Ndilo. Balanced with this desire for quality data are budget and time constraints. As a result, surveying will rely on a household sample in each community.

The survey population will be made up of all current housing units within Dettah and Ndilo totaling 193. Houses were assigned randomly generated numbers which determined the order in which they would be contacted to complete surveys. They will be contacted by a community facilitator wherein the survey process will be explained and, should they choose

to participate, a time for surveys to be completed will be agreed upon and a translator will be arranged if required. While being scheduled, consent forms and the consent process will be explained to participants. It is anticipated that each household and individual survey will take up to thirty minutes.

Surveys will continue to be conducted until at minimum 30% of houses in both Dettah and Ndilo have had a representative complete the household survey. At this time the project team will reassess the feasibility of reaching a higher target.

In addition to randomly selected households, households will have the opportunity to voluntarily complete the survey. Completed volunteer survey data, for both surveys, will be held in a separate data pool until all surveys have been completed. Data between the two survey pools will then be compared and if appropriate will be combined into a single research pool. While data pools may not be combined, voluntary survey data still provides important descriptive data. Voluntary participation will ensure that no YKDFN community member feels excluded from the Housing Strategy development process and will allow for discussions about housing quality to grow through the community.

The surveying process has been amended to reflect existing public health guideline related to COVID-19. While it was originally planned that surveys would be conducted jointly by Together Design Lab staff and community facilitators, all surveys will now be completed solely by facilitators. As well, it was previously assumed that most surveys would be conducted within the homes of participants however, this option is no longer preferred. All participants will have the options of choosing the location, but it will be required that social distancing can be followed in the selected location. YKDFN has also made office space available which would allow for socially distanced surveying and includes plexiglass to separate the surveyor and participant. Local facilitators will be supplied with PPE in order to safely undertake surveying.

## PHASE 2B & 3: COLLECTION OF SURVEY DATA

### *Facilitator Training*

As a result of COVID-19 public health measures and travel restrictions, the project was required to shift to a model where all survey implementation was undertaken by local community facilitators. In order to make this possible, and ensure adequate training and the long-term success of the project, an enhanced virtual training program was developed.

The original training plan consisted of a hybrid approach with in-person, virtual and experiential training, as noted in previous reporting. This plan would have allowed facilitators to become familiar with the process by learning the relevant theory, practicing in a classroom environment and then co-leading surveys with partners from TDL in advance of leading surveys on their own. Some local facilitators had already begun this hybrid approach to training when the plan was redeveloped.

In adapting the training plan, it was important to ensure that facilitators continued to receive training on both practical survey delivery and the theoretical framework that led to the survey tool's creation. Through the implementation of the survey, facilitators recruited and interviewed community members who may have had no previous experience with YKDFN's Housing Strategy. As such, community facilitators were acting as ambassadors for the Strategy, and therefore needed to understand and be able to communicate the role the survey played within the context of the strategy, as well as general Housing Strategy information.

Without the ability to provide experiential learning opportunities to facilitators it was important to create new mechanisms for support and ongoing learning. Rather than facilitators relying entirely on TDL team members, a model was created wherein facilitators could also offer peer support or look to other community members for support. Beyond community facilitators, an emphasis was placed on providing survey information to YKDFN staff and Housing Strategy Working Group members. As a result, they were able to provide in-community support to facilitators and support public messaging and information about surveys. Weekly, and later in the process biweekly, meetings between facilitators and TDL allowed for ongoing support and troubleshooting, ensuring that facilitators felt comfortable in their role.

Through a combination of pre-survey learning, ongoing in-community support and regular check-ins with TDL, the adapted training program were able to meet the goals of the original despite the significant changes required by COVID-19 protocols.



**SURVEY RESULTS**



## RESULTS: NDILO

### PROFILE

Respondents from 38 housing units participated in the YKDFN Housing Survey in Ndilo, generating 38 household and 41 individual surveys. Of the houses surveyed, the average number of persons per house was 3.1, more than 15% above both the national and territorial averages<sup>4</sup>, see Figure 2 below.

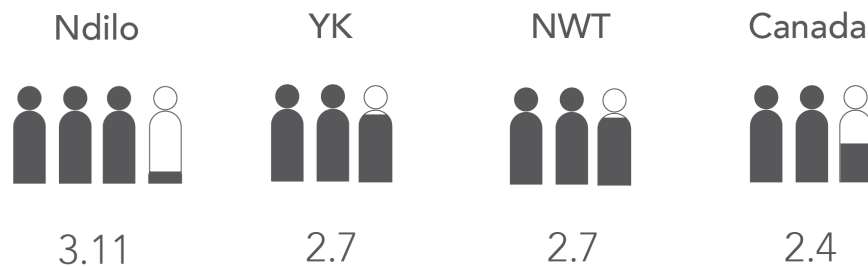


Figure 1: Average number of people per household in Ndilo, Yellowknife, the Northwest Territories and Canada (Ndilo data from YKDFN Needs Assessment, remaining data from StatsCan<sup>4</sup>)

The average age of individual survey respondents was 48, with 44% identifying as male and 56% identifying as female. The most common housing unit type surveyed was single detached dwellings (68%), with 61% of surveyed housing units privately owned and 39% owned by the NWT HC.

### PHYSICAL ASPECTS OF HOUSING

As noted in Figure 3, 26% of respondents self-reported the need for major repairs and an additional 42% reported the need for minor repairs. As illustrated in Figure 4, of respondents who identified that they believed their home needed major repairs, the most commonly required were: windows, walls, insulation, siding, floor, doors, roof, bathroom, and kitchen and heating.

Additionally, the most common minor repairs reported include: floor, bedrooms, bathroom, kitchen and windows. Areas such as bathrooms and windows were both commonly identified as needing repair, both of which can be linked to other physical issues identified within units such as heating/warmth and mould, discussed below.

<sup>4</sup> Statistics Canada. 2017. Northwest Territories [Territory] and Canada [Country] (table). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed November 18, 2021).

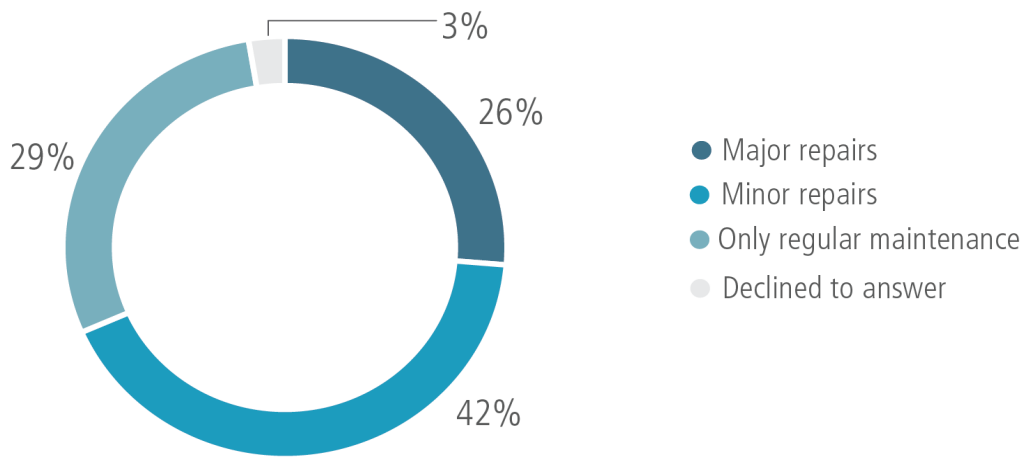


Figure 2: Percentage of Ndilo survey respondents by type of repair required for their unit

