



# **Final Report**

**Cost analysis of current  
housing gaps and future  
housing needs in First Nations**

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## Executive Summary

Housing, as referenced in Articles 21 and 23 of United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP),<sup>1</sup> is essential to Indigenous Peoples improving social and economic conditions through their self-determined strategies and priorities. More than a structure, housing is a matter of social policy, inextricably linked to well-being. To support thriving First Nations, addressing core horizontal issues of social policy, such as housing, is imperative.

Gaps in housing in First Nations communities are well-documented, as are their related social and economic repercussions. Based on estimates produced by the First Nations Information Governance Centre (FNIGC), using the Assembly of First Nations' (AFN) (2018) First Nations On-Reserve Housing and Related Infrastructure Needs survey data, of existing units (estimated to be approximately 85,700), 34% require minor repairs and 31% require major repairs.<sup>2</sup> These estimates are based only on the six participating regions in the report, representing nearly 50% of First Nations, which suggests that gaps are likely much larger.

The human impacts of the housing shortage and inadequacy of housing in First Nations are significant. Issues such as overcrowding cascade into challenges such as family violence, intimate partner violence, and education, growth, and development challenges for children.<sup>3</sup> Health challenges emerge as the transmission of communicable diseases are facilitated due to overcrowding, and due to poor structures, e.g. the effects of mold.<sup>4</sup> The human impacts of inadequate housing are not one-time fixed costs but long-term challenges with social and fiscal repercussions for children, families, and communities.

<sup>1</sup> United Nations, 2007, "Declaration on the Rights of Indigenous Peoples (UNDRIP)," [https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP\\_E\\_web.pdf](https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf) (accessed July 27, 201).

<sup>2</sup> First Nations Information Governance Centre, 2020, "First Nations On-Reserve Housing and Related Infrastructure Needs," Technical Report, 5.

<sup>3</sup> See for instance, Xavier Bonnefoy, "Inadequate housing and health: an overview," *International Journal of Environment and Pollution* 30, 3/4 (2007): 411–429; Lauren Taylor, "Health policy brief. Housing and Health: An Overview of the Literature," *Health Affairs*, June 7, 2018, <https://www.healthaffairs.org/doi/10.1377/hpb20180313.396577/full/>; Leilani Farha and UN Secretary-General, "Adequate Housing as a Component of the Right to an Adequate Standard of Living, and the Right to Non-Discrimination in This Context," July 17, 2019, <https://digitallibrary.un.org/record/3823982>, 10, 14, 15; Kevin James Swick and Reginald D. Williams, "An analysis of Bronfenbrenner's bioecological perspective for early childhood educators: Implications for working with families experiencing stress," *Early childhood education journal* 33, no. 5 (2006): 371–378.

<sup>4</sup> See for instance, The Standing Senate Committee on Aboriginal Peoples, "Housing on First Nation Reserves: Challenges and Successes" (Ottawa, February 2015), <https://sencanada.ca/content/sen/committee/412/appa/rms/08feb15/Home-e.htm>, 17; Nathalie Röbbel, "Housing and Health Guidelines" (World Health Organization, 2018), <https://www.who.int/publications-detail-redirect/9789241550376>, xv.; Tracey Mactavish et al., "A Participatory Process for the Design of Housing for a First Nations Community," *Journal of Housing and the Built Environment* 27, no. 2 (June 2012): 207–24, <http://dx.doi.org.proxy.bib.uottawa.ca/10.1007/s10901-011-9253-6>, 210.

Investing in housing now can mitigate challenges such as homelessness and family violence, as well as a variety of others, in the future.

The Institute of Fiscal Studies and Democracy (IFSD) was asked by the Assembly of First Nations (AFN) to undertake cost analysis of current housing gaps and future housing needs of First Nations living in community. With the intention of promoting First Nations care and control of delivery in housing through the lens of holistic well-being, a performance measurement framework, was also sought, with relevant strategic objectives and indicators.

To deliver on its mandate, IFSD understood housing as a matter of social policy, with a three-part approach:

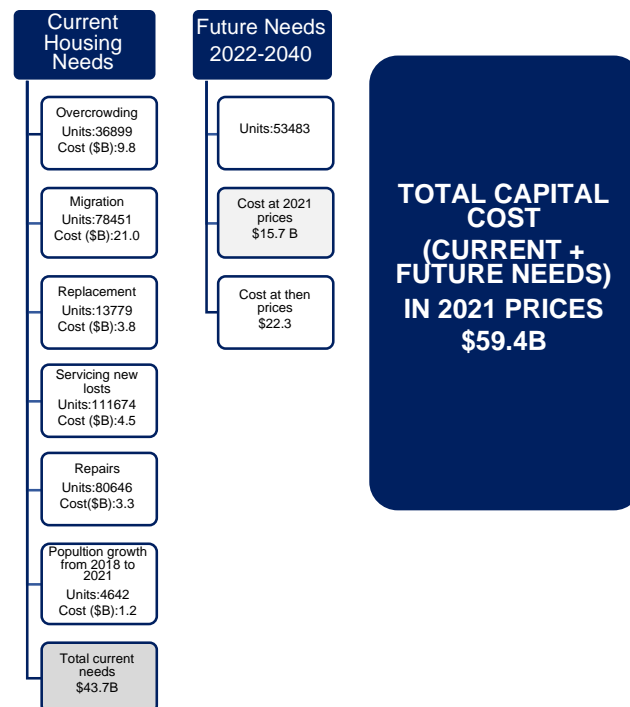
- 1) Policy and practices in First Nations: Ten First Nations collaborated with IFSD to build in-depth case studies and analysis on housing needs, costs, opportunities, and challenges.
- 2) Cost estimation of current and future needs: With data from AFN's 2018 First Nations On-Reserve Housing and Related Infrastructure Needs (AFN Survey) current and future needs were costed with consideration of growth factors such as population, migration, and inflation.
- 3) Performance measurement for well-being: A future-focused framework was developed by leveraging best practices from other jurisdictions, a holistic well-being understanding of housing, with consideration of First Nations care and control of delivery.

The three components capture current context and needs, with measurement tools for future planning.

Analysis of housing policy and practices in ten First Nations that served as case studies highlighted the differentiated resources and tools needed to address contextual realities. Demographic pressures, geography, and economic viability influence the tools and approaches a First Nation may leverage in their housing practice. First Nations that served as case studies from different provinces/regions struggle with overcrowding, demographic pressures, and cost increases in housing. Resources are insufficient to meet needs, with budgets stretched to cover repairs, maintenance, and salaries, let alone, new builds. Looking to the future, a variety of housing types are needed to meet changing community needs, e.g. transitional housing, elders homes, etc. Essential to meeting the challenge of housing, are capacity support, strategic planning, and community engagement to develop and implement a community's vision.

With data from the AFN Survey on housing needs, the costs to close immediate and future housing needs were estimated. In 2021 prices, the total capital cost for current and future needs is estimated to be \$59B (this includes an estimated \$21B for migration on-reserve) (see Figure 1). A range of estimates are provided in the costing section of this report, covering a range of population growth and migration scenarios.

Figure 1



Given existing housing shortages, high rates of family formation, and the potential for migration on-reserve, it is crucial to plan for and address needs, as gaps are only expected to widen.

Establishing a baseline and measuring the housing gap is essential in reducing it. A performance measurement framework unique to First Nations can be designed with indicators that encompass well-being and a First Nations-informed definition of an acceptable dwelling standard. Leveraging and implementing this bottom-up, well-being focused approach to housing would see First Nations leading the path to a holistic needs-based assessments of this critical asset class.

Quality, safety, stability, affordability, and community could make-up a First Nations dwelling standard informed by the strategic objectives of health, environment, society, and economic prosperity. Establishing a clear baseline would provide a point of departure from which First Nations could track and measure their holistic vision of well-being informed housing. First Nations care and control of delivery would be well-established and supported with data to inform planning and capacity development. As housing is inextricably linked to well-being, First Nations are uniquely positioned to define the vision of acceptable dwelling standard and the additional indicators required.

Housing needs and tools to address gaps are diverse and connected to the geographic and economic contexts of First Nations. Beginning to address current and future needs

in housing will require differentiated approaches, suitable to the needs and contexts of First Nations.

Through findings across the three dimensions of policy and practice, cost estimations, and a performance framework, actions and lessons were defined to support and improve housing in First Nations:

- 1) Address existing housing gaps in First Nations to meet immediate needs.
- 2) Refine assessments of future needs through a bottom-up study that captures variances with greater detail to enhance the precision of cost estimates.
- 3) Address immediate housing needs with financial, human, and capacity building supports, including financial literacy. A clear well-being focused bottom-up baseline assessment of housing needs in First Nations is required.
- 4) Establish regular and streamlined access to funding for housing in First Nations. Ensure that funding is allocated and transferred in a regular and reliable fashion.
- 5) Recognize the diversity of need and approaches to meeting housing demand in First Nations. Approaches to resourcing and planning should align to these differences.
- 6) Support First Nations with capacity and financial resources to undertake well-being focused housing needs assessments. Leverage those capital plans to orient approaches to housing and federal resource allocations.
- 7) Collaborate with First Nations on identifying and refining proposed indicators for use in a well-being focused housing measurement framework.
- 8) Develop an easily accessible cloud-based tracking tool to support First Nations in measuring relevant indicators in housing.
- 9) Ensure differentiated points of departure and needs of First Nations are captured in the well-being framework.

There is a significant fiscal shortfall that will require a large up-front investment with sustained funding increases for many years to address and mitigate large economic, social, health and environmental negative outcomes. The transfer of control for First Nations housing must come with additional resources to address significant current and future needs. The infrastructure gap should be assessed and addressed in accordance with a First Nations forward looking and comprehensive well-being performance framework.

## Introduction

The Institute of Fiscal Studies and Democracy (IFSD) was asked by the Assembly of First Nations (AFN) to undertake cost analysis of current housing gaps and future housing needs of First Nations living in community. With the intention of promoting First Nations care and control of delivery in housing through the lens of holistic well-being, a preliminary performance measurement framework, was also sought, with relevant strategic objectives and indicators.

To deliver on its mandate, IFSD understood housing as a matter of social policy, with a three-part approach:

- 1) Policy and practices in First Nations: Ten First Nations collaborated with IFSD to build in-depth case studies and analysis on housing needs, costs, opportunities, and challenges.
- 2) Cost estimation of current and future needs: With data from AFN's 2018 First Nations On-Reserve Housing and Related Infrastructure Needs (AFN Survey) current and future needs were costed with consideration of growth factors such as population, migration, and inflation.
- 3) Performance measurement for well-being: A future-focused framework was developed by leveraging best practices from other jurisdictions, a holistic well-being understanding of housing, with consideration of First Nations care and control of delivery.

The three components capture current context and needs, with measurement tools for future planning.

The AFN's pursuit of an approach to housing through the lens of well-being and First Nations care and control of delivery is defined in their First Nations National Housing and related Infrastructure Strategy, and was supported through the unanimous Resolution 57/2018 on housing and infrastructure.

Both the approach and resolution are rooted in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)<sup>5</sup>. Articles 21 and 23 of the Declaration emphasize Indigenous Peoples rights to improve their social and economic conditions, through self-determined priorities and strategies:

Indigenous peoples have the right, without discrimination, to the improvement of their economic and social conditions, including, inter alia, in the areas of education, employment, vocational training and retraining, housing, sanitation, health and social security. (Article 21)

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<sup>5</sup> United Nations, 2007, "Declaration on the Rights of Indigenous Peoples (UNDRIP)," [https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP\\_E\\_web.pdf](https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf) (accessed July 27, 201).



Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development. In particular, indigenous peoples have the right to be actively involved in developing and determining health, housing and other economic and social programmes affecting them and, as far as possible, to administer such programmes through their own institutions. (Article 23)

The approach outlined in UNDRIP emphasizes a holistic understanding of well-being for matters of social policy, including housing. This horizontal and relational understanding of housing as more than a structure, but as a critical component of wellness, is reflected in this report. Housing is about more than infrastructure,\* as its safety and suitability impact the well-being of children and families that live in the dwelling, and ultimately, the well-being of their communities.

Gaps in housing in First Nations communities are well-documented, as are their related social and economic repercussions. Based on estimates produced by the First Nations Information Governance Centre (FNIGC), of existing units (estimated to be approximately 85,700), 34% require minor repairs and 31% require major repairs.<sup>6</sup> These estimates are based only on the six participating regions in the report, representing nearly 50% of First Nations, which suggests that gaps are likely much greater. The findings for the six regions\*\* are consistent with a 2019 report by CMHC (using Census 2016 data), which suggests that nationally, approximately 32% of existing homes in First Nations require major repairs. The need for repairs is substantially higher than those of non-First Nations, estimated by CMHC to be 4% of the existing stock.<sup>7</sup>

The human impacts of the housing shortage and inadequacy of housing in First Nations are significant. Issues such as overcrowding cascade into challenges such as family violence, intimate partner violence, and education, growth, and development challenges for children.<sup>8</sup> Health challenges emerge as the transmission of communicable diseases

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\* In this report, housing infrastructure includes the physical structure, lot, and connecting services associated to a residential unit.

<sup>6</sup> First Nations Information Governance Centre, 2020, "First Nations On-Reserve Housing and Related Infrastructure Needs," Technical Report, 5.

\*\* The six regions are: British Columbia, Saskatchewan, Yukon, Ontario, Quebec, and Atlantic (New Brunswick, Nova Scotia, Prince-Edward- Island, and Newfoundland).

<sup>7</sup> CMHC, Brahim Lgui, 2019, "Housing Conditions of On-Reserve Aboriginal Households", <https://www.cmhc-schl.gc.ca/en/professionals/housing-markets-data-and-research/housing-research/research-reports/housing-needs/socio-economic-housing-conditions-on-reserve-aboriginal-households>.

<sup>8</sup> See for instance, Xavier Bonnefoy, "Inadequate housing and health: an overview," *International Journal of Environment and Pollution* 30, 3/4 (2007): 411–429; Lauren Taylor, "Health policy brief. Housing and Health: An Overview of the Literature," *Health Affairs*, June 7, 2018, <https://www.healthaffairs.org/doi/10.1377/hpb20180313.396577/full/>; Leilani Farha and UN Secretary-General, "Adequate Housing as a Component of the Right to an Adequate Standard of Living, and the Right to Non-Discrimination in This Context," July 17, 2019, <https://digitallibrary.un.org/record/3823982>, 10, 14, 15; Kevin James Swick and Reginald D. Williams, "An analysis of Bronfenbrenner's bioecological

are facilitated due to overcrowding, and due to poor structures, e.g. the effects of mold.<sup>9</sup> The human impacts of inadequate housing are not one-time fixed costs but long-term challenges with social and fiscal repercussions for children, families, and communities. Investing in housing now can mitigate a variety of challenges from homelessness to addictions, in the future.

It is in this context, using AFN's 2018 survey data, that IFSD estimates the cost to close existing housing gaps in First Nations at \$44B, with an additional \$16B for future needs. The estimated size of the gap will not change, but risks worsening with high rates of family formation and changing needs in communities. Housing needs and tools to address gaps are diverse and connected to the geographic and economic contexts of First Nations. Beginning to address current and future needs in housing will require differentiated approaches, suitable to the needs and contexts of First Nations.

This report is designed to support First Nations deliberations and strategic thinking on approaches to housing policy, program costs, future planning, and measurement. The report proceeds with a review of the current context, with policy and practices from First Nations; followed by a cost estimation of current and future housing needs using AFN's survey data; and culminates with a performance measurement approach to measuring housing through the lens of well-being.

## Why housing matters

### *Defining adequate housing*

Adequate housing is essential for social well-being, health, and economic opportunities. While there is consensus on the imperative for housing, defining adequacy varies. Organizations and institutions define housing adequacy differently based on their mandates and functions (see [Table 1](#)).

Traditional definitions of “adequate housing” or “affordable housing” focus on the income of the occupants and the proportion of that income that they must expend on shelter. CMHC defines “affordable housing” as housing that costs less than 30% of a household's pre-tax income. Much of the CMHC's focus is based on this income-based definition of “adequate” housing although a part of their framework through the

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perspective for early childhood educators: Implications for working with families experiencing stress,” *Early childhood education journal* 33, no. 5 (2006): 371–378.

<sup>9</sup> See for instance, The Standing Senate Committee on Aboriginal Peoples, “Housing on First Nation Reserves: Challenges and Successes” (Ottawa, February 2015), <https://sencanada.ca/content/sen/committee/412/appa/rms/08feb15/Home-e.htm>, 17; Nathalie Röbbel, “Housing and Health Guidelines” (World Health Organization, 2018), <https://www.who.int/publications-detail-redirect/9789241550376>, xv.; Tracey Mactavish et al., “A Participatory Process for the Design of Housing for a First Nations Community,” *Journal of Housing and the Built Environment* 27, no. 2 (June 2012): 207–24, <http://dx.doi.org.proxy.bib.uottawa.ca/10.1007/s10901-011-9253-6>, 210.

Canadian National Housing Strategy is to provide “building more affordable, accessible, inclusive and sustainable homes.”<sup>10</sup>

Table 1

Definitions of Housing Adequacy		
Term for adequate housing	Organization	Definition and metrics
Affordable Housing	CMHC	Housing that costs less than 30% of a household's pre-tax income
Housing Rights are Human Rights	Canadian Government	“Affordable housing is a cornerstone of sustainable, inclusive communities and a Canadian economy where we can prosper and thrive.” <sup>11</sup>
Sustainable Housing	Queensland Government	Environmentally, economically and socially sustainable housing that meets “the needs of the present without compromising the ability of future generations to meet their needs.” <sup>12</sup>
Healthy Housing	WHO	“Shelter that supports a state of complete physical, mental and social well-being.” <sup>13</sup>
Mauri Housing	New Zealand Government	Housing that is “a vehicle for achieving whānau [individual and extended family] prosperity and intergenerational wellbeing.” <sup>14</sup>
Sustainable Housing	UN-Habitat	Housing that addresses the interconnect issues of “impacts on the environment and climate change; durability and resilience of homes; economic activities in housing and their links with the wider economy; cultural and social fabric of communities and impacts of housing on poverty alleviation, social development, and the quality of life.” <sup>15</sup>
Housing Need	AFN	All First Nations “right to shelter” and access to “safe, secure, adequate and affordable housing.” <sup>16</sup>

The Queensland government in Australia has adopted a definition of “sustainable housing” to guide their housing policy focusing on the environmental, economic, and social aspects of housing. In all aspects, they adopt the broad definition of sustainability as “meeting the needs of the present without compromising the ability of future

<sup>10</sup> Canada Mortgage and Housing Corporation, “About Affordable Housing in Canada,” CMHC, March 31, 2018, <https://www.cmhc-schl.gc.ca/en/professionals/industry-innovation-and-leadership/industry-expertise/affordable-housing/about-affordable-housing/affordable-housing-in-canada>.

<sup>11</sup> Government of Canada, 2017, “Canada’s National Housing Strategy,” 41.

<sup>12</sup> Queensland Government, 2019, “Sustainable Housing,” <https://www.qld.gov.au/housing/building-home/sustainable-housing>.

<sup>13</sup> Nathalie Röbbel, “Housing and Health Guidelines,” 2.

<sup>14</sup> Mahuta, “Te Maihi o Te Whare Māori – the Māori and Iwi Housing Innovation (MAIHI) Framework for Action,” 5.

<sup>15</sup> Oleg Golubchikov and Anna Badyina, *Sustainable Housing for Sustainable Cities: A Policy Framework for Developing Countries* (Nairobi, Kenya: UN-HABITAT, 2012), <http://peoplebuildingbettercities.org/wp-content/uploads/2013/06/Sustainable-Housing-Policy-Framwork.pdf>, 3.

<sup>16</sup> Assembly of First Nations (AFN), 2017, “TECHNICAL BULLETIN - First Nations National Housing and Infrastructure Strategy,” Assembly of First Nations (blog), <https://www.afn.ca/technical-bulletin-first-nations-national-housing-infrastructure-strategy/>.

generations to meet their needs.”<sup>17</sup> The Queensland government starts to look at housing beyond a simple shelter to income ratio but does not adequately develop the requirements for environmental, economic, or social sustainability.

The World Health Organization’s (WHO) framework considers housing in connection to health and well-being. “Healthy housing” is defined as “shelter that supports a state of complete physical, mental and social well-being.”<sup>18</sup> This includes the belonging, security and privacy that comes from “a feeling of home,” how the physical structure of the house affects health, the community that “enables social interactions that support health and well-being,” and the access to green space and other physical infrastructure in the immediate environment.<sup>19</sup> The WHO framework is particularly useful in identifying what aspects of housing negatively impact human health like overcrowding, low indoor temperatures, high indoor temperatures, poor construction, poor air quality and poor water quality.

In an Indigenous context, the New Zealand government has developed the Māori and Iwi Housing Innovation - Framework for Action (MIHI) which promotes a view of housing as more than the physical structure of the building:

housing is not only a foundation for whānau [individual and extended family] wellbeing and supporting the rights to adequate housing but is also a vehicle for achieving whānau prosperity and intergenerational wellbeing.<sup>20</sup>

This framework directly integrates the importance of housing in other social, cultural and health well-being. The principles guiding MIHI include “self-determination of self-sufficiency,” “doing things right” at the right time, delivering services through a Māori lens, intergenerational empowerment, mechanisms for “engaging and building relationships” and is based on Mauri – “enabling the life force, an essence for revival and fulfilment to be sustained in wellbeing.”<sup>21</sup> This framework provides a useful example of how culturally specific values can be integrated into an understanding of adequate housing, intently designed for applicability to Aotearoa (New Zealand). While a useful model, the approach would have to be adapted for use by any other Indigenous group.

The UN Human Settlements Programme (UN-Habitat) provides the most comprehensive and holistic baseline housing framework. Like the Queensland government, they promote “sustainable housing,” however they provide a detailed framework that encompasses “the four dimensions of sustainability – environmental,

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<sup>17</sup> Queensland Government, 2019, “Sustainable Housing,” <https://www.qld.gov.au/housing/building-home/sustainable-housing>.

<sup>18</sup> Nathalie Röbbel, “Housing and Health Guidelines” (World Health Organization, 2018), <https://www.who.int/publications-detail-redirect/9789241550376>, 2.

<sup>19</sup> Nathalie Röbbel, 2.

<sup>20</sup> Nanaia Mahuta, 2020, “Te Maihi o Te Whare Māori – the Māori and Iwi Housing Innovation (MAIHI) Framework for Action,” Cabinet Paper (Office of the New Zealand Associate Minister of Housing, <https://www.hud.govt.nz/assets/News-and-Resources/Proactive-Releases/Cabinet-Paper-Te-Maihi-o-te-Whare-Maori-the-Maori-and-Iwi-Housing-Innovation-MAIHI-Framework-for-Action.pdf>, 5.

<sup>21</sup> Mahuta, 6.

social, cultural and economic.”<sup>22</sup> In this view “housing” is seen as a physical structure and a social structure which reflects the importance of the building itself as a material space providing protection from the environment and also a space of socio-economic interaction across broader society. The UN-Habitat sustainability framework promotes the importance of integrating housing in the physical, social, and cultural infrastructure of the community. By this, they mean that sustainable housing units give occupants access to things like portable water, transportation, services, employment, education, a sense of community and culturally important activities. Affordability is still important and building housing that fits the needs of the occupants is a key aspect for the affordability and longevity of housing units. If all four aspects of sustainable housing aren’t addressed, it is more difficult to improve the outcomes in any single one of the categories because they are all interconnected.

For the AFN and most First Nations, the importance of housing goes beyond the CMHC’s definition of affordable housing and should be considered as the foundation for broader social, cultural, and economic prosperity as reflected by the WHO’s healthy housing framework, the MIHI and UN Habitat’s sustainable housing. Historically housing programs have imposed suburban Canadian housing designs on First Nations.<sup>23</sup> The concept of cultural sustainability may be employed in future housing policy to take “into consideration cultural worldviews and values, norms and traditions, as well as lifestyles and behaviours of occupants, communities and society, thus supporting the dignity of communal life.”<sup>24</sup>

Housing is now seen as more than just the physical shelter it provides and a cost to minimize; it is a social, cultural, and economic asset that affects ones standing in the community, access to employment, wealth, physical and mental health and much more. The literature demonstrates that the case for housing is more than one of charity, or even human rights (which it is widely seen to be), but of economic, social, and health benefits for entire communities.

#### *Cost-benefit analysis of adequate housing*

According to the UN Special Rapporteur, poor housing conditions on-reserve may contribute to everything from reduced preparedness for climate change to First Nations homelessness in urban centers, the epidemic of missing and murdered Indigenous women and girls and other forms of family and domestic violence.<sup>25</sup> Olsen concurs that poor housing quality leads to a wide range of social and health issues. Poor social outcomes from education, job prospects, health, and family stability, can all be correlated to poor housing conditions. While the role that housing plays in the cycle of

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<sup>22</sup> Golubchikov and Badyina, *Sustainable Housing for Sustainable Cities*, 3.

<sup>23</sup> Sylvia Olsen, “Making Poverty: A History of on-Reserve Housing Programs, 1930-1996” (Thesis, University of Victoria, 2016), <https://dspace.library.uvic.ca/handle/1828/7239>.

<sup>24</sup> Golubchikov and Badyina, *Sustainable Housing for Sustainable Cities*, 33.

<sup>25</sup> Farha and UN Secretary-General, 10,14, 15.



poverty on-reserve has been poorly studied, Olsen argues that this role should not be understated.<sup>26</sup>

The shortage of housing also causes unnecessary homelessness and emigration to urban areas where people hope to find adequate shelter. Mactavish et al. found that young people and those looking to move back to the reserve were particularly impacted by the housing shortage.<sup>27</sup> This exacerbates the skills shortage on-reserve and prevents people from elsewhere going to gain skills before returning to share them with their community.

The costs of inadequate housing are clear, as are the benefits of suitable, stable, and safe housing.

The WHO supports taking a multifactor approach when addressing the health risks caused by inadequate housing. Addressing multiple risk factors will help lower more of the social costs of poor physical and mental health while reducing the investment required to address each risk simultaneously.<sup>28</sup> A summary of studies conducted by the WHO also found that many interventions such as retrofitting insulation in homes were highly cost-effective.<sup>29</sup>

Interventions to reduce overcrowding and connect occupants with health and social services were found to have a positive benefit-cost ratio<sup>30</sup> of 1.15.<sup>31</sup> In the United States, investments in the reduction of asthma (mold removal, etc.) have been found to have a benefit-cost ratio of 1.90, while an older 2011 study found the benefits to be even higher at \$5-\$14 (US) for every dollar invested in home asthma prevention.<sup>32</sup> In the United Kingdom and European Union, the WHO found that investment in improving housing conditions repays the costs over a few years to a decade in reduced health care and publicly funded services costs.<sup>33</sup>

UN-Habitat argues that investment in sustainable housing, when paired with investments in local training can provide large economic benefits beyond reductions in health and social service costs. By training locals for the construction jobs required to renovate and build housing units employment can be greatly increased providing additional income for residents both directly and indirectly (through the purchases of the workers).<sup>34</sup>

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<sup>26</sup> Sylvia Olsen, "Making Poverty: A History of on-Reserve Housing Programs, 1930-1996" (Thesis, University of Victoria, 2016), <https://dspace.library.uvic.ca/handle/1828/7239>, 361.

<sup>27</sup> Mactavish et al., "A Participatory Process for the Design of Housing for a First Nations Community," 216.

<sup>28</sup> Nathalie Röbbel, "Housing and Health Guidelines" (World Health Organization, 2018), <https://www.who.int/publications-detail-redirect/9789241550376>, 114.

<sup>29</sup> Nathalie Röbbel, 115.

<sup>30</sup> A cost benefit ratio greater than 1.0, suggests net benefit.

<sup>31</sup> Nathalie Röbbel, 116.

<sup>32</sup> Nathalie Röbbel, 116.

<sup>33</sup> Nathalie Röbbel, 117.

<sup>34</sup> Golubchikov and Badyina, *Sustainable Housing for Sustainable Cities*, 52.

The benefits of investment in suitable housing are numerous and extend beyond financially quantifiable metrics. To capture the broader benefits of housing, social return on investment analysis (SROI), can be a useful approach to comprehensively identify and capture benefits. In a 2009 guidance note on SROI, the United Kingdom's Office of the Third Sector, defined SROI as:

a framework for measuring and accounting for this much broader concept of value; it seeks to reduce inequality and environmental degradation and improve wellbeing by incorporating social, environmental and economic costs and benefits.<sup>35</sup>

A broad conception of value, SROI could be a useful point of departure for future assessments of returns on investments in housing in First Nations. While there is no known SROI calculation for First Nations, the approach could be applied nationally, or, at the level of communities (although the approach is resource-intensive).

Calculating SROI is a resource-intensive exercise that requires “establishing scope and involving stakeholders, mapping outcomes, evidencing outcomes, valuing outcomes, establishing impact, and calculating the SROI ratio from the perspective of all relevant stakeholders.”<sup>36</sup> The ‘triple-bottom-line’ approach to value, is intended to “capture the intervention’s effects on the economy, environment, and people.”<sup>37</sup> In a study of an affordable housing program in Baltimore, Drabo et al. (2021), estimated an SROI between \$1.30 and \$1.92 for each dollar invested in the program.<sup>38</sup>

The Housing First approach to addressing homelessness identifies similar returns on early investments. A Housing First Strategy is one designed to voluntarily move those “who are experiencing chronic or episodic homelessness as rapidly as possible from the street or emergency shelters into permanent housing with supports to maintain housing stability.”<sup>39</sup> Housing First fundamentally recognizes the need for stable housing as the foundation for other social outcomes and the right for an individual to have their own place to live. It also recognizes that housing should be integrated into the community to foster the well-being of the occupant(s).<sup>40</sup> As a relational program, Housing First can both provide and expect a great deal from its clients by promoting their independence and responsibility.

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<sup>35</sup> Office of the Third Sector, Cabinet Office, United Kingdom, 2009, “A Guide to Social Return on Investment,” p. 8, [https://ccednet-rcdec.ca/files/ccednet/pdfs/2009-SROI\\_Guide\\_2009.pdf](https://ccednet-rcdec.ca/files/ccednet/pdfs/2009-SROI_Guide_2009.pdf) accessed July 27, 2021.

<sup>36</sup> Emmanuel Fulgence Drabo et al., 2021, “A Social-Return-On-Investment Analysis Of Bon Secours Hospital’s ‘Housing For Health’ Affordable Housing Program,” *Health Affairs* 40, no. 3: 514, <https://doi.org/10.1377/hlthaff.2020.00998>.

<sup>37</sup> Drabo et al., p. 514.

<sup>38</sup> Drabo et al., p. 517.

<sup>39</sup> Alina Turner, 2015, “Performance Management in a Housing First Context: A Guide for Community Entities,” The Homeless Hub Press, 4.

<sup>40</sup> Alina Turner, 2015, “Performance Management in a Housing First Context: A Guide for Community Entities,” The Homeless Hub Press, 7.

Housing First attempts to address homelessness through a holistic lens. While providing safe and immediate shelter, the approach provides wrap-around social, health, and related supports, e.g. job-seeking. In various cities, the approach has proven successful with returns on investment and an emphasis on strength-based approaches to wellness.

While Housing First is not cost-neutral, Ly and Latimer report that “the certainty of significant cost offsets, combined with their benefits for participants, means that they represent a more efficient allocation of resources than traditional services.”<sup>41</sup> Gaetz et al. (2013), note that returns are greatest for high needs individuals experiencing homelessness, with a \$7 return for every \$10 spent on Housing First intensive programming.<sup>42</sup>

The lessons from Housing First programs are instructive, in that they emphasize the benefits of early investment, wrap-around services, and a holistic approach to housing. In First Nations with limited service delivery options and an existing housing shortage, a complete application of a Housing First style program would likely not be practical. There are, nonetheless, useful indicators on the overall social and economic benefits of safe and stable housing.

In the First Nations context, there is an identifiable need for more housing units and more safe and secure housing units than those that currently exist. The current housing stock is not just a result of poverty, but a key contributor to it. Moving forward, housing must be considered a matter of social policy with horizontal connections and impacts on the well-being of communities. Any investments made in making housing more environmentally, economically, socially, and culturally more sustainable can expect a positive return on investment through reduced services costs, increased economic activity and far healthier communities in the long run.

## **Federal expenditures**

Federal funding for First Nations housing in community can be a complex web of potential resources. Federal funding for First Nations housing comes principally from the Canada Mortgage and Housing Corporation (CMHC) and Indigenous Services Canada (ISC). These programs target new builds, repair and maintenance, special projects, loan guarantees, etc. (see Appendix 1). Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) offers tangentially-related funding for matters of specific claims, jurisdiction over land and fiscal management, individual affairs, etc. but these programs do not explicitly mention or target housing, and are thus omitted from the analysis.

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<sup>41</sup> Angela Ly and Eric Latimer, 2015, Housing First Impact on Costs and Associated Cost Offsets: A Literature Review. Canadian Journal of Psychiatry, 60:11, 475-487.

<sup>42</sup> Stephen Gaetz, Fiona Scott, Tanya Gulliver, 2013, “Housing First in Canada: Supporting Communities to End Homelessness,” Canadian Homelessness Research Network, p. 14, <https://www.homelesshub.ca/sites/default/files/HousingFirstInCanada.pdf>.

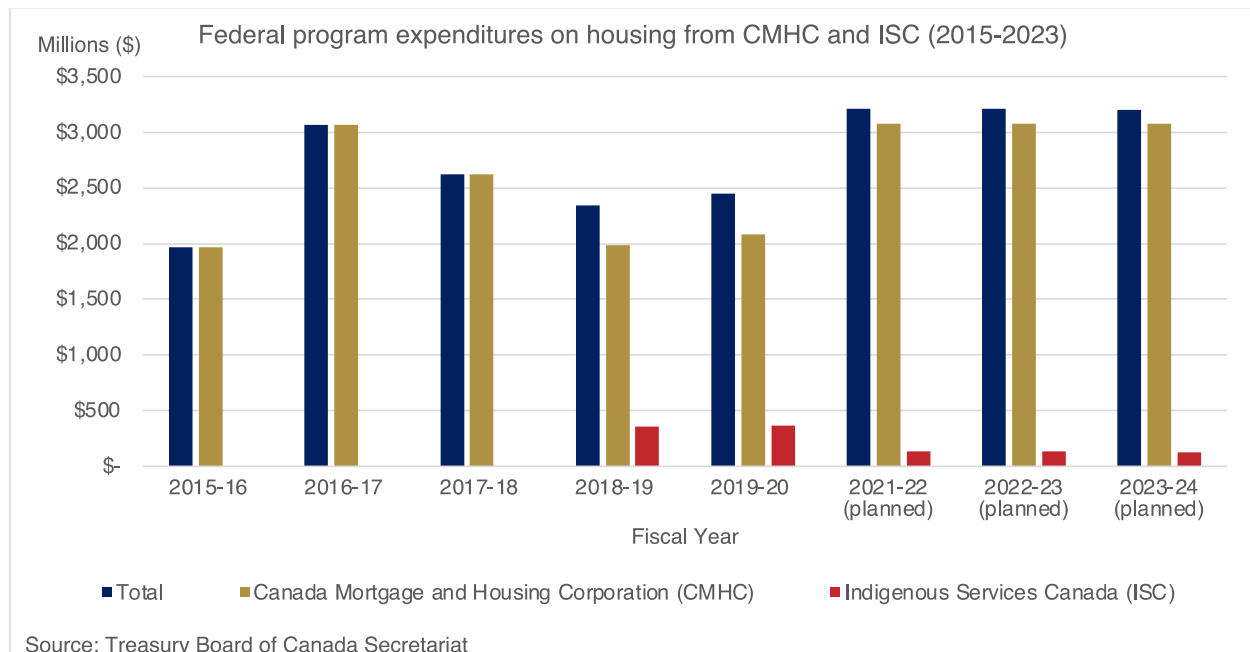


Publicly available federal expenditure data is aggregated to the program level. This means that funding specifically allocated to First Nations housing cannot be identified, nor can actual transfers to First Nations be confirmed through CMHC's programs. As detailed in Appendix 2, publicly available data does not provide the detail necessary at the sub-program level of activity to capture actual expenditures in housing for First Nations. First Nations-specific expenditures tend to be buried in program-level activities and are undistinguishable from the whole.