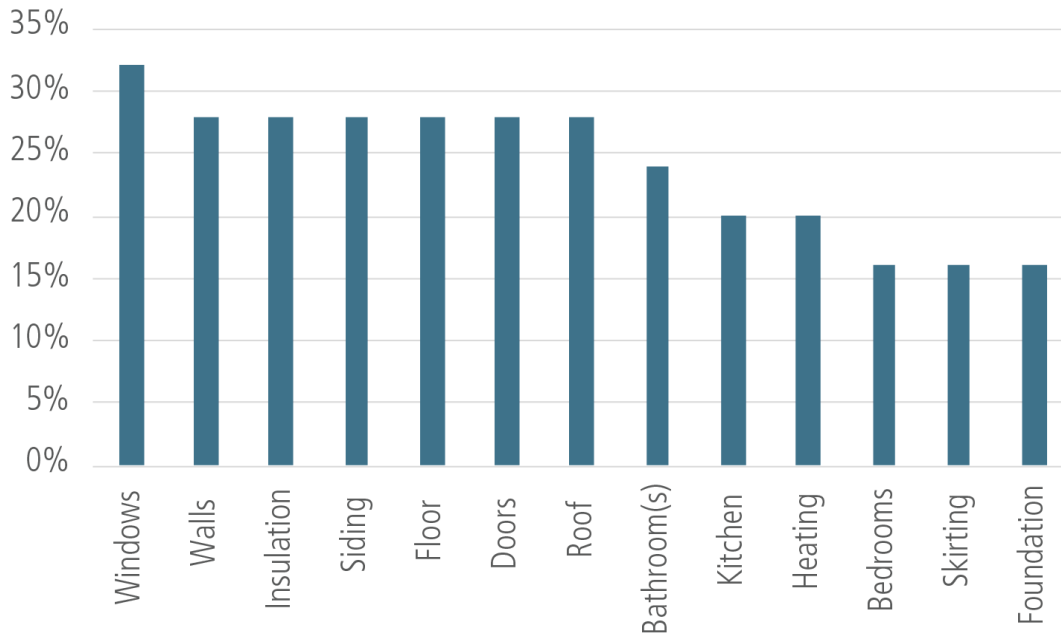


Figure 3: Most Common Major Repairs indicated by type, Ndilo respondents

In early YKDFN Housing Strategy workshops, warmth and the ability to keep a house warm were identified as key areas of concern. In Ndilo, 76% of households use an oil furnace or boiler as their primary source of heat, and 47% of houses use at least one secondary heat source to help heat their house. The two most common secondary heat sources recorded were electric space heaters and the stovetop/open oven door. The use of secondary heat sources was more common in private households (65%) versus NWTHC households (20%). Overall, only 58% of respondents said they were able to keep their houses warm and 32% said they were mostly able to keep their house warm with primary and secondary heating sources. The ability to keep a house warm is linked to the overall adequacy of the house. Thirty-one percent of respondents who reported difficulty keeping their house warm also reported frost inside windows and doors, and drafts. Ninety-four percent of respondents noted that their house was generally cold.

Phase 1 engagements identified that water tank capacity was a concern. Overall, 74% of units report running out of water, with more NWTHC tenants (87%) than private residents (65%) reporting this issue (see Figure 5). A majority of households (87%) responded that they used a secondary water source to supplement insufficient water tanks, such as bottled water.

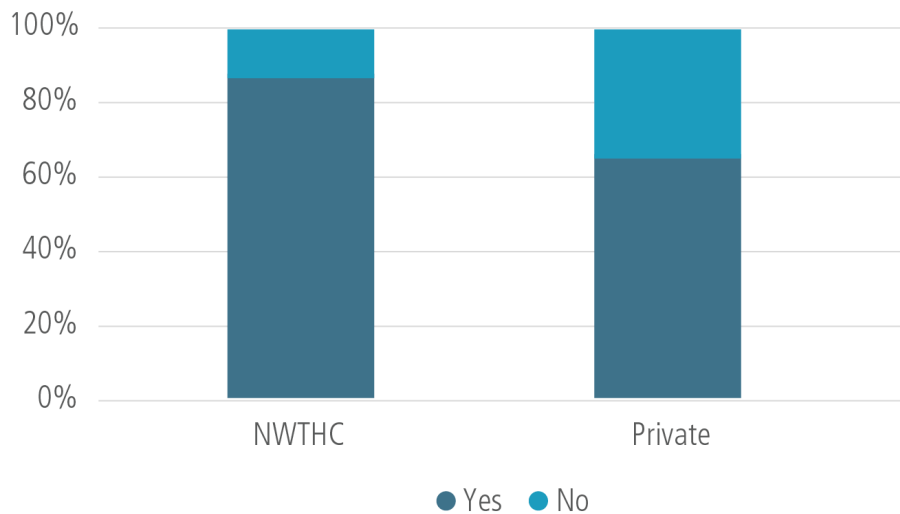


Figure 4: Percentage of Units that Run out of Water by Tenure in Ndilo

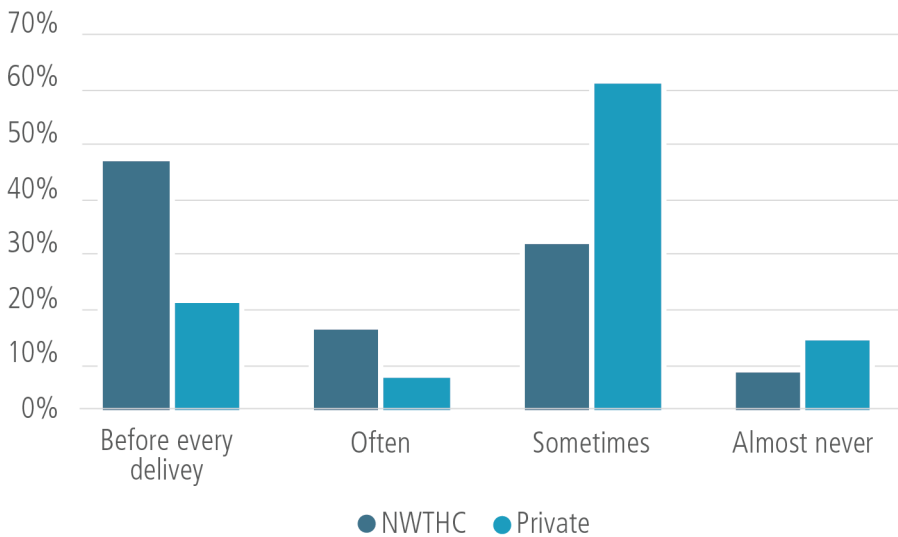


Figure 5: Frequency that Units Run out of Water by Tenure in Ndilo

In addition to water shortages, 37% of Ndilo households responded that there are times in the year when they believe their water is not safe to drink. Lack of access or inconsistent access to water impacts households in a variety of ways including their ability to do laundry, clean, cook and maintain basic hygiene and wellbeing.

Most houses had basic fire safety equipment: 95% had working smoke detectors, 76% had working fire extinguishers and 71% had working carbon monoxide detectors.

Eighty-seven percent of houses had at least two exterior doors, however 13% of houses reported having only 1 door, which community members have described as a major safety concern. Additionally, 24% of households reported mould as an issue, with the majority of these households identifying mould in bathrooms (88%).

## SOCIAL ASPECTS OF HOUSING

As part of the household surveys, respondents drew their unit's floorplan, labelled current occupants, and noted sleeping arrangements. This data was used to identify if a house met crowding criteria as set by the Canadian National Occupancy Standards (CNOS)<sup>5</sup>.

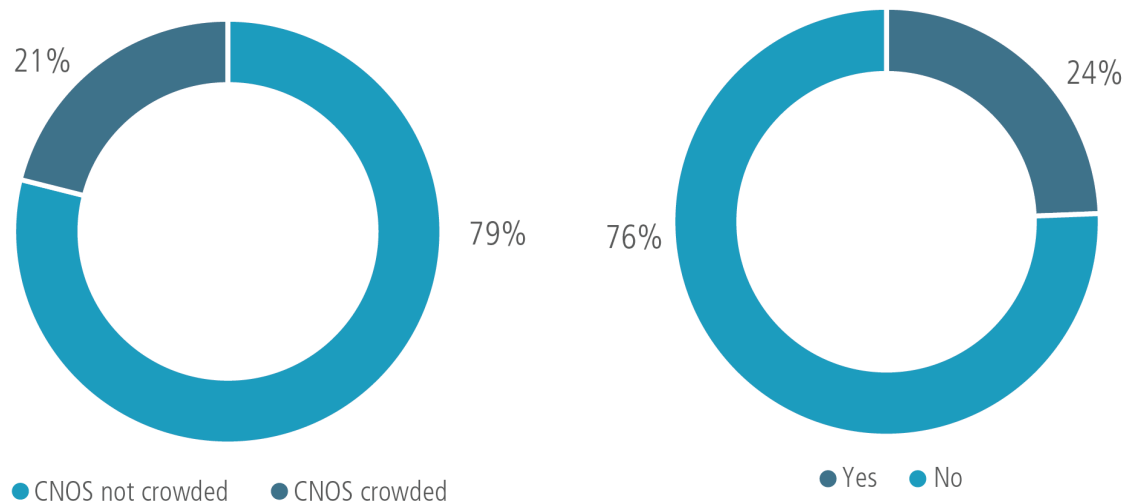


Figure 6: Percentage of Households that are CNOS Crowded (left) and Survey Respondents who Self reported their Household being Crowded (right) in Ndilo

Based on the CNOS definition, 21% of households in Ndilo were crowded, and similarly, 24% of Ndilo respondents self-reported that their houses felt crowded (See Figure 7). However, 10% of respondents in CNOS crowded houses reported that they did not believe their house was crowded, whereas 12% of respondents in not-CNOS crowded houses identified feeling that their house was crowded.

Of the respondents who identified their house as crowded, 70% said it was very crowded and 60% identified this as a big problem. Respondents who lived in CNOS crowded houses were more likely to respond that they could not make the changes they wanted to their houses and that they felt they had less privacy.

<sup>5</sup> Statistics Canada. 2013. Housing suitability of private household. Definitions, data sources and methods. Ottawa. Released January 21, 2013. <https://www23.statcan.gc.ca/imdb/p3Var.pl?Function=DEC&Id=100731> (accessed November 1, 2021).

## WHAT IS THE CANADIAN NATIONAL OCCUPANCY STANDARD (CNOS)?

The CNOS derives the number of bedrooms a household requires as follows:

- A maximum of two persons per bedroom.
- Household members, of any age, living as part of a married or common-law couple share a bedroom with their spouse or common-law partner.
- Lone-parents, of any age, have a separate bedroom.
- Household members aged 18 or over have a separate bedroom - except those living as part of a married or common-law couple.
- Household members under 18 years old of the same sex share a bedroom, except lone-parents and those living as part of a married or common-law couple.
- Household members under 5 years old of the opposite sex share a bedroom if doing so would reduce the number of required bedrooms. This situation would arise only in households with an odd number of males under 18, an odd number of females under 18, and at least one female and one male under the age of 5<sup>6</sup>.

<sup>6</sup> Statistics Canada. 2013. Housing suitability of private household. Definitions, data sources and methods. Ottawa. Released January 21, 2013. <https://www23.statcan.gc.ca/imdb/p3Var.pl?Function=DEC&Id=100731> (accessed November 1, 2021).

Crowding is a complicated factor that can have a number of causes and effects. Given that it is viewed as a significant problem by a number of community members and is demonstrated to impact perception of both control and privacy within their houses, it is an important aspect of housing need. Figure 8 illustrates the percentage of CNOS crowded households in Ndilo, neighbouring Yellowknife as well as the Northwest Territories and Canada overall. This comparison illustrates the significant levels of crowding experienced in Ndilo, and highlights the need for additional housing to provide YKDFN community members with suitable housing.

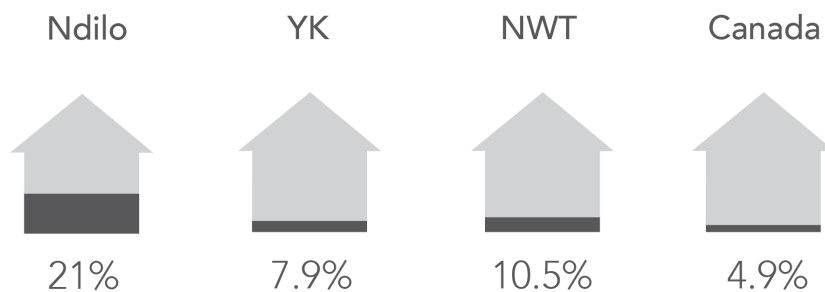


Figure 7: Percentage of Households that do not meet CNOS criteria in Ndilo, Yellowknife, the Northwest Territories and Canada (Ndilo data from YKDFN Needs Assessment, remaining data from StatsCan)<sup>7</sup>

Beyond permanent household residents, the survey also looked to identify two further groups: visitors and people who had stayed in the house because they had nowhere else to live.

## RESIDENTIAL MOBILITY AND EMERGENCY HOUSING

Thirty-four percent of households identified that they had housed visitors in the past week, and 47% of households also reported that they had housed someone in the previous year because that person had nowhere else to live, see Figure 9. These individuals stayed with their hosts for an average of 18 days; and stays happened throughout the year without any significant link to seasonality. In addition to housing others, 15% of respondents identified that they have had to leave their community to access housing.