The sole performance metric available for housing-specific program spending is for ISC's housing program (CMHC's metrics were not available through InfoBase, as it is a Crown Corporation). The metric is input-focused and does not consider the contextual factors influencing First Nations housing: "Percentage of First Nation housing that is adequate as assessed and reported annually by First Nations," with a target of "at least 75%." In 2018, the result was 75% and 73% in 2019. Other fiscal years were unavailable. In the measurement framework proposed later in this report, a well-being focused set of indicators for assessing housing needs and suitability are discussed. This approach, leveraging best practices from other jurisdictions, emphasizes a holistic understanding of housing, treating it as a social policy, integral to well-being.

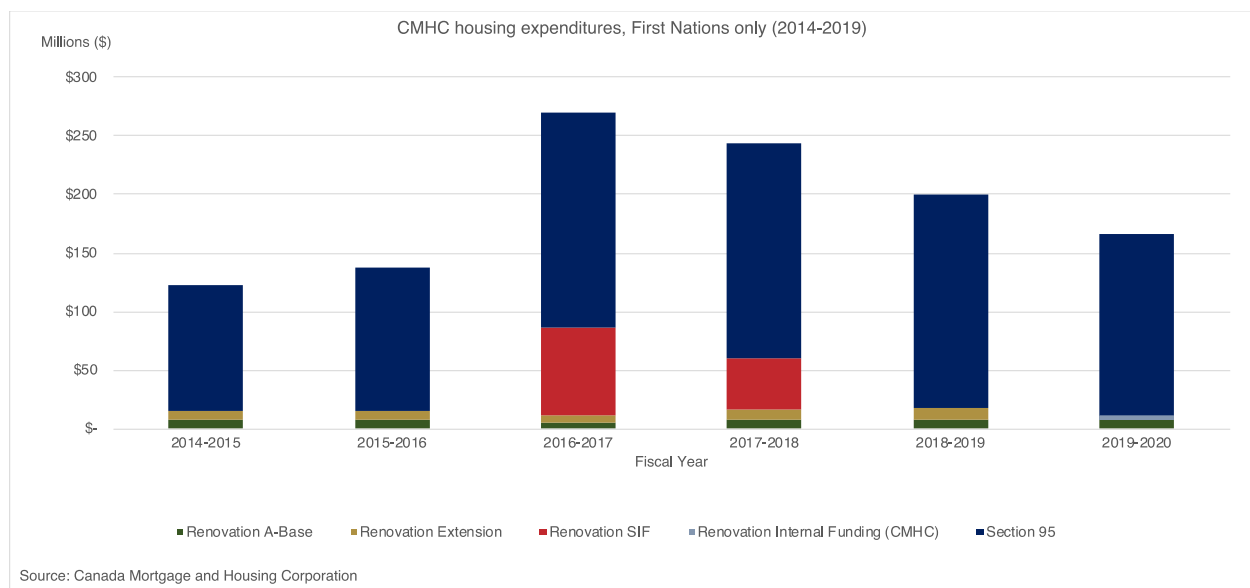
Publicly accessible data from Treasury Board's InfoBase leaves an incomplete perspective on federal housing expenditures in First Nations. When considered in aggregate, combined federal spending by CMHC and ISC for housing has increased, with an average total of approximately \$2.7B per year, with planned spending increasing to an average of \$3B per year (Figure 1). CMHC's spending is greater than ISC's, which is trending downward. However, when CMHC's spending is disaggregated to the more granular sub-program level, a different story emerges.

Figure 1



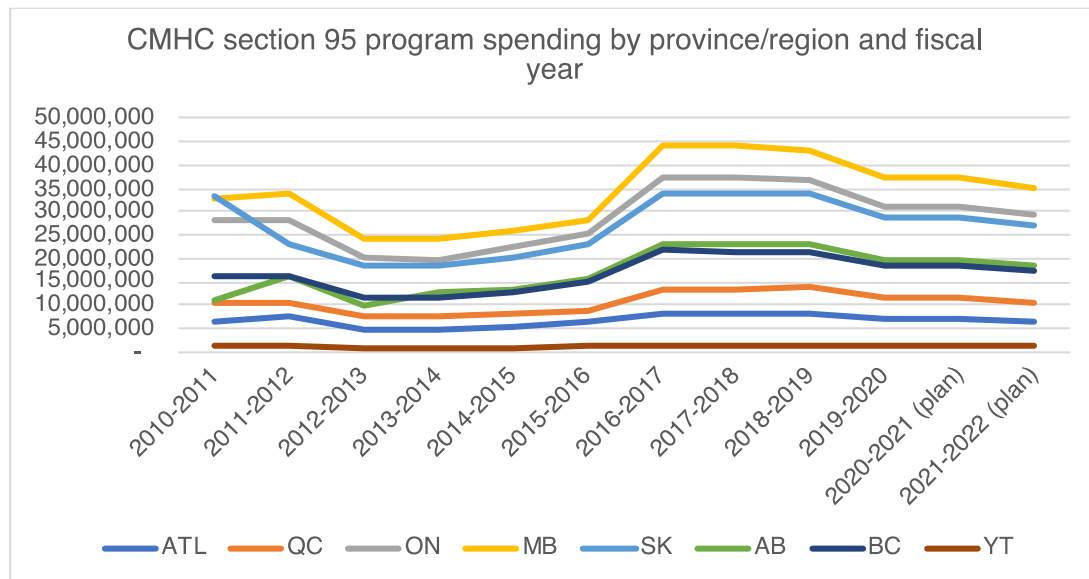
Through the client, IFSD obtained sub-program data from CMHC, which isolated expenditures allocated to First Nations housing. The data from CMHC provides a clearer portrait of expenditures across sub-program activities targeting First Nations. CMHC's total funding for housing in First Nations has declined since fiscal year 2016-17, with an average total expenditure of approximately \$190M (Figure 2) (the 2016-17 increase was one time funding).

Figure 2



The section 95 program is CMHC's largest First Nations-focused expenditure. The AFN survey found that 19% of housing units are currently under a section 95 agreement with CMHC. Since 2010-11, Manitoba, Ontario, and Saskatchewan have received most of the program funding, with Yukon consistently receiving the least. Costs for construction differ by province and are impacted by market variables. An often-referenced program for the construction of new homes in community, since 2018-19, the program's expenditures have trended downward and are projected to decline in 2020-21 and 2021-22 (Figure 3).

Figure 3



The complex web of federal funding sources was cited by some case studies as a challenge, especially, when human resources are limited to pursue application-based funding opportunities (Figure 4).<sup>43</sup> With multiple programs and potential points of access, the federal system would benefit from streamlining to facilitate adjudication and funding allocations through a single point of access for First Nations. The bureaucracy could then in the background determine the most suitable funding source for the initiative at hand, rather than requiring resource allocation for applications and reviews across government.

<sup>43</sup> Figure 4 includes only federal programs with a specific allocation for First Nations. Other programs/funding sources exist, but they are not exclusively intended for or targeted to First Nations.



## **Policy and practice in First Nations: Case study analysis**

First Nations have different realities that influence their housing needs, operations, and governance. To capture the context and experiences that inform housing, ten case studies were undertaken with First Nations across provinces and territories. The knowledge shared through the case studies is intended to supplement cost information, by offering portraits of different experiences in First Nations housing, shaped by their unique environments. All interviews were undertaken virtually, given travel restrictions.

There are data gaps in the AFN/FNIGC housing survey for the province of Alberta, Manitoba, and the Northwest Territories' data. Originally, IFSD had developed a questionnaire to supplement survey findings and intended to release the survey to all 635 First Nations (see Appendix 3). Following consultations with the client, it was determined that a general questionnaire would not be released to First Nations. This included First Nations in Alberta and the Northwest Territories that did not participate in the original survey. It was determined that survey fatigue and a potential lack of consistency in the fiscal years of the data (between the questionnaire and the survey) would limit the applicability of the exercise. In consultation with the client, it was determined that the case studies would supplement data collection efforts by providing additional contextual information on the challenges, opportunities, enabling, and constraining factors in housing.

The goal, at the outset of the project, was to have at least one First Nation from every province/region take part as a case study. At the time of writing, there is at least one case study from each province other than Alberta, Saskatchewan, and Manitoba, as well as case studies from two of the three territories. Despite best efforts by the client and IFSD, as well as some of the housing technicians, there are no case studies from First Nations in the above-mentioned provinces.

### **Case study methodology**

Case study participants volunteered to share their experiences for this study. Working with the client, IFSD presented the framework for this project and requested case study participation during an AFN Chiefs Committee on Housing and Infrastructure. Following the presentation, the client reached out to the Chiefs and technical experts involved in housing. Additional outreach was undertaken by the client to attempt to close representation gaps in various provinces.

Following the client's outreach to Chiefs and technical experts, IFSD was provided with a contact list of regional housing technicians. Outreach was undertaken by IFSD's senior team. Each technician was contacted by phone and email, with follow-ups as required. For most provinces and territories, the technician provided a list of First Nations to contact to participate in the study. A project overview and case study ask was shared with the technicians (and with First Nations) (see Appendix 4). Where coordinating bodies exist, such as the Assembly of First Nations of Quebec and Labrador (AFNQL), and the Atlantic Policy Congress of First Nations Chiefs Secretariat, outreach and follow-ups with First Nations were facilitated by the convening

intermediary. IFSD was also invited to present the study and request participation during a meeting of the Chiefs of Ontario Committee on Housing and Infrastructure. IFSD's outreach efforts began in June 2021 and ran for approximately six weeks, to accommodate the participation of First Nations.

When a First Nation housing director or housing consultant accepted to take part in the study, an interview was scheduled, and guiding questions were shared ahead of the discussion. Following each interview, a profile was drafted based on the exchange. The profile was returned to the interlocutor in the First Nation for review and approval. As indicated in the overview shared with First Nations, all information shared during the interview would be anonymized for use in the final report to AFN. In keeping with OCAP® principles, following a review of the profile, written permission was required from the interlocutor to include the profile in the final report. OCAP® principles were followed to ensure an approach to outreach and data collection that respected First Nations ownership, control, access, and possession of data, as defined by the principles.

### Case study sample

In Canada, most First Nation communities are in British Columbia, Ontario, and Saskatchewan. Total populations in communities (on-reserve), are highest in Ontario, Manitoba, and Alberta. The majority of First Nations (65%) are in geographic zones 1 and 2, within a commutable distance to a service centre. Nearly 80% (78.8%) of the total First Nations population are in communities in zones 1 and 2. The remaining 21% of First Nations are in zones 3 and 4, the majority of which are in zone 4. More than half (55%) of First Nations have populations below 500 in community.

The First Nations that volunteered to serve as case studies, mostly had populations above 500 in community, with two below 500 (Table 2). Geographic zones of the case studies reflect the composition of the general population, with the majority of participating First Nations in zones 1 and 2. Given geography is the principal driver of construction costs, it was important to ensure representation across zones. Five case studies are in zones 1 and 2, and five cases were in zones 3 and 4. While zone 3 and 4 First Nations are overrepresented relative to the general population, it is considered relevant given the differences in cost and housing needs (see costing section of this report). The underrepresentation of First Nations relative to the general population with populations below 500 is considered acceptable, as population is not a driver of cost. Growth rates and rates of family formation are more accurate indicators for identifying future needs and ultimately, costs for housing.

Table 2

Case study characteristics	Number of case studies (n=10)	Reflective of composition of general population (Y/N)	Relevance for housing analysis (low, medium, high)
Population <500	3	N	Low/medium
Population >500	7	N	Low/medium
Geographic zones 1 & 2	5	N	High
Geographic zones 3 & 4	5	N	High



## **Case study findings**

All case studies reported housing shortages and insufficient resources to build and maintain homes. From the cases, a spectrum of approaches to housing can be defined. On one end of the spectrum are First Nations actively pursuing approaches to housing that include home ownership. On the other end of the spectrum, are First Nations with all Band Council-subsidized housing. Several First Nations have some combination of the approaches, with the majority identifying principally Band-owned and managed housing in community.

There is consensus among case studies that approaches to housing and resource profiles should be differentiated based on contextual realities. Demographic pressures, geography, and economic viability all influence what a First Nation can (and cannot) achieve in housing. Addressing housing needs will require creativity, a variety of tools and approaches, and a change in resource profiles, i.e. amount and timing of funding.

To summarize case study findings, four themes are reviewed: context, resource challenges, approaches/solutions, and future considerations.

### *Context*

The current state of housing in most case studies is fraught with overcrowding and a lack of funding for new builds and regular maintenance. The overcrowding, typically, a function of multiple generations living in a single home, is linked to several social challenges. From family violence to the transmission of illnesses, a lack of housing has social and health repercussions for adults and children.

Housing supply cannot keep up with demand as demographic pressures mount, due to high rates of family formation, and in some instances, members returning to community. Similar constraints in the supply of materials have caused the cost to build homes to increase by tens of thousands of dollars in the last two years. The combination is challenging, with many housing directors and housing consultants emphasizing the unsustainability of the current model.

Managing housing creates financial pressures for First Nations. Financial and human resources are necessary to maintain the existing stock and to build new homes. The realities of isolation and variable terrain can make building a challenge. In zone 3 and 4 case studies, the construction season is limited due to weather and accessibility. When you can only arrive in a community by plane for nearly half the year, the window for transporting supplies and construction is limited.

Assessing the individual contexts of the case studies highlights the need for differentiated approaches to funding, planning, and developing housing in communities. Differences in economic viability influence own-source revenue generation, and the potential to apply those resources to housing. While some First Nations can afford a variety of supports and tools for housing (as with First Nations 10 and 8), others are applying any additional resources to cover basic housing, as most members are on

some form of social assistance. Geography has a significant impact on planning for procurement of materials, transportation, and building, let alone costs and labour. The more remote the community, typically, the more complex the costs (both seen and unseen) in housing.

**Action: Address immediate housing needs with financial, human, and capacity building supports, including financial literacy. A clear well-being focused bottom-up baseline assessment of housing needs in First Nations is required.**

#### *Resource challenges*

Several case studies emphasized that the current housing track is financially unsustainable for their First Nations. It was noted by various housing directors that there may be a misunderstanding in community about the role of the federal government in housing as a partial funder rather than a subsidizer. Federal resources are not sufficient to cover housing needs, from maintenance to new builds. The gap in resources – and in some instances – community preference for Band Council subsidized housing, means that First Nations use their own resources (whether that is own-source or a reallocation of other funding) for housing costs. All case studies consider themselves under-resourced for housing, with budgets stretched thin to cover operations, salaries, maintenance, and repairs.

Compounding the resource limitations are their unreliability. In many First Nations, funding for housing is not allocated and transferred at regular and reliable intervals. This has significant repercussions for First Nations, especially those in more remote and isolated places, because it limits their ability to plan for construction. If funding levels are not confirmed or if the funding does not arrive in time, First Nations can experience significant delays or may even have to skip construction seasons all together.

In the last two years, the cost of materials has increased significantly, making it even more challenging to build new homes. The average price to build a single-detached family unit in several case studies, increased by tens of thousands of dollars. In an attempt to manage the new reality, some like First Nation 10, have been buying existing homes adjacent to their community, rather than building new ones. For those in isolated and remote communities, buying pre-existing homes is not an option.

Challenges accessing labour and labour shortages add additional resource pressures. Without access to skilled trades, building and maintaining homes is not possible. Several First Nations have introduced training programs to develop the skilled trades necessary among members of their own communities. With skilled workers in community, contractors and certified tradespeople will often hire locally and supervise work, creating opportunities for employment for local workers and benefits for the community.

As with many policy areas, housing is political. The importance and delicacy of the issue makes it challenging to attract and retain staff. Even with decades of experience, the role is complex. Part infrastructure, part social policy, with the need for community



outreach and engagement, the human and financial resources required in housing are multifaceted.

**Action: Establish regular and streamlined access to funding for housing in First Nations. Ensure that funding is allocated and transferred in a regular and reliable fashion.**

*First Nations solution and approaches to managing housing*

Leadership and creativity in housing can impart meaningful change in communities. Housing directors and consultants have highlighted their work with Band Councils to develop approaches to housing to support adjudication, allocation, and streamlining of what can be a complex and challenging portfolio. A defined housing policy and laws, can allow for actions such as evictions (as difficult as they may be), that can help to maintain a responsible housing system by removing those who do not care for their homes, pay rent, etc. In particular, First Nations 1, 2, and 5, demonstrate the benefits of structured approaches to housing by reducing waitlists, improving housing stock, and the reliability of rent payments. In First Nation 9, efforts by the housing consultant increased housing stock and access to tools for financing.

Fundamental to the role of housing directors and consultants is the issue of public education and outreach. In particular, efforts to improve knowledge and basic personal financial management practices have been central for many working in housing. The housing teams in various First Nations have begun educating young people about saving, the benefits of home maintenance, and even home ownership. While home ownership may not be a priority or an interest to all First Nations, the opportunity to access reliable financial tools and skills can be useful long-term.

For those First Nations encouraging private ownership of homes, a variety of approaches have been defined. The certificate of possession has been applied to define ownership of a home structure, but not the land on which it is built. While rare, some fully finance and build their own homes in community. More typical, is the buy-out of the remaining balance of a Band-held mortgage at competitive prices. First Nation 10 offers subsidies both in and out of community for its members purchasing or building their own homes, as well as subsidies for elders. First Nation 9 offers Band Council-backed loans through a bank, although the consultant had to negotiate interest rates lower than those of a corporate loan. Just as First Nations are diverse, so too are their approaches to housing.

In First Nations where housing is fully Band-subsidized, some maintain a rental scheme, while others, as in First Nation 10, have foregone rent. In the case of First Nation 10, members are invited to maintain their own homes with an annual credit for renovation materials. For those without the revenue base of First Nation 10, rental incomes are an important source of funding for ongoing maintenance, repairs, and operations.

With different approaches to managing housing, some case studies expressed a need for a paradigmatic shift in how communities think about housing. This means educating

and raising awareness on the duties of home maintenance or ownership, the basics of personal finance, and the community-wide benefits of quality and suitable housing. This is not easy. For some First Nations, it was not long ago that communities lived nomadically on their territories, with homes built only in the last thirty or forty years by the federal government. With poor quality and durability, some First Nations may not have known anything other than those same homes, left unrepaired and unmaintained. Recognizing the importance and the need for housing for overall well-being, housing directors, consultants, and leadership have had to be creative in their approaches. For some, housing remains in crisis mode, unable to plan or shift course due to resource constraints.

**Action: Recognize the diversity of need and approaches to meeting housing demand in First Nations. Approaches to resourcing and planning should align to these differences.**

#### *Future considerations*

When looking to the future, demographic shifts require action on two broad fronts: 1) diversity of housing types; 2) strategic planning support and capacity.

With high rates of family formation and young populations in a number of First Nations, housing demand is continuing to increase. To keep up with the changing realities in communities, a variety of housing types are needed. Case studies expressed the need for supportive housing with wrap-around services for emergency homes, e.g. for those fleeing domestic violence, assisted living for elders, transition homes for those working on substance misuse or returning to the community after time away. Building those types of structures require special financing, and are often special projects with a variety of funding sources, beyond the federal government. These special housing types are above and beyond the single-family dwellings that are in short supply in many growing First Nations.

A whole of community approach rooted in well-being is needed for housing. With many in housing moving from crisis to crisis, there is a need to support capacity planning and development. This means funding for comprehensive baseline assessments to truly understand current stock, with crucial community input and engagement. Ideally, First Nations would have the capacity to plan and deliver on their plans, following a strategic exercise that would help to develop unique community needs now and into the future.

**Action: Support First Nations with capacity and financial resources to undertake well-being focused housing needs assessments. Leverage those capital plans to orient approaches to housing and federal resource allocations.**

## **Case study profiles**

***Note: The profiles presented in this section have been approved by interlocutors from First Nations and have been reproduced with their permission.***

*Note: There are two additional case studies for First Nations 4 and 7 prepared for this report. Pursuant to OCAP-informed practices, IFSD is awaiting written permission from interlocutors to include their First Nations' profiles in this report.*

## First Nation 1

By the numbers	
Existing housing stock	196
Number of homes needed	15
Average cost to build a home	\$450k (32ft x 36ft)
Average cost to develop a lot	\$85k
Average monthly rental fee	\$400 + utilities
Geographic zone	2

### Context

Housing is about people. Much like people, housing is part of an ecosystem of basic needs for health, wellness, growth and development. The director of housing in First Nation 1 views housing as a social program with repercussions for young and old.

Building and maintaining homes requires a mix of financial and human resources that this First Nation works to build. With the goal of increasing private home ownership and growing the number of skilled tradespeople in the community, First Nation 1 is working to build a holistic approach to housing.

When dwelling infrastructure is unsafe, overcrowded, or not properly maintained, people suffer. Tensions and family violence emerge, struggles with addictions, and food insecurity can compound, children and youth struggle to function at school, and a vicious cycle emerges. People move from one system to another without supports or tools for a different way of life.

To intercept this cycle, First Nation 1 considers the fundamentals of housing and plans accordingly. Rather than focusing exclusively on financial requirements, the housing director is working with the community on the fundamentals of personal finance. From budgeting workshops to income tax information sessions to the fundamentals of electricity, the housing director is working to equip people, including youth, with the tools and information they need to learn about home ownership, its benefits, and responsibilities. These actions are beginning to shift discourse and understanding of home ownership and home maintenance. Starting this education from an early age (reaching children in elementary school) can begin to build a knowledge base and perspective on personal finance and home ownership that is rooted in community responsibility.

### Administrative action for housing outcomes

The majority of First Nation 1's housing units are individually owned with a certificate of possession. The First Nation encouraged members to move to home ownership and

maintain their own homes. Many individuals bought out units that they were renting by taking advantage of the Band's capital funding program, paying back the First Nation directly when buying out the balance of the loan.

The focus on individual ownership and maintenance emerged in the early 2000s. Previously, in the First Nation, there was a lack of care and maintenance of homes. Overcrowding, multi-generational homes, child and family services and violence concerns, were reflective of housing challenges and shortages. The First Nation decided this had to change.

In 1997, First Nation 1 established a housing committee to develop its own housing policy. Two years later, the policy was being implemented. Rent was initially increased to \$200 (from \$45), to support home maintenance by the Band. A process was put in place to adjudicate and triage housing requests, ultimately, removing Band Council politics from housing.

In the 1990s, there were only 80 homes in the First Nation and 80 on the waiting list. Today, there are 196 homes in the First Nation, with only 15 on the waiting list. The change in results came from a series of administrative decisions and changes to streamline decision-making and housing resource management.

The approach was underpinned by defining and assessing the baseline stock of housing and future needs. Then, local people were trained in the trades, through partnerships with different organizations as funding came available, e.g. from Prospect Canada, CMHC, etc. Several homes were then built in the 2000s (when housing costs were more affordable at approximately \$100k per unit). These administrative decisions enabled a systematic and transparent approach to adjudicating proposals and requests and improved the First Nation's housing stock.

Anyone in search of a home must submit an application, with letters of reference to support their request. The applications are evaluated and scored against a set of criteria in the First Nation's housing policy. Previously, people had to be married with children to own a home in the First Nation. This approach created social challenges and had to change. The First Nation created its own law. Now, if you were married and you were non-First Nation, you can remain in your existing residence until you die. The only caveat is you have to sell your home to another member of the band.

### **Resource and structural challenges**

Planning can be a challenge as funding from federal sources, e.g. CMHC, ISC, can be unpredictable. Funding is released at different times which makes planning for construction a challenge, as the amount and arrival of funding are unknown. Capital funding from ISC is allocated as a fixed amount (approximately \$250k per year) and can be used at the discretion of the Band Council. This means that the limited funding can be used for anything from school buses to roads, water, and housing renovations. CMHC for s. 95 homes offers different annual amounts to fund a unit. For instance, funding for 2021 increased to \$160k from \$120k. Changes in funding levels require

housing directors to revise plans to align to resource constraints, e.g. number of available lots, reduction in number of units, etc. While funding increased, supply of materials and labour re restricted with the pandemic.

From the perspective of the housing director, sensible capital funding would be allocated based on a First Nation's defined capital plan. The capital plan would be a challenge, nonetheless, as determining priorities will require balancing trade-offs between different groups, e.g. children, elders, etc. Community consultations would be essential to determine the prioritization.

### **Future considerations**

Demographics are changing housing needs. As members of the First Nation age, there is a need for ramps, personal support workers and other accommodations to keep them healthy and safe. High rates of diabetes and other health challenges impact members as young as 60, who require similar accommodations.

Homelessness continues to impact the First Nation. Unemployment challenges and housing insecurity outside of the community mean that members often return seeking housing, living with family, and contributing to overcrowding.

Along with homelessness, addictions and family violence have highlighted the need for emergency and transitional housing in the First Nation. Short-term, safe, and staffed housing is needed for emergency circumstances or for those transitioning from hospital, incarceration, etc. This type of holistic approach would require funding from various sources outside of housing, as traditional housing funding does not include social workers, councillors, or other support staff.

Extending beyond traditional infrastructure considerations for housing, future efforts on housing in the First Nation will continue to include education on personal finance, homeownership, and maintenance.

Housing is dynamic and changing. Building a future-focused and sustainable approach to housing must have community well-being at its core. This means looking beyond infrastructure to connect with people and understand their needs.

## First Nation 2

By the numbers	
Existing housing stock	160
Number of homes needed	76
Average cost to build a home	\$230,000 (typically, \$170,000)
Average cost to develop a lot	\$60,000
Average monthly rental fee	\$400
Population	650
Geographic zone	2

### Context

Located near an urban centre, this First Nation with high employment rates experiences housing shortages. There is a culture within the First Nation of accepted dependence on the Band Council to provide and maintain housing. Members depend on the Band Council, and the Band Council depends on federal funding. This dependence is becoming increasingly challenging. As housing pressures mount due to family formation and migration back to the community, decreasing financial resources cannot fund the required infrastructure.

The limited housing stock means overcrowding with up to 8 or 9 people per home. This lack of space creates tensions, ultimately leading to social challenges, e.g. family violence, addictions. In particular, overcrowding impacts school-aged children who may not have a supportive and healthy environment in which to learn and grow.

The housing director sees great potential in the First Nation to build credit and access financing for home ownership. A paradigm shift is needed for change. If you watched your parents get by with the minimum in life, you may not think or want to be any different. If ever you find yourself with cash, you may not know what to do with it, and you end up buying novelty items like a skidoo or truck, rather than investing in a home.

The First Nation has made a strategic decision to encourage private ownership of homes in community. The approach is intended to increase and better manage homes, maintenance, and social well-being. To action the approach, good credit and knowledge of financing options are required. In the First Nation, initiatives are underway with young people to educate them early and sustainably on the benefits of personal financial management.

Homeownership is not popular for many in the First Nation. There is a preference to defer to the Band Council for all maintenance and repairs of homes. Given federal funding levels relative to housing needs, this approach is simply unsustainable. This is a community challenge and opportunity: encouraging members to consider the



community benefits of private ownership means supporting one another for sustainable change. This is not something an individual can do alone.

### **Administrative action for housing outcomes**

The decision to encourage private ownership did not come easily. The First Nation at one time, had monthly rent of \$150 for anyone over the age of 50. These rates could not keep up with repair and maintenance costs for the First Nation's housing stock. A Band Council Resolution was introduced to reverse the commitment, and now, rents increase at a rate of 5% per year. Average monthly rent is now \$400 per month.

Rents are paid regularly, with approximately 90% paid on time (this is considered to be high, relative to other payment rates among First Nations in the province). This is a significant increase over the 40% payment rate that once existed. The Band Council's housing policy that included expulsion, changed everything. Since 2015, if rent is not paid, the Band Council reserves the right to evict tenants.

Housing management creates a number of financial pressures. The Band Council depends on rents to pay mortgages for the homes it built and manages. Once a mortgage is paid off, the funding that the Band Council would have allocated to a mortgage payment, can now be returned to the housing system to fund other matters, such as repairs.

### **Resource and structural challenges**

The base budget for housing in the First Nation is \$300,000 and is stretched to pay salaries, housing maintenance, and repair costs. The First Nation considers itself underfunded in housing, relative to need.

Indigenous Services Canada (ISC) provides financing to build one new home per year and funds the preparation of lots for construction. The housing budget for the Band Council is general, meaning there is a competition to apply resources to many areas of need.

Funding from CMHC helps to defray repairs and renovations in the First Nation. These are seldom minor repairs; it can feel like the housing director is responding to one housing catastrophe after another.

### **Future considerations**

In 2021, it should be easy to have a roof over your head. One home per family is the goal of the housing director for the First Nation.

Achieving this goal will be a multifaceted effort that will take years. Strategically, financing options will be needed to offset the gaps in federal funding to support housing. This means that members, especially, young people will require a better understanding of personal finances and how to build a credit score. These basic building blocks for homeownership can be taught and developed in young people.



Shifting paradigms will take creativity and patience. From gift cards to pizza dinners, the housing director works hard to reach young people. Current federal funding for housing is insufficient. The only way housing can be sustainably developed to meet the needs of the First Nation is to walk with and support community members in their journeys of homeownership.



### *First Nation 3*

<b>By the numbers</b>	
Existing housing stock	300
Number of homes needed	80 (wait list only; does not cover all housing needs)
Average cost to build a home	\$250,000
Average cost to develop a lot	
Average monthly rental fee	\$400
Population	1,200
Geographic zone	4

#### **Context**

In this isolated First Nation, housing is a form of social programming. With limited economic prospects due to the isolation (boat access April-December; access exclusively by plane January-March), the majority of the population is on some form of social assistance. Members of the First Nation depend on the Band Council for housing, and, for various reasons, are in a context in which home ownership has limited favourability.

With high rates of family formation and young people returning to the community (often times, with children), pressures for housing outstrip available financial resources to build them. Many existing homes are overpopulated with children, adults, and elders living in a single home. The overpopulation creates social problems and spreads illnesses quickly.

To keep up with need and demand, the First Nation would have to build 20 homes per year. This is far beyond current rates of construction. In a good year, the Band Council can build seven homes, but more typically, four to five homes per year are built. As homes are built, available land continues to decrease, adding additional constraints on the First Nation's housing plans.

#### **Administrative action for housing outcomes**

Managing housing in an isolated place presents scheduling, procurement, and logistical challenges. Not only are you managing home building, but you are managing uncertainty of deliveries, unemployment, etc. It can take up to six months to build a single home, based on ship delivery schedules aligning to the availability of building materials.

With the seasonally dependent boat access bringing supplies, First Nation 3's construction period is well-defined. When it is construction season (April to October/November), you must build. If you do not build, you risk major delays in your

overall housing plan, impacting the next year's plans as well. Volume purchasing of materials is not an option, as there are no suitable facilities to house them.

Adding to the scheduling, procurement, and logistical complexities are Band Council political cycles. Elections every two years create a tenuous political environment, that impacts housing. Political intervention in housing is a regular occurrence, which can interrupt and complexify existing plans.

### **Resource and structural challenges**

Financial resources, not human resource are the limiting factors in housing.

The First Nation has developed its own pool of skilled workers, by training young people in plumbing, electricity, and millwork. Contractors who are certified (and come to the First Nation for construction) will often sub-contract skilled workers from the First Nation to build the homes.

The federal funding apparatus is complex and limited. Most of the funding for housing comes from CMHC. CMHC's budget (that fluctuates every year) is announced at different times, and subsequently flows to the recipient at different times. This lack of reliability creates significant planning challenges. When money does not flow on a regular schedule, it limits the First Nation's ability to plan its construction season by ordering materials, organizing construction crews, etc. For instance, if the budget is announced in June/July, you cannot build with that funding until the next year, because it arrived too late.

The Band Council uses resources from various sources, e.g. federal government, rent, to build more homes and to maintain existing ones. These resources are insufficient.

### **Future considerations**

A sustainable long-term housing strategy for First Nation 3, must include consideration of high rates of family formation and current overcrowding. In the next five years, the First Nation is expected to be connected to a road which would fundamentally change the way First Nation 3 plans, builds, and maintains housing infrastructure.

## First Nation 5

By the numbers	
Existing housing stock	300+30 privately owned homes
Number of homes needed	226
Average cost to build a home	\$240k (average), now \$300k
Average cost to develop a lot	Due to the limitations of the terrain, the community has been forced to experiment with different foundation techniques, including, screw piles and pre-fabricated foundation
Average monthly rental fee	\$350
Population	1,500
Geographic zone	3

### Context

Housing must be conceptualized in terms broader than infrastructure. It is a political challenge with human, social, and economic dimensions. To make progress on housing, building more homes will not solve the problem; more money will not solve the problem. You must define an approach and structure that are sustainable, that involve people and good practices. Critically, approaches and structures to address housing must be contextually relevant, as First Nations have different needs, experiences, and capacities.

Four years ago, 100% of homes in First Nation 5 were Band-owned. Today, nearly 10% of homes are privately owned and broad reforms to the Band's approach to housing have been implemented. These are substantial changes. For these reforms to take effect, the housing team supported by a consultant, work with individual members of the First Nation, by targeting financial awareness and access, as well as by providing ongoing support functions to walk with those exploring housing options in the community.

The Band Council still manages most of the homes in the First Nation, including social housing. This is resource-intensive, and from the perspective of the housing consultant, unsustainable in the long-term.

The average occupancy rate in First Nation 5 is over double the average of the province, with some homes having as many as 9 occupants. The above-average occupancy is a function of elders living with their children, and raising children from other families in a single home. The overcrowding creates a number of social challenges from substance misuse to poor maintenance of homes, e.g. trash build-up, etc. In a generation, the lived experience of this First Nation shifted from a nomadic life to one of permanent land and constructed homes. If no model for life in this way, including home maintenance, existed, how would one know what to do?

There is a (mis)understanding among several members of the First Nation that housing is a service fully funded by the federal government. The narrative emerged when the federal government built the initial homes in the community when it was established just over 45 years ago. These homes were not well-made or suitable to the environment. The result was that several members of the First Nation believed they were entitled to funded housing, who found comfort in Band Council-managed homes, and who privileged access to housing over the quality of the build. Add to the mix, high levels of indebtedness (brought on by expensive purchases, e.g. vehicles, as members privilege transportation being remote), and you have a community that struggles with personal financial management and does not find value in home ownership and property maintenance. Debts to the Band Council are considered by some members to be less important to pay, often times making the Band Council the last debtor to be repaid.