<sup>7</sup> Statistics Canada. 2017. Northwest Territories [Territory] and Canada [Country] (table). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed November 18, 2021)

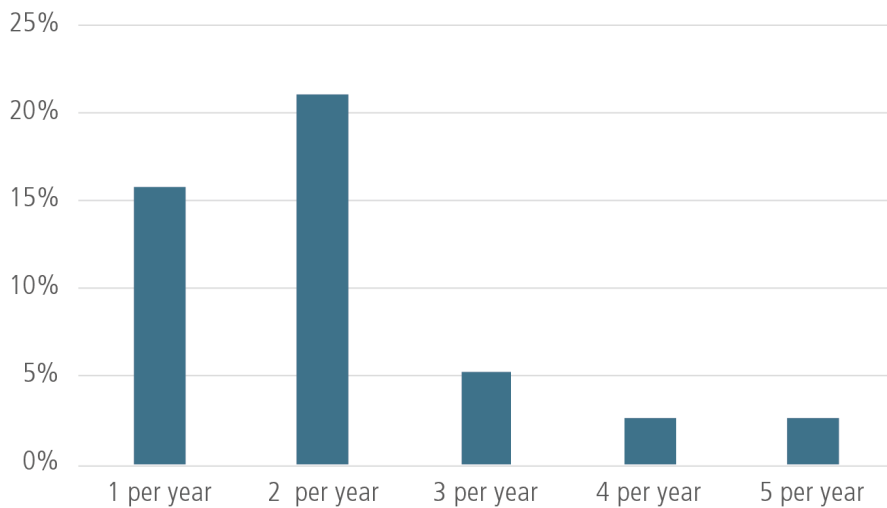


Figure 8: Number of individuals hosted per household who had nowhere else to live in the past year, in Ndilo

Reducing the cost of housing was also identified as a key priority. More than 1 in 5 households (21%) reported that after monthly housing costs they did not have enough money remaining for clothing and food. Further, 29% of households reported that monthly, they were spending more than they are making, with 32% of households identifying that they struggled to pay housing costs.

Individuals were also asked to respond with their current perceptions of their housing environment. Regarding their overall perception of their house, 68% agreed, or strongly agreed, that their house provided a good place to live their lives. A stronger response was given when asked whether respondents liked living in their house, with 78% agreeing or strongly agreeing. More specifically, 88% of respondents agreed, or strongly agreed, that they felt safe in their house; with 66% identifying that their houses provided sufficient privacy.

## **COMMUNITY**

Participants were asked on the individual survey about their perception of community safety. A majority of respondents (61%) felt it was unsafe for children to be out after dark but that overall, the community was a safe place for children during the day. The majority of respondents (85%) felt it was safe to walk during the day and only 34% felt unsafe walking alone at night. Women were more likely to feel unsafe walking alone in their community both during the day and at night. More than three quarters of respondents identified that loose dogs were a concern in their community.

Community members were also asked the top three reasons they chose to continue to live in their community, and if relevant, reasons why they had considered leaving. The top three factors that caused people to stay in Ndilo were: remaining close to family, it is their home/land/First Nation and job opportunities.

## **FUTURE DESIGN CONSIDERATIONS**

Findings from the survey in Ndilo generate an understanding of community perception of existing housing and desire for change in future housing. For example, 39% of respondents were dissatisfied with the size of their bedrooms, the most of any room. Additionally, 50% of respondents identified that they did not have adequate or appropriate space either inside or outside their house for animal hide tanning, 36% identified that space was not available for woodworking and 25% identified that space was not available for smoking and drying meats.

# RESULTS: DETTAH

## PROFILE

Respondents from 34 households participated in the YKDFN Housing Survey in Dettah, completing 34 household and 38 individual surveys. Of the households surveyed, the average number of persons per household was 2.9, 10% greater than the territorial average<sup>8</sup>.

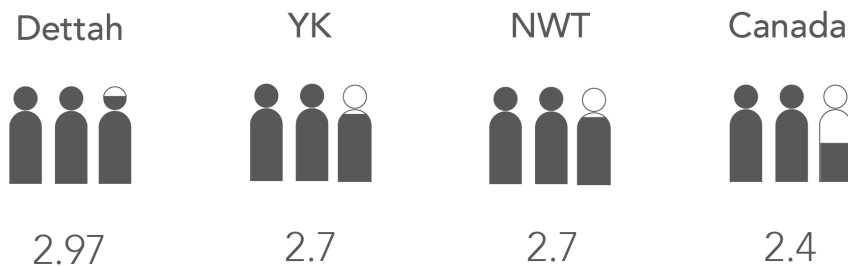


Figure 9: Average number of people per household in Dettah, Yellowknife, the Northwest Territories and Canada (Dettah data from YKDFN Needs Assessment, remaining data from StatsCan<sup>8</sup>)

The average age of individual participants was 51, with 32% of respondents identifying as male and 68% identifying as female. The most common housing unit type surveyed was single detached dwellings (68%), and 50% of housing units surveyed were private, while 50% were owned by the NWTHC.

## PHYSICAL ASPECTS OF HOUSING

As noted in Figure 11, 35% of respondents self-reported the need for major repairs and an additional 47% reported the need for minor repairs. As illustrated in Figure 12, of respondents who believed that they needed major repairs, the most commonly required were: floor, windows, bathroom, doors, bedrooms, skirting and roof.

Additionally, the most common areas in need of minor repairs reported included: floor, bathroom, kitchen, living room, walls, windows, doors, bedrooms, insulation and electrical.

<sup>8</sup> Statistics Canada. 2017. Northwest Territories [Territory] and Canada [Country] (table). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed November 18, 2021).

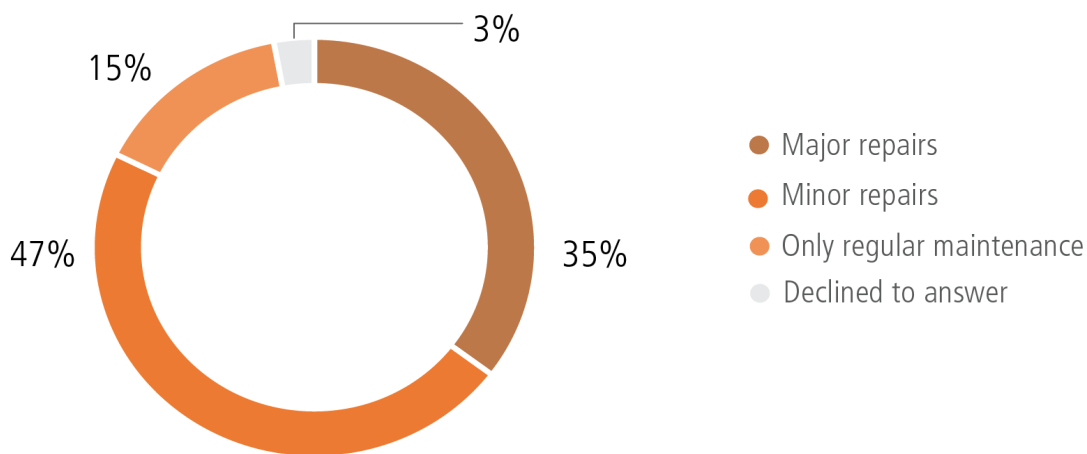


Figure 10: Percentage of Dettah survey respondents by type of repair required for their unit