### **Administrative action for housing outcomes**

Despite gaps in financial literacy and limited interest in home ownership among several members, the First Nation made a choice to pursue private housing. This approach requires awareness, education, and long-term support for viability. The chosen approach is a challenging one, as it depends on resetting understandings of homes, property, and personal finance. This is not an easy task. There are many members, who in some instances for generations, did not pay their housing debt to the Band Council, i.e. unpaid rents by a father, who told his children they did not have to pay rent. To build awareness and understanding, young people should be educated early-on about home maintenance, paying rent on-time, and buying and maintaining your home.

The consultant and housing team completely redesigned the housing program and implemented a structure for adjudicating housing requests in the First Nation. There are now four housing types: social and community housing that is Band-owned, homes bought-out from the Band Council, and privately built homes. To accompany the new structure, a policy and outreach manual were developed to answer frequently asked questions and to provide members with information on the changes. Housing staff make themselves readily available for members and spend time identifying potential candidates who may be in a position to buy-out the remaining mortgage on their home (to manage it themselves) and those who may be in a position to build their own homes.

Every time a member buys or builds their own home, it is one less administrative and resource commitment for the Band Council to manage. This is significant, as costs for

renovation and maintenance are high and funding is limited. Having individuals manage these costs means the Band Council can use its finite resources for maximum benefit.

It has been a challenge to grow the number of privately owned homes beyond the current thirty. These private homes were 'bought back' at costs that ranged from \$6,000 to \$12,000 each. The prices were kept intentionally low with years of support from the Band Council to encourage uptake. Some new owners paid in cash, while other took on a mortgage. Those early adopters appear to have understood the value proposition of private ownership and are doing well, but it has been difficult to encourage others to adopt the model.

There are 226 requests for homes on the First Nation's waitlist. The First Nation is a good place to live with community infrastructure such as a gym, arena, etc. There are however, more people living in the First Nation than working and living in the community. This increases the pressure on the housing system. There are many members who would return to the First Nation if housing conditions and employment prospects improved.

For sustainable change in housing, you have to work with people by meeting them where they are (this includes speaking their language) and providing opportunities and support.

### **Resource and structural challenges**

There are not enough resources in housing to do everything that needs to be done. In remote environments like that of First Nation 5, there are a variety of direct and indirect costs associated to housing. Transportation, storage facilities for bulk purchases, securing facilities, etc. are all more expensive in remote places.

There are three dimensions that can improve funding for housing. First, timing must be consistent and aligned to the construction season. Often, financial resource approvals do not arrive until the end of the summer or fall which is too late for construction. Federal fiscal years and construction seasons do not align. Resource allocation information is needed early and consistently to support planning. Second, resources should be available for bulk purchasing of materials and their related costs. As a remote First Nation, volume buying can help to spread the cost of materials and transportations across several projects. There are, however, additional costs to securely storing the materials when they arrive. These practices and costs that can promote more regular building should be funded. Third, the different costs and experiences of communities in urban environments and communities in forested places must be recognized and funded accordingly. The needs and expenses in urban and more remote First Nations differ, so too should their resources and allocation principles.

### **Future considerations**

Living, working, and managing housing infrastructure in remote and isolated communities requires a distinct approach and funding practices. The highest

performing communities near urban centres often benefit from access, something that remote and isolated communities may not have. This only widens the divide.

An ideal approach to housing would include the capacity for long-term planning, and resources to educate and support people in their housing needs. Looking beyond infrastructure costs and including resources for personal financial knowledge and management, as well as maintenance would be essential. Sustainable housing requires resilient and capable people to fund and maintain them. A holistic vision of housing, that includes geographic realities would be an ideal and needed step forward as resilience is rebuilt in the First Nation.



## First Nation 6

By the numbers	
Existing housing stock	148
Average cost to build a home	\$300,000
Average cost to develop a lot	\$40,000-\$70,000
Average monthly rental fee	\$550
Geographic zone	3

### Context

The traditional territory of First Nation 6 was suddenly occupied by others, who came to the land for resource extraction. This resulted in big changes in culture and health, and led to First Nation 6 resettling on a parcel of land downriver, which is now recognized as settlement land.

Housing pressures have emerged as First Nations return to the community and young people come of age, seeking their own homes. A variety of homes are needed for the growing and changing community, e.g. one-bedroom units, single detached homes, social housing. The constraining factors in this environment are available land and connections to related services, e.g. sewer, electricity, etc.

With a great deal of resource extraction and tourism in the area, housing pressures around the First Nation change seasonally. In summer months, the population can triple, with some people renting their homes from \$100/night to \$140/night, with some higher at prices just below hotel rates, to tourists or workers. For younger residents, this creates additional housing challenges. How can they compete with tourism and extractive services for homes?

### Administrative action for housing outcomes

Construction in the First Nation can take time, as labour and materials can be difficult to source. There are limited connections to water and sewer as available space for connections have been used up by the First Nation and the neighbouring town. Adding to the complexity, are the marshlands that need to be backfilled prior to construction for lot preparation. Excavation and backfilling costs can range from \$40,000-\$70,000 (prices have increased, but these increases may be a 2021 anomaly), on top of the average \$300,000 needed to build a home.

While most in the First Nation are employed, there is still a need for social housing. To deliver on the First Nation's needs, the First Nation has partnered with CMHC and the sub-national housing corporation to build a new social housing facility, to include six transitional units, two supported living, and two emergency intake units. The initiative is a jointly developed approach to social housing by the First Nation and CMHC. Funding is transferred partly as a loan, and partly as a grant. The approach is intended to invest and support the First Nation in addressing social challenges (the loan is forgivable). With an estimated cost of \$4M, the building will be constructed suitably to the

environment, and will include resident caretaker and services. Monthly rents are expected to be \$400. The partnership and other investments help to make the project sustainable, as rental income alone would be insufficient for maintenance.

### **Resource and structural challenges**

The housing director works with programs and people to deliver on the First Nation's needs. This means focusing efforts on CMHC, the sub-national government and housing corporation, rather than CIRNA or ISC. Opportunities and mechanisms for engagement with the federal government on housing are considered unclear, and unhelpful, making interactions with other partners more fruitful. For instance, a project with the sub-national housing corporation and a local university, trained seven members of the First Nation in home maintenance, with a focus on installation and retrofitting. This crew now supports installation and retrofitting in the community.

The annual maintenance and service budget for housing comes from rent and subsidies from CMHC mortgage-funded homes. The majority of the housing units are rental units, with rents paid regularly and on time. In the First Nation, there is a budget for housing and a budget for other buildings.

### **Future considerations**

Looking to the future there are two areas of action: financing and supportive housing.

It is a challenge to access financing for homes on settlement land. There has to be a change in the way people access loans and pay them off on settlement land because they are willing to do it. Members need opportunities to access loans, to build and manage their own homes.

Supportive and safe housing for more vulnerable members, e.g. elders, those in need of temporary shelter, youth in transition, is critical. These units should have staff to provide them with the wrap-around support and services needed.

## *First Nation 8*

<b>By the numbers</b>	
Number of homes needed	500
Average cost to build a home	\$160,000-\$170,000
Average monthly rental fee	None
Population	3,200
Geographic zone	2

### **Context**

Supply for housing in First Nation 8 cannot keep up with demand. Over half of the population is under the age of 40, with high rates of family formation. There are approximately 65 births per year, making this community young and in need of suitable housing.

The First Nation estimates a backlog of 500 units, as need compounds year over year. In a typical year, only 6-10 housing units are built in the First Nation. Current construction rates are unable to keep up with demand.

In the last two years, the cost to build a home in the community has increased by approximately \$50,000, now in the range of \$160,000-\$170,000.

### **Administrative action for housing outcomes**

First Nation 8 runs a successful fishing and processing plant. With its own source revenues, it is able to fund housing in the community. Most people desire a stand-alone housing unit. The First Nation avoids multi-unit homes, as they can increase tensions among neighbours.

Members of the First Nation do not pay rent for their homes. Maintenance services are provided by the First Nation, although some households with means undertake their own renovations.

Social housing, however, was built privately. These residences for members on social assistance charge rent (\$550, the maximum amount ISC will cover for those on social assistance).

If employment rates were stable throughout the year, the circumstances for rent and private financing may be different. At peak season, the employment rate is at 75%, with changes to employment levels outside of the fishing season.

### **Resource and structural challenges**

The constraints to building more homes are financing and the availability of land. First Nation 8 is working on options for private financing. For those willing and able, they

would access their own funding and use land from the First Nation to build their home. It is expected that if some members are able to build their own homes, their existing residences could be reallocated within the First Nation.

As land is a limiting factor, the First Nation is seeking a set aside for land, and once there is clarity on title, it is expected to be available for building. As the First Nation continues to grow, construction has been undertaken on wetlands. This is a costly and time-consuming exercise.

### **Future considerations**

The First Nation has the capacity to address housing needs, but requires additional measures. It was proposed that the federal government match own-source revenues committed to First Nations in housing on a dollar-for-dollar basis, rather than working through CMHC.

CMHC's processes are considered long and convoluted. If a First Nation can demonstrate funding capability, extra steps should be omitted. The cumbersome application process would benefit from streamlining.

## First Nation 9

By the numbers	
Existing housing stock	67
Number of homes needed	42
Average cost to build a home	\$300,000
Average monthly rental fee	\$475
Population	361
Geographic zone	1

### Context

When asked about housing in First Nations, a housing consultant replied: “Putting it mildly, it has been setup to fail.”

With decades of experience in First Nations housing, the consultant now serves two First Nations as their de facto housing director. Housing, for the First Nation discussed here is a challenge. For over 20 years, not a single home was built in the First Nation.

Original designs (pre-1997) of programs such as s.95, left some First Nations burdened by debt. If they were not able to collect rents to pay the program’s mortgage, the First Nation was left to pay the fee. For years, First Nation 9 opted out of the program, due to challenges of mounting debt from rental arrears. The First Nation is still working through the remnants of the original program structure.

Since the arrival of the consultant and a new permanent director of capital and infrastructure, nearly two years ago, the First Nation has had 14 single family homes and a duplex constructed, with two triplexes and a safe house under development. A subdivision with lots left empty after its completion in 2008, is now full. Homes are built with private financing and through the updated s.95 program. This shift in housing is attributable to the presence of the consultant and director, and their work to navigate bureaucracy and identify financing options for new builds.

### Administrative action for housing outcomes

Housing is a political issue. With sometimes small populations in First Nations and many ties between members, defining and enforcing a housing policy and program can be challenging. Band Councils may not set out to evict their brother, sister, or friends from their homes, but without the threat of eviction, collecting arrears can be difficult, as compulsion is limited. Such pressures and stresses of the job contribute to the high turnover in employees.

It is a challenge to find and retain qualified and experienced housing personnel, including an administrator and supporting staff (this includes maintenance staff who are in high demand). For instance, prior to hiring the housing consultant, First Nation 9 had not had a housing director for years. The housing consultant, with decades of experience, is managing on only two days per week (as their time is split with another

First Nation). Given the importance of housing and the challenges of the file, it can be especially difficult to be a member of the First Nation and serve in the housing portfolio.

Despite the staffing challenges, there have been a number of activities led by the Band Council associated to housing. For instance, the development of construction standards and building codes for the First Nation, were designed to professionalize and streamline infrastructure development. These are positive steps for the First Nation, especially, as the housing consultant implements approaches for housing requests and construction.

### **Resource and structural challenges**

Among some First Nations, there may be a conception of being entitled to housing on-reserve at no cost. This is not sustainable for many First Nations as they do not have the revenue base to fund housing. Existing federal funding is alone insufficient for building new homes.

In First Nation 9, many existing homes were originally poorly built, requiring tens of thousands of dollars in repairs and renovations. All of this maintenance is paid for by the Band Council. Current per home maintenance funding from ISC is considered insufficient, given the neglect of infrastructure over the years.

As in many First Nations, there are pressures driving housing need including overcrowding, increased demand from members returning to live in the First Nation, and health and safety of homes (due to infestations and other challenges).

A mix of programs and financing tools are required to support housing in First Nations. There should be differentiation based on need and location. Bands with lands in economically viable places will have needs and capacities that are different than those in less viable places. These differences should be taken into account in federal funding practices.

First Nation 9 applies to several funding programs in an attempt to obtain additional resources for special projects. If the funding source is not First Nations-specific, First Nation 9 finds they cannot compete. With a team of two people, First Nation 9 does not have the capacity of larger First Nations or other organizations, e.g. municipalities, for proposal writing.

An alternative to public financing, is private financing through chartered banks. First Nation 9 has a Band Council Guarantee with one of the large banks, and has a direct lending arrangement for members of the First Nation. The option can be useful, but requires careful attention. The bank made a corporate loan arrangement charging interest rates much higher than those for personal lending. The consultant negotiated lower rates, and emphasized the importance of advocating for the First Nation's interests to ensure the financing tool is useable.



**Future considerations**

Achieving housing goals requires land and funding. There is a land shortage for First Nation 9, and they are exploring ways of increasing available land for building. Federal funding should reflect the different realities and needs of First Nations. Furthermore, federal funding should be allocated to planning and capacity building, to support First Nations in developing their own approaches to housing.

A primary goal for the housing consultant is to undertake comprehensive community planning. This in-depth assessment is needed to understand community needs, and also to engage the community in planning.

## First Nation 10

By the numbers	
Number of homes needed	100
Average cost to build a home	\$200,000 (3 bedroom bungalow)
Average cost to develop a lot	\$50,000 (and as high as \$110,000 for complex lots)
Average monthly rental fee	N/A
Population	1,000
Geographic zone	1

### Context

Economic development is at the core of First Nation 10's approach to housing. Leveraging its location, First Nation 10 has well-developed economic programs and investments, ranging from apartment buildings to strip malls, with interests and partnerships in dozens of other areas of economic activity.

The revenue generation enables the Band Council to fund 75% of its activities through own-source revenues. When it comes to housing, rent is not charged on-reserve. Instead, the Band Council requires occupants to maintain their homes and will reimburse up to \$750 in materials per year. Repairs for seniors and those on social assistance are covered by the Band Council. Should a member damage their home, the Band Council deducts the cost from the twice annual payouts to members of the First Nation, totalling \$2,250 per year.

Despite their best efforts to keep up with demand, overcrowding remains a challenge and homelessness is on the rise. Roughly one quarter of members are young, with high rates of family formation. Changes to status laws have also increased demand for housing on-reserve, as well as support for housing off-reserve.

There is limited interest in private homes on-reserve. Financing is a challenge, and furthermore, many members do not want to use their money for rent (Band-owned apartment buildings are mainly occupied by non-Indigenous people and are managed by a property company). Nonetheless, First Nation 10 is exploring options for financing and home ownership, including certificates of possession (to facilitate the transfer of structures between families/members).

### Administrative action for housing outcomes

With shortages of land and homes, First Nation 10 is using cash payouts (from a land claim) for communal benefit by buying homes and transferring lands to the Band. Houses bordering the First Nation were purchased and lots are now being transferred to be reserve lands to be administered by the Band Council.

First Nation 10 has established a subsidy program for off-reserve housing. For those members looking to build or purchase a home off-reserve, the Band Council will offer 10% of the cost to build (up to \$30,000), with requisite proof, e.g. purchase and sale agreement, bank financing, etc. to issue the payment. For seniors living off-reserve, the Band Council will cover up to 75% of their utility costs. The Band Council also offers subsidies to seniors wishing to live in Band-owned apartments adjacent to the reserve, at roughly half the cost of usual rent, with utilities also paid for by the Band.

On-reserve, one to two homes per year are built through the s.95 program. This does not keep up with demand. The balance of homes built in any given year, are funded through the Band Council's revenues. Few homes are built with private money (one to two per year). In those instances, a prepared lot (paid for by the Band), plus up to \$30,000 are provided by the Band Council to support the build. Most take on unsecured loans, as traditional mortgages are challenging on-reserve.

For members to obtain secured loans, they would have to be guaranteed by the Band Council. The approach is considered unfavourable to the Band, due to the associated risks. Should the recipient default on a loan payment, the Band does not want to evict those members or be liable for the payment.

### **Resource considerations**

Financial and human resources are the two most significant limiting factors for housing in First Nation 10. To build more homes, program dollars would have to be leveraged, as own-source revenues can only do so much. The cost of building materials has increased significantly. Rather than building new homes, the First Nation is buying homes adjacent to the reserve to help to increase supply.

On average, it takes 4-5 months to build a home in First Nation 10, due mainly to a contracting construction workforce. With retirements and disabilities shrinking available skilled labour, First Nation 10 is looking to train younger members in carpentry, plumbing, and electricity closer to the community. As First Nation 10's own pool of skilled labour is regenerated, it remains difficult to schedule skilled trades for construction due to high demand.

### **Future considerations**

For the future, a complete capital assessment (extending beyond housing) is being undertaken in First Nation 10. This strategic planning exercise is considering demographic and social trends and pressures, as well as existing infrastructure to best determine community needs. For now, the Band Council depends on housing applications to understand who needs housing, e.g. families, single people, seniors, etc.

In an ideal situation, housing is built to accommodate the needs of members in different stages of life. While detached homes and multiplexes are preferred by families, many seniors, who wish to live on their own, may benefit from supporting infrastructure. With



the goal of supporting members, wherever they may be, First Nation 10 is continuing to generate resources for the benefit of its people.

## **Cost estimation of current and future needs**

This chapter provides estimates of current and future housing needs in terms of both housing units and capital cost. The current needs address existing gaps due to overcrowding, migration on- reserve, replacement of outdated and unlivable housing units, and repairs and renovations needed to improve housing conditions to an acceptable standard. The future needs arise from natural population growth and net migration, which result in the formation of new households and the need for new housing units. A review of construction cost information and related contextual considerations for construction are available in Appendix 5.

There are limitations to the data set compiled through the AFN survey. The available data set does not represent all First Nations and provinces/regions, nor can it be considered a truly bottom-up estimate based on full information from communities. As a result of these limitations, cost analysis was undertaken with caution. The estimates for the non-participating First Nations were extrapolated from the raw data for the communities and regions that were represented in the data base. In an effort to address the uncertainty associated with the available data set and the chosen methodology, a range of estimates are provided.

### **Housing Data**

The housing need and cost estimates in this report are based on two main sources of data: AFN Survey; and Indigenous Services Canada's (ISC) estimate and projection of Indigenous population based on data from the Indian Registration System (IRS). Other sources of data were used to validate or supplement information from these data sets.

#### *AFN Survey*

The AFN conducted a comprehensive survey of on-reserve housing conditions and needs of First Nations in 2018. The First Nations Information Governing Centre (FNIGC) designed a multi-stage complex sampling strategy stratified by region, population, and remoteness to ensure that the survey adequately represented differences in those strata.

The survey contained detailed questions to assess gaps in the existing housing stock. Questions addressed issues such as, population, housing stock, age of housing units and main areas of housing gaps (multi-family housing units, outdated housing units, number of units sought by members living off-reserve, needs for minor and major renovations, and serviced lots).

Nearly 50% (46%) of First Nations participated in the AFN survey on housing need (Table 3). Data was available for provinces and territories other than Alberta, Manitoba, and Northwest Territories. Alberta, Manitoba, and the Northwest Territories, did not participate sufficiently to be included in the final survey results. Only Quebec had 100% participation in the survey, as a regional survey had been previously completed.

Table 3

Participating Communities						
	Atlantic	Quebec	Ontario	Saskatchewan	British Columbia	Yukon
Number of communities	24 of 34	40 of 40	102 of 138	45 of 70	89 of 198	9 of 17
Percent of on-reserve population	82%	100%	86%	61%	53%	60%

The geographic zones of First Nations participating in the survey are reflective of the overall population (Table 4). Most of the participants are from zones 1 and 2, with a smaller number from zones 3 and 4 (Figure 5 and Figure 6).

Table 4

ISC defines geographic zone as a First Nation's distance to a service centre and associated mode(s) of transportation:

- Zone 1: First Nations located within 50 km of a service centre.
- Zone 2: First Nations located between 50–350 km of a service centre.
- Zone 3: First Nations located over 350 km from a service centre.
- Zone 4: First Nations with air, rail or boat access to service centre.

Survey participation is generally representative, with exception to the non-participating provinces and territory (Figure 7). These gaps were addressed by applying available data, discussed in greater detail below.



Figure 5

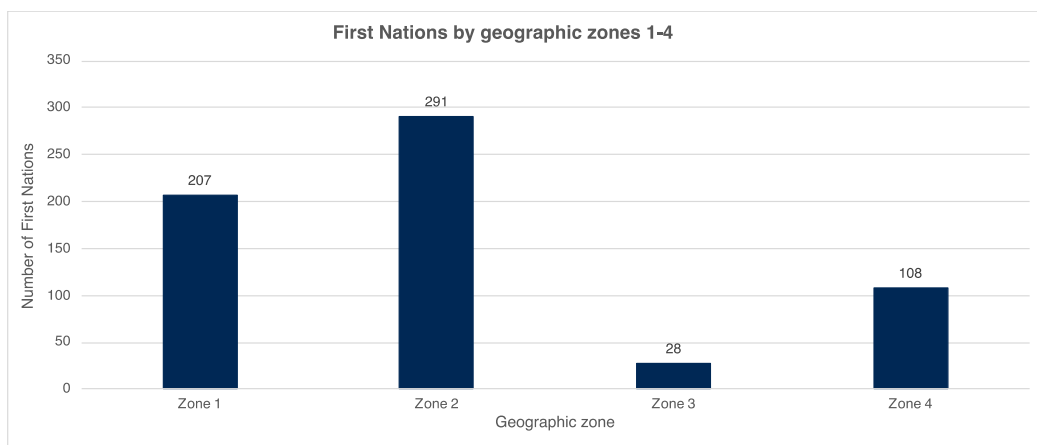


Figure 6

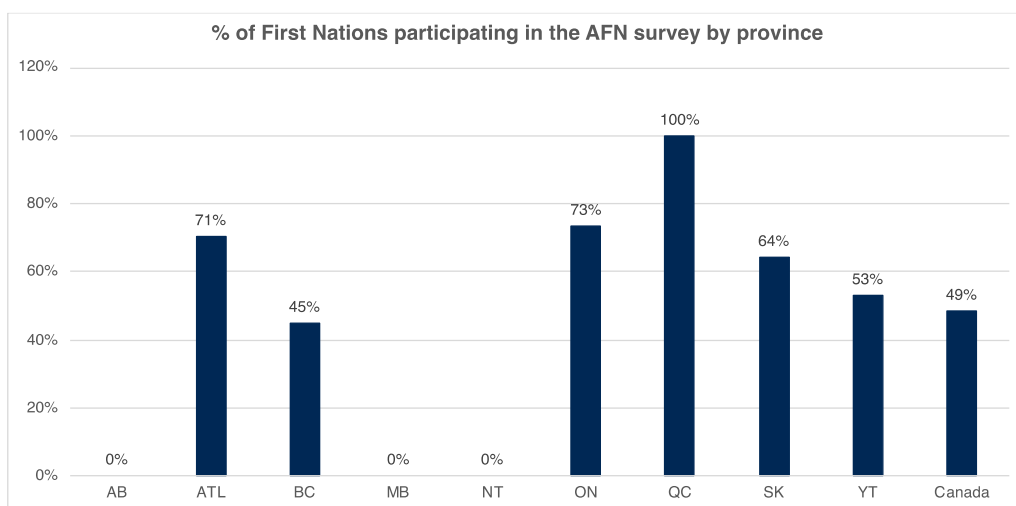
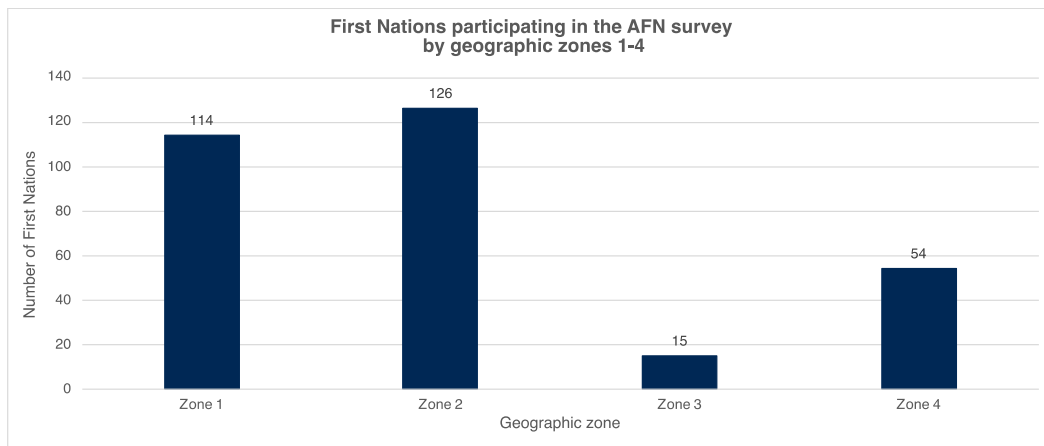


Figure 7



Due to missing information and inconsistent responses, some of the data collected from the survey was deemed unusable. For instance, it appears that some questions may have been misinterpreted by providing unapplicable data, e.g. providing total cost to replace all unlivable units rather than the cost per unit (Table 5). Despite these limitations, the nearly 50% participation rate and detailed data make the 2018 survey the best available source for estimating housing needs and cost in First Nations.

In future studies, AFN intends to clarify questions and guidelines to limit misinterpretation by respondents. Reviewing and refining the 2018 survey would be a fruitful exercise to build a more robust estimate of the housing needs.

Table 5

<b>Costed housing needs components (AFN 2018)</b>	
<b>Component</b>	<b>Definition</b>
Overcrowding	The number of housing units meant for one family but used by multi-generational families. The estimated need is for new housing units that are required to allow multi-generational families to live in separate units.
Migration	The number of families that wanted to move on-reserve, rather than the number of people. The estimated need is for the new units required to house the migrating families. (Note: The survey question asked, "How many people living off-reserve are seeking housing on-reserve?" which may have been interpreted differently by respondents than explained in the survey guide).
Replacement	The number of new housing units needed to replace those that are outdated and unlivable.
Minor repairs	The number of housing units that require minor repairs, such as, fixing doors, windows, roofs, plumbing, heating systems, etc.
Major repairs	The number of housing units that require major repairs, such as, major plumbing or electrical renovations, major structural repairs, adding living space, etc.
Servicing new lots	Serviced lots are lots that are connected to water systems, wastewater systems, and other utilities. The estimated need is for the additional lots that need to be serviced for the new units required to address overcrowding and migration. The housing units that must be replaced are assumed to already have serviced lots. (Note: The survey asked, "How many serviced lots are currently available for the construction of new housing units?").

Geography heavily influences the cost of construction. On the basis of geographic zones, the survey data was extrapolated to review findings across other indicators. The aggregate data suggests that multi-generational homes and the need for major renovations and repairs are greatest in zones 3 and 4.

In Ontario, British Columbia and Yukon, a much larger share of housing stock in zones 3 and 4 is outdated and need to be replaced. In all the regions, except the Atlantic, more houses in zones 3 and 4 require minor or major renovations.

Except in Quebec and Ontario, construction cost per unit reported in the survey does not increase consistently with remoteness. This could be due to a lower labour cost in

some remote communities or the type of housing units (in terms of size and facilities) that are typically built in those communities.

Figure 8

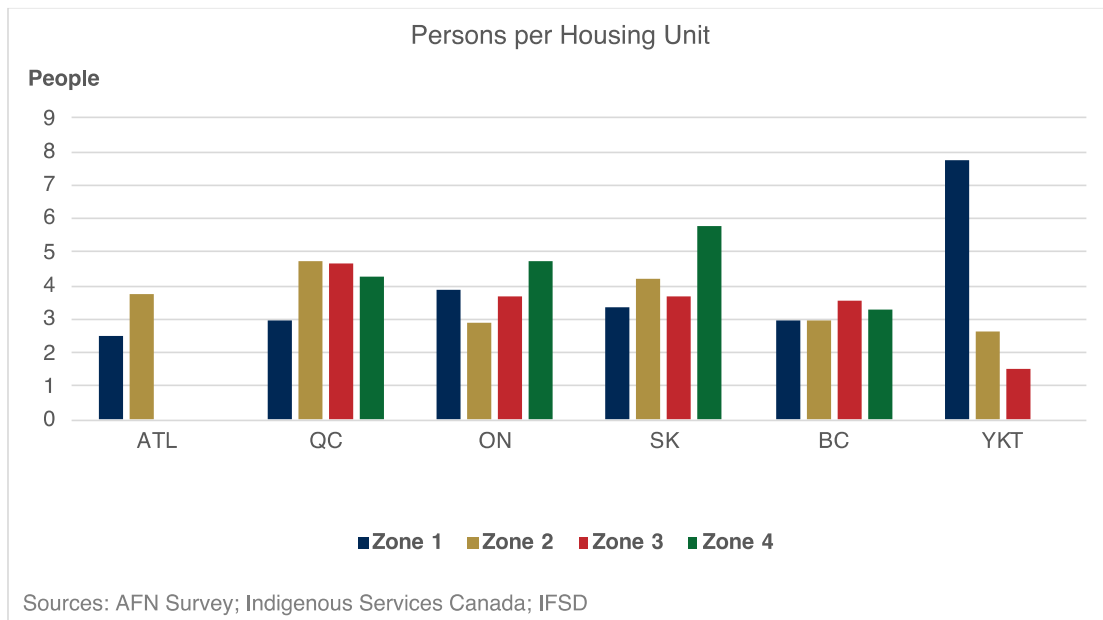


Figure 9

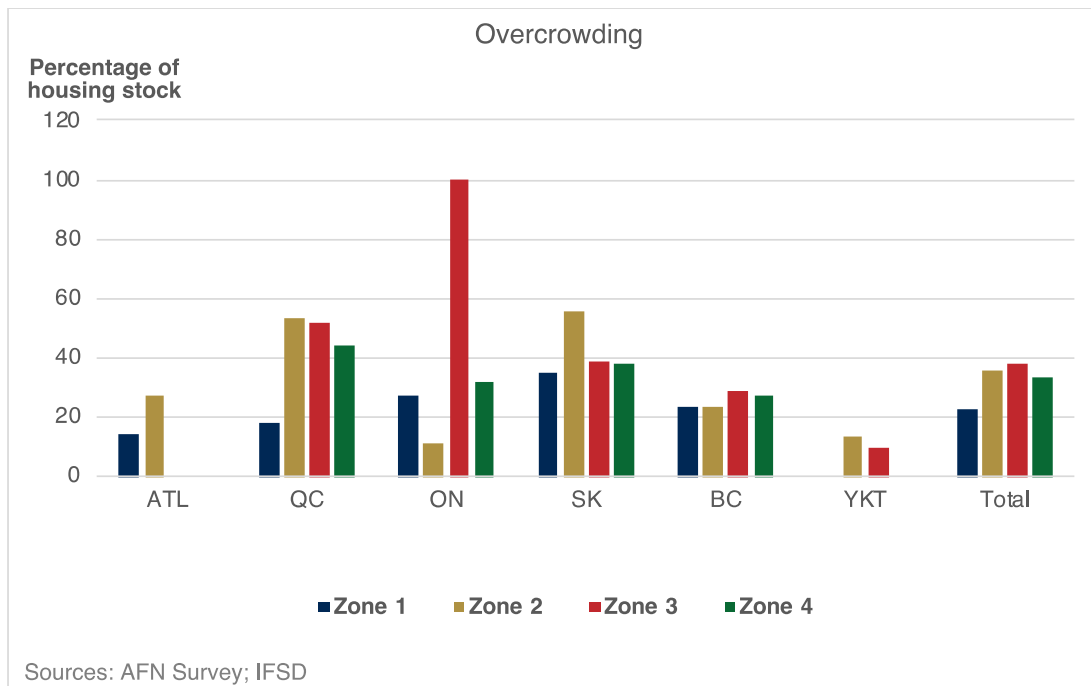


Figure 10

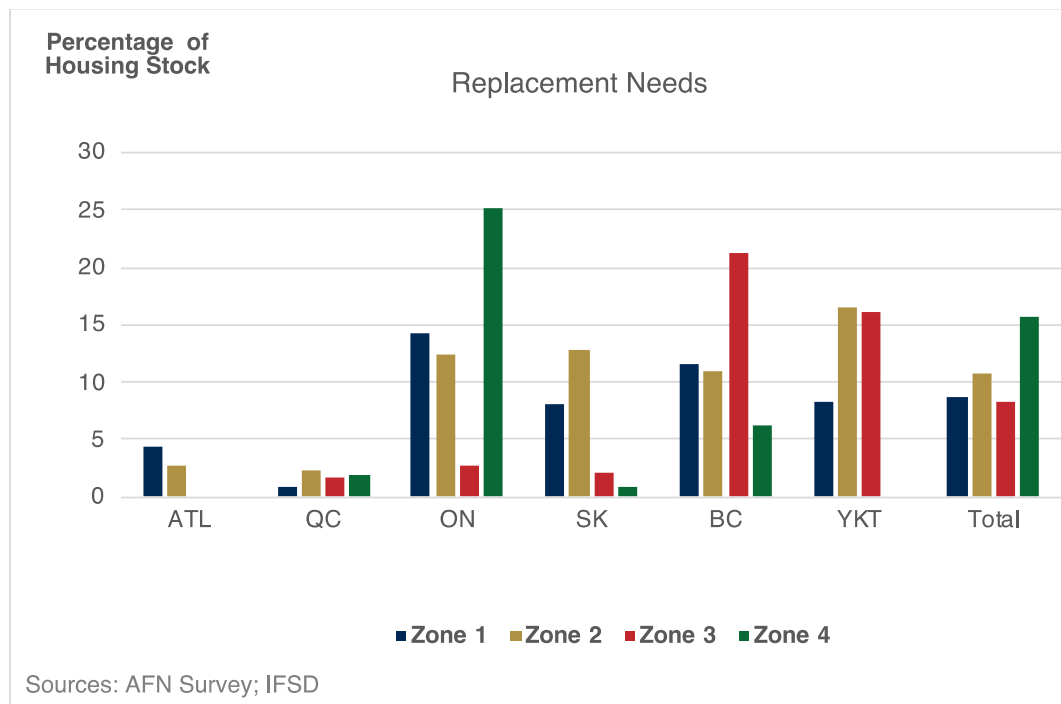


Figure 11

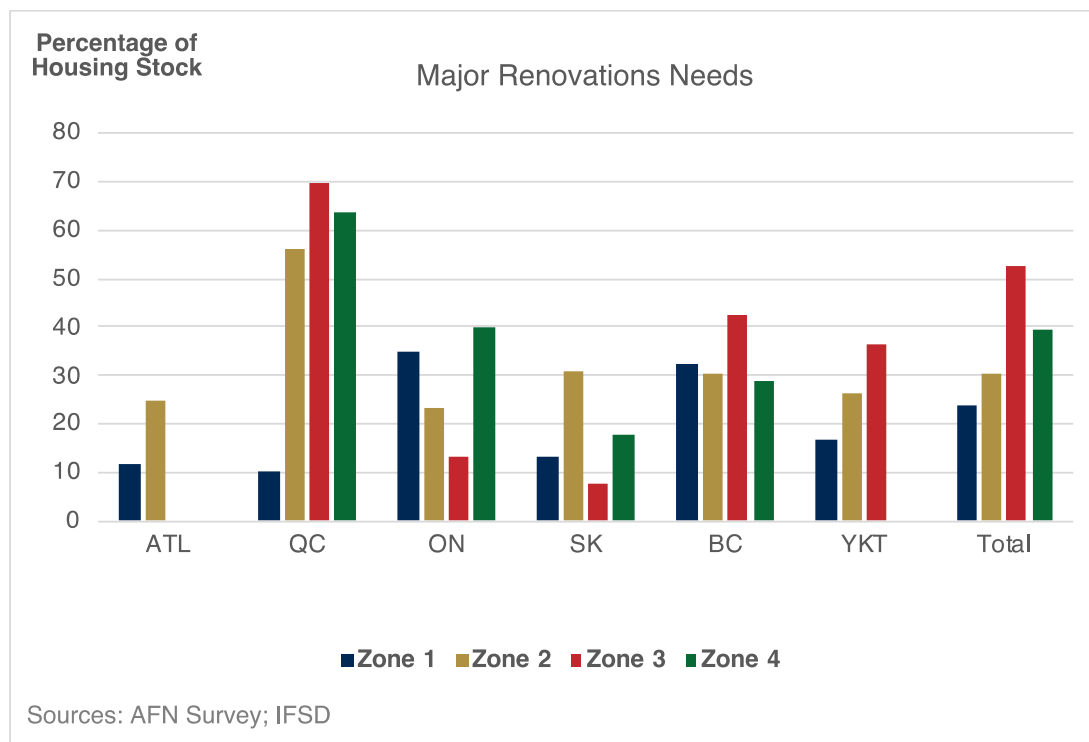
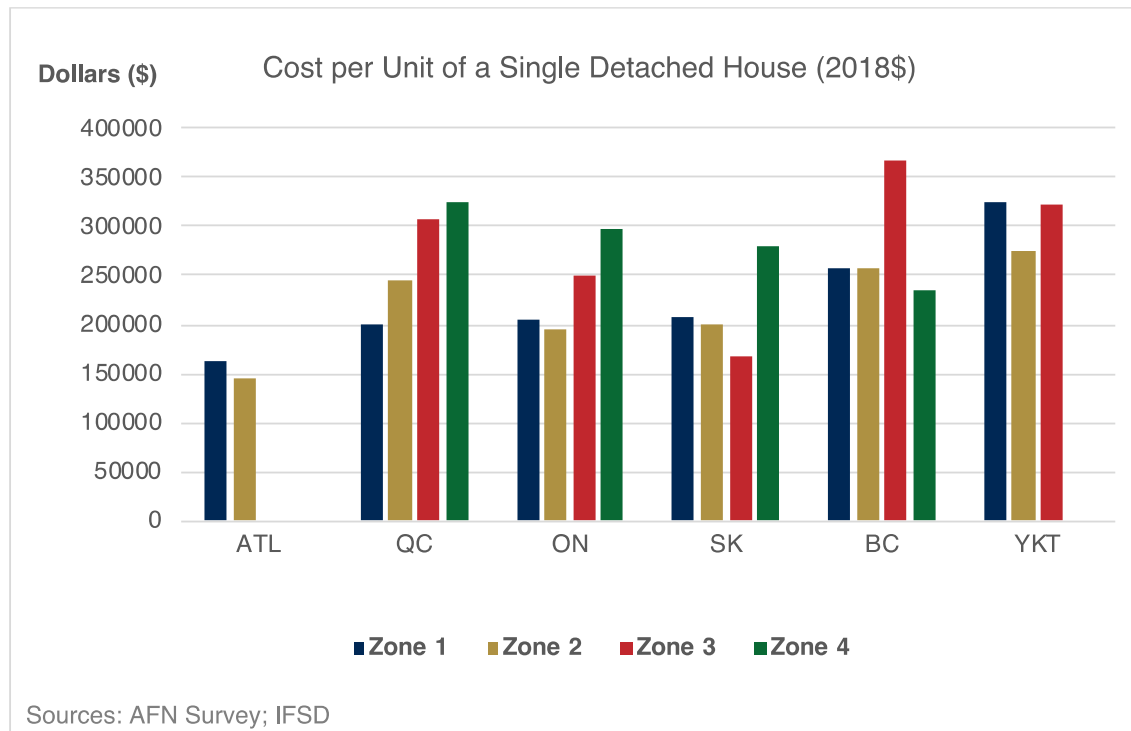


Figure 12



A key factor for estimating future housing needs is the number of persons per household (see the methodology section). The survey suggests that in most cases the number of persons per household is higher in zones 3 and 4 as remote communities appear to have either larger families or more overcrowding. The number of persons for Yukon shows a very large number for zone 1, considered an exception as data is from one small community (a single data point).