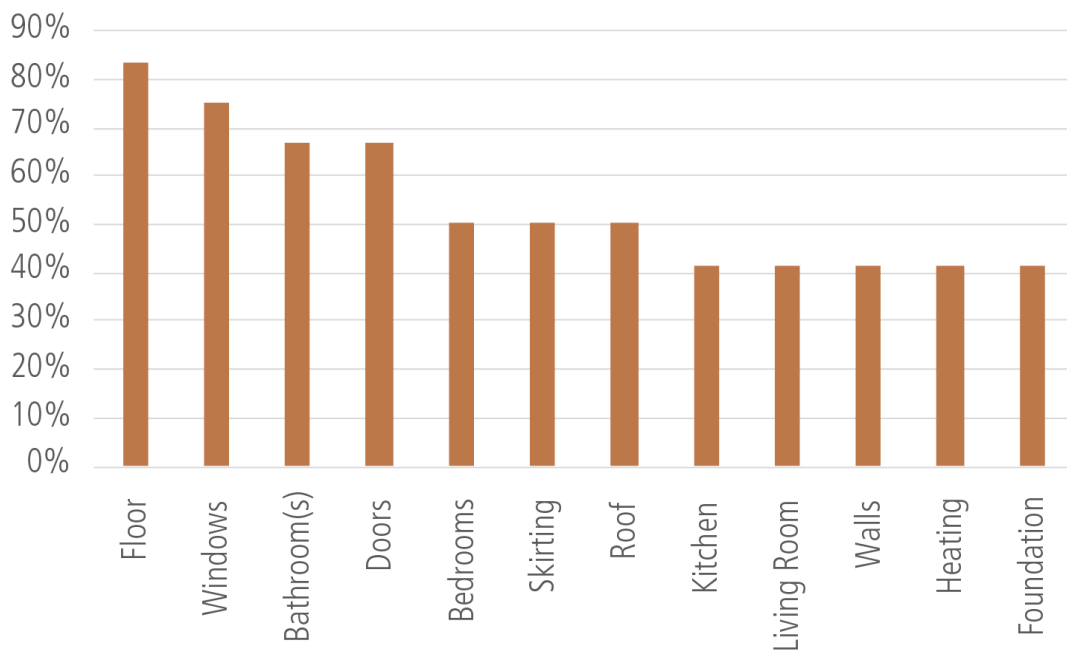


Figure 11: Most Common Major Repairs indicated by type, Dettah respondents

In early housing workshops, heating and the ability to keep a house warm, was identified as a key area of concern. In Dettah, 82% of households used an oil furnace/boiler as their primary heating source, and 47% of households use at least one source of secondary heating to keep their house warm. The most common secondary heat source recorded was an electric space heater. Private households (71%) were more likely to use a secondary heat source than NWTHC households (29%). Using both primary and secondary heating sources, 65% of NWTHC households and 59% of private households reported they were always able to keep their house warm, while 29% of both NWTHC and private households said they were mostly able to keep their house warm. The ability to keep a house warm is linked to the overall adequacy of the house. At least 69% of respondents who reported difficulty keeping their house warm also reported frost inside windows and doors, as well as drafts.

Phase 1 engagements identified water tank capacity as a concern. Overall, 50% of units report running out of water, with more private residents (53%) than NWTHC tenants (47%) reporting this issue (see Figure 13). As shown in Figure 14, both NWTHC and private households respectively reported that they ran out of water before every delivery (25% and 33%), often (13% and 0%), sometimes (38% and 33%), or almost never (25% and 33%). The majority of households (94%) responded that they used a secondary water source to supplement insufficient water tanks, such as bottled water (76%).

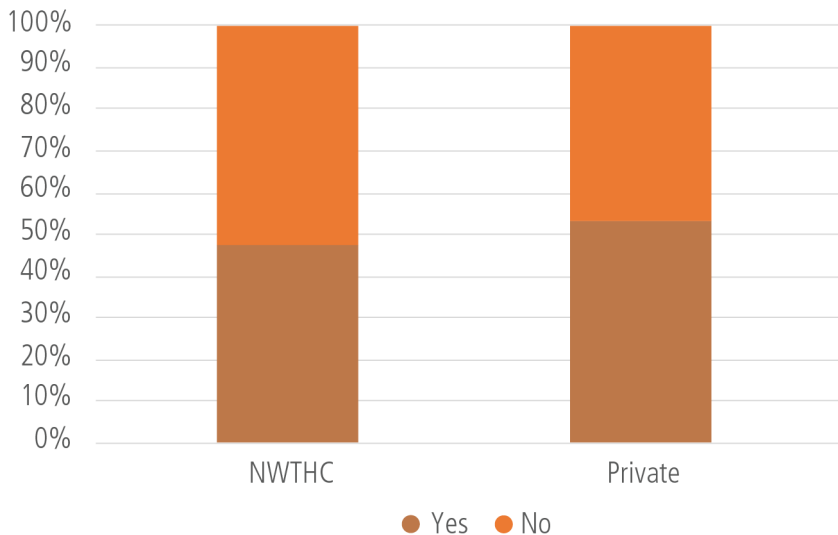


Figure 12: Percentage of Units that Run out of Water by Tenure in Dettah

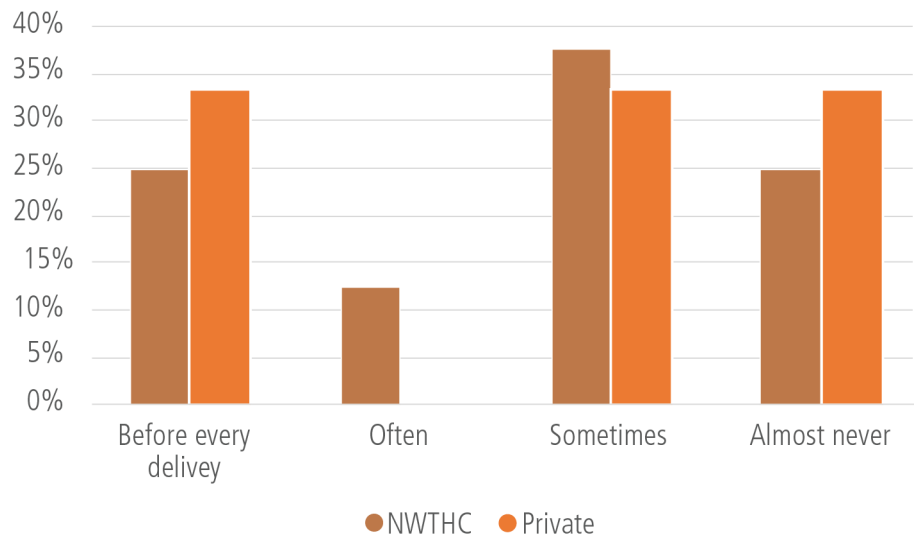


Figure 13: Percentage of Frequency that Units Run out of Water by Tenure in Dettah

In addition to water shortages, 24% of Dettah households responded that there are times of year when they believe their water is not safe to drink. Lack of access or inconsistent access to water impacts households in a variety of ways including their ability to do laundry, clean, cook and maintain basic hygiene and wellbeing.

Most houses had basic fire safety equipment: 88% had working smoke detectors, 74% had working fire extinguishers and 59% had working carbon monoxide detectors.

Seventy-nine percent of houses had at least two exterior doors. However, 21% of houses reported having only 1 door, which community members have described as a major safety concern. Additionally, 21% of households reported issues with mould, and most commonly reported it in the bathroom (43%).