#### *Indigenous Services Canada (ISC) Population Projections*

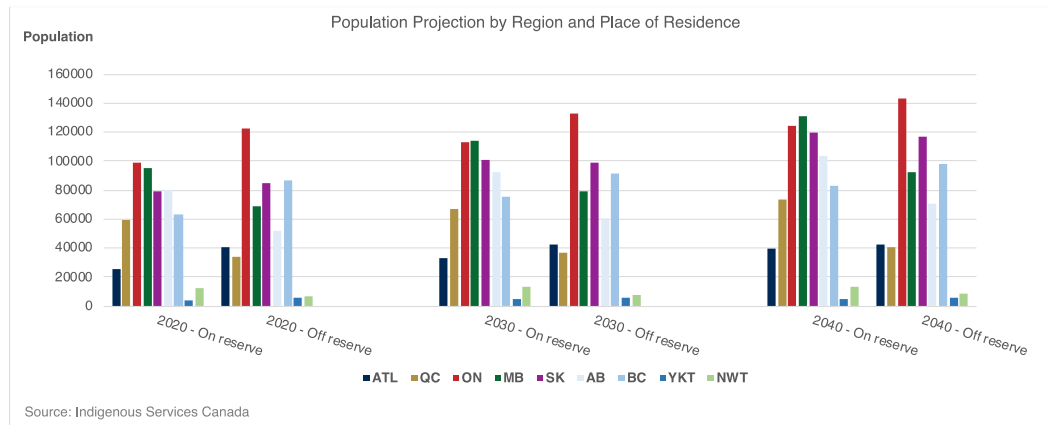
The Research and Statistics Directorate of ISC provides 20-year projections of First Nations population by place of residence, gender, and age group. The most recent update is based on the IRS counts as of December 31, 2020. IRS data is subject to typical limitations of late registry of birth and death. ISC provides three projection scenarios: medium growth; high growth; and low growth. The projections were prepared by Statistics Canada's demographic microsimulation model, Demosim.

The medium-growth scenario combines the following assumptions: constant fertility; moderate increase in life expectancy at birth; base assumptions for registrations and reclassifications on the Indian Registration System; internal migration based on patterns estimated from the 2001 and 2006 Censuses as well as the 2011 National Household Survey (NHS); constant intragenerational ethnic mobility; medium-growth assumptions for net international migration among the non-registered population only.

The high-growth scenario is the same as the medium-growth scenario except for an increasing fertility and a faster increase in life expectancy at birth. The low-growth scenario is the same as the medium-growth scenario except for a decreasing fertility and a slower increase in life expectancy at birth.

The following figures summarize the medium growth projection results (Figure 13; Figure 14; Figure 15).

Figure 13



For the Atlantic region, Ontario, Saskatchewan, British Columbia and Yukon, the on-reserve population was smaller than the off-reserve population in 2020. In all regions except for Alberta and the Northwest Territories the on-reserve population is projected to grow faster than the off-reserve population, mainly due to higher fertility rates.

Figure 14

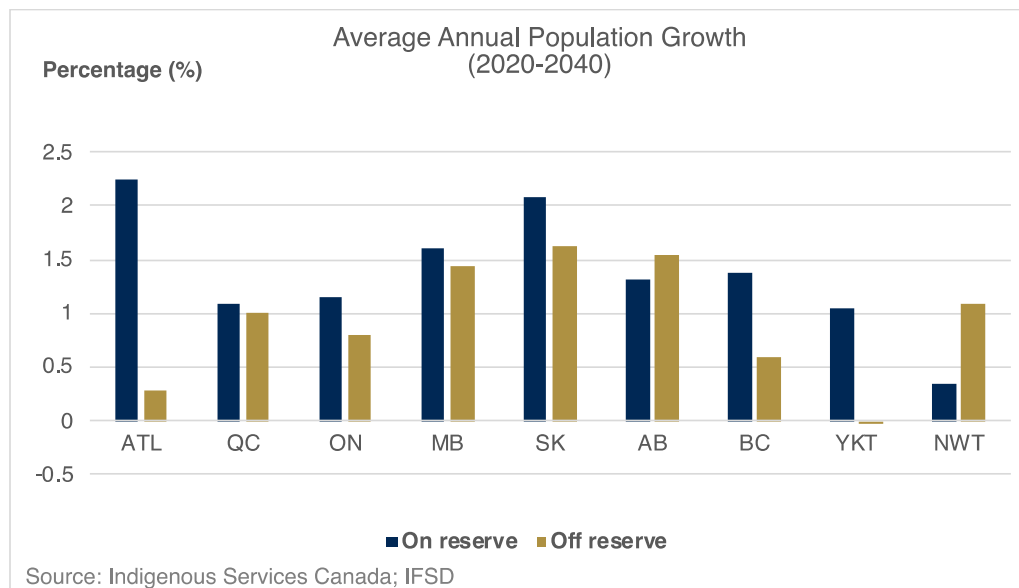
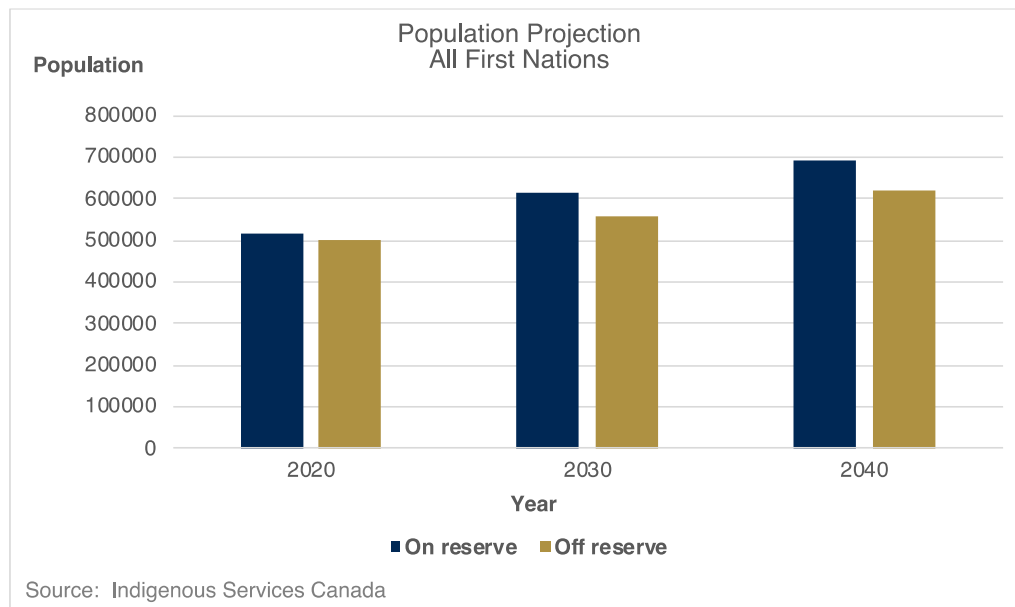




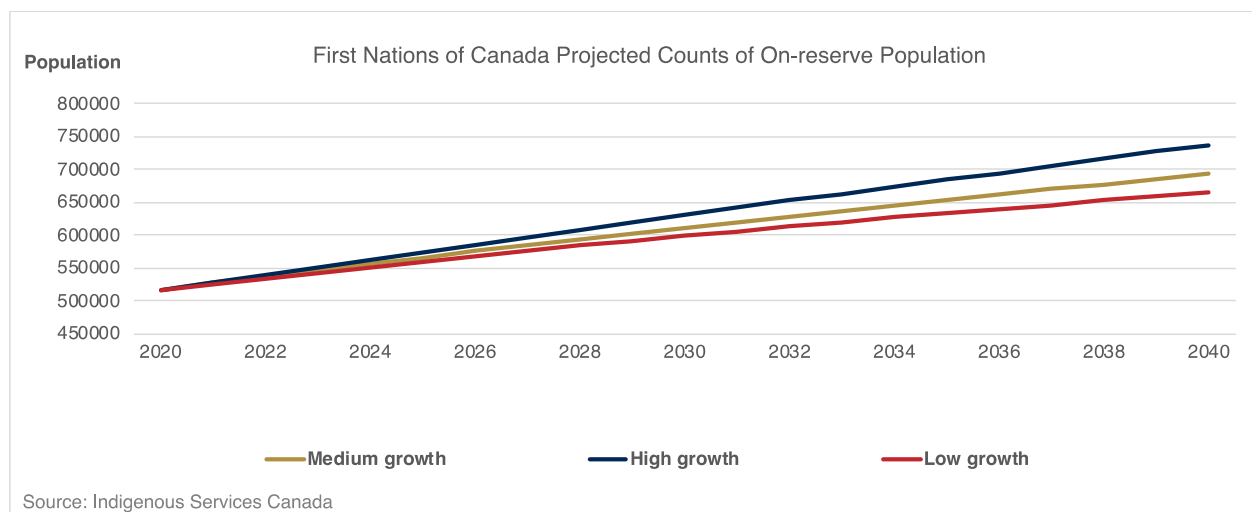
Figure 15



Over the period 2020-2040, the on-reserve population is projected to grow by 34 per cent compared with 24 per cent for the off-reserve population. The Atlantic region is projected to show the highest rate of growth (2.2 per cent) for the on-reserve population. By 2040, the First Nations on-reserve population is projected to be about 75,000 persons greater than the off-reserve population.

The future profiles of on-reserve population for the three growth scenarios are depicted in Figure 16. By 2040 the high growth scenario projects about 71,000 more on-reserve population relative to the low growth scenario.

Figure 16



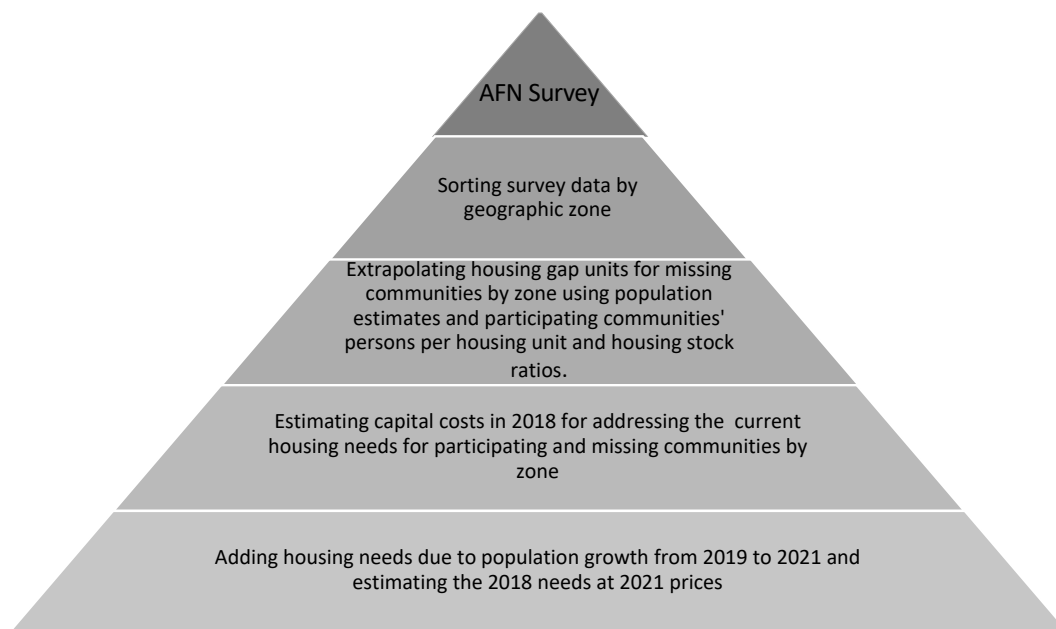
## Methodology for Costing Current and Future Needs

Data from AFN's 2018 survey is the main source of information for estimating current housing needs and cost on-reserve. The limitations of the data set required extrapolations to cover non-participating First Nations. This section discusses the approach taken to estimate the various components of current housing needs, the projection of future needs due to population growth, as well as the modelling of a what-if scenario, for migration on-reserve.

### *Costing current needs for the participating regions*

The survey data was first sorted by geographic zone and adjusted for missing responses and responses that were not consistent with the intent of the survey questions, e.g. omitting a response for a single unit replacement cost reported as \$9,000,000 (Figure 17). Next, for each province/region, the data for the non-participating First Nations was extrapolated. The non-participating First Nations were grouped by geographic zone to estimate existing housing stock. For each zone, housing stock was estimated by dividing IRS population data by the average of persons per housing unit from the corresponding geographic zone. To estimate housing needs in non-participating First Nations, the ratio of housing needs to existing stock from available data was applied on the basis of geographic zone.

Figure 17



Using the 2018 average per unit costs reported in the survey for each zone, the capital cost for addressing overcrowding (multiple family units), new units for families that applied to move on-reserve, replacing outdated and unlivable units, minor and major renovations, and servicing of the lots for the new units were estimated for each region.

The final step in the analysis was the estimation of capital costs at 2021 prices using Statistics Canada's construction cost inflation data. To account for the increase in housing needs due to population increases from 2018 to 2021, the capital costs of the required new units were added to the current needs at 2021 prices.

#### *Costing current needs in Manitoba, Alberta, and the Northwest Territories*

- 1) Manitoba: Initially Manitoba's First Nations did not provide sufficient information to be included in the main AFN Survey. Recently, in 2021, the AFN collected some data from 27 communities in Manitoba. The raw data contains information on the total stock of housing units, overcrowded units (multiple families), off-reserve families seeking housing on-reserve, and available serviced lots, but lacks information on replacement of outdated units, minor and major renovation needs, and the cost of constructing a new unit. To estimate current housing needs for the latter components, data was extrapolated from Saskatchewan's responses. Saskatchewan was deemed a suitable benchmark for Manitoba given their geographic proximity and similar climates.
- 2) Alberta: First Nations in Alberta did not participate in the AFN Survey. Thus, we did not have access to comparable data to estimate Alberta's First Nations' current housing needs. To provide an indicative estimate of the current housing needs we chose to use the weighted average of housing needs for the Atlantic region, Quebec, Ontario, Saskatchewan, and British Columbia as the benchmark for Alberta. Yukon was not included on the assumption that the territorial First Nations communities are less comparable to Alberta's than those First Nations in the other regions. The weighted average of the housing needs of the five regions was then used along with IRS population data for Alberta to estimate its current housing needs. Due to the lack of data from Alberta, we did not believe providing extrapolated estimates by geographic zones would provide more useful information.
- 3) Northwest Territories: As for Alberta, the AFN Survey does not include any data for the Northwest Territories. Yukon's housing information from the Survey was used, along with population estimates from the IRS to extrapolate current housing needs for the Northwest Territories.

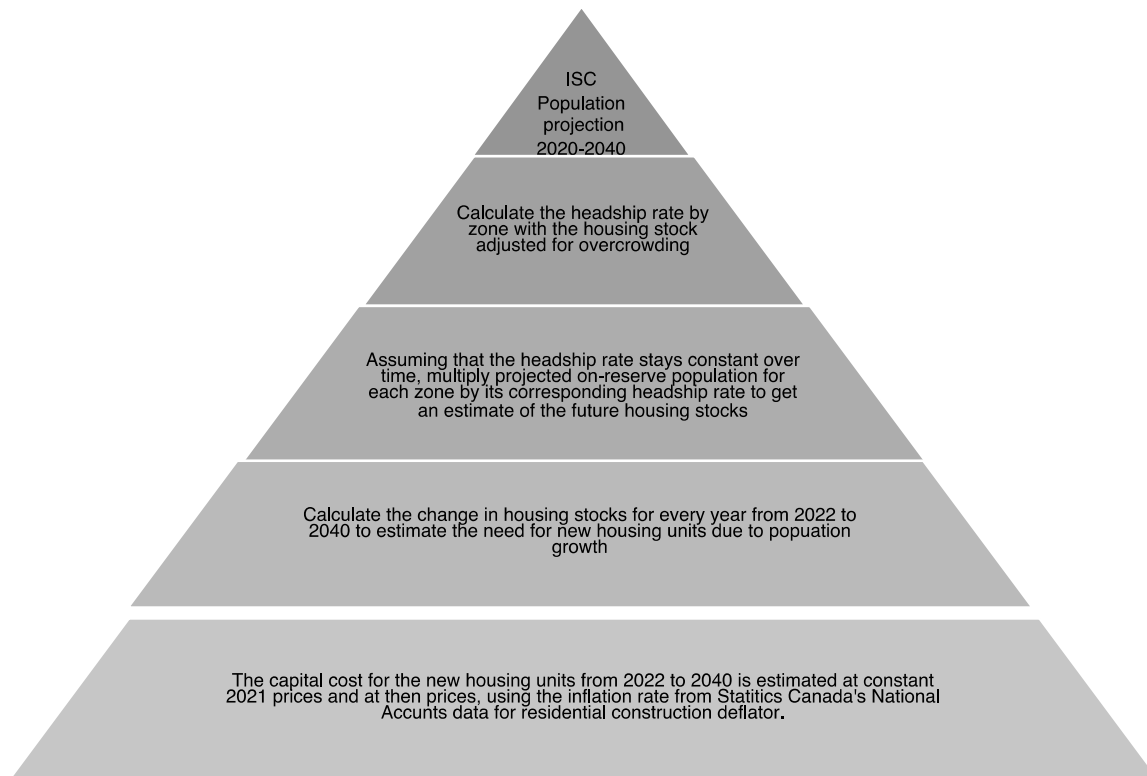
It is important to note that the extrapolated estimates for these three regions are only indicative and should be used cautiously.

#### *Estimating future housing needs due to population growth*

ISC's population projections are the basis for estimating future needs for housing units. From the estimates of the current housing needs we calculate the existing housing

stock adjusted for overcrowding by adding the new units needed to address overcrowding to the existing housing stock (Figure 18). The headship rate is normally defined as the ratio of the number of household (in our case the adjusted housing stock) to the size of the adult population. The headship rate can then be multiplied by the population projection to estimate the number of future households and the need for new housing units.

Figure 18



ISC's most recent population projection does not provide projection by age group. As a result, we could not use the estimate of headship rate based on the size of the adult population. Instead, we estimated the headship rate as the ratio of the adjusted housing stock to total population.

Assuming that the headship rate remains constant over the projection period, the future housing stock is estimated by multiplying the projection of total population by our estimate of the headship rate to estimate the total number of households. The change in the estimated number of households provides the estimate for new housing units needed to accommodate the increase in population.

The capital cost for the new housing units is estimated at constant 2021 prices and at then prices using the average rate of growth of Statistics Canada's residential construction deflator over the past twenty years as a proxy for construction cost inflation over the projection period.

### *A what-if scenario for migration on-reserve*

This scenario provides estimates for new housing needs if over the period 2022-2031, 10% of the off-reserve population in each zone migrate to live on-reserve. This would be in addition to the migration that underlies the population projection over that period. The housing stocks and new housing needs are estimated using the approach deployed for estimating the future housing needs due to population growth.

## **Capital Costs of Current and Future Housing Needs**

### *Current housing needs*

Current housing needs include the following components: new units needed to address overcrowding (when multiple families reside in a single unit); new units needed to accommodate the off-reserve families that want to live on-reserve; new units needed to replace unlivable units; new serviced (connected to water, wastewater system, and other utilities) lots needed for the new units; and units that need minor or major renovations. In addition, since the AFN Survey was conducted in 2018, we include the need for new units to accommodate the formation of new households due to the increase in population from 2018 to 2021.

Since only six regions\* were included in the Survey and we had to extrapolate the estimates for the excluded regions, we report the results for the participating and non-participating regions separately to highlight the additional degree of uncertainty attached to the estimate for the excluded regions.

### *Current housing needs for the six regions included in AFN Survey*

Table 6 contains the results of the six participating regions.

To address overcrowding, a nearly 30% increase to the existing housing stock is needed. Most of the need is concentrated in zones 1 and 2. There is likely overcrowding due to the lack of adequate space in single-family units, which were not estimated as data from the survey was unavailable. Further, it is possible that the reported need for major renovations in the Survey included the need for the expansion of the current housing units to address the lack of adequate space.

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\* The six regions are: British Columbia, Saskatchewan, Yukon, Ontario, Quebec, and Atlantic (New Brunswick, Nova Scotia, Prince-Edward- Island, and Newfoundland).

Table 6

Current Needs – Housing Units							
	Overcrowding	Migration	Replacement of outdated units	New units for population growth 2019-2021	Minor Renovations	Major Renovations	Servicing New Lots
<b>Atlantic</b>							
Zone 1	421	826	147	190	1935	480	116
Zone 2	950	310	101	227	1427	872	218
Zone 4	70	23	7	23	105	64	910
<b>Total</b>	<b>1441</b>	<b>1159</b>	<b>254</b>	<b>440</b>	<b>3467</b>	<b>1416</b>	<b>1244</b>
<b>Quebec</b>							
Zone 1	1647	1163	84	201	1145	947	2676
Zone 2	1387	472	62	133	291	1454	1799
Zone 3	1184	45	38	105	100	1608	1206
Zone 4	642	215	26	53	143	923	834
<b>Total</b>	<b>4860</b>	<b>1895</b>	<b>210</b>	<b>491</b>	<b>1679</b>	<b>4932</b>	<b>6514</b>
<b>Ontario</b>							
Zone 1	3049	3810	1624	299	2913	3984	6864
Zone 2	901	7210	1013	174	2664	1941	7953
Zone 3	38	150	1	1	10	5	188
Zone 4	1798	1988	1312	233	2222	2342	3923
<b>Total</b>	<b>5785</b>	<b>13159</b>	<b>3950</b>	<b>708</b>	<b>7809</b>	<b>8272</b>	<b>18928</b>
<b>Saskatchewan</b>							
Zone 1	742	4428	153	125	742	299	5266
Zone 2	7366	8367	1656	1003	6240	4570	16131
Zone 3	141	605	4	43	59	28	788
Zone 4	275	197	6	39	414	126	500
<b>Total</b>	<b>8524</b>	<b>13597</b>	<b>1819</b>	<b>1210</b>	<b>7454</b>	<b>5023</b>	<b>22686</b>
<b>British Columbia</b>							
Zone 1	1841	8009	961	257	1908	2223	9641
Zone 2	1635	4993	886	197	2204	2018	6000
Zone 3	285	1840	164	27	339	304	2083
Zone 4	637	1242	145	73	532	728	1661
<b>Total</b>	<b>4398</b>	<b>16084</b>	<b>2156</b>	<b>553</b>	<b>4982</b>	<b>5274</b>	<b>19384</b>
<b>Yukon</b>							
Zone 1	85	28	7	2	36	14	116
Zone 2	80	162	100	0	251	161	218
Zone 3	63	868	86	13	214	202	910
Zone 4	13	175	17	3	43	41	183
<b>Total</b>	<b>241</b>	<b>1233</b>	<b>210</b>	<b>18</b>	<b>545</b>	<b>418</b>	<b>1427</b>
<b>Total of Six Regions</b>							
Zone 1	7785	18266	2975	1074	8678	7948	24678
Zone 2	12319	21514	3818	1734	13078	11015	32318
Zone 3	1711	3509	293	188	722	2147	5175
Zone 4	3434	3839	1513	424	3459	4224	8011
<b>Total</b>	<b>25249</b>	<b>47128</b>	<b>8599</b>	<b>3421</b>	<b>25937</b>	<b>25335</b>	<b>70183</b>

The largest demand for new housing units is from those who want to move on-reserve, mainly in Ontario, Saskatchewan, and British Columbia. About 47,000 new units are needed to address this demand. This estimate however, could be significantly lower depending on the interpretation of the survey question. The Survey question asked, “how many people living off-reserve are seeking housing on-reserve?” but the guide for the survey requested the number of families. Thus, it is not clear whether the responses refer to the number of people or the number of families. We assumed the respondents followed the survey guide and reported the number of families. If, however, the responses indicate the number of people instead, the estimated number of units needed for this purpose would be between one-third and one-fourth of our baseline estimate.

Approximately 10% of the existing housing stock needs to be replaced by new units because existing units are outdated and unlivable. Almost half of these units are in Ontario. Since the Survey was done in 2018 and we are reporting the current needs in 2021, we have estimated the number of new units needed to accommodate the increase in population and in the number of households from 2018 to 2021. We estimate that 3,421 units will be needed to house the new families. Almost one-third of the units are needed in zone 2 in Saskatchewan as most of First Nations communities of this region are in zone 2.

About 60% of current housing units require either minor or major renovations. The need for and the distinction between minor and major renovations are somewhat subjective and depend on the judgement of those who responded to the Survey questions. However, other studies also report significant need for major and minor renovations of the housing stock on-reserve.<sup>45</sup>

The last column in Table 2 shows the estimates of the number of lots that need to be serviced (connection to water, wastewater and other utility systems) for the new units to be built, except for the units that replace the current units as they are assumed to already have utility services.

#### *A test of reasonableness*

As was explained in the methodology section, we used a simple approach to extrapolate the housing needs for non-participating First Nations in the AFN Survey. To test the reasonableness of IFSD's methodology and estimates, we conducted a complex sample analysis of the AFN Survey, using the SPSS software package, to scale up the survey results to all First Nations across the regions participating in the Survey.

Table 7 compares IFSD's estimates to the SPSS complex sample analysis. The results show very small differences between our estimates and the results from the statistical analysis. For example, for the new housing units needed for the six regions, the largest difference is just over 3 per cent for the new units needed to accommodate migration on-reserve. This provides reassurance that IFSD's extrapolation methodology can also be used for the three regions that were not included in the Survey. The SPSS sample analysis was not used to estimate housing needs as a common and consistent methodology was required for both participating and non-participating regions. The SPSS sample was only available for the regions participating in the Survey.

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<sup>45</sup> See Stewart Clatworthy, 2016, "Assessment of Current and Projected On-Reserve Housing Needs: 2011 Update," Four Directions Project Consultants.



Table 7

Test of Reasonableness						
Comparison between IFSD's Estimates and Complex Sample Analysis (housing units)						
	Housing Stock	Overcrowding	Migration	Replacement of outdated units	Minor Renovations	Major Renovations
<b>Atlantic</b>						
IFSD	7650	1441	1159	254	3467	1416
SPSS analysis	7609	1519	1296	274	3678	1334
<b>QC</b>						
IFSD	15545	4860	1895	210	1679	4932
SPSS analysis	15545	4860	1994	210	1679	4932
<b>ON</b>						
IFSD	25518	5785	13159	3950	7809	8272
SPSS analysis	25215	5775	13095	4043	7837	8161
<b>Sask</b>						
IFSD	17871	8524	13597	1819	7454	5023
SPSS analysis	17355	9002	12460	2001	7588	4843
<b>BC</b>						
IFSD	18158	4398	16084	2156	4982	5274
SPSS analysis	18244	4392	15239	2043	5051	5780
<b>Yukon</b>						
IFSD	1486	241	1233	210	545	418
SPSS analysis	1575	174	1577	256	616	500
<b>Total</b>						
IFSD	86229	25249	47128	8599	25937	25335
SPSS analysis	85543	25722	45661	8827	26449	25550

### *Capital costs of current housing needs*

To estimate the capital cost of meeting the current housing needs we made minor adjustments to the costs per unit reported in the AFN Survey. The adjustments were for cases where the reported cost was clearly the result of a misinterpretation of the survey question or a false entry. The data that were considered unusable were deleted from the sample. Table 8 shows the per unit costs for new units, servicing the lots for new units, minor renovations, and major renovations.

Table 8

Cost per Unit - 2021 Dollars				
	New units	Servicing New Lots	Minor renovations	Major renovations
<b>Atlantic</b>				
Zone 1	189943	37772	9248	53093
Zone 2	168498	30661	14140	48019
Zone 4	168498	30661	14140	48019
<b>Quebec</b>				
Zone 1	231251	45024	38236	71743
Zone 2	282457	49501	39140	91422
Zone 3	354371	86338	37413	79711
Zone 4	373365	77704	40291	79478
<b>Ontario</b>				
Zone 1	249335	41385	16174	57466
Zone 2	240001	42667	18481	55365
Zone 3	305672	36681	12227	61134
Zone 4	364588	55812	45665	115701
<b>Saskatchewan</b>				
Zone 1	238959	27485	6538	60791
Zone 2	229922	29332	12858	51820
Zone 3	192123	45880	15485	57350
Zone 4	322308	88319	14338	57350
<b>British Columbia</b>				
Zone 1	292222	42457	13891	54616
Zone 2	292768	40487	15828	57469
Zone 3	418176	36115	11405	45619
Zone 4	268355	39917	25131	56907
<b>Yukon</b>				
Zone 1	369279	26214	9118	34193
Zone 2	314571	45590	52429	103717
Zone 3	367569	41791	26594	106377
Zone 4	367569	41791	26594	106377

The cost per unit is an important factor in determining the capital cost of current housing needs. When the Survey was completed, there were concerns about the accuracy of the costs reported in the Survey. To ensure that the estimated costs per unit are reasonable we used the cost per square foot (in 2015 dollars) for new construction reported in Clatworthy (2016).<sup>46</sup> We estimated the cost per unit of a single detached

<sup>46</sup> Stewart Clatworthy, 2016, "Assessment of Current and Projected On-Reserve Housing Needs: 2011 Update," Four Directions Project Consultants.

home of 1500 square feet in 2021 prices for five regions, based on Clatworthy's estimated cost per square foot (Table 9).

Table 9

Cost per Unit in 2021(\$) Based on Clatworthy's Estimate				
Atlantic	Quebec	Ontario	Saskatchewan	British Columbia
318009	388007	320741	373393	297775

Clearly these estimates are much higher than the estimates we propose to use for the current study based on the AFN Survey. This reassures us that using the Survey's cost estimates does not result in exaggerating the capital cost of the current housing needs. Using the costs per unit reported in Table 8, the capital costs of the current housing needs for the six regions included in the AFN Survey are presented in Table 10.

Table 10

Capital Costs of Current Housing Needs - (\$Millions)								
	Overcrowding	Migration	Replacement of outdated units	New units for population growth 2019-2021	Minor Renovations	Major Renovations	Servicing New Lots	Total current needs
<b>Atlantic</b>								
Zone 1	79.9	156.9	27.8	36.2	17.9	25.5	47.8	392
Zone 2	160.1	52.3	16.9	38.2	20.2	41.9	42.1	371.7
Zone 4	11.8	3.9	1.2	3.9	1.5	3.1	3.3	28.6
<b>Total</b>	<b>251.8</b>	<b>213.1</b>	<b>46</b>	<b>78.2</b>	<b>39.6</b>	<b>70.4</b>	<b>93.2</b>	<b>792.3</b>
<b>Quebec</b>								
Zone 1	380.9	268.9	19.4	46.5	43.8	67.9	120.5	947.9
Zone 2	391.8	133.3	17.5	37.4	11.4	132.9	89	813.4
Zone 3	419.6	15.9	13.5	37	3.7	128.2	104.1	722
Zone 4	239.7	80.3	9.7	19.9	5.8	73.4	64.8	493.6
<b>Total</b>	<b>1431.9</b>	<b>498.5</b>	<b>60.1</b>	<b>140.9</b>	<b>64.7</b>	<b>402.4</b>	<b>378.4</b>	<b>2976.9</b>
<b>Ontario</b>								
Zone 1	760.2	950.1	405	74.7	47.1	228.9	284	2750
Zone 2	216.2	1730.3	243	41.8	49.2	107.5	339.3	2727.4
Zone 3	11.6	45.9	0.3	0.4	0.1	0.3	6.9	65.6
Zone 4	655.4	724.9	478.3	84.8	101.5	271	218.9	2535
<b>Total</b>	<b>1643.4</b>	<b>3451.2</b>	<b>1126.7</b>	<b>201.7</b>	<b>197.9</b>	<b>607.7</b>	<b>849.3</b>	<b>8078</b>
<b>Saskatchewan</b>								
Zone 1	177.2	1058.2	36.4	29.8	4.8	18.2	144.8	1469.4
Zone 2	1693.7	1923.7	380.8	230.7	80.2	236.8	473.2	5019
Zone 3	27.1	116.2	0.8	8.3	0.9	1.6	36.2	191.1
Zone 4	88.6	63.5	1.9	12.6	5.9	7.2	44.2	224
<b>Total</b>	<b>1986.6</b>	<b>3161.7</b>	<b>419.9</b>	<b>281.4</b>	<b>91.9</b>	<b>263.8</b>	<b>698.2</b>	<b>6903.5</b>
<b>British Columbia</b>								
Zone 1	538.1	2340.5	280.7	75	26.5	121.4	409.3	3791.6
Zone 2	478.5	1461.8	259.4	57.7	34.9	116	242.9	2651.3
Zone 3	119.2	769.5	68.8	11.1	3.9	13.9	75.2	1061.5
<b>Total</b>	<b>1306.7</b>	<b>4905</b>	<b>647.7</b>	<b>163.5</b>	<b>78.6</b>	<b>292.7</b>	<b>793.7</b>	<b>8188</b>
<b>Yukon</b>								
Zone 1	31.6	10.5	2.6	0.7	0.3	0.5	3	49.3
Zone 2	25.3	50.9	31.6	0.1	13.2	16.7	9.9	147.6
Zone 3	23.1	319.2	31.5	4.6	5.7	21.5	38	443.7
<b>Total</b>	<b>84.5</b>	<b>444.8</b>	<b>72.1</b>	<b>6.4</b>	<b>20.4</b>	<b>43</b>	<b>58.6</b>	<b>729.8</b>
<b>Total of Six Regions</b>								
Zone 1	1967.7	4785.2	772.1	262.8	140.5	462.5	1009.4	9400.2
Zone 2	2965.5	5352.4	949.2	406	209.1	651.7	1196.5	11730.4
Zone 3	600.5	1266.7	114.9	61.5	14.3	165.5	260.4	2483.9
Zone 4	1171.1	1269.9	536.4	141.8	129.2	400.4	405.2	4054
<b>Total</b>	<b>6704.9</b>	<b>12674.2</b>	<b>2372.5</b>	<b>872.1</b>	<b>493.1</b>	<b>1680.1</b>	<b>2871.5</b>	<b>27668.5</b>

For the regions included in the Survey, the total cost of the current housing needs is estimated to be about \$27.7 billion in 2021 prices. Approximately 79% of the total cost is for zones 1 and 2. In line with our estimate of the housing units needed, the highest capital cost is for accommodating the migration of the off-reserve population, with about

30 per cent of it for communities in zones 1 and 2 of British Columbia. The second highest capital cost is for new units needed to address overcrowding (multiple family units). This issue is more prevalent in Saskatchewan communities (particularly in zone 2), accounting for about 25 per cent of the total cost.

The lack of survey data required extrapolation for estimates for Manitoba, Alberta, and the Northwest Territories. Given the nature of the extrapolation, we only estimated the housing needs at the total provincial/territorial level rather than by geographic zones. It is important to emphasize that the estimates for these three regions are only indicative and subject to significant uncertainty.

Tables 11-13 present the housing need, the estimated cost per unit, and the capital cost for these three regions.

Table 11

Current Housing Needs - Housing Units							
	Overcrowding	Migration	Replacement of outdated units	New units for population growth 2019-2021	Minor Renovations	Major Renovations	Servicing New Lots
<b>Manitoba</b>	4377	12809	1471	467	8529	4770	16748
<b>Alberta</b>	6501	14569	3034	739	6617	6380	20220
<b>NWT</b>	771	3945	673	15	1742	1336	4523
<b>Total</b>	11650	31323	5179	1221	16888	12486	41491

Table 12

Cost per Unit (\$)				
	New units	Servicing New Lots	Minor renovation	Major renovation
<b>Manitoba</b>	244960	37034	12679	51727
<b>Alberta</b>	264735	40698	18617	65702
<b>NWT</b>	372421	42903	39003	107361

Table 13

Current Housing Needs - (\$Millions)								
	Overcrowding	Migration	Replacement of outdated units	New units for population growth 2019-2021	Minor Renovations	Major Renovations	Servicing New Lots	Total current needs
<b>Manitoba</b>	1072.3	3137.7	360.5	114.3	108.1	246.8	620.2	5659.9
<b>Alberta</b>	1721.1	3856.9	803.3	195.8	123.2	419.2	822.9	7942.2
<b>NWT</b>	287.3	1469.3	250.8	5.6	68	143.4	194.1	2418.4
<b>Total</b>	3080.6	8463.9	1414.5	315.7	299.3	809.4	1637.2	16020.6

The estimates for Manitoba, Alberta and the Northwest Territories add another 49,000 units to the required new housing units. Almost 50% of the needed units are for Alberta communities. The cost of the new units and the cost of servicing the lots and minor and major renovations is estimated at \$16 billion in 2021 prices.

For all nine regions, the current housing needs of all First Nations communities are estimated to require a capital investment of about \$44 billion.

*A range for the estimated current housing needs*

Due to data gaps and the inherent uncertainty associated with survey-based data, these estimates are subject to a margin of error. It is therefore prudent to consider a range for the estimates that would reflect different possible outcomes.

A statistical analysis of the AFN Survey provides an estimate of the standard error of the Survey data. Using the estimated standard errors we can provide a 95% confidence interval for our estimates, which would effectively provide a range around the baseline estimates that were presented above.

The estimated standard errors are only available for the six regions that participated in the Survey. To provide a similar confidence interval for the three non-participating regions, we used the standard error of Saskatchewan estimates for Manitoba, the standard error of Yukon for the Northwest Territories, and a weighted average of the standard errors of the included regions for Alberta.

The estimated ranges have been calculated only at the regional level rather than by geographic zone. The following figures present the baseline estimate and the high and low estimates for each region for the current housing needs in housing units and millions of dollars. Tables of these estimates are available in Appendix 6.

To get the range for the capital cost of the current housing needs, we apply the baseline prices to the high and low estimates.