## SOCIAL ASPECTS OF HOUSING

As part of the household surveys, respondents drew their unit's floorplan, labelled current occupants, and noted sleeping arrangements. This data was used to identify if a house was crowded using the Canadian National Occupancy Standards (CNOS)<sup>9</sup>.

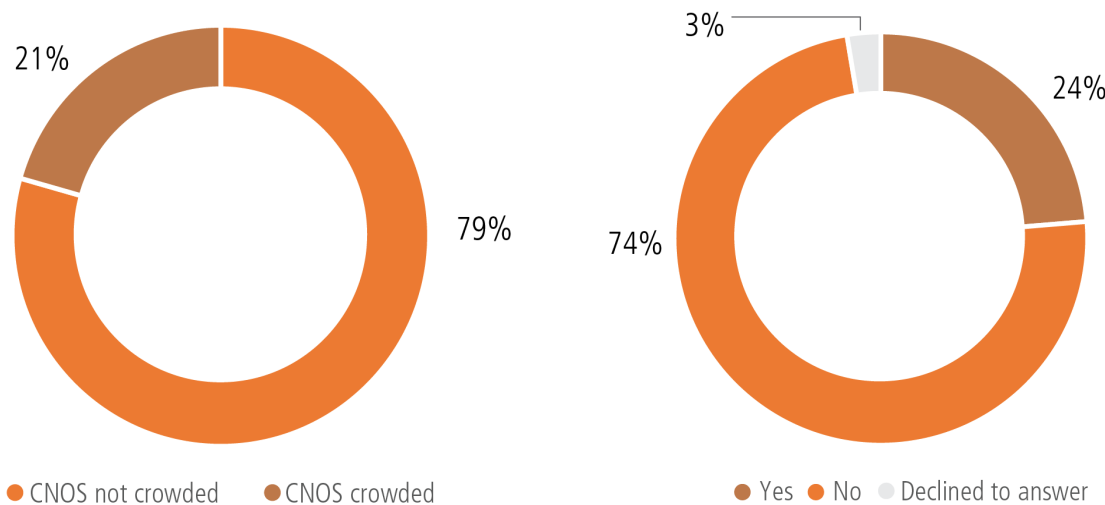


Figure 14: Percentage of Households that are CNOS Crowded (left) and Survey Respondents who Self reported their Household being Crowded (right) in Dettah

Based on the CNOS definition of crowding, 21% of households in Dettah were crowded, and similarly, 24% of Dettah respondent self-reported that their houses felt crowded (See Figure 15). However, 8% of respondents living in CNOS crowded houses did not perceive their house as crowded, whereas an additional 11% of individuals identified their house as crowded despite not meeting the CNOS definition.

Respondents who lived in CNOS crowded houses were more likely to respond that they could not make the changes they wanted to their houses and that they felt they had less privacy.

<sup>9</sup> Statistics Canada. 2013. Housing suitability of private household. Definitions, data sources and methods. Ottawa. Released January 21, 2013. <https://www23.statcan.gc.ca/imdb/p3Var.pl?Function=DEC&Id=100731> (accessed November 1, 2021).

## WHAT IS THE CANADIAN NATIONAL OCCUPANCY STANDARD (CNOS)?

The NOS derives the number of bedrooms a household requires as follows:

- A maximum of two persons per bedroom.
- Household members, of any age, living as part of a married or common-law couple share a bedroom with their spouse or common-law partner.
- Lone-parents, of any age, have a separate bedroom.
- Household members aged 18 or over have a separate bedroom, except those living as part of a married or common-law couple.
- Household members under 18 years old of the same sex share a bedroom, except lone-parents and those living as part of a married or common-law couple.
- Household members under 5 years old of the opposite sex share a bedroom if doing so would reduce the number of required bedrooms. This situation would arise only in households with an odd number of males under 18, an odd number of females under 18, and at least one female and one male under the age of 5<sup>10</sup>.

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<sup>10</sup> Statistics Canada. 2013. Housing suitability of private household. Definitions, data sources and methods. Ottawa. Released January 21, 2013. <https://www23.statcan.gc.ca/imdb/p3Var.pl?Function=DEC&Id=100731> (accessed November 1, 2021).

Crowding is a complicated factor that can have a number of causes and effects. Given that it is viewed as a significant problem by a number of community members and is demonstrated to impact member perception of both control and privacy within their houses, it is an important aspect of housing need. Figure 16 illustrates the percentage of CNOS crowded households in Dettah, nearby Yellowknife as well as the Northwest Territories and Canada overall. This comparison illustrates the significant levels of crowding experienced in Dettah, and highlights the need for additional housing to provide YKDFN community members with suitable housing.

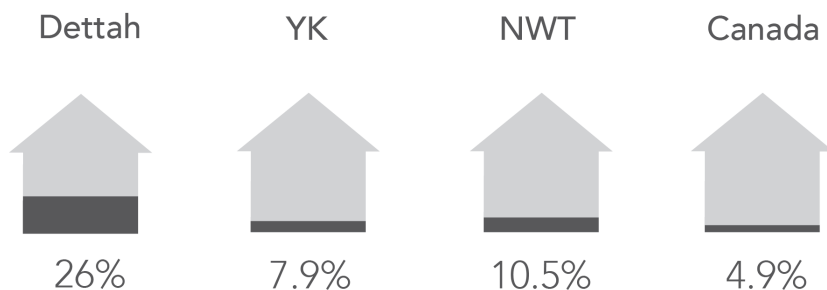


Figure 15: Percentage of Households that do not meet CNOS criteria in Dettah, Yellowknife, the Northwest Territories and Canada (Dettah data from YKDFN Needs Assessment, remaining data from StatsCan)<sup>11</sup>

Beyond permanent household residents, the survey also looked to identify two further groups: visitors and people who had stayed in the house because they had nowhere else to live.

Forty-seven percent of households identified that they had housed visitors in the past week, and 29% of households also reported that they had housed someone in the previous year because that person had nowhere else to live, see Figure 17. These individuals stayed with their hosts for an average of 11 days; and stays happened throughout the year without any significant link to seasonality. In addition to housing others, 21% of respondents identified that they have had to leave their community to access housing.