Figure 19

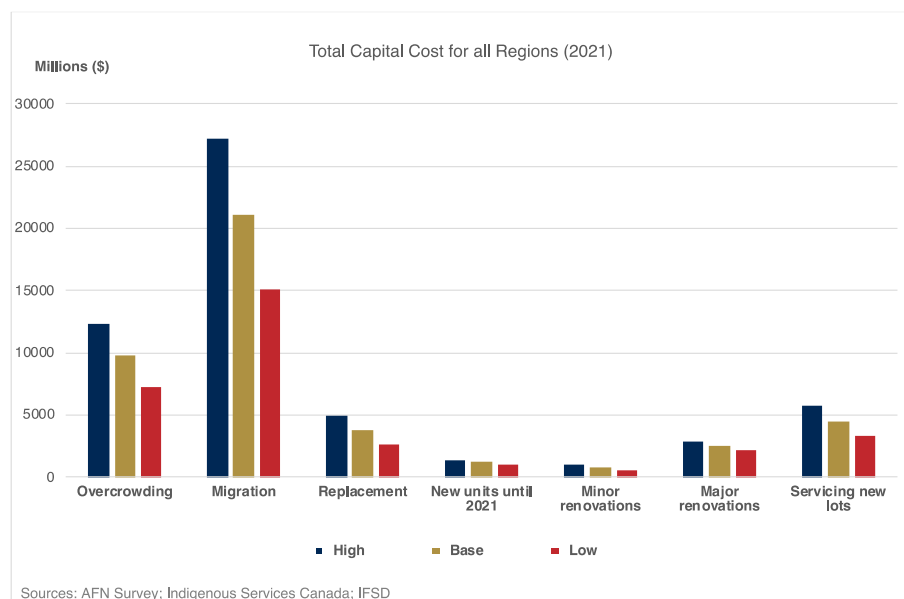


Figure 20

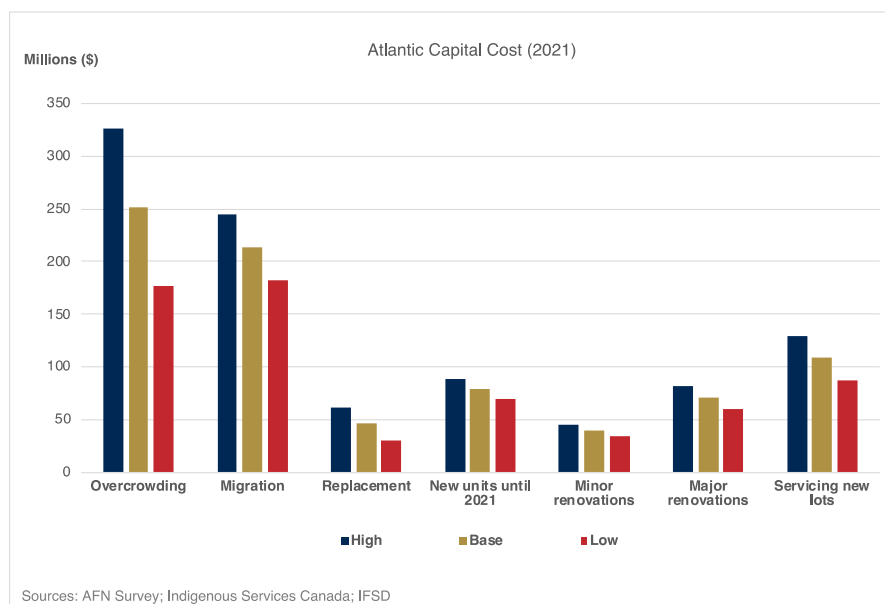


Figure 21

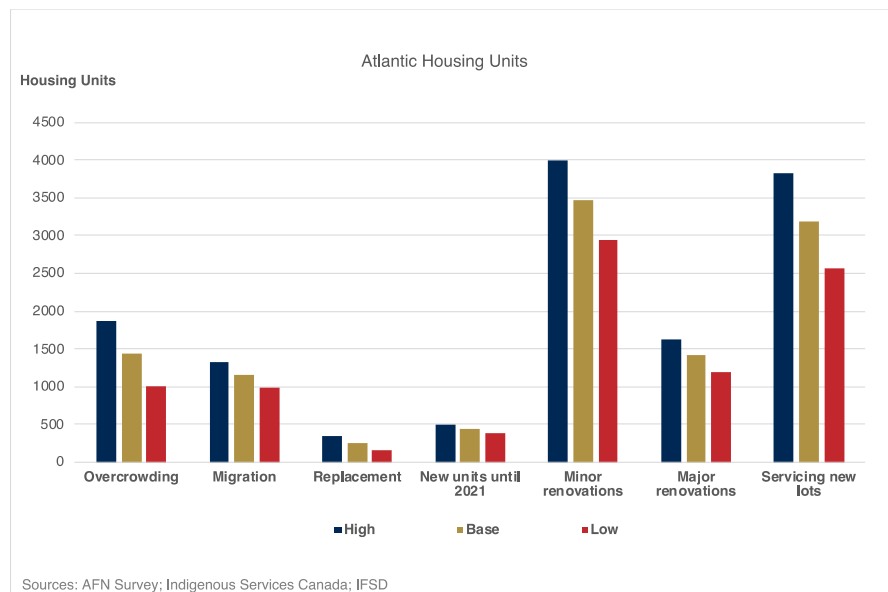


Figure 22

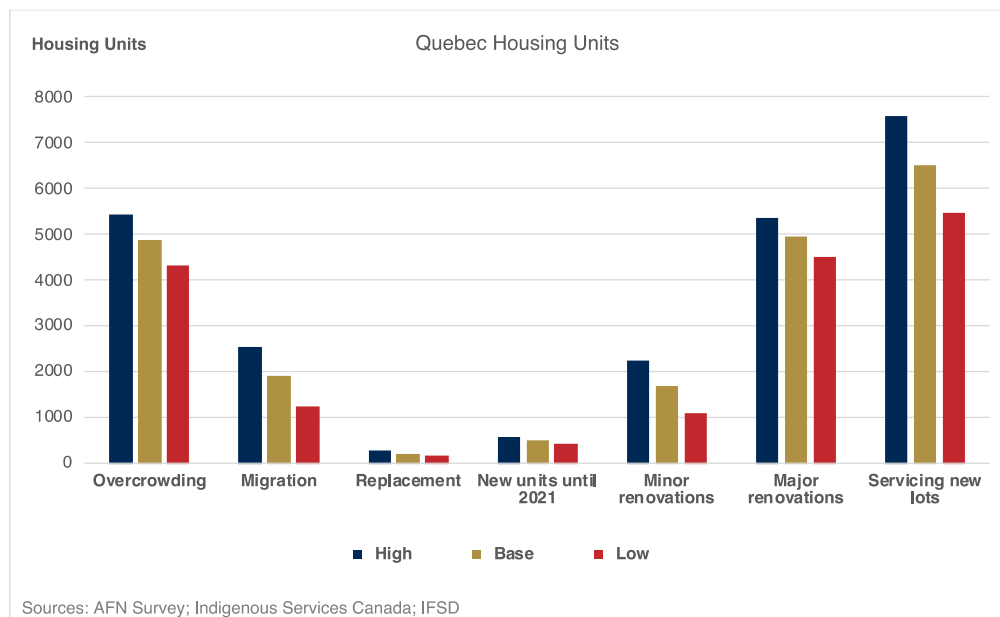




Figure 23

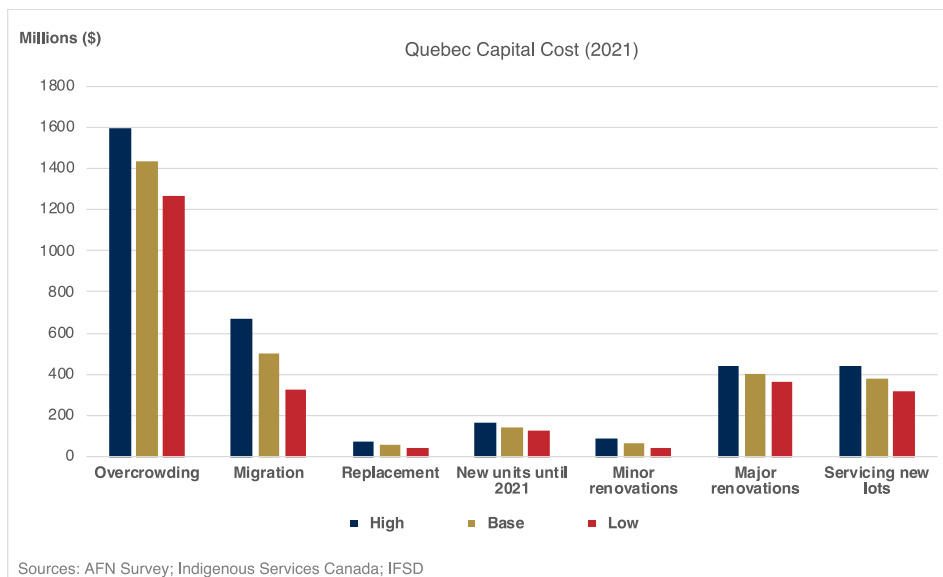


Figure 24

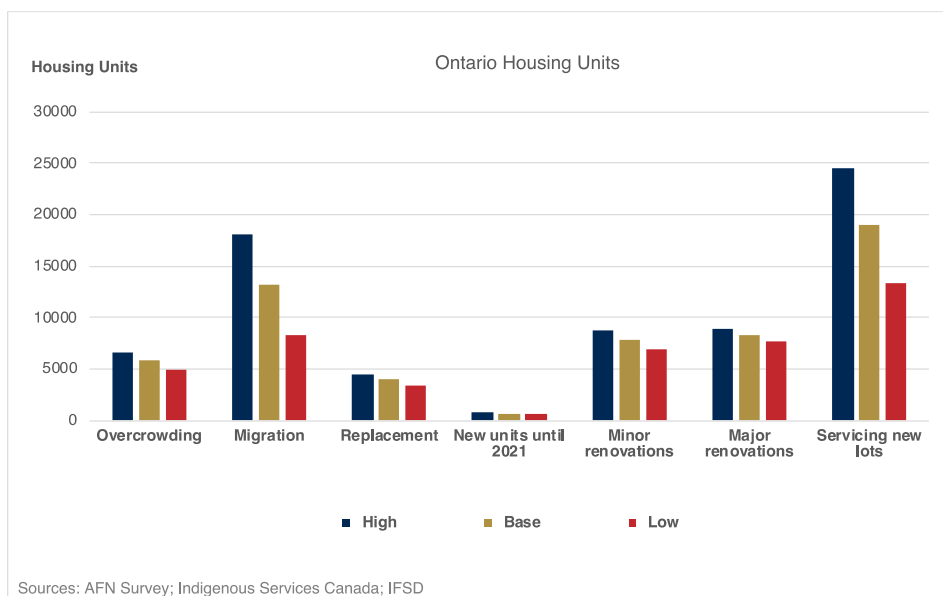


Figure 25

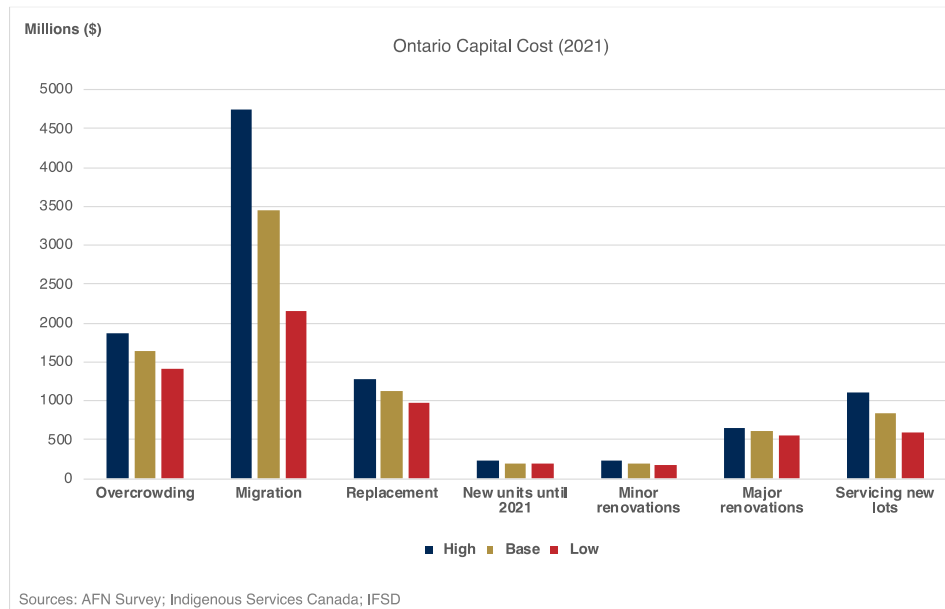


Figure 26

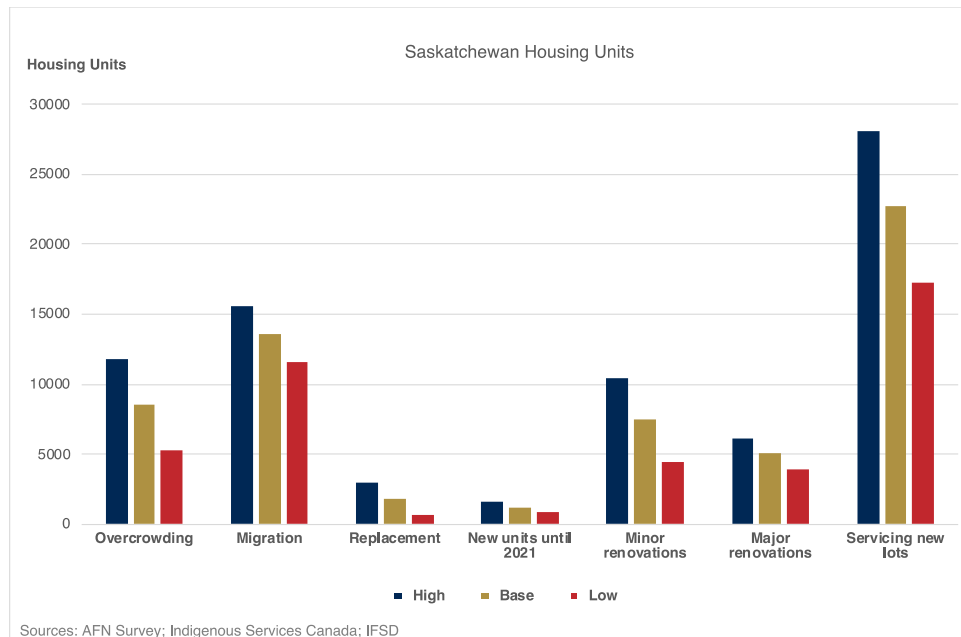


Figure 27

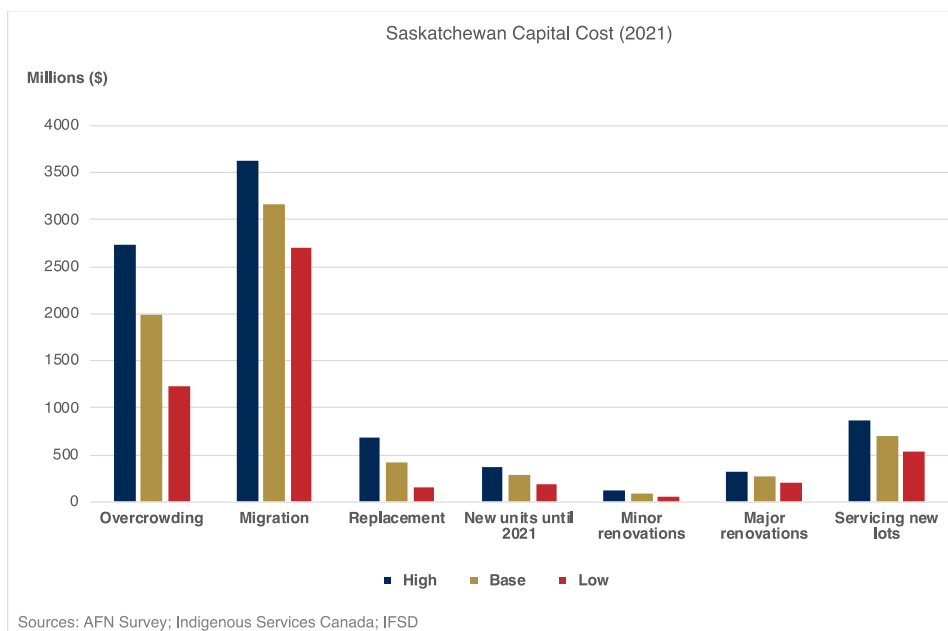


Figure 28

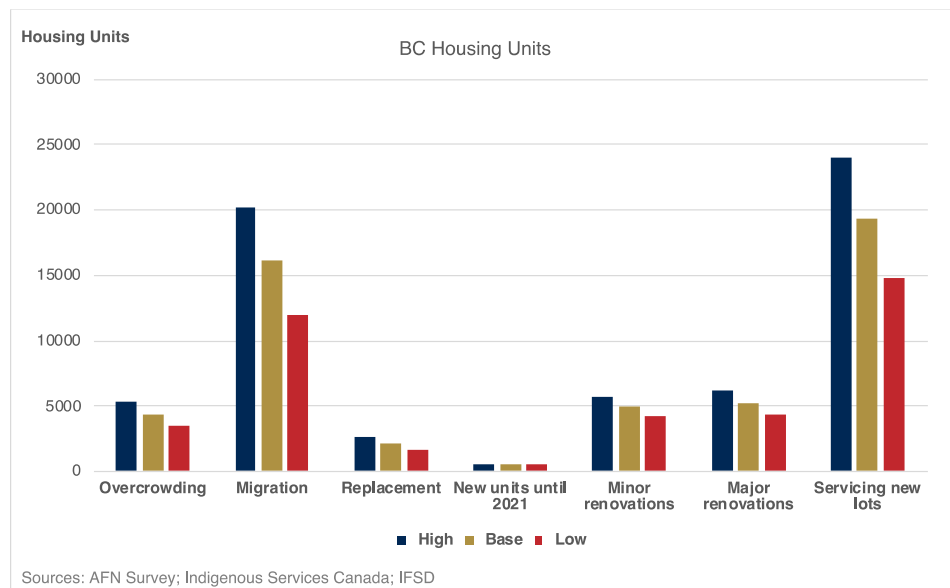


Figure 29

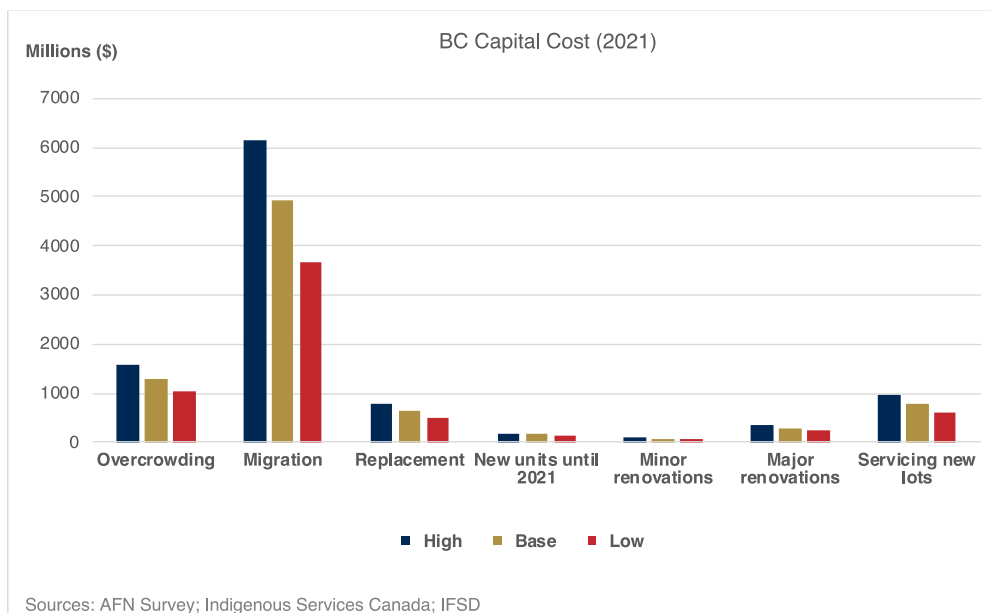


Figure 30

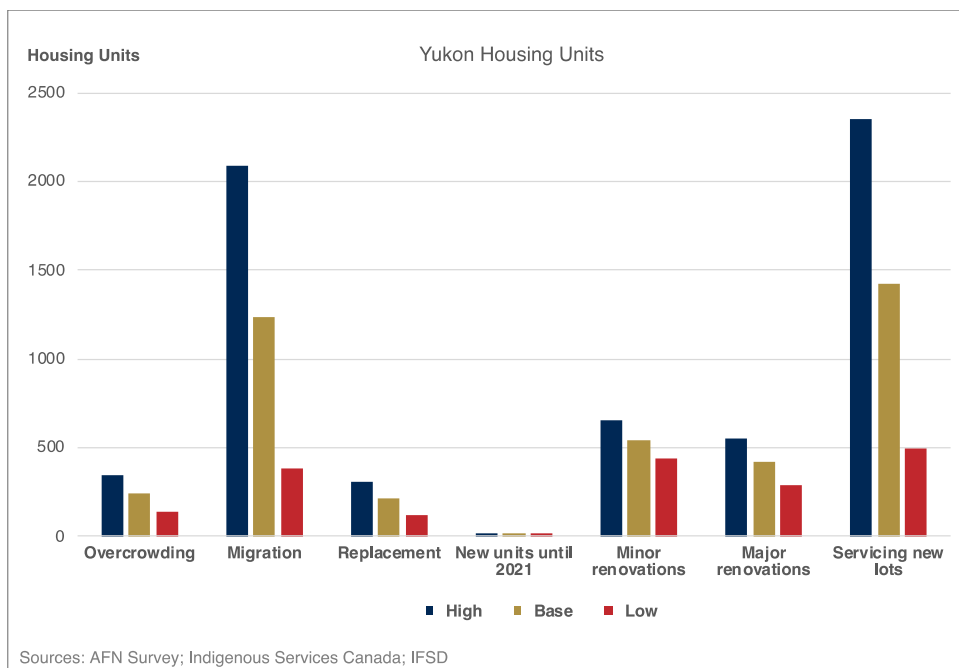


Figure 31

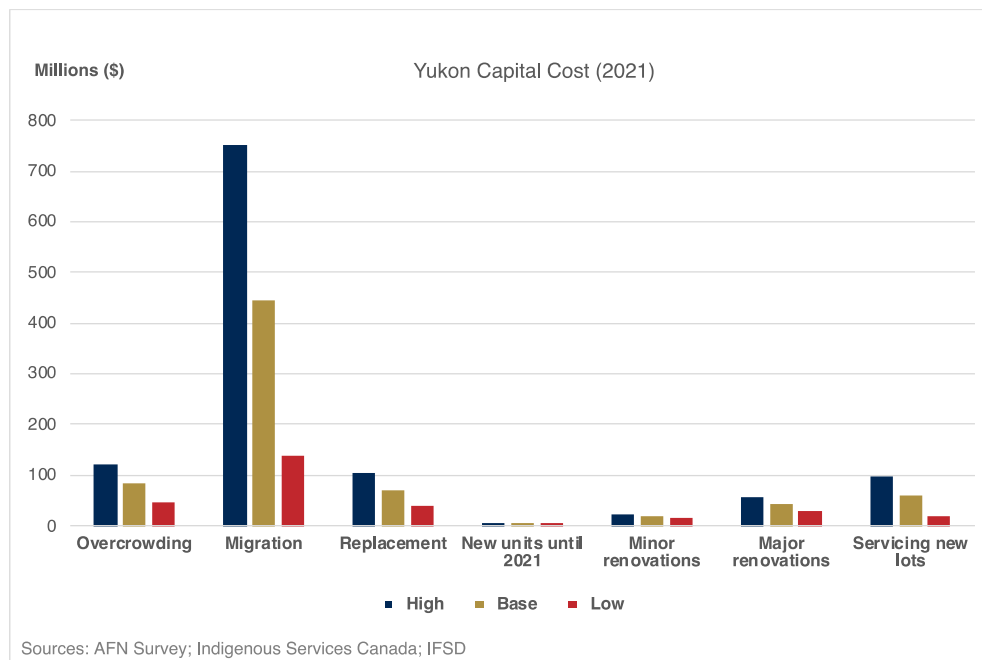


Figure 32

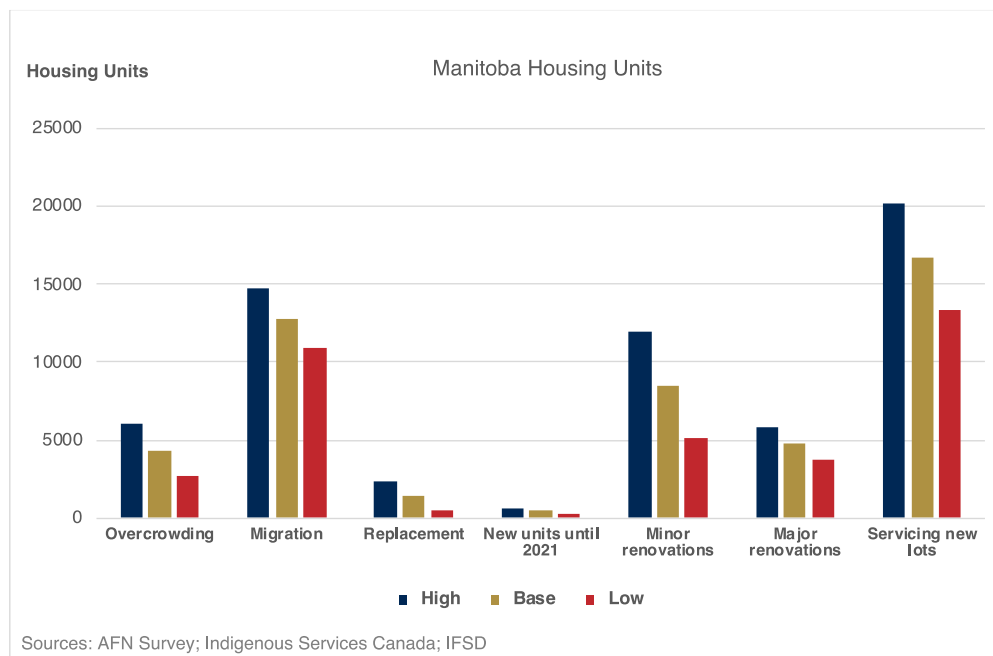


Figure 33

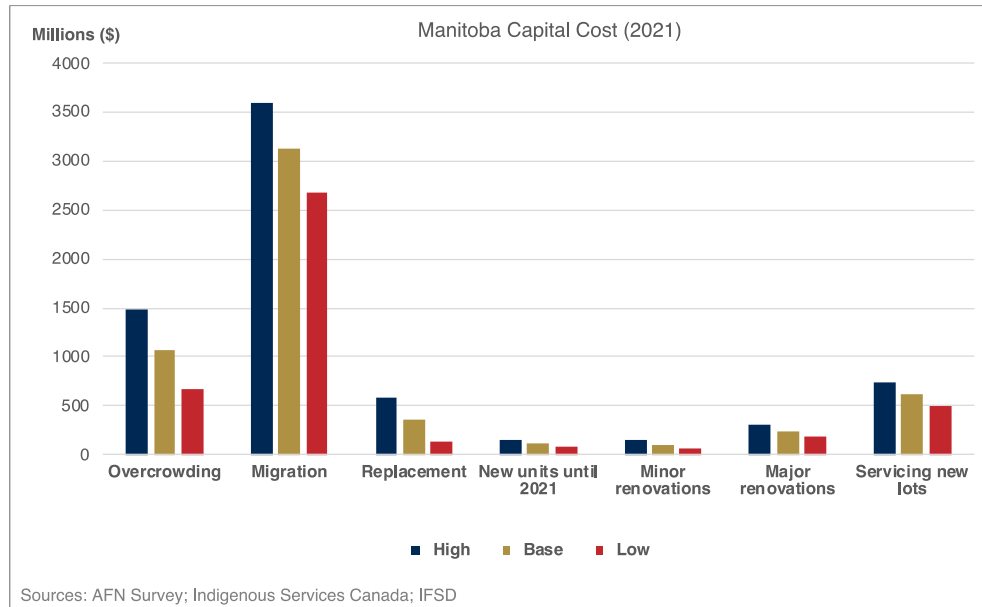


Figure 34

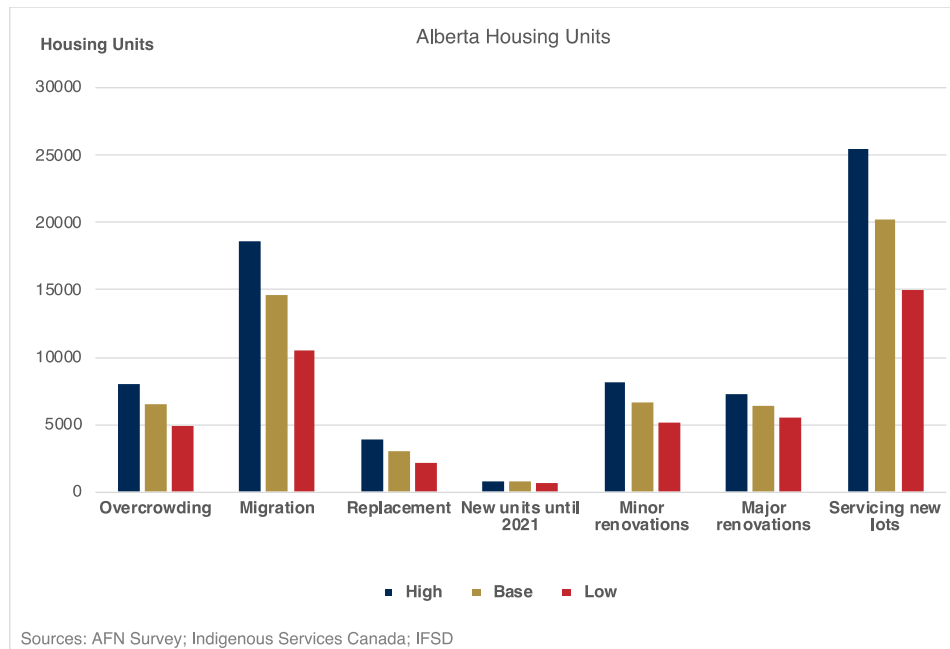


Figure 35

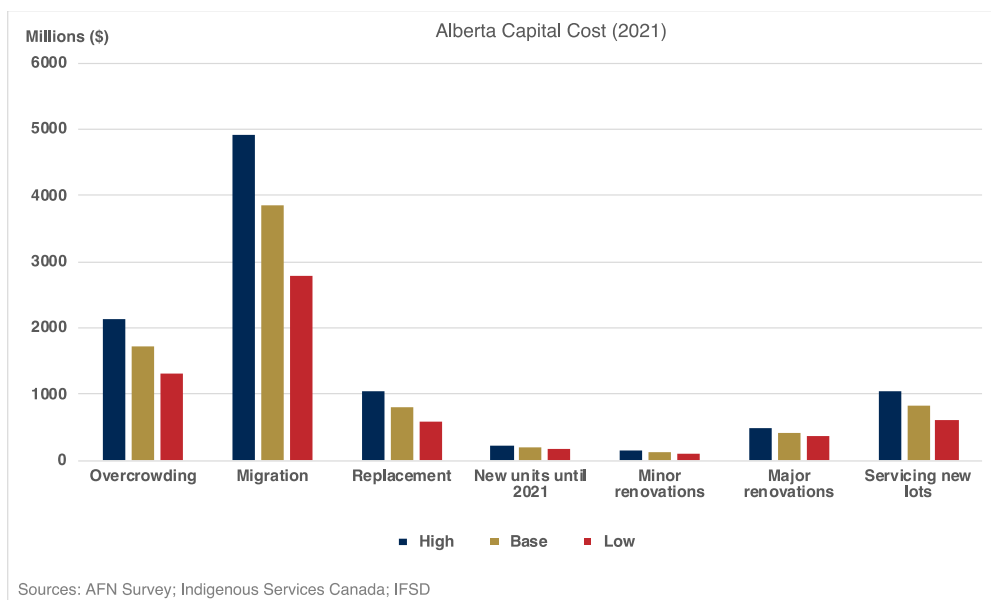


Figure 36

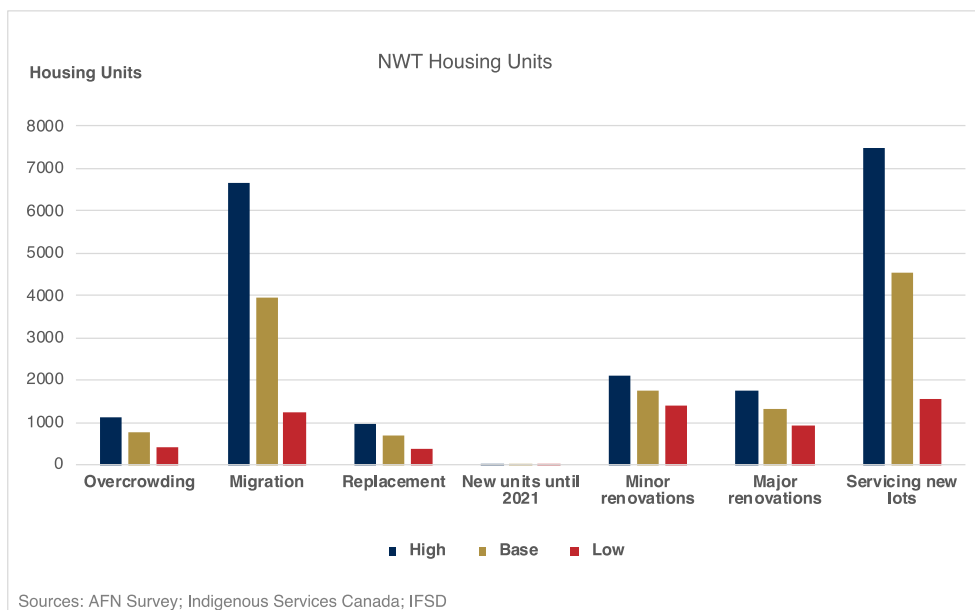
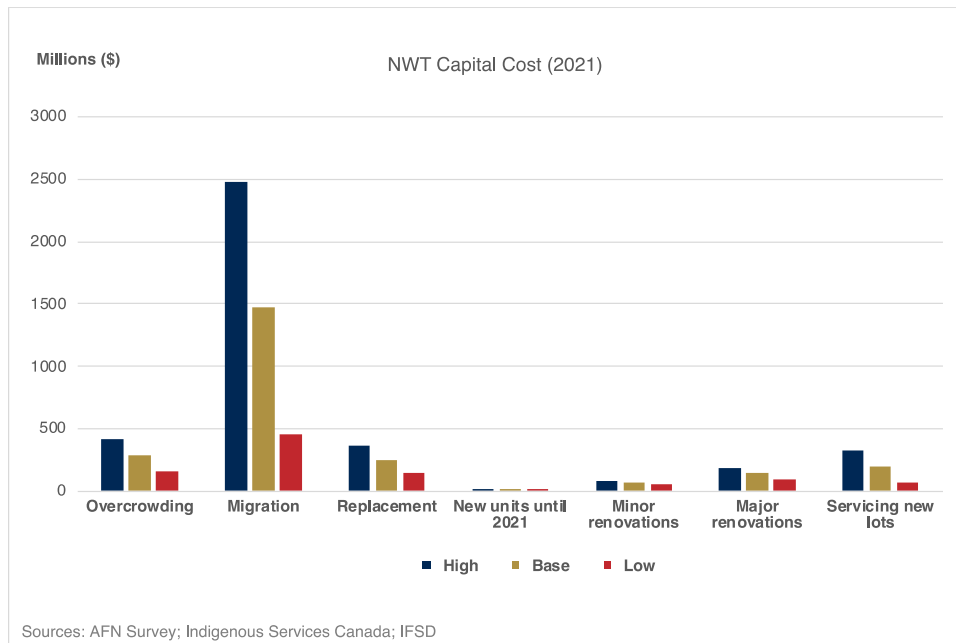




Figure 37



## Future housing needs due to population growth

In the previous section, housing needs were estimated to address current deficiencies in the housing stock, including, overcrowding, outdated units and desired migration on-reserve. The estimated capital investment would help to improve the conditions of the existing housing stock and help to provide new housing units to address current needs. Demand for new housing units can also arise as First Nations' on-reserve population grows.

The on-reserve population is growing rapidly due to a relatively high fertility rate and rising life expectancy at birth. From 2020 to 2030, First Nations' on-reserve population is expected to grow at an average rate of 1.7% per year compared with only 1.0% for the rest of Canada. The expansion of the population and the formation of new households and families will require new housing units.

To estimate the future housing needs of First Nations, we need a projection of the population and an estimate of the headship rate as was explained in the methodology section. ISC's most recent population projections are used for projections from 2020-2040. In our baseline estimate we use the medium-growth population projection, which assumes that the fertility rate will remain constant and the life expectancy at birth will increase at a moderate rate over the projection period.

For each zone in each region, the number of persons per household is estimated by dividing the population estimate by the existing stock of housing plus the new housing units needed to address overcrowding. Assuming that the headship rate (1/(persons per household)) remains constant over time, the estimate of the increase in population

every year multiplied by the headship rate provides an estimate of the number of new households and thus new housing units needed over the next 19 years.

The capital cost of the new units can be estimated at constant 2021 prices, using the estimated cost of construction of a single detached new unit plus the cost of servicing the lots needed for the new units. It is also important to show the capital cost over the next 19 years at then prices, using an estimate of the rate of increase in construction cost over the next 19 years. A reasonable estimate of future inflation in construction cost is the average rate of increase over the past 20 years, which included ups and downs of costs through different business cycles.

Tables 14 and 15 present the projection for future housing needs due to population growth. For the six regions that were included in the AFN Survey, the results are shown by geographic zone. The estimates for the other three regions are shown only at the regional level.

Table 14

Future Housing Needs Due to Population Growth (2022-2040)				
		Housing Units	Capital cost at constant 2021 prices (\$ Millions)	Capital cost at then prices (\$Millions)
<b>Atlantic</b>				
Zone1		2343	533.5	685
Zone 2		2374	472.8	608
Zone 4		178	35.5	46
Total		4895	1041.7	1339
<b>Quebec</b>				
Zone1		2478	684.5	922.2
Zone 2		924	306.9	413.4
Zone 3		805	354.8	478.1
Zone 4		481	217.1	292.4
Total		4689	1563.3	2106.1
<b>Ontario</b>				
Zone 1		3444	1001.4	1480.5
Zone 2		2305	651.6	963.3
Zone 3		19	6.4	9.4
Zone 4		1851	778.2	1150.4
Total		7619	2437.6	3603.7
<b>Saskatchewan</b>				
Zone 1		1458	388.5	561.98
Zone 2		10819	2805.0	4057.1
Zone 3		259	61.7	89.258
Zone 4		487	200.0	289.29
Total		13024	3455.1	4997.6
<b>British Columbia</b>				
Zone 1		2956	989.3	1376.7
Zone 2		2476	825.1	1148.5
Zone 3		362	164.3	228.6
Zone 4		925	285.2	397
Total		6719	2263.9	3150.8
<b>Yukon</b>				
Zone 1		36	14.4	18.3
Zone 2		147	52.8	67.2
Zone 3		157	64.4	82.0
Zone 4		32	12.9	16.4
Total		372	144.6	184.0
<b>Total of Six Regions</b>				
Zone 1		12716	3612	5045
Zone 2		19046	5114	7257
Zone 3		1602	652	887
Zone 4		3954	1529	2191
Total		37317	10906	15381

Table 15

Future Housing Needs Due to Population Growth - 2022-2040			
	Housing Units	Capital cost at constant 2021 prices (\$ Millions)	Capital cost at then prices (\$ Millions)
<b>Manitoba</b>	8091	2281.7	3288.3
<b>Alberta</b>	7683	2346.7	3447.5
<b>NWT</b>	391	162.3	205.9
<b>Total</b>	16165	4790.7	6941.7

The largest demand for new housing units is estimated for Saskatchewan, mostly in zone 2 with a current population of about 65,000. While Saskatchewan has the third largest on-reserve population after Ontario and Manitoba, the projected average annual rate of growth of its on-reserve population is almost twice as high as Ontario's and 33% higher than Manitoba's.

All regions together will need about 53,000 new housing units to accommodate the natural increase in on-reserve population over the period 2022 to 2040. This costs about \$16 billion at constant 2021 prices and about \$22 billion if we consider the increase in construction costs over time.

#### *A range for future housing needs*

Population projections are sensitive to their underlying assumptions, particularly the fertility rate and changes in life expectancy at birth. Changes in these assumptions would impact population growth and thus the estimate of future housing needs. ISC provides two alternative on-reserve population projection scenarios. In the high-growth scenario the fertility rate increases over time and the life expectancy at births rises at a faster rate than in the baseline scenario. In the low-growth scenario, the fertility rate declines over time and the life expectancy increases at a lower rate than in the baseline scenario. Table 16 presents future housing needs in the three scenarios.

The population projections show the highest annual average growth rates in on-reserve population in the Saskatchewan region. This together with a relatively large on-reserve population (16% of the total) translates into a higher range for the future housing needs in that region. Between 11,000 and 16,000 new units will be needed from 2022 to 2040 in Saskatchewan.

For all regions together, future housing needs range from about 44,000 to 67,000 depending on population scenario. The capital cost ranges from about \$13 billion to \$20 billion at constant 2021 prices and from about \$18 billion to \$28 billion at then prices.

Table 16

Future Housing Needs - Three Scenarios (2022-2040)					
		Housing Units	Capital cost at constant 2021 prices (\$ Millions)	Capital cost at then prices (\$ Millions)	Average Population growth (Percent %)
Atlantic	High	5719	1217	1573	2.46
	Baseline	4895	1042	1339	2.16
	Low	4329	921	1180	1.96
Quebec	High	6135	2045	2773	1.35
	Baseline	4689	1563	2106	1.06
	Low	3700	1234	1647	0.85
Ontario	High	9799	3135	4686	1.39
	Baseline	7619	2438	3604	1.11
	Low	6145	1966	2879	0.91
Manitoba	High	10276	2898	4224	1.92
	Baseline	8091	2282	3288	1.56
	Low	6770	1909	2735	1.33
Saskatchewan	High	15940	4229	6166	2.38
	Baseline	13024	3455	4998	2.02
	Low	11096	2944	4223	1.76
Alberta	High	9911	3027	4483	1.61
	Baseline	7683	2347	3448	1.3
	Low	6320	1930	2822	1.09
British Columbia	High	8380	2824	3988	1.6
	Baseline	6719	2264	3151	1.32
	Low	5638	1900	2613	1.12
Yukon	High	432	168	217	1.12
	Baseline	372	145	184	0.99
	Low	304	118	149	0.81
NWT	High	705	293	378	0.62
	Baseline	391	162	206	0.34
	Low	172	71	79	0.14
Total	High	67297	19835.7	28489	1.75
	Baseline	53483	15697	22322.4	1.43
	Low	44475	12993.7	18327.3	1.21

## **Total housing needs**

Total housing needs consist of the current needs to address various deficiencies in the current stock and future needs until 2040 to address population growth and new household formation. Figure 38 and Table 17 summarize IFSD's estimates for total housing needs at the regional level. To address the current needs the housing stock should be doubled. About 78,000 of the new units are for those who currently want to move on-reserve. As was described earlier, this may be an overestimate of about 55,000 units depending on the interpretation of the respondent providing survey data.

Moreover, such a large migration of First Nations people on-reserve seems inconsistent with available analysis. Recent analysis that linked the 2011 and 2016 Census results concluded that there were in fact net migration out of reserves, meaning that more people left the reserves than entered them.<sup>47</sup> A potential contributor to past net migration could be the lack of adequate housing on-reserve. It is likely that if on-reserve housing conditions improved, there will be migration on-reserve in the future.

Given the uncertainty of this estimate and its large impact on the overall current housing needs, Table 17 reports the total current needs including and excluding this item.

Accommodating population growth over the next 19 years requires an additional 53,000 units at a cost of \$16 billion. Funding current and future housing needs is estimated to require capital investment of approximately \$59 billion at constant 2021 prices.

The baseline cost for the current housing needs is estimated at \$43.7 billion. Taking into account the sampling standard error provides a range of estimates between \$55.4 billion and \$32 billion.

Two alternative scenarios for population increase over the next 19 years provide a range for the future housing needs. The capital requirement to meet future housing needs is estimated to be between \$13 and \$20 billion at constant 2021 prices.

Overall, the capital requirement for current and future housing needs is estimated between \$45 and \$75 billion. Excluding the impact of migration would significantly reduce this range to \$30-\$48 billion.

Given the enormity of the current needs for new housing units, a relatively short construction season in most communities and other practical constraints, it is highly unlikely that those needs can be met now even if the required funds were available. It is therefore important to have a plan to address these needs over time.

It should also be noted that due to data gaps the estimates presented here are indicative and should be used cautiously with consideration of the range of estimates provided in this report.

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<sup>47</sup> See Jean-Dominique Morency, Patrice Dion, Chantal Grondin, 2021, "Migration Between Indian Reserves and Off-Reserve Areas: an Exploratory Analysis Using Census Data Linkage," *Canadian Studies in Population*, 48:91–122.

Figure 38

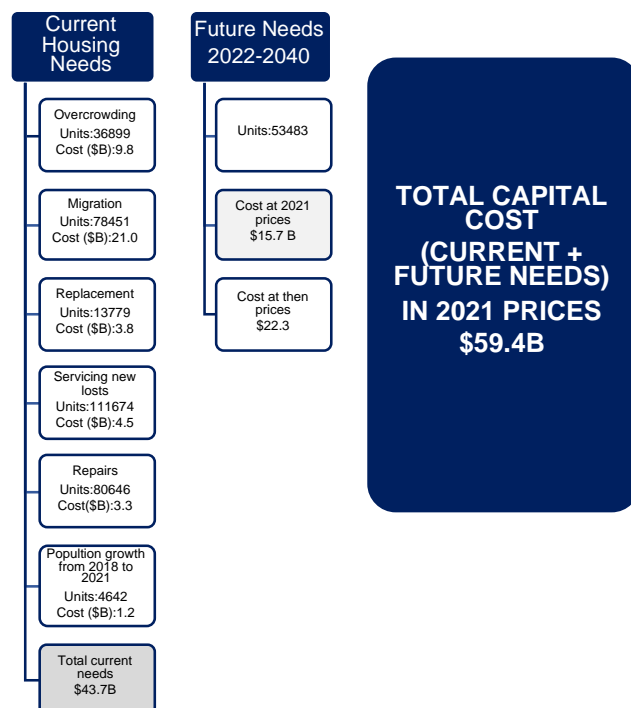


Table 17

Total Housing Needs							
	Current needs			Future needs		Total	
	Current Housing Stock	New housing units	Units that need minor or major renovations	Total capital cost of current needs (\$ Millions)	New housing units	Capital cost of future needs in constant 2021 prices (\$ Millions)	Capital cost of current and future needs (\$ Millions)
Atlantic	7650	3295	4884	792.9	4895	1041.7	1834.7
Quebec	15545	7456.4	6611	2976.9	4689	1563.3	4540.2
Ontario	25518	23602	16081	8087.7	7619	2437.6	10525.3
Manitoba	18459	19125	13300	5659.9	8091	2281.7	7941.6
Saskatchewan	17871	25150	12477	6909	13024	3455.1	10364.1
Alberta	20312	24844	12996	7942.2	7683	2346.7	10288.9
British Columbia	18158	23191	10256	8188	6719	2263.9	10451.9
Yukon	1486	1703	962	730.2	372	144.6	874.8
NWT	4755	5405	3078	2419.6	391	162.3	2581.9
<b>Total</b>	<b>129754</b>	<b>133770</b>	<b>80646</b>	<b>43706</b>	<b>53483</b>	<b>15697</b>	<b>59403</b>
<b>Total Excluding Migration</b>	<b>129754</b>	<b>55319</b>	<b>80646</b>	<b>22568</b>	<b>53483</b>	<b>15697</b>	<b>38265</b>



## A what-if scenario for migration on-reserve

In this scenario we assume that every year over the next 10 years, one per cent of the off-reserve population from each zone will move to live on-reserve. To account for the reduction of the off-reserve population we reduce the projected population every year by the numbers that are assumed to have migrated.

This scenario is done to provide an estimate for measuring the impact of migration from off-reserve to on-reserve. As was discussed earlier, it is unlikely that such a large net migration on-reserve would be a realistic scenario. In total, accommodating the migration of 10% of the off-reserve population will require about 31,000 new units at a cost of \$7.2 billion in 2021 prices (Table 18).

Table 18

Housing Needs for Ten Per cent Increase in Migration from Off-reserve over the Next Ten Years			
	Units (2022-2031)	Capital cost at constant 2021 prices (\$Millions)	Capital cost at then prices (\$Millions)
Atlantic	1583	354.5	406.9
Quebec	1359	402.7	471.1
Ontario	4157	1250.9	1558.1
Saskatchewan	13024	2832.7	3487.3
British Columbia	6719	1066.8	1304.8
Yukon	372	97.9	114.3
Manitoba	1810	510.4	627.5
Alberta	1951	595.7	738.9
Northwest Territories	319	132.7	153.4
<b>Total</b>	<b>31294</b>	<b>7244</b>	<b>8862</b>

**Action: Address existing housing gaps in First Nations to meet immediate needs.**

**Action: Refine assessments of future needs through a bottom-up study that captures variances with greater detail to enhance the precision of cost estimates.**

## Performance measurement for well-being

### First Principle Infrastructure Fit for Purpose Question

To truly understand the magnitude of the First Nations housing infrastructure gap and advance an evidence-based cost estimate towards filling the infrastructure gap it is necessary to understand the contribution of the housing stock to the well-being of First Nations peoples.

Typically, an infrastructure gap is defined as the engineering condition gap that arises from not properly maintaining the existing infrastructure stock. This is an important component, but it most crucially does not ask the first principle question of whether the existing infrastructure asset remains fit for purpose with respect to meeting the needs of the citizen/consumer of the infrastructure asset. The triple bottom line of condition, service level performance and future need forms the foundation of a broader definition of the infrastructure gap.

This broader definition of the infrastructure gap needs to be explicitly linked to, and informed by, well-being to citizens and society that will be enabled by the infrastructure investments of yesterday, today, and tomorrow. Moreover, any cost estimate of the infrastructure investment required to address a current and projected infrastructure gap should be informed by this broader definition of the infrastructure gap.

Applying this well-being lens to infrastructure will help to transform the First Nations infrastructure investment narrative from one focusing only on fixing legacy issues to a system-wide approach that emphasizes the holistic well-being of First Nations Peoples.

#### *The 2021 to 2040 Housing Well-Being Roadmap*

The purpose of this section of the report is to “identify potential strategic objectives and indicators that could inform a measurement framework for housing, with a focus on First Nations control and care of delivery.”

There are two very important points to note from this purpose statement.

First, is that this section will identify potential strategic objectives and indicators but ultimately the right potential strategic objectives and indicators are those that will be considered, debated, and chosen by First Nations on-reserve. They are the end customers/consumers of the housing well-being outcomes that a housing well-being performance measurement framework outlines.

This section will put forward a draft measurement framework with strategic objectives and indicators based on the literature research carried out. The framework, methodology and process are the key takeaways from this section, and they should ultimately be tailored to reflect value and well-being from the residents of on-reserve housing.

Second, the 2021 to 2040 time horizon for housing needs being considered in this report also means that there is an opportunity to evolve the housing needs from a current state perspective to a more aspirational one in 2040. The future state housing needs must seek to eliminate any gap with respect to a First Nations and non-First Nations expectation from a housing needs perspective.

The intent of this section of the report is to advocate for a 2040 housing needs aspirational future state that is much more robust with respect to the housing strategic objectives and indicators centered on well-being. The framework recognizes that there is a network of infrastructure asset classes that need to be integrated and working with synergies to realize desired housing outcomes on-reserve.

This would be a change from the current state where the focus is solely on the housing asset class where the definition of the acceptable dwelling condition is focused on the condition of the house as well as the degree to which there is overcrowding in the existing housing stock.

The balance of this section is broken down as follows:

- 1) Understanding Holistic First Nations Well-Being
- 2) Understanding First Principle Housing Outcomes and Alignment to Holistic First Nations Well-Being
- 3) Making Real the Concept of First Nations Control and Care of Delivery
- 4) Introducing a Draft First Nations Housing Performance Measurement Framework with Potential Strategic Objectives and Indicators
- 5) Proposing a Reporting Framework to Assess a Well-Being Centered First Nations Infrastructure Gap
- 6) Recognizing that One Size Does Not Fit All and Adopting a Zone Based Approach to the Infrastructure Gap Approach
- 7) Developing a Roadmap Towards the Implementation of the Performance Measurement Framework

## **Step 1: Understanding Holistic First Nations Well-Being**

The cost estimates to address the First Nations housing infrastructure gap to date reflect the need to address existing legacy issues that are driven by the poor condition of the existing housing stock. This approach is consistent with an engineering condition definition of the infrastructure gap that informs the debate around the need for infrastructure investment.

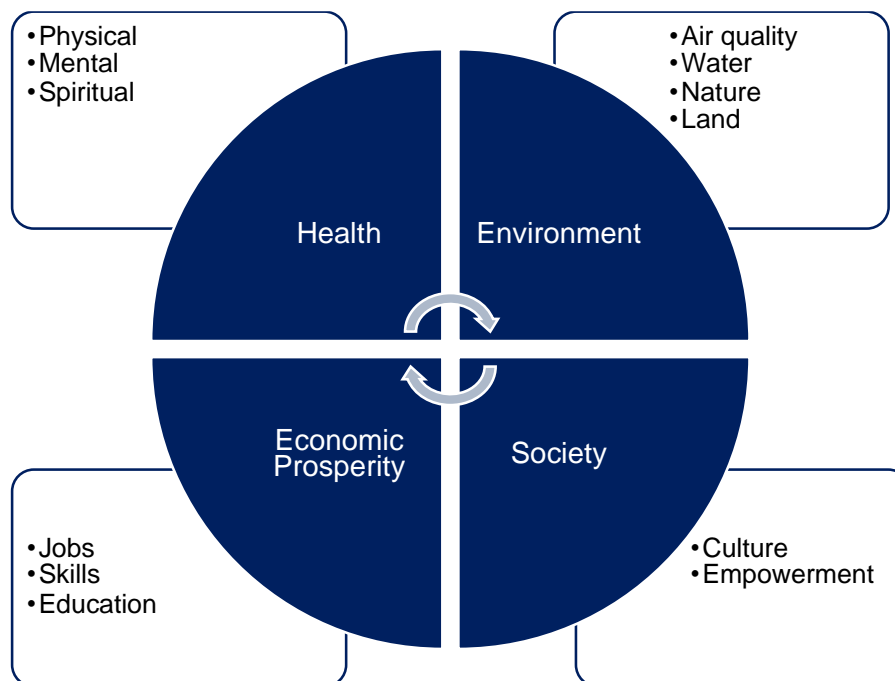
However, as we look to transition towards the realization of good housing outcomes for First Nations on-reserve to 2040 there is an opportunity for AFN to become a global leader in evidence-based infrastructure investment decision-support by adopting a well-being centered infrastructure gap assessment that includes understanding future

infrastructure needs as well as current infrastructure stock performance in addition to the engineering condition of the existing stock.

This transformative approach begins with explicitly understanding and measuring well-being for First Nations on-reserve. The core outcome underlying every infrastructure investment is to improve the quality of life for citizens. The quality of life improvement could be economic, social, environmental, or some combination thereof. Quality of life is inextricably linked to citizen well-being. Linking infrastructure needs to well-being outcomes and expressing the infrastructure gap in these terms is a necessary first step to evaluate the first principle question of whether the existing infrastructure asset base is fit for purpose. For the purposes of this performance section, the definition of infrastructure includes both housing infrastructure and community infrastructure.

There are various well-being domains that are helpful in identifying a framework that could be aligned to the needs of First Nations in Canada. For the purposes of this report, health, society, economic prosperity, and the environment are four holistic well-being elements that could make up a First Nations holistic well-being framework as shown in Figure 39.

Figure 39



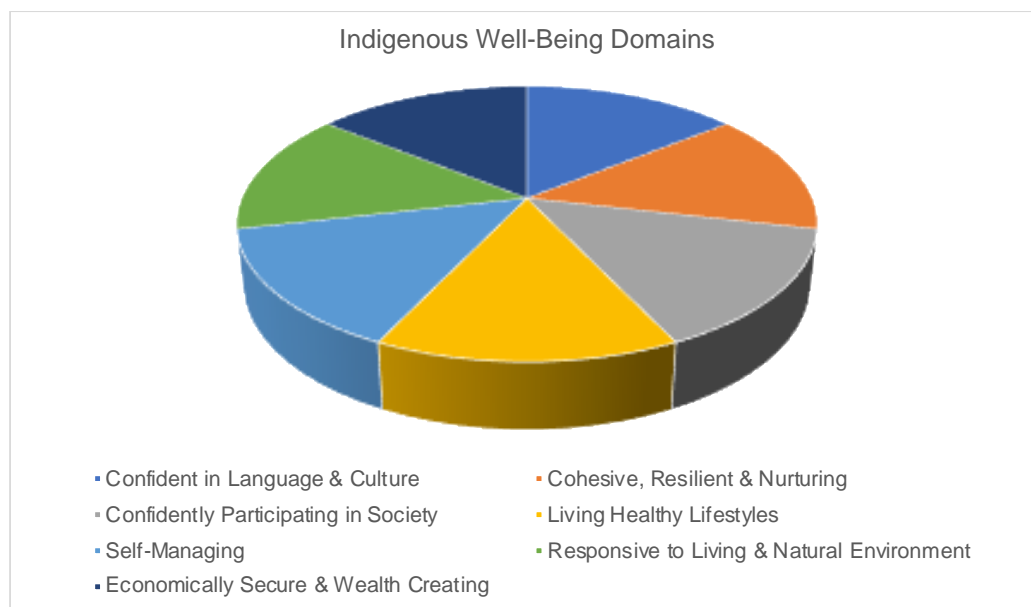
### *A First Nations Lens on Holistic Well-Being*

IFSD's report on Funding First Nations child and family services: A performance budget approach to well-being outlined a Measuring to Thrive well-being centered performance

measurement framework designed specifically for the well-being of First Nations children. This framework that was designed primarily with input from First Nations communities across Canada provided a child, family, and community lens to First Nations children well-being. This reflects the First Nations perspective of a medicine wheel frame for well-being with the individual at the center of the wheel and the family and the community progressively captured in the outer bands of the wheel.

New Zealand's Living Standards Framework has also identified seven specific Indigenous well-being domains<sup>48</sup> that map to their social, human, natural and physical/financial capital well-being Framework elements. These seven well-being domains are depicted in Figure 40.

Figure 40



## Step 2: Aligning Housing Outcomes to Well-Being Outcomes

The potential outcomes to be realized from good housing are significant and cover the full gamut of standard of living outcomes including economic, social, and environmental.

For the purposes of building a framework around good housing outcomes, the Health Affairs<sup>49</sup> four pathways to good housing outcomes succinctly captures the spectrum of elements that contribute to the realization of positive housing outcomes. They are depicted in Figure 41.

<sup>48</sup> Ministry of Māori Development—Te Puni Kōkiri, 2019, "An Indigenous Approach to the Living Standards Framework," *Te Tai Ōhanga (The Treasury)*, <https://www.treasury.govt.nz/publications/dp/dp-19-01-html#section-7>.

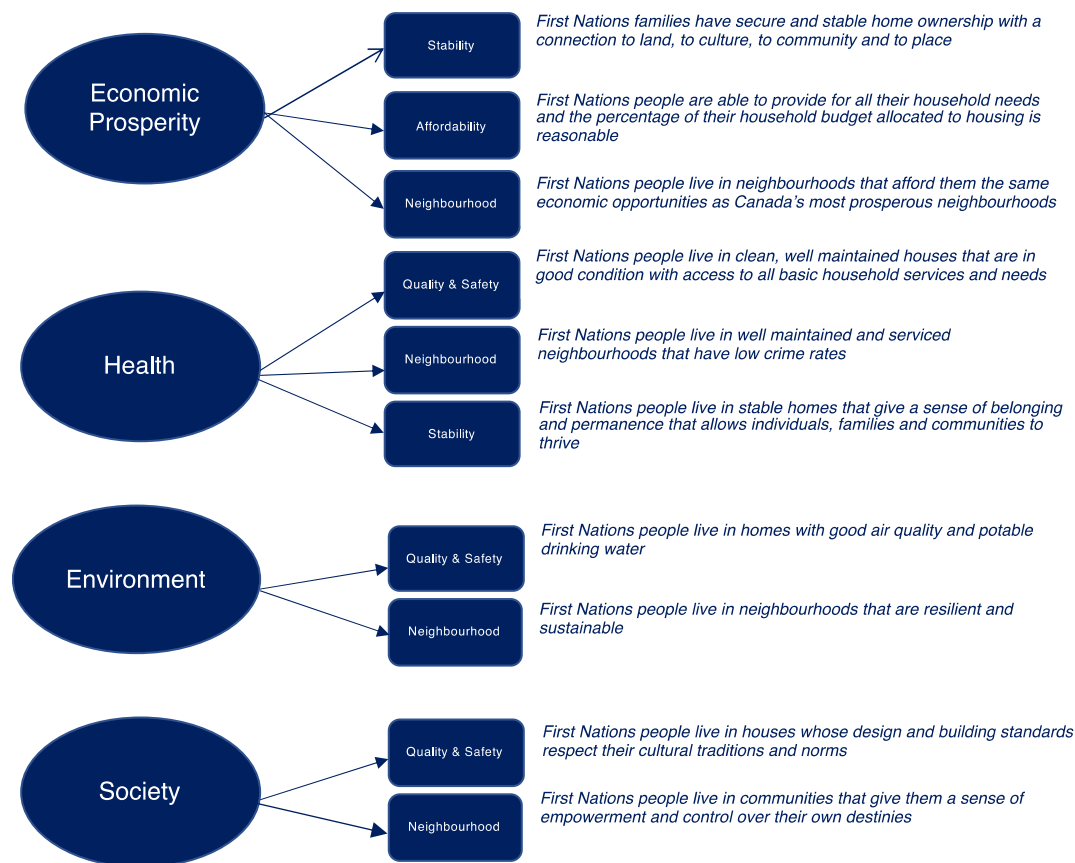
<sup>49</sup> Lauren A. Taylor, 2018, "Housing And Health: An Overview Of The Literature," Health Affairs Health Policy Brief, [https://www.healthaffairs.org/doi/10.1377/hpb20180313.396577/full/HPB\\_2018\\_RWJF\\_01\\_W.pdf](https://www.healthaffairs.org/doi/10.1377/hpb20180313.396577/full/HPB_2018_RWJF_01_W.pdf).

Figure 41



These four elements can then be aligned to the holistic well-being framework with outcome statements that can provide the basis for measurement, evaluation, and response (Figure 42).

Figure 42



### Step 3: Defining First Nations Control and Care of Delivery

The development of a performance measurement framework for housing should include a focus on First Nations control and care of delivery.

The concept of First Nations control and care of delivery was articulated in the AFN National First Nations Housing Strategy.<sup>50</sup> The vision articulated in this Strategy was as follows:

All First Nations members living on or away from their community have a right to shelter and they must be provided with an opportunity to access safe, secure, adequate and affordable housing.