<sup>11</sup> Statistics Canada. 2017. Northwest Territories [Territory] and Canada [Country] (table). Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017. <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed November

18, 2021)

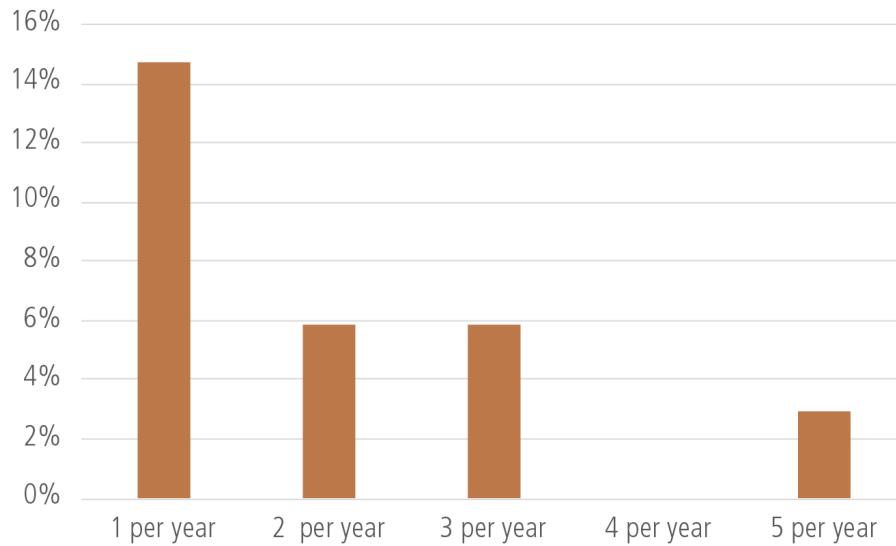


Figure 16: Percentage of Households who hosted Individuals with Nowhere Else to Live in the past year, in Dettah

Challenges with housing costs and overall costs of living were prevalent in Dettah. Almost 1 in 5 households (15%) reported that after monthly housing costs they did not have enough money remaining for clothing and food. Further, 24% of households reported that monthly, they were spending more than they are making, with 35% of households identifying that they struggled to pay housing costs.

Individuals were also asked to respond with their current perceptions of their housing environment. Regarding their overall perception of their house, 68% agreed, or strongly agreed, that their house provided a good place to live their lives. A similar response was given when asked whether respondents liked living in their house, with 68% agreeing or strongly agreeing. More specifically, 91% of respondents agreed, or strongly agreed, that they felt safe in their house; with 71% identifying that their house provided sufficient privacy.

## **COMMUNITY**

Participants were asked on the individual survey about their perception of community safety. A majority of respondents (74%) felt it was unsafe for children to be out after dark but that overall, the community was a safe place for children during the day. The majority of respondents felt it was safe to walk during the day and 40% felt it was unsafe walking alone at night, with female respondents more likely to feel unsafe at night than male respondents. More than three quarters of respondents identified that loose dogs were a concern in their community.

Community members were also asked the top three reasons they chose to continue to live in their community, and if relevant, reasons why they had considered leaving. The top four factors that caused people to stay in Dettah were: remaining close to family, it is their home/land/First Nation, access to hunting, fishing and trapping and it is a safe and calm place to live.

## **FUTURE DESIGN CONSIDERATIONS**

As with Ndilo, findings from the survey in Dettah generate an understanding of community perception of existing housing and desire for change in future housing. For example, 51% of respondents were dissatisfied with the size of their bedrooms and 50% were dissatisfied with kitchen size. Individual respondents also identified being dissatisfied with the condition of specific areas of the house including: bedrooms (39%); kitchen (52%); bathrooms (47%); and laundry (40%). Only 55% of respondents identified that they were satisfied that they could undertake all activities they desired in their house.

## SUMMARY OF SELECTED LEARNINGS

The implementation of a housing needs assessment is a step towards data sovereignty and housing system control for YKDFN. However, the value of any evaluation or assessment relies on the implementation of findings. Immediate next steps have been identified which translate survey results into actions directly impacting the lives of YKDFN members. In addition, specific areas for further research and community engagement have been identified to ensure that appropriate actions can be taken to improve housing outcomes.

Beyond immediate next steps, survey results will be used to inform Housing Strategy development. The dataset generated represents a baseline of existing housing outcomes in YKDFN and can act as a long-term reference for community planning and decision-making. Future iterations and implementation of the survey tool will allow YKDFN to measure whether the changes implemented through the Housing Strategy are successful in addressing housing needs and the well-being outcomes of members.

Data sovereignty is an important aspect of the 'by-us, for-us' ethos of the YKDFN Housing Strategy. Findings from the housing survey tool counter existing external portrayals of the lived experience and housing outcomes in Dettah and Ndilo<sup>12</sup>. The mandate to create a Housing Strategy was derived from YKDFN leadership's understanding that members were experiencing a housing crisis. Existing quantitative datasets at both the federal and territorial government levels did not align with this understanding and were in conflict with the stories being shared by community members. Quantitative data, collected using a rigorous methodology, was required to support community members' claims that existing housing was failing to provide safe and appropriate places to live for many members. The results presented above and the learnings below support the stories and experiences shared by community members, and demonstrate a significant level of housing need.

By moving beyond existing standardized housing metrics, inappropriate for the culture and context of YKDFN, data collected reflects the local context, experiences of members and their priorities for the future. In confirming the stories told by community members, findings demonstrate the need for a critical assessment of externally-collected housing data and a justification for believing the lived experience of First Nations peoples. This does not mean a turn away from evidence-based decision-making, or the collection of housing data, but rather an ontological shift which prioritizes community-level data, qualitative data and the knowledge and experience of local leaders and members.

Identified on the following page are examples of immediate actions that derive from survey learnings and resultant analysis of the YKDFN Housing Strategy Working Group.

## IMMEDIATE HOUSING NEED

A goal of the housing needs assessment was to understand and quantify the need for housing development in Dettah and Ndilo. However, the close proximity of Dettah and Ndilo to Yellowknife, Northwest Territories' largest urban centre, creates a unique housing dynamic that can mirror a single-market. The availability of a broader, and more diverse range of housing options in Yellowknife causes members in a variety of circumstances to be pushed towards accessing housing in the City. As a result, it is difficult to measure the specific demand for housing in Dettah and Ndilo or what factors impact demand.

Housing needs assessment surveys were conducted only with existing residents of Dettah and Ndilo, and therefore do not record the needs of community members wishing to return to the communities, either from Yellowknife or beyond. Individual respondents completed a housing preference chart wherein they reallocated all residents of their current house into a housing situation they felt appropriate. Completed charts allowed the respondent to either maintain their current arrangement, move all existing residents into a more appropriately sized house, or divide residents between additional potential houses. Responses created an understanding of both the number of houses needed to appropriately house YKDFN members and the types of houses required. Using the data collected, two models were created to predict housing need: a density-based model and a multiplier-based model.

### *Density Model*

Using the number of additional homes and residents in each home identified by respondents, a target residential density was created. The target densities identified, 2.29 in Dettah and 2.38 in Ndilo, were both in line with the current Canadian average household density of 2.4. As shown in Figure 18, this model estimates an additional 24 homes are needed in Dettah and 30 in Ndilo to house the current residents of these communities.

	<b>Target Density</b>	<b>Current Density</b>	<b>Population</b>	<b>Total Houses Required</b>	<b>Existing Houses</b>	<b>Additional Houses Required</b>
Dettah	2.29	3.2	234	102	78	24
Ndilo	2.38	3.3	296	124	94	30

Figure 17: Number of Additional Homes Required to Accomodate Existing Dettah and Ndilo Residents using Density Model

### Multiplier Model

Using the same data, and understanding that respondents represent only a sample of the population, we can also estimate housing need based on multipliers. For each existing home surveyed in Dettah it was identified that 1.37 homes were needed, in Ndilo it was 1.47; yielding a need for 28 and 44 new homes respectively, as illustrated in Figure 19.