The Strategy is built on a “Rights-based Approach” and outlines a comprehensive approach that includes the care and control of band-owned housing. The Strategy outlined several objectives of the strategy that all have elements with control and care of delivery implications, including supporting information on financing options, research approaches to plan for housing needs, industry partnerships, etc.

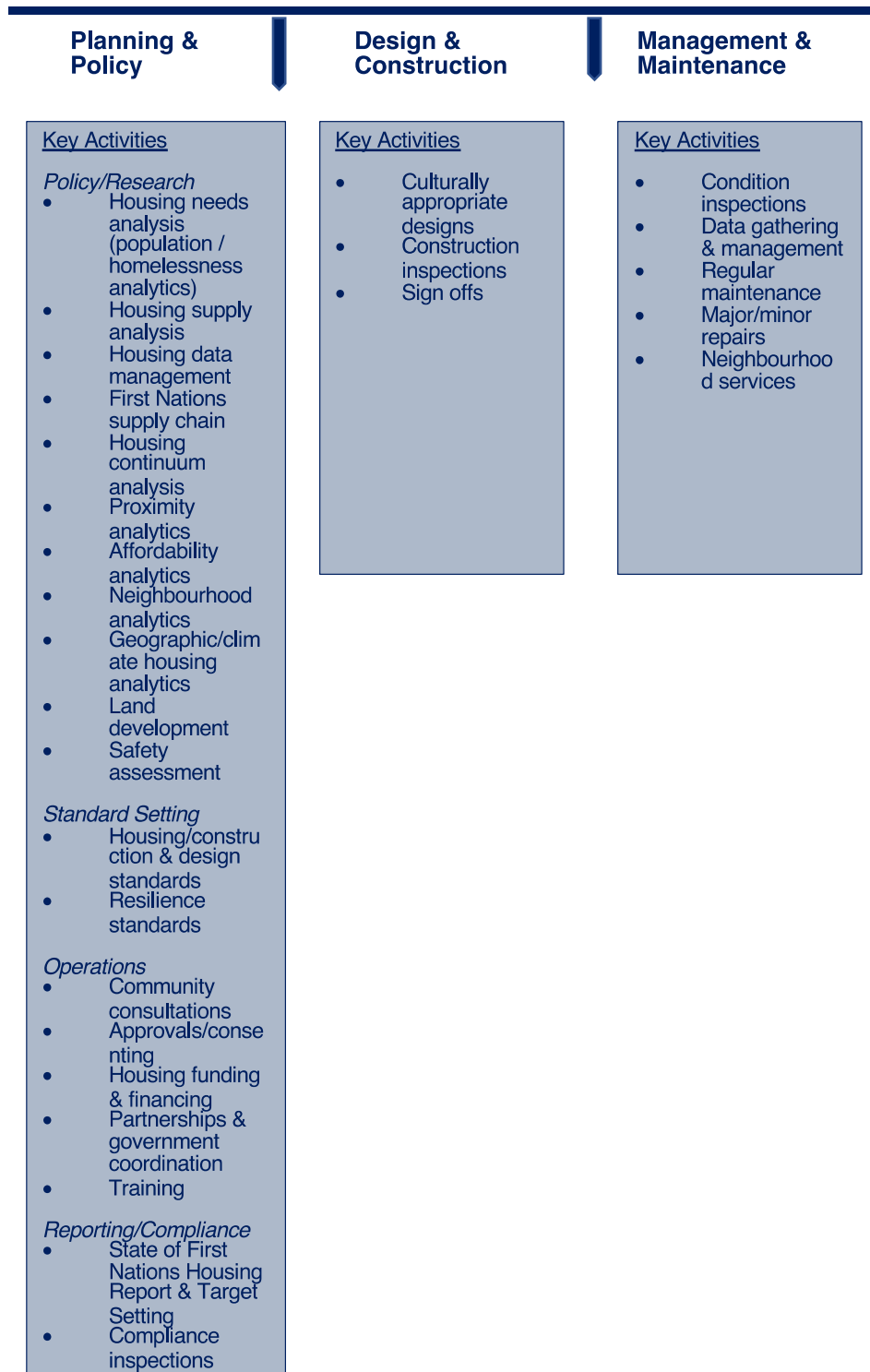
The challenge with respect to a focus on control and care of delivery within a performance measurement framework is to make the concept of control and care of delivery real and tangible so that appropriate standards and accountability can be put in place.

This is best accomplished by looking at the housing lifecycle and the control and care of delivery activities/capabilities required throughout that lifecycle. At an aggregate level, there are three distinct parts of the housing lifecycle illustrated in Figure 43.

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<sup>50</sup> Assembly of First Nations, n.d., National First Nations Housing Strategy, [https://www.afn.ca/uploads/files/housing/afn\\_national\\_housing\\_strategy.pdf](https://www.afn.ca/uploads/files/housing/afn_national_housing_strategy.pdf)

Figure 43





#### **Step 4: Towards a First Nations Well-Being Performance Measurement Framework with Housing Key Performance Indicators**

The First Nations well-being performance measurement framework with housing key performance indicators is a transformative first step towards articulating the First Nations on-reserve housing infrastructure gap from the perspective of not just condition but needs and service levels as well.

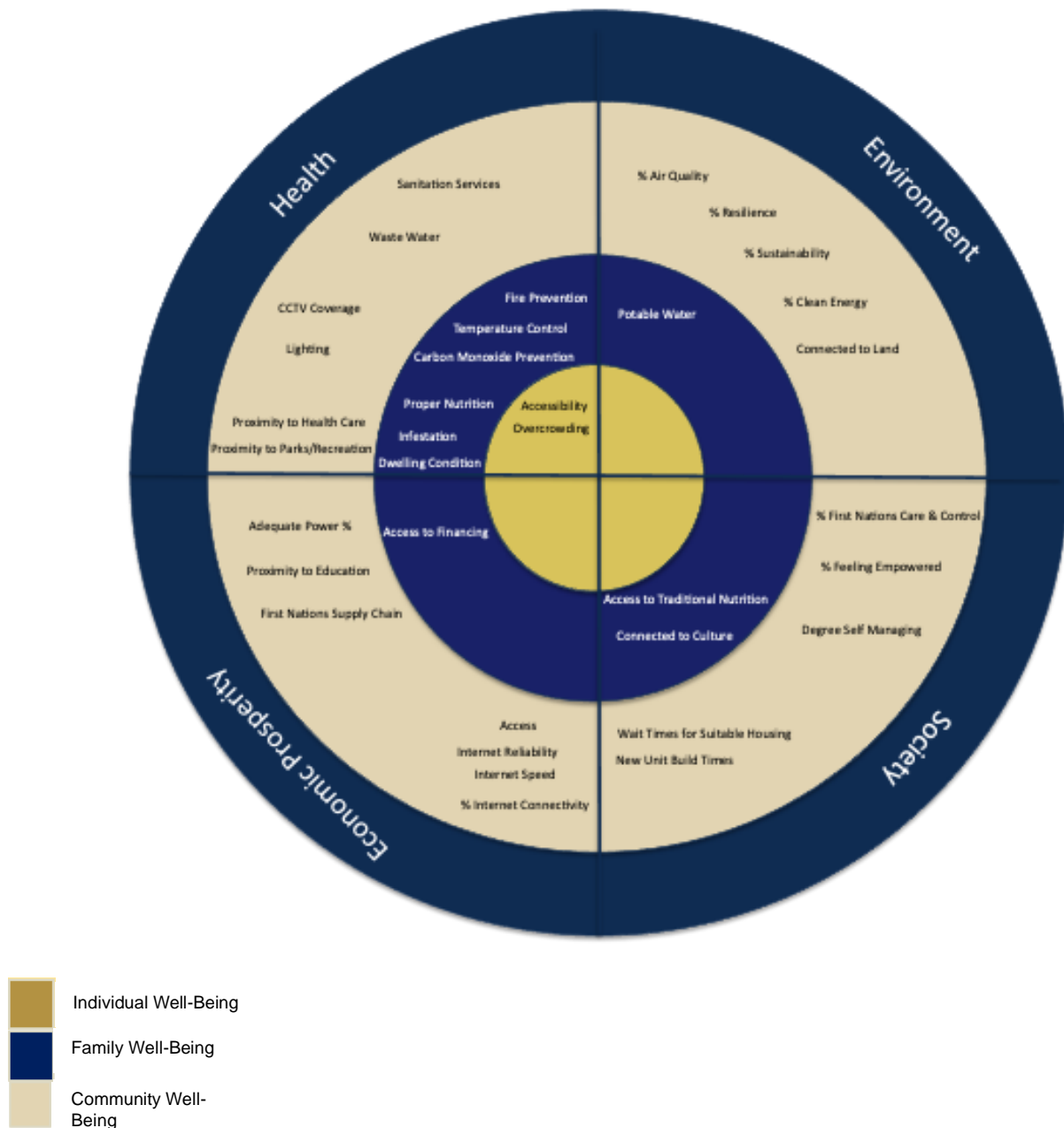
This would be a global leading best practice that would make significant progress towards enabling evidence-based infrastructure investment priority setting and decision-making. In addition, it would be transformative by articulating the First Nations on-reserve infrastructure gap not just at a significant point in time but also extrapolating how infrastructure investments over time would contribute towards the realization of well-being outcomes over time.

The intent with the well-being performance measurement framework within the context of this project is not just to articulate the investment required to deal with existing legacy issues but also to specifically articulate the desired end state vision of First Nations on-reserve housing in 2040. This end state vision would not be constrained by the realities of the limitations of the present but aspirational with respect to the ideal First Nations on-reserve housing needed to optimize the well-being of First Nations individuals, families and communities. This is critical with respect to centering the discussion, debate and decision-making around the adequacy of First Nations housing on the quality of life of First Nations peoples.

**Action: Collaborate with First Nations on identifying and refining proposed indicators for use in a well-being focused housing measurement framework.**

Building from the research and benchmarking, a draft First Nations well-being measurement framework with housing indicators is outlined in Figure 44.

Figure 44

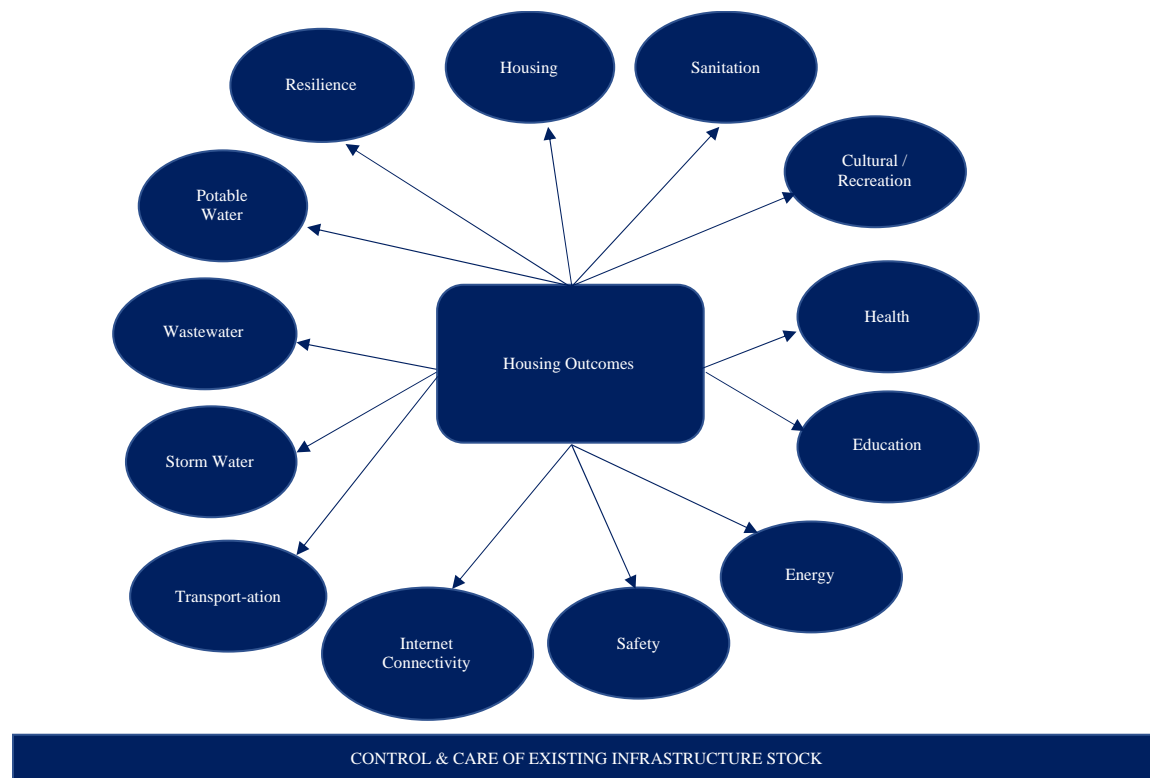


The First Nations well-being framework and indicators depicts that the positive housing outcomes is not solely a function of the physical dwellings on-reserve. Rather it is a network of integrated policies and infrastructure assets that need to work in a coordinated fashion with synergies to realize positive housing outcomes (Figure 45).

As noted earlier in this report, First Nations people should provide their input on this draft performance measurement framework in order to arrive at a final version that reflects their needs and desires. IFSD has also been made aware that there are a

number of health related housing metrics developed by Indigenous Services Canada as part of their Environmental Scan of Housing and Healthy Built Environment Toolkit that should be considered in the finalization of this performance measurement framework.

Figure 45



The above diagram illustrates that several infrastructure asset classes have a role to play in the realization of positive housing outcomes. In addition, beyond the asset classes a strong control and care capacity is needed to ensure that there is a strong understanding of both infrastructure needs and the performance of the existing infrastructure stock not on just an individual basis but operating as a network with synergies to deliver on these good housing outcomes. This capacity needs to clearly understand the linkage between well-being outcomes for citizens and whether the infrastructure asset base is fit for the purpose of realizing those outcomes.

This type of approach also plants the seeds that will help to start to identify the specific elements that could make up the definition of the aspirational 2040 acceptable on-reserve dwelling condition for housing. This 2040 definition would go beyond condition and overcrowding and consider additional fundamental elements such as connectivity, resilience, safety etc. that are fundamental to delivering on First Nations on-reserve well-being.

The well-being framework will allow AFN to ask the fundamental question on whether on-reserve housing infrastructure is fit for the purpose of First Nations well-being today but also out to 2040. By the year 2040, the aspiration should be to have dealt with all existing legacy issues and reaching a steady state of well-being that is in line with the ever-changing needs of First Nations people and consistent with the standards expected by non-First Nations Canadians.

### **Step 5: A Possible Framework to Consider a Well-Being Centered Infrastructure Gap**

The First Nations Housing Well-Being framework is necessary to evaluate the existing infrastructure asset base from the perspective of whether the infrastructure is fit for the purpose of well-being and where a well-being infrastructure gap exists then the necessary intervention and/or cost estimate required to address that gap.

The ability to set aspirational targets and then measure and report on the performance of specific indicators that are aligned to well-being outcomes is a transformative step forward towards being able to provide an evidence-based and objective assessment of the state of First Nations on-reserve housing. This will also be instrumental in being able to identify a long-term roadmap from the current state to the aspirational 2040 future state.

This foundation will also enable AFN to perform fidelity evaluation tests that are consistent in principle with the fidelity tests applied in a Housing First context. The philosophy in Housing First that it is not simply the accommodation by itself that matters but also the complementary wrap around services is consistent with a well-being focused approach to determining the adequacy of on-reserve housing. The state of First Nations on-reserve housing report would be analogous to Housing First fidelity tests that would evaluate and assess the house as well as the other supporting infrastructure needed to realize good housing outcomes.

To illustrate this we can take each of the four holistic well-being outcomes and create a performance table that identifies each of the housing outcomes (with a performance outcome statement) and the associated performance indicators. These performance indicators would be further broken down into individual, family, and community indicators consistent with a First Nations perspective on well-being. This table would allow stakeholders to challenge, debate and ultimately agree on whether the indicators are the right ones to realize well-being outcomes and what the appropriate targets are over time to reach a 2040 aspirational future state.

This can be done for each of the four well-being domains identified in Step 1 of this section.

## First Nations Health and Housing Outcomes

<b><u>Health</u></b>				
First Nations people have access to on-reserve housing that maximizes their physical, mental and spiritual health				
	<u>Quality &amp; Safety</u>		<u>Neighbourhood</u>	<u>Stability</u>
	On-Reserve housing meets acceptable quality and safety standards for First Nations individuals to enjoy a high standard of living		Neighbourhoods in on-reserve communities have acceptable amenities and services to promote thriving communities	Stability in on-reserve housing gives First Nations peoples a sense of belonging and permanence that will allow them to realize their full potential
	Quality	Safety		
Individual Well-Being	<ul style="list-style-type: none"> <li>• 100% accessibility</li> <li>• 0% overcrowding</li> </ul>			
Family Well-Being	<ul style="list-style-type: none"> <li>• 100% acceptable dwelling condition (aspirational 2040 definition to be determined by First Nations)</li> <li>• 100% proper nutrition (ability to store, prepare &amp; cook)</li> <li>• Temperature control</li> <li>• 0% mold</li> <li>• 0% infestation</li> </ul>	<ul style="list-style-type: none"> <li>• Fire protection</li> <li>• Carbon monoxide protection</li> </ul>		<ul style="list-style-type: none"> <li>• Low moving rate</li> </ul>
Community Well-Being		<ul style="list-style-type: none"> <li>• Lighting coverage</li> <li>• CCTV coverage</li> </ul>	<ul style="list-style-type: none"> <li>• Proximity to health care</li> <li>• Proximity to parks/recreation</li> <li>• Timely sanitation services</li> <li>• Reliable wastewater services</li> </ul>	

## First Nations Economic Prosperity and Housing Outcomes

<b><u>Economic Prosperity</u></b>			
First Nations people on-reserve are afforded the same economic opportunities as Canadians living in Canada's more prosperous communities			
	<u>Neighbourhood</u>	<u>Affordability</u>	<u>Stability</u>
	Neighbourhoods in on-reserve communities have acceptable amenities and services to promote thriving communities	On-reserve housing is affordable for First Nations people	Stability in on-reserve housing gives First Nations peoples a sense of belonging and permanence that will allow them to realize their full economic potential
Individual Well-Being			
Family Well-Being		<ul style="list-style-type: none"> <li>• 100% access to affordable financing</li> </ul>	<ul style="list-style-type: none"> <li>• First Nations households have a significant majority in the private ownership continuum</li> </ul>
Community Well-Being	<ul style="list-style-type: none"> <li>• 100% stable power supply on-reserve</li> </ul>		

	<ul style="list-style-type: none"> <li>• Proximity to high-quality education</li> <li>• First Nations companies and people are a significant % of the infrastructure supply chain</li> <li>• % access to on-reserve communities</li> <li>• 100% internet coverage</li> <li>• 100% internet reliability</li> <li>• Internet speeds that are at least x% of Canada's urban centres</li> </ul>		
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## First Nations Environment and Housing Outcomes

<b><u>Environment</u></b>			
First Nations people on-reserve benefit from their natural environment and on-reserve communities are resilient and sustainable			
	<b><u>Neighbourhood</u></b>	<b><u>Quality &amp; Safety</u></b>	
	Neighbourhoods in on-reserve communities enjoy the natural benefits from their environment	On-reserve housing is affordable for First Nations people	
		<b>Quality</b>	<b>Safety</b>
Individual Well-Being			
Family Well-Being		<ul style="list-style-type: none"> <li>• 100% access to potable water</li> </ul>	<ul style="list-style-type: none"> <li>• 100% resilient on-reserve communities</li> </ul>
Community Well-Being	<ul style="list-style-type: none"> <li>• 100% air quality</li> <li>• 100% renewable energy supply</li> <li>• 100% land connection</li> <li>• 100% sustainable</li> </ul>		

## First Nations Society and Housing Outcomes

<b><u>Society</u></b>			
First Nations people on-reserve are self-managing, self-empowered and have a strong connection with their culture			
	<b><u>Neighbourhood</u></b>	<b><u>Quality &amp; Safety</u></b>	
	Neighbourhoods in on-reserve communities are self-reliant, empowered, connected with their First Nations culture and have control over their destiny	On-reserve housing meets the ever changing needs of its residents and there is no discrepancy between their standard of living and comparable non-First Nations communities in Canada	
		<b>Quality</b>	<b>Safety</b>
Individual Well-Being			

Family Well-Being		<ul style="list-style-type: none"> <li>• Access to traditional nutrition</li> <li>• Connected to culture</li> </ul>	
Community Well-Being	<ul style="list-style-type: none"> <li>• 100% empowered</li> <li>• 100% self-managing</li> <li>• 0% wait time for suitable housing</li> <li>• Acceptable new unit build times</li> <li>• Acceptable service standards to First Nations people from First Nations care and control function               <ul style="list-style-type: none"> <li>• Research &amp; Policy</li> <li>• Standard Setting</li> <li>• Land Development</li> <li>• Reporting &amp; Compliance</li> <li>• Inspections</li> <li>• Repairs</li> <li>• Community consultations</li> <li>• Approvals/consenting</li> <li>• Housing funding &amp; financing</li> <li>• Partnerships &amp; government coordination</li> <li>• Training</li> </ul> </li> </ul>		

### *Toward a Well Being Focused Measurement of the First Nations On-Reserve Housing Infrastructure Gap*

Building from the performance tables, it is now possible to develop a supporting detailed framework and process to enumerate this well-being infrastructure gap. Each indicator could be evaluated with respect to its current performance result against the acceptable service standard in 2021 and out to 2040.

The implication of variances could then be analyzed from a performance and cost perspective that would provide evidence to inform infrastructure priority setting. The following tables illustrate the potential application of this process to the performance tables. They also highlight the importance of identifying and collecting the data that would be a key capability that should be appropriately resourced with a specific accountability assigned.

#### Supply of On-Reserve Housing Infrastructure Gap

Type of Dwelling	Current Stock Quantity	2021 Quantity Needed	2021 Infrastructure Gap	2040 Projected Housing Stock Need	2040 Infrastructure Gap	Infrastructure Gap Cost Estimate
Single Detached Home						

#### Health Outcome Infrastructure Gap

Quality & Safety
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Type of Well-Being	Key Performance Indicator	2021 Actual Score	2040 End State Target	Performance Gap	Implications of the Gap [Strategy to address the gap and associated cost estimates is critical]
Individual Well-Being	Accessibility for Disabled First Nations Residents	X%	100%	tbd	Accessibility is a fundamental right of all First Nations residents. The control & care function needs to understand the magnitude of any accessibility gap.
Individual Well-Being	Overcrowding	X%	0%	tbd	Overcrowding is one of the core existing legacy issues that needs to be addressed. Moreover, the control and care function need to have an ongoing sense of the on-reserve population to ensure that the housing supply aligns to need of the population
Family Well-Being	Acceptable Dwelling Condition	tbd	tbd	tbd	AFN to define acceptable dwelling condition. The UK has a decent homes standard and the Australian National Aboriginal and Torres Strait Islander Housing Authority has a definition for acceptable dwelling condition. AFN might need to consider an initial dwelling condition standard based on condition of the house and overcrowding. However, in looking to 2040 it might wish to expand that definition to incorporate critical well-being indicators
Family Well-Being	Proper Nutrition	tbd	100%	tbd	Proper nutrition is defined as the ability to store, prepare and cook. This is a fundamental right.
Family Well-Being	Temperature Control	tbd	100%	tbd	The ability to control the temperature in the dwelling for extreme heat and cold, which reflects the realities of Canadian life is key for good health
Family Well-Being	Mold	tbd	100%	tbd	Housing free of mold is necessary for good health
Family Well-Being	Infestation	tbd	100%	tbd	Housing free of infestation is necessary for good health
Community Well-Being	Lighting Coverage	tbd	100%	tbd	Communities that are well lit are safer for residents
Community Well-Being	CCTV Coverage	tbd	100%	tbd	Communities with CCTV coverage are safer for residents

Neighbourhood					
Type of Well-Being	Key Performance Indicator	2021 Actual Score	2040 End State Target	Performance Gap	Implications of the Gap [Strategy to address the gap and associated cost estimates is critical]
Community Well-Being	Proximity to Health Care	tbd	tbd	tbd	Proximity to health care is critical for good health
Community Well-Being	Proximity to Parks/Recreation	tbd	tbd	tbd	Proximity to parks/recreation is important for good health
Community Well-Being	Timely Sanitation Services	tbd	tbd	tbd	Ensuring that trash is collected and disposed of in a timely manner is critical for community health and well-being
Community Well-Being	Reliable Wastewater Service	tbd	tbd	tbd	Reliable wastewater services are important for good health



Stability					
Type of Well-Being	Key Performance Indicator	2021 Actual Score	2040 End State Target	Performance Gap	Implications of the Gap [Strategy to address the gap and associated cost estimates is critical]
Family Well-Being	Low Moving Rate	tbd	tbd	tbd	Family stability and a reasonable degree of performance is important for stability and the physical and mental health of First Nations residents

## Economic Outcome Infrastructure Gap

Neighbourhood					
Type of Well-Being	Key Performance Indicator	2021 Actual Score	2040 End State Target	Performance Gap	Implications of the Gap [Strategy to address the gap and associated cost estimates is critical]
Community Well-Being	Stable Power Supply On-reserve	tbd	100%	tbd	Stable power supply is needed for businesses and households to function optimally
Community Well-Being	Proximity to High-Quality Education	tbd	tbd	tbd	Proximity to high-quality education is essential for thriving children and improving long-term economic independence for First Nations on-reserve residents
Community Well-Being	First Nations Supply Chain	tbd	X%	tbd	First nations businesses and individuals are a significant component of the housing infrastructure supply chain
Community Well-Being	Access	tbd	tbd	tbd	By the year 2040 there will be economical and timely access to on-reserve communities
Community Well-Being	Internet Coverage	tbd	100%	tbd	All on-reserve communities have access to internet
Community Well-Being	Internet Reliability	tbd	tbd	tbd	On-reserve communities have reliable internet services
Community Well-Being	Internet Speed	tbd	tbd	tbd	On-reserve communities have decent internet speeds to be able to interact efficiently online for business, education, health or other reasons

Affordability					
Type of Well-Being	Key Performance Indicator	2021 Actual Score	2040 End State Target	Performance Gap	Implications of the Gap [Strategy to address the gap and associated cost estimates is critical]
Family Well-Being	Access to Affordable Financing	tbd	tbd	tbd	The ability of First Nations residents to affordable financing is key to moving First Nations individuals along the housing continuum to home ownership

Stability					
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Type of Well-Being	Key Performance Indicator	2021 Actual Score	2040 End State Target	Performance Gap	Implications of the Gap [Strategy to address the gap and associated cost estimates is critical]
Family Well-Being	Housing Continuum	tbd	tbd	tbd	Home ownership/residency is key to a stable housing environment that gives a sense of permanence

## Environment Outcome Infrastructure Gap

Neighbourhood					
Type of Well-Being	Key Performance Indicator	2021 Actual Score	2040 End State Target	Performance Gap	Implications of the Gap [Strategy to address the gap and associated cost estimates is critical]
Community Well-Being	Air Quality	tbd	100%	tbd	No pollution in on-reserve communities
Community Well-Being	Renewable Energy Supply	tbd	tbd	tbd	100% renewable energy supply on-reserve communities
Community Well-Being	Land Connection	tbd	X%	tbd	All on-reserve residents have a strong connection to land
Community Well-Being	Sustainable	tbd	tbd	tbd	All infrastructure development in on-reserve communities respects the environment and ecological systems with no adverse impacts

Quality & Safety					
Type of Well-Being	Key Performance Indicator	2021 Actual Score	2040 End State Target	Performance Gap	Implications of the Gap [Strategy to address the gap and associated cost estimates is critical]
Family Well-Being	Potable Water Advisories	X%	0%	tbd	No drinking water advisories in on-reserve communities
Family Well-Being	Resilience	X%	100%	tbd	On-reserve housing infrastructure is resilient and will meet the specific climate change challenges specific to each on-reserve community

## Society Outcome Infrastructure Gap

Neighbourhood					
Type of Well-Being	Key Performance Indicator	2021 Actual Score	2040 End State Target	Performance Gap	Implications of the Gap [Strategy to address the gap and associated cost estimates is critical]
Community Well-Being	Empowerment	tbd	tbd	tbd	On-reserve communities are places where First Nations people are empowered to take control of their own destinies
Community Well-Being	Self-Managing	tbd	tbd	tbd	On-reserve communities are self-managed by First Nations people
Community Well-Being	Housing Wait Times	tbd	0	tbd	There is no wait time to access suitable housing on-reserve
Community Well-Being	New Unit Build Times	tbd	tbd	tbd	New unit build times are in line with best in class housing design and build best practices

Community Well-Being	Control & Care Service Standards				<p>A First Nations control and care function is resourced so that it has the capacity and capability to provide adequate service standards to First Nations residents. Service could include the following:</p> <ul style="list-style-type: none"> <li>• Research &amp; Policy</li> <li>• Standard Setting</li> <li>• Land Development</li> <li>• Reporting &amp; Compliance</li> <li>• Inspections</li> <li>• Repairs</li> <li>• Community consultations</li> <li>• Approvals/consenting</li> <li>• Housing funding &amp; financing</li> <li>• Partnerships &amp; government coordination</li> <li>• Training</li> </ul>
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**Action: Develop an easily accessible cloud-based tracking tool to support First Nations in measuring relevant indicators in housing.**

## **Step 6: Infrastructure Gap Needs to Recognize the Diversity and Variety of On-Reserve Communities**

The application of the well-being housing outcome framework is intended to augment and support evidence-based decision-making. It will inform infrastructure investment priority setting but it is not black and white and will require judgement with respect to its application in decision support.

One of the most obvious examples of this judgement is a reflection of the diversity and variety of on-reserve communities in Canada that makes it impossible to apply a one-size fits all well-being framework for on-reserve communities in Canada. The geographic diversity (as expressed in ISC's geographic zones) reflects this reality.

This difference can further be illustrated with an in-depth look at specific communities in each of these four zones. Reviewing the attributes of different First Nations selected at random (see Appendix 7), highlights the differences in their points of departure. Variables such as geography, employment, economic viability, health outcomes, current housing stock, etc. can all influence a First Nation's needs. With the goal of well-being expressed through the indicators in the proposed framework, these and other contextual variables must be considered to develop sustainable long-term plans that meet the needs of communities. First Nations have different needs and different starting points in 2021. Over time, one of the outcomes sought by the 2040 aspirational targets might be to have a common housing needs standard across First Nations. Such a goal, however, would have to recognize and account for current state variability.

A well-being focused approach to measuring housing needs in First Nations, requires a holistic view of housing as a social policy. Through this lens, indicators will reflect the horizontality of housing. Considerations from education to internet connectivity to

community safety become integral to understanding housing needs. It will be critical that this initially proposed approach be reviewed and refined by First Nations. Only then, can a well-being focused approach to housing infrastructure truly reflect the complex challenges and opportunities of housing in First Nations.

**Action: Ensure differentiated points of departure and needs of First Nations are captured in the well-being framework.**

### **Step 7: Developing a Roadmap Towards the Implementation of the Performance Measurement Framework**

The performance measurement framework section lays out a process and methodology that AFN could potentially deploy to ensure that a well-being centered housing performance measurement framework is tailored to the needs of First Nations Peoples. By definition, this would require that the performance measurement framework be finalized with the input of on-reserve First Nations residents so that it reflects their actual needs.

Implementation of this framework would be truly transformative and that underscores that there will be challenges in the implementation of the framework. In particular, these challenges reflect the true horizontality of a well-being centered housing performance measurement framework.

Another key element that contributes to the implementation challenge is that this exercise is not a one-time single point in time exercise. It is an exercise that looks to move from a 2021 current state to an aspirational future state.

This challenge is best illustrated by the possible evolution of the definition of an acceptable dwelling standard for First Nations on-reserve housing as follows:

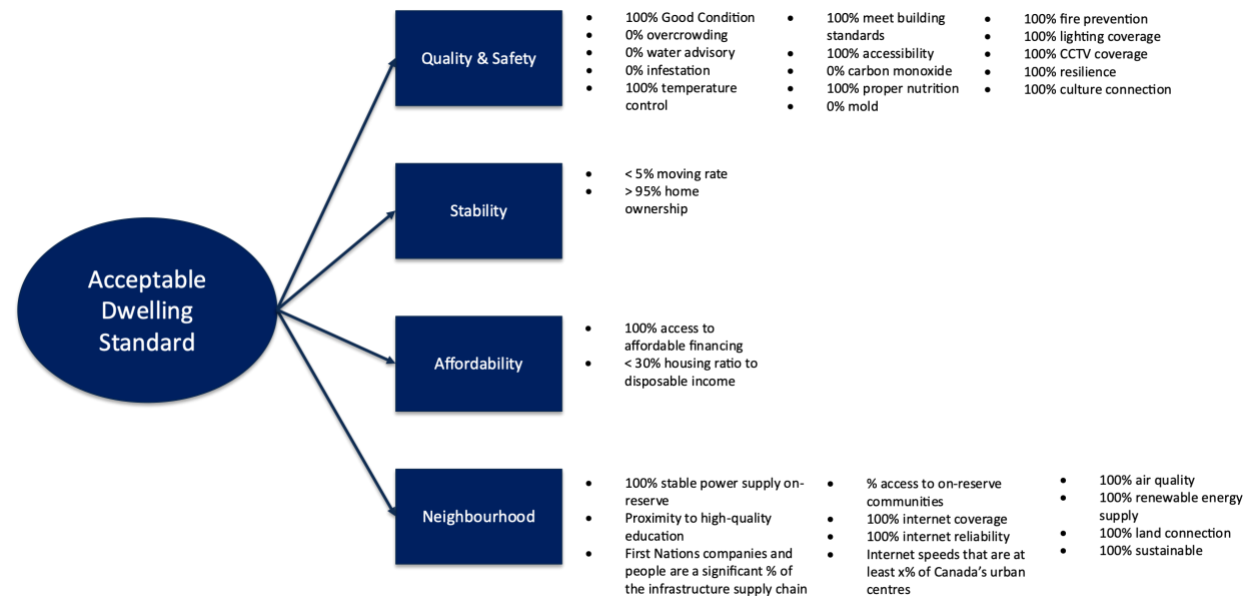
## 2021 Acceptable Dwelling Standard

Figure 46



## Possible 2040 Acceptable Dwelling Standard

Figure 47



This possible evolution of the definition of an acceptable dwelling standard from the 2021 to 2040 highlights the challenges of moving towards a well-being centered housing performance measurement framework.

Accordingly, the following next steps are recommended in order to consider how best to implement this performance measurement framework moving forward:

1. Establish a governance model that recognizes the horizontality of the well-being outcomes associated with on-reserve housing

2. Finalize a well-being housing performance measurement framework that is tailored to the needs of First Nations on-reserve residents
3. Specify the mandate and accountabilities for a First Nations control and care of delivery capacity and develop a realistic and credible transition plan over time to ensure that this capacity is adequately resourced and equipped to succeed
4. Develop aligned short-term, medium-term and long-term investment plans that are systematic and reflect a realistic roadmap to move from the needs of the 2021 current state to an aspirational 2040 future state

## Conclusion

Housing, as referenced in Articles 21 and 23 of UNDRIP, is essential to Indigenous Peoples improving social and economic conditions through their self-determined strategies and priorities. More than a structure, housing is a matter of social policy, inextricably linked to Well-being. To support thriving First Nations, addressing core horizontal issues of social policy, such as housing, is imperative.