	<b>Sample Existing Units</b>	<b>Sample Desired Units</b>	<b>Multiplier</b>	<b>Total Existing Units</b>	<b>Projected Desired Units</b>	<b>Additional Houses Required</b>
Dettah	27	37	1.37	78	107	29
Ndilo	34	50	1.47	94	138	44

Figure 18: Number of Additional Homes Required to Accomodate Existing Dettah and Ndilo Residents using Multiplier Model

## RESIDENTIAL MOBILITY AND HOMELESSNESS

During the creation of the survey tool, the YKDFN Housing Strategy Working Group stressed the importance of capturing the experiences of individuals without permanent housing, as they are a vulnerable group of community members whose experiences are not currently being recorded in existing housing datasets. However, with houses being the primary unit of analysis, it was difficult to measure the experience of those who are unhoused within this needs assessment. It was agreed that subsequent targeted research could provide a clearer understanding of homelessness and housing precarity in YKDFN, and the survey integrated a measure of housing mobility experiences.

Findings demonstrate a high level of residential mobility requiring both short- and long-term housing solutions. In Dettah, 29% of houses have acted as emergency housing for an individual who had nowhere else to live in the last year, with an average stay of 11.1 days. In Ndilo, 47.8% of houses had similarly acted as emergency housing over the past year with an average stay of 18.2 days.

Beyond survey respondents providing temporary shelter for those with nowhere else to live, the survey recorded housing precarity and mobility for members who are currently permanently housed. Eighteen percent of respondents have, in the past, had to leave their community to access housing. Additionally, 15% of respondents reported that they rely on other housing or emergency services for a place to sleep; with the most common support being a relative within the community.

While formal emergency, transitional and supportive housing does not exist in Dettah or Ndilo, this does not mean that there is not a need for a full housing continuum. It also does not mean that these services are not currently being provided, as evidenced by

the number of households who temporarily house those who do not have another place to live. Survey findings indicate that a significant number of community members are experiencing homelessness or housing precarity and are looking to access safe housing in their communities, rather than in Yellowknife. Additionally, the survey demonstrates that where formal services are not provided, an informal service network is filling the gap. The consequences of an informal, unfunded service network is further strain on YKDFN's already challenged housing stock.

Without the implementation of homelessness prevention strategies and the development of a complete continuum of housing in Dettah and Ndilo, an expanded reliance on informal service provision and further deterioration of housing must be expected. This cycle of overuse and disrepair will generate further homelessness as additional housing becomes uninhabitable, deepening strain on both the existing housing stock and its occupants. By recognizing the informal services being provided, and appropriately compensating YKDFN members who are filling the housing continuum gaps by acting as emergency service providers, this cycle can be broken. Additionally, investigating why community members are not accessing housing services in Yellowknife and creating a more appropriate full range of housing options in Dettah and Ndilo could reduce the burden of informal service provision on members.

## **REPAIRS**

The estimates for housing need presented above assume that all existing houses provide safe and appropriate housing for their occupants. However, survey data shows that across both communities, a total of 31% of housing units are in need of major repair. Major repairs must be considered part of immediate housing need, as failure to bring housing into a state of good repair risks creating additionally unhoused members and deepening the existing housing crisis.

State of repair is a particular problem in private housing. Seventy-seven percent of units in need of major repair are privately owned; with 43% of all respondents in private housing indicating that they are in need of major repair. This must be considered alongside the understanding that 26% of respondents living in private housing indicated that they are spending more than they earn. Understood together, it is possible to recognize the circumstances that lead to growing levels of disrepair in private housing and a scenario where repairs cannot be addressed by residents themselves. A gradual decline of private housing without the introduction of new mechanisms to assist with renovations and repairs will increase the pressure on public housing units and likely cause greater displacement to Yellowknife.

While private housing represents a significant portion of units in need of major repair; an alarming number of public housing units were reported as needing more than regular maintenance. Fifteen percent of all public housing units reported needing major repairs with an additional 50% of units in need of minor repairs. Given that these are rental units, the NWTHC has a responsibility under the Residential Tenancies Act (1988) to keep units “in a state of good repair and fit for habitation”<sup>12</sup> throughout the tenancy. Follow up and advocacy on behalf of tenants will be undertaken to understand why existing repairs have not been completed and to ensure that YKDFN members are living in safe housing.

## **ECONOMIC CHALLENGES AND HOUSING COSTS**

While the estimates above indicate that between 54 and 72 homes are needed to meet the immediate housing needs of current Dettah and Ndilo residents, units must be developed with consideration for YKDFN members’ economic realities. Survey findings demonstrate that a significant portion of YKDFN members are struggling with living costs; spending more than they make, not having money for food and clothes, and missing meals. A range of housing options and tenure models will best serve the diverse needs of YKDFN members. Critically, this must include an expansion to affordable housing offerings.

Current Government of Northwest Territories and NWTHC policies create barriers to YKDFN developing affordable housing units. Accommodation allowance, a basic benefit under the Social Assistance Act and Income Assistance Program, provides housing cost support for persons in need. However, in order to qualify for rental assistance an individual must be on the NWTHC low cost housing waitlist, and accept a position in low cost housing should one become available. Both using the low cost housing waitlist, whose eligibility requirements extend outside the eligibility criteria for basic benefits, and requiring individuals to move to NWTHC housing should it become available, restrict the use of accommodation allowance and limit the potential for community-built affordable housing options. Making accommodation allowance a portable benefit would create greater economic certainty for YKDFN in the development of affordable housing for its members.

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12 Government of Northwest Territories, 1988. Residential Tenancies Act, as Amended. Yellowknife. Released 2019. <https://www.justice.gov.nt.ca/en/files/legislation/residential-tenancies/residential-tenancies.a.pdf> (accessed November 18, 2021)

## CONCLUSION

As part of the development of YKDFN Housing Strategy, YKDFN, along with project partner TDL, completed a community-based housing needs assessment in Dettah and Ndilo. Throughout this process, emphasis was placed on creating a high-quality, rigorous data collection tool and methodology representative of the experiences of home of YKDFN members. The result was an alternative data collection tool which summarized housing experiences and need. Using local facilitators, and through a collaborative data analysis and discussion process the results of the needs assessment are a baseline understanding of housing and can be used to guide housing systems change and measure effectiveness longitudinally.

Survey findings represent a significant step towards housing system control and data sovereignty for YKDFN. Locally collected, relevant data allows for YKDFN to plan for future housing and community development, ensuring that all development is tailored to specific existing needs. Further, possessing high quality data supports the ongoing advocacy work being undertaken by YKDFN to ensure that all housing decisions impacting community members are undertaken jointly, through a process of engagement with the First Nation. The creation of the survey tool further allows for subsequent data collection, measuring whether changes to the housing system have been effective in supporting the outcomes most important to community members.

The value in collecting needs assessment data is in its application to directly improving the housing outcomes of YKDFN members. Through findings being integrated into the development of the YKDFN housing strategy and ongoing advocacy, needs identified are being addressed. Needs assessment results validate the experiences shared by community members of the ongoing housing crisis in YKDFN. While some existing government-led datasets, reports and other evaluations may have indicated that significant need did not exist, community members continued to share their experiences and advocate for housing development. Needs assessment findings demonstrate the need to critically assess existing datasets with regards to housing in the Northwest Territories and recognize how colonial systems of data collection may be biasing responses and erasing resident experiences.

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