The business case for housing is well-established, with returns on investment in fiscal and social terms. Ranging from studies of low-income housing to Housing First programs, investments in housing yield dividends for individuals and communities. Defining adequate housing requires consideration of the holistic health, social, and economic well-being of a community. Beyond providing a physical shelter, a home should be sustainable and informed by culture and environment.

In this report, housing was assessed along three dimensions: policy and practices in First Nations, cost estimations of current and future needs, and the definition of a performance framework for well-being.

Through findings across the three dimensions, actions and lessons were defined to support and improve housing in First Nations:

- 1) Address existing housing gaps in First Nations to meet immediate needs.
- 2) Refine assessments of future needs through a bottom-up study that captures variances with greater detail to enhance the precision of cost estimates.
- 3) Address immediate housing needs with financial, human, and capacity building supports, including financial literacy. A clear well-being focused bottom-up baseline assessment of housing needs in First Nations is required.
- 4) Establish regular and streamlined access to funding for housing in First Nations. Ensure that funding is allocated and transferred in a regular and reliable fashion.
- 5) Recognize the diversity of need and approaches to meeting housing demand in First Nations. Approaches to resourcing and planning should align to these differences.
- 6) Support First Nations with capacity and financial resources to undertake well-being focused housing needs assessments. Leverage those capital plans to orient approaches to housing and federal resource allocations.
- 7) Collaborate with First Nations on identifying and refining proposed indicators for use in a well-being focused housing measurement framework.

- 8) Develop an easily accessible cloud-based tracking tool to support First Nations in measuring relevant indicators in housing.
- 9) Ensure differentiated points of departure and needs of First Nations are captured in the well-being framework.

There is a significant fiscal shortfall that will require a large up-front investment with sustained funding increases for many years to address and mitigate large economic, social, health and environment negative outcomes. The transfer of control for First Nations housing must come with additional resources to address significant current and future needs. The infrastructure gap should be assessed and addressed in accordance with a First Nations forward looking and comprehensive well-being performance framework.

Housing is a multifaceted issue of social policy that should be understood horizontally, as a factor in the well-being of First Nations communities. Ensuring alignment of resources, capacity, and measurability of relevant indicators would be a critical step forward in establishing First Nations care and control of delivery in this essential area of activity.



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## Appendix 1

### Indigenous Services Canada (ISC) Programs

The status of certain ISC programs, such as the Capital Facilities Maintenance Program, could not be determined. It is unclear if it is an active sub-program or sub-sub-program or if the program is no longer active as it does not appear on the Government of Canada's GC InfoBase. The program may come under the umbrella of the First Nations On-reserve Housing Program. ISC's website with the program information has not been updated since 2015.

Other ISC programs that do not appear on GC InfoBase include the Housing Support Program (HSP) in British Columbia and the Ministerial Loan Guarantee Program. These program websites were all updated in 2020 and 2021, suggesting they are ongoing, but likely as sub-programs or sub-sub-programs. The Housing Subsidy Program also does not appear on GC InfoBase but this program only operates for a few First Nations in Ontario who have opted not to join the First Nations On-reserve Housing Program.

<b>Capital Facilities Maintenance Program<sup>51</sup></b>	
Department	Indigenous Services Canada
Constituency	First Nations and First Nations members living on-reserve
Mandate	Invest in housing, education, water and wastewater systems, and other infrastructure in First Nations across what is now called Canada. The program also aims to maximise the life cycle of physical assets, mitigate health and safety risks, ensure assets meet applicable codes and standards, and ensure assets are managed in a cost-effective and efficient manner.
Period	Since 2003
How Funding is Accessed	The funding is managed through five-year capital plans.
Delivery	The program has three funding streams: operations and maintenance (O&M), minor capital (for projects under \$1.5 million) and major capital (for projects over \$1.5 million). The funding is managed through five-year capital plans. Most funding is provided on a "cash basis" meaning all the funding is given at the time of the project planning and construction, rather than financed over many years.
Funding	The program's total funding is over \$1 billion per year.

<sup>51</sup> Indigenous Services Canada, "Capital Facilities and Maintenance Program," fact sheet, Government of Canada, March 26, 2015, <https://www.sac-isc.gc.ca/eng/1100100016395/1533641696528>.

Challenges/Outcomes	Rising construction costs, rising fuel costs, driving project costs and operating costs, increasing operations and maintenance costs, premature rust-out of assets that is often due to a lack of regular maintenance and infrastructure funding diverted to cover price and volume increases in social and educational costs.
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<b>First Nations On-reserve Housing Program<sup>52</sup></b>	
Department	Indigenous Services Canada
Constituency	First Nations in all provinces and territories, except British Columbia are eligible recipients to the program.
Mandate	Support First Nations with on-reserve housing through funding some construction, renovation, maintenance and management activities. Key principals are First Nations control, First Nations expertise, shared responsibilities, and increasing First Nations access to private sector financing.
Period	Since 1996
How Funding is Accessed	There is no need to apply, the funding allocation is given through a funding agreement between ISC and the First Nation through the Capitals Facility Maintenance Program.
Delivery	ISC provides funds that First Nations can use to build and renovate homes, as well as costs such as maintenance, insurance, debt servicing, and the planning and management of a housing portfolio. INAC does not cover the full cost of housing. Recipients are expected to secure additional funding from other sources, such as shelter charges and private-sector loans.
Funding	ISC provides around \$143 million per year to improve First Nations housing on-reserve although not all of it flows through this program.
Challenges/Outcomes	ISC's current funding strategy is short term and makes it difficult for First Nations to make and implement long-term community plans. <sup>53</sup>

<sup>52</sup> Evaluation, Performance Measurement and Review Branch, "Evaluation of On-Reserve Housing," assessment (Government of Canada, September 21, 2017), <https://rcaanc-cirnac.gc.ca/eng/1506018589105/1555328867826>;

Indigenous Services Canada, "First Nations On-Reserve Housing Program," Government of Canada, July 19, 2021, <https://www.sac-isc.gc.ca/eng/1100100010752/1535115367287>.

<sup>53</sup> Evaluation, Performance Measurement and Review Branch, "Evaluation of On-Reserve Housing."

<b>Housing Support Program (HSP) in British Columbia<sup>54</sup></b>	
Department	Indigenous Services Canada
Constituency	First Nations, First Nation councils, tribal councils, authorized band-housing authorities, block-funded First nations and self-government/treat First Nations (subject to terms of agreements) in BC .
Mandate	Provide financial support for capacity building, and housing projects for First Nations in what is now British Columbia. This program was developed specifically for BC, because the First Nation On-Reserve Housing Program's per capita funding model did not work for many smaller First Nations in BC.
Period	Renamed from the New Approach for Housing Support (NAHS) in B.C. in summer 2021.
How Funding is Accessed	There is no deadline for application, however applicants must submit their planned housing projects in their annual First Nations Infrastructure Plan submissions.
Delivery	The program is delivered through the annual First Nations Infrastructure Investment Plan process. The program has two streams: <ol style="list-style-type: none"> <li>1. Governance and capacity (creation of housing policies, training and capacity development)</li> <li>2. Housing Support Program (subsidy for construction, purchase or renovation of homes as well as a flat rate towards multi-unit building construction.</li> </ol>
Funding	Unclear what current funding under this program is. Until summer 2021 the program was called the New Approach for Housing Support (NAHS) and funding was up to \$50,000 for governance and capacity. Single year project funding varied by the geographic and economic characteristics of a First Nation and the type of project from \$28,000 to \$57,000. The program funded multi-year projects at "90% for health and safety renovations, 60% for regular renovations, 70% for multiunit/high density construction (3 or more units), and 20% for new home construction or purchase." NAHS also offers up to \$25,000/lot for site preparation and up to \$50,000 (pro-rated over 3 years) for project management costs. <sup>55</sup>
Challenges/Outcomes	No Program Review Available

<sup>54</sup> Indigenous Services Canada, "Housing Support Program (HSP) in British Columbia," Government of Canada, July 23, 2021, <https://sac-isc.gc.ca/eng/1460572397817/1533297381547>.

<sup>55</sup> Indigenous Services Canada, "New Approach for Housing Support in British Columbia FAQ'S 2018-19" (Government of Canada, 2018), <https://www.sac-isc.gc.ca/eng/1460572397817/1533297381547>. This document seems to be no longer available and redirects to the new program page.



<b>Housing Subsidy Program<sup>56</sup></b>	
Department	Indigenous Services Canada
Constituency	First Nations that did not opt-into the 1996 On-reserve Housing Program and the NAHS in BC. Currently about 20 in Ontario.
Mandate	Provide support for First Nations construction and renovation projects.
Period	First implemented in 1966 <sup>57</sup> the program has been mostly phased out since the introduction of the 1996 On-reserve Housing Program and the NAHS in BC.
How Funding is Accessed	Funding is provided on a per-capita basis by ISC.
Delivery	Funding is allocated to bands and distributed to specific projects.
Funding	In 2015 subsidies were between \$20,000 and \$40,000 depending on the specific project. <sup>58</sup>
Challenges/Outcomes	No program review available.

<b>On-reserve Income Assistance Program<sup>59</sup></b>	
Department	Indigenous Services Canada
Constituency	To be eligible, applicants must meet the following criteria: ordinarily resident on-reserve or Status Indians in the Yukon, eligible for basic or special financial assistance and be able to demonstrate having no other source of funding to meet basic needs
Mandate	First Nations living on-reserve tend to have lower household incomes. The cost of living on their reserves can also be very expensive. This fund helps First Nations cover the costs of their daily life.
Period	The current program originated in 1964. The government had not changed the program's design significantly since 1964, but it did change its delivery model in the 1990s. It has been running since.
How Funding is Accessed	There is no deadline for applications. Individuals may apply at any time. The application process depends on where you reside. Applicants are suggested to contact their band office to receive more details.

<sup>56</sup> Indigenous Services Canada, "First Nations On-Reserve Housing Program."

<sup>57</sup> Sylvia Olsen, "Making Poverty: A History of on-Reserve Housing Programs, 1930-1996" (Thesis, University of Victoria, 2016), <https://dspace.library.uvic.ca/handle/1828/7239>.

<sup>58</sup> The Standing Senate Committee on Aboriginal Peoples, "Housing on First Nation Reserves: Challenges and Successes" (Ottawa, February 2015), <https://sencanada.ca/content/sen/committee/412/appa/rms/08feb15/Home-e.htm>.

<sup>59</sup> Indigenous Services Canada, "On-Reserve Income Assistance Program," Government of Canada, June 23, 2020, <https://www.sac-isc.gc.ca/eng/1100100035256/1533307528663>.



Delivery	Funding is provided to First Nations communities, organizations, and other service providers, who are responsible for providing this program to their eligible on-reserve members.
Funding	The ISC program provides around \$125 million per year to low-income individuals to assist them with shelter needs. Due to the ongoing pandemic, the government will provide an additional \$270 million to the program to address increased demand from First Nations individuals and families impacted by the pandemic. Budget 2018 proposed to invest \$86.9 million over 2 years to improve the current program.
Challenges/Outcomes	No program review available.

<b>Ministerial Loan Guarantee Program<sup>60</sup></b>	
Department	Indigenous Services Canada
Constituency	First Nations acting on their own behalf or on behalf of an individual First Nations member that meet the eligibility criteria.
Mandate	To give access to affordable loans for First Nations, because they are not able to use reserve land or housing as loan security with traditional financial institutions.
Period	In 1966, the department was first granted authority to provide government-backed security for loans issued on-reserve for the first time.
How Funding is Accessed	The loan guarantees are issued throughout the year, as necessary. The 2020 Manual takes effect on January 31.
Delivery	The program supports on-reserve housing through ISC and CMHC. There can only be one loan guarantee per project. Each request for a loan guarantee must be assessed and approved by the regional office against the application requirements and eligibility criteria. Applicants must review the appropriate toolkit. The application process takes approximately six weeks if all application requirements and eligibility criteria have been met.
Funding	The department provides Ministerial Loan Guarantees for the loan security required by lenders who are financing housing loans on-reserve. The departments' current authority is valued at \$2.2 billion. CMHC provides about 80% of these loans and the other 20% are provided by other lending institutions.
Challenges/Outcomes	No program review available.

<sup>60</sup> Indigenous Services Canada, "Ministerial Loan Guarantees," Government of Canada, March 31, 2020, <https://www.sac-isc.gc.ca/eng/1100100010759/1533297595541>.

## Canada Mortgage and Housing Corporation (CMHC) Programs

<b>On-reserve Non-profit Housing Program (Section 95)<sup>61</sup></b>	
Department	Canada Mortgage and Housing Corporation
Constituency	All First Nation communities are eligible for the program.
Mandate	Assist First Nations in the “construction, purchase and rehabilitation, and administration of suitable, adequate and affordable rental housing on-reserve.” <sup>62</sup>
Period	Named Section 95 in 1983 <sup>63</sup> and then reformed into its current form in 1996/1997.
How Funding is Accessed	Funding allocations letters are sent in early June. The application in-take window opens immediately after allocation letters are sent. Applications deadlines vary by region.
Delivery	<p>There are two components to the financial assistance provided by CMHC.</p> <ol style="list-style-type: none"> <li>1. CMHC may provide direct loans, for up to 100 percent of the total eligible capital costs, to First Nations in order to construct, purchase and rehabilitate projects. Alternatively, a First Nation may choose to finance a project with another lender.</li> <li>2. CMHC provides subsidy to the First Nation for a maximum of 25 years or the duration of the project loan amortization period, whichever is less. Subsidy assistance is to help offset operating costs associated with a housing project.</li> </ol>
Funding	<p>The subsidy amount is determined by adding the loan repayment and the operating cost benchmarks together, and then subtracting the revenue. The program can cover up to 100% of the eligible capital costs of the housing project.</p> <p>The loan is disbursed based on confirmation of work in place. To assist communities with project start up, CMHC is able to accommodate accountable advances on the</p>

<sup>61</sup> Canada Mortgage and Housing Corporation, “Overview of Canada Mortgage and Housing Corporation Initiatives for the Information of the Commissioners for the National Inquiry into Missing and Murdered Indigenous Women and Girls,” 2018, <http://www.mmiwg-ffada.ca/wp-content/uploads/2019/02/Canadas-Written-Submissions-Annex-9.pdf>; Email correspondence from CMHC officials to AFN with IFSD in copy (Tuesday, October 5, 2021); CMHC, “On-Reserve Non-Profit Housing Program (Section-95),” Canada Mortgage and Housing Cooperation, March 31, 2018, <https://www.cmhc-schl.gc.ca/en/professionals/project-funding-and-mortgage-financing/funding-programs/all-funding-programs/on-reserve-non-profit-housing-program-section-95>.

<sup>62</sup> Canada Mortgage and Housing Corporation, “Overview of Canada Mortgage and Housing Corporation Initiatives for the Information of the Commissioners for the National Inquiry into Missing and Murdered Indigenous Women and Girls.”

<sup>63</sup> Olsen, “Making Poverty,” 291.

	loans. Communities with road access can request up to 25% of the approved loan amount. Communities with winter road access can request up to 50% of the approved loan amount and communities without road or winter road access can request up to 75% of the approved loan amount.
Challenges/Outcomes	<p>Delays between applications for funding and the arrival of funding in many federal programs can make it difficult for communities to plan construction. Funding must be committed within the fiscal year (March 31). This means that CMHC must receive and approve the application by March 31 or the funding allocation will be cancelled. In 2021, CMHC communicated funding allocations to First Nations in June. While application deadlines vary by region, First Nations may submit their applications as early as they wish.</p> <p>Most common delays between application to funding are related to loan security. This usually comes in the form of a Ministerial Loan Guarantee. Other common delays include site location change requests, submission of signed agreements, or submission of supporting documents such as insurance, declaration forms or code compliance certificates. Delays between the request for advance and the completion of the progress inspection can be reduced by requesting the advance in anticipation of completing the next phase of the project.</p> <p>Funding must be used within the fiscal year (March 31<sup>st</sup>) and sometimes funding isn't announced until the fall. This is especially a problem in communities that cannot build during the winter.<sup>64</sup> In the case of Section 95, the loan must be advanced within two years from the agreement date. Once conditions of the loan agreement are met, including confirmation of loan security, First Nations may request an accountable advance to assist with project startup costs. Subsequent loan advances are based on confirmation of work in place and are initiated at the request of the First Nation.</p> <p>Funding is also provided in phases rather than a lump sum. Construction sites sometime sits inactive for over a month while CMHC confirms the next stage of funding. This means that materials are exposed to the weather for an extended</p>

<sup>64</sup> The Standing Senate Committee on Aboriginal Peoples, "Housing on First Nation Reserves: Challenges and Successes," 26.

	<p>period and some First Nations reported requiring security guards at unfinished sites to prevent vandalism.<sup>65</sup></p> <p>There is a fair to good understanding of the application process by First Nations, but a low understanding of how the subsidies are allocated. The program is fairly well run according to the First Nations survey by KPMG, but does not provide enough funding for repairs and maintenance which reduces the quality of the housing stock.<sup>66</sup></p>
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<b>Proposal Development Funding (PDF) for First Nation Communities<sup>67</sup></b>	
Department	Canada Mortgage and Housing Corporation
Constituency	First Nations or their affiliated housing organizations.
Mandate	Provide First Nations with financing for the tools needed to apply to the On-reserve Non-Profit Housing Program (Section 95).
Period	Unavailable
How Funding is Accessed	Eligible applicants must communicate need to the CMHC. Must apply before starting the proposal to receive maximum funding.
Delivery	Funding is sent to First Nations who apply before commencing the estimates, testing, design and management planning that go into creating a proposal for the Section 95 program.
Funding	An interest free, repayable loan up to \$75,000 is available through the program.
Challenges/Outcomes	No program review available.

<b>Insured Loans for On-Reserve First Nation Housing<sup>68</sup></b>	
Department	Canada Mortgage and Housing Corporation
Constituency	First Nation individuals who have certificates of possession or otherwise granted use of the land. The individual also must meet the lending criteria of the approved lender.
Mandate	Provide individuals on-reserve access to loans to build personal or rental housing units.
Period	Unavailable

<sup>65</sup> The Standing Senate Committee on Aboriginal Peoples, 26.

<sup>66</sup> KPMG LLP, "Final Report: Review of CMHC's On-Reserve Non Profit Housing Program (Section 95)," April 20, 2017, <https://assets.cmhc-schl.gc.ca/sf/project/cmhc/pdfs/content/en/final-report-review-cmhc-on-reserve-non-profit-housing-program-section-95.pdf?rev=855f5c01-91e4-436f-ba1e-a345ec25f24f>.

<sup>67</sup> Canada Mortgage and Housing Corporation, "Proposal-Development-Funding-First-Nation-Communities," Canada Mortgage and Housing Corporation, CMHC, March 31, 2018, <https://www.cmhc-schl.gc.ca/en/professionals/project-funding-and-mortgage-financing/funding-programs/all-funding-programs/proposal-development-funding-first-nation-communities>.

<sup>68</sup> Canada Mortgage and Housing Corporation, "Insured Loans for On-Reserve First Nation Housing," CMHC, March 31, 2018, <https://www.cmhc-schl.gc.ca/en/professionals/project-funding-and-mortgage-financing/funding-programs/all-funding-programs/funding-first-nations-development/insured-loans-on-reserve-first-nation-housing>.

How Funding is Accessed	Eligible applicants must work with an approved lender (bank, credit union or Aboriginal Capital Corporation) and their band council to get the necessary approval for the project.
Delivery	ISC will work with CMHC to provide a Ministerial Loan Guarantee to provide collateral should the individual and the First Nation default on the loan.
Funding	Individuals building or buying their own home must provide a 5% down payment on whatever the value of the approved loan is. For individuals building rental units the down payment is 20% if there are 4 or less units and 15% if there are 5 or more units.
Challenges/Outcomes	No program review available.

<b>Residential Rehabilitation Assistance Program (RRAP)<sup>69</sup></b>	
Department	Canada Mortgage and Housing Corporation
Constituency	Individual First Nation homeowners (or landlords) who need repairs to their homes are eligible. The resident of the unit's household income must be at or below the established limit, which is based on where the community is located. If the unit is rented the rent must be below the CMHC limits for the community and the owner cannot be related to the tenants.
Mandate	Offer financial support to First Nation individuals whose homes need to be repaired to minimum levels of health and safety. Structural, electrical, plumbing, heating and fire safety work are just some of the areas covered by this program. Support may also be available to address overcrowding.
Period	The program was announced in 1973 and started running the following year. It has been running since.
How Funding is Accessed	Contact your First Nation Housing Specialist.
Delivery	The funding takes the form of forgivable loans, meaning they do not need to be repaid if the recipient meets all the terms and conditions. The owner must agree to put a ceiling on any rents charged after the renovation is completed, limit the number of rent increases during the term of the loan agreement with CMHC, rent only to tenants with income below the communities specified limits and cover the cost or need repairs not covered by the loan.

<sup>69</sup> Canada Mortgage and Housing Corporation, "Overview of Canada Mortgage and Housing Corporation Initiatives for the Information of the Commissioners for the National Inquiry into Missing and Murdered Indigenous Women and Girls.";

Canada Mortgage and Housing Corporation, "Residential Rehabilitation Assistance Program (RRAP) - Regular," March 31, 2018, <https://www.cmhc-schl.gc.ca/en/professionals/project-funding-and-mortgage-financing/funding-programs/all-funding-programs/residential-rehabilitation-assistance-program>.

Funding	The program provides up to \$60,000 for each unit that needs major home repairs. If the home is located on-reserve in northern or remote areas, this maximum amount may be increased by 25%.
Challenges/Outcomes	No program review available.

<b>Residential Rehabilitation Assistance Program (RRAP) – Secondary and Garden Suites<sup>70</sup></b>	
Department	Canada Mortgage and Housing Corporation
Constituency	First Nations or First nations members who own a family home that can be converted to have a secondary self-contained rental unit. For this program the tenant in the new unit must be a senior or an adult with a disability.
Mandate	Support the addition of rental units to family homes on-reserves. The program funds the addition of self-contained rental units to family homes. The new unit's tenants must be a senior or an adult with a disability and must have an income at or below the limit established by the location of the community.
Period	The parent program RRAP has been running since 1974.
How Funding is Accessed	Contact your First Nation Housing Specialist.
Delivery	The funding takes the form of forgivable loans, meaning they do not need to be repaid, as long as the recipient meets all the terms and conditions.
Funding	The program provides up to \$60,000 for each converted unit. If the property is located on-reserve in northern or remote areas, the maximum amount may be increased by 25%.
Challenges/Outcomes	No program review available.

<sup>70</sup> Canada Mortgage and Housing Corporation, "Overview of Canada Mortgage and Housing Corporation Initiatives for the Information of the Commissioners for the National Inquiry into Missing and Murdered Indigenous Women and Girls.";

Canada Mortgage and Housing Corporation, "Residential Rehabilitation Assistance Program (RRAP) – Secondary and Garden Suites," CMHC, March 31, 2018, <https://www.cmhc-schl.gc.ca/en/professionals/project-funding-and-mortgage-financing/funding-programs/all-funding-programs/residential-rehabilitation-assistance-program/secondary-and-garden-suite-development>.



<b>Residential Rehabilitation Assistance Program – Conversion (RRAP-C)<sup>71</sup></b>	
Department	Canada Mortgage and Housing Corporation
Constituency	Owners of non-residential property on-reserve. Owners may be the First Nation or private.
Mandate	Convert non-residential on-reserve properties that are environmentally safe into affordable housing. The property must be realistically convertible into affordable housing, should charge rents at or below the limits set by CMHC and should be aimed at tenants below a specific household limit for the community.
Period	The parent program RRAP has been running since 1974.
How Funding is Accessed	Contact your First Nation Housing Specialist.
Delivery	The funding takes the form of forgivable loans, meaning they do not need to be repaid, as long as the recipient meets all the terms and conditions.
Funding	The program provides up to \$60,000 for each converted unit. If the property is located on-reserve in northern or remote areas, the maximum amount may be increased by 25%.
Challenges/Outcomes	No program review available.

<sup>71</sup> Canada Mortgage and Housing Corporation, “Overview of Canada Mortgage and Housing Corporation Initiatives for the Information of the Commissioners for the National Inquiry into Missing and Murdered Indigenous Women and Girls.”;

Canada Mortgage and Housing Corporation, “Residential Rehabilitation Assistance Program – Conversion (RRAP-C),” CMHC, March 31, 2018, <https://www.cmhc-schl.gc.ca/en/professionals/project-funding-and-mortgage-financing/funding-programs/all-funding-programs/residential-rehabilitation-assistance-program/affordable-housing-conversion-rehabilitation>.



<b>Residential Rehabilitation Assistance Program for Persons with Disabilities (RRAP-D)<sup>72</sup></b>	
Department	Canada Mortgage and Housing Corporation
Constituency	Any First Nation wanting to adapt on-reserve affordable housing to better serve people with disabilities or a First Nation member with a disability needing to make their own home more accessible is eligible for support if their total household income is at or below the established limit. This limit is based on the location of the community. Their home must also meet minimum health and safety standards and must be located on-reserve.
Mandate	The program funds to help modify on-reserve housing to accommodate the needs of persons with disabilities. Modifications such as ramps, handrails, chairlifts, height adjustments to countertops, smoke detectors and fire alarms are all covered by this program. Modifications must be related to housing and to the occupant's disability.
Period	The parent program RRAP has been running since 1974.
How Funding is Accessed	Contact your First Nation Housing Specialist.
Delivery	The funding takes the form of forgivable loans, meaning they do not need to be repaid, if the recipient meets all the terms and conditions.
Funding	The program provides up to \$60,000 for each converted unit. If the property is located on-reserve in northern or remote areas, the maximum amount may be increased by 25%.
Challenges/Outcomes	No program review available.

<sup>72</sup> Canada Mortgage and Housing Corporation, "Overview of Canada Mortgage and Housing Corporation Initiatives for the Information of the Commissioners for the National Inquiry into Missing and Murdered Indigenous Women and Girls.";

Canada Mortgage and Housing Corporation, "Residential Rehabilitation Assistance Program for Persons with Disabilities (RRAP-D)," CMHC, March 31, 2018, <https://www.cmhc-schl.gc.ca/en/professionals/project-funding-and-mortgage-financing/funding-programs/all-funding-programs/residential-rehabilitation-assistance-program/home-modifications-for-persons-with-disabilities>.

<b>Home Adaptations for Seniors Independence Program (HASI) <sup>73</sup></b>	
Department	Canada Mortgage and Housing Corporation
Constituency	All First Nations members living on-reserve may receive assistance. The senior occupant must be 65 or older and have difficulty with daily activities due to age. The household income must be at or below the established limit based on where the community is located. The home must be a permanent residence.
Mandate	Extend the time on-reserve seniors can live independently on their own homes through minor renovations to meet their age-related needs.
Period	Unavailable
How Funding is Accessed	Applicants who are eligible must go to the CMHC website and they will be sent a HASI application package.
Delivery	The funding takes the form of forgivable loans, meaning they do not need to be repaid. The senior occupant must live in the home for at least 6 months after the work is completed; otherwise, the loan will have to be paid back.
Funding	The program provides owners with up to \$20,000 for needed home adaptations. If the property is located on-reserve in northern or remote areas, this maximum amount may be increased by 25%.
Challenges/Outcomes	No program review available.

<b>Emergency Repair Program<sup>74</sup></b>	
Department	Canada Mortgage and Housing Corporation
Constituency	First Nations or First Nation member living on-reserve where the applicant's household income is at or below the established community threshold for financial assistance.
Mandate	Fund repairs that are immediately needed to ensure the safe occupancy of a home.
Period	Unavailable
How Funding is Accessed	Eligible applicants must communicate need to the CMHC.

<sup>73</sup> Canada Mortgage and Housing Corporation, "Overview of Canada Mortgage and Housing Corporation Initiatives for the Information of the Commissioners for the National Inquiry into Missing and Murdered Indigenous Women and Girls.";

Canada Mortgage and Housing Corporation, "Home Adaptations for Seniors Independence," CMHC, November 2, 2020, <https://www.cmhc-schl.gc.ca/en/professionals/project-funding-and-mortgage-financing/funding-programs/all-funding-programs/home-adaptations-for-seniors-independence>.

<sup>74</sup> Canada Mortgage and Housing Corporation, "Overview of Canada Mortgage and Housing Corporation Initiatives for the Information of the Commissioners for the National Inquiry into Missing and Murdered Indigenous Women and Girls.";

Canada Mortgage and Housing Corporation, "Emergency Repair Program On-Reserve," CMHC, March 31, 2018, <https://www.cmhc-schl.gc.ca/en/professionals/project-funding-and-mortgage-financing/funding-programs/all-funding-programs/emergency-repair-program-on-reserve>.

Delivery	Once approved, all work must start within 30 days and be completed within 90 days.
Funding	A contribution of up to \$30,000 for needed repairs (not a loan so it does not have to be repaid). The maximum contribution is increased by 25% in northern or remote areas.
Challenges/Outcomes	No program review available.

<b>Housing Internship for Indigenous Youth<sup>75</sup></b>	
Department	Canada Mortgage and Housing Corporation
Constituency	<p>Eligible Hiring organizations (proponents):</p> <ul style="list-style-type: none"> <li>- Indigenous governments and affiliated organizations</li> <li>- Indigenous organizations in the public or not-for-profit sector</li> <li>- Indigenous businesses in the for-profit sector</li> <li>- Non-Indigenous employers seeking to employ Indigenous youth</li> </ul> <p>Eligible candidates for an internship:</p> <ul style="list-style-type: none"> <li>- Indigenous youth between the ages of 15 and 30 inclusive.</li> <li>- Must not be otherwise employed during the internship.</li> <li>- Must not be receiving Employment Insurance benefits or must agree to discontinue the benefits before starting the internship</li> </ul>
Mandate	A youth employment initiative providing work experience and on-the-job training for Indigenous youth facing barriers to employment. The goal of the program is to assist youth in gaining work experience and pursuing long-term employment in the housing sector, or a related field.
Period	<p>Created in 1999 as the Housing Internship Initiative for First Nations and Inuit Youth; was renamed the Housing Internship for Indigenous Youth in 2020 to reflect expanded eligibility to all Indigenous youth.</p> <p>To be eligible for funding, internships must be of a minimum duration of 8 weeks and a maximum duration of 52 weeks.</p>
How Funding is Accessed	Funding is available annually. CMHC sends out a deadline for proponent organizations to apply. Typically, the application window is open for 90 days and closes in the second quarter of the calendar year.
Delivery	The funding takes the form of wage subsidies. Additional assistance is also provided to cover safety equipment, and skills training may also be eligible for financial support.

<sup>75</sup> Program data was provided by CMHC to AFN with IFSD in copy on October 5, 2021.

Funding	The wage subsidy amount includes all mandatory expenses such as Employment Insurance, Canada and/or Quebec Pension Plans, Workers' Compensation premiums, vacation pay, and Northern allowance (if applicable). The hiring organizations (proponent) must pay at least the minimum wage for their province or territory.
Challenges / Outcomes	Non-completion or cancellation of internships does occasionally occur, resulting from personal challenges experienced by youth and preventing them from completing their internship. More often, however, are challenges resulting from the hiring organization's inability to retain and employ the youth post-internship, due to a lack of organizational and financial resources. Desired outcomes post-internship include the youth returning to school or securing employment. Although these outcomes can sometimes be challenging for interns living on reserve, the HIIY program has led some Indigenous youth to obtain long-term employment in the housing sector and pursue educational and technical training in the field of housing, substantively improving housing outcomes in their communities.

<b>Indigenous Skills Training Program<sup>76</sup></b>	
Department	Canada Mortgage and Housing Corporation
Constituency	All First Nation communities are eligible
Mandate	The IST program assists First Nation communities to acquire the skills, training and knowledge needed to achieve their housing objectives.
Period	Formally known as Aboriginal Capacity Development, this program has been delivered across Canada since the 1970's.
How funding is accessed	Funding is accessed by First Nations through negotiations with regional Specialists who agree to a scope of work and sign Contribution Agreements. National IST projects are also accessible to First Nations.
Delivery	Delivery processes are flexible; each region has a customized approach to meet regional needs.
Funding	Annual national budget approx. \$1.85 million
Challenges/Outcomes	A benefit of this program is its flexibility to meet needs as described by First Nation communities directly. As such, one program outcome is a stronger relationship between CMHC and a First Nation. Challenges include small budget size; lack of a standardized/national process; inefficiencies in administration and data collection. Lack of data = lack of clear understanding of long-term outcomes/impact.

<sup>76</sup> Program data was provided by CMHC to AFN with IFSD in copy on October 5, 2021.

## Non-Federal Government Housing Funding Programs

<b>First Nations Housing Market Fund (FNHMF)<sup>77</sup></b>	
Oversight	Independent board of 9 trustees which includes guaranteed First Nations representation.
Constituency	Available to First Nations who demonstrate competency in financial management and good governance as well as need for the program. Individuals in First Nations who successfully complete the application process receive credit enhancement (loan guarantees). For First Nations who are unable to show sound financial management and good governance the fund provides capacity development to help bring them up to the standard required by the fund.
Mandate	To promote and support home-ownership on reserve.
Period	The program has been running since its creation, on April 20, 2007.
How Funding is Accessed	Individuals to apply for loans at traditional financial institutions even without the ability to leverage their home as collateral.
Delivery	The FNHMF guarantees the loans of individuals who meet the other requirements for a loan.
Funding	The FNHMF grows based on their investment returns which have averaged 3.3% between 2008 and 2020. The fund has grown its total assets from \$300 Million to \$375 million over that period and can leverage \$992 million in potential credit as of 2020 approved to support an estimated 6,767 homes. <sup>78</sup>
Challenges/Outcomes	The fund is not reaching its targets and low take up means it is operating far below capacity. The FNHMF had only enabled the construction of 55 homes in 2013 (5 years after it was created in 2008). <sup>79</sup> It does not appear that the fund was able to get close to goal of supporting 25,000 unit over its first decade, reporting only 297 fund-backed loans active in 2018 <sup>80</sup> growing to a total of 419 fund-backed loans active in 2020. <sup>81</sup>

<sup>77</sup> Lydia Hwitsum, "FNHMF Home," First Nations Market Housing Fund, 2018, <https://www.fnmhf.ca/english/index.html>.

<sup>78</sup> Lydia Hwitsum, "Embracing Change Building Connections," Annual Report (First Nations Housing Market Fund, 2020), <https://www.fnmhf.ca/english/reports/fnmhf-2020-annual-report.pdf>.

<sup>79</sup> The Standing Senate Committee on Aboriginal Peoples, "Housing on First Nation Reserves: Challenges and Successes," 12.

<sup>80</sup> Deborah Taylor, "Moving Forward Together," Annual Report (First Nations Housing Market Fund, 2018), <https://www.fnmhf.ca/english/reports/fnmhf-2018-annual-report-3.pdf>.

<sup>81</sup> Hwitsum, "Embracing Change Building Connections."

<b>Revolving Loan Programs – Ex. Six Nations of the Grand River<sup>82</sup></b>	
Oversight	Operated independently by the Six Nations of the Grand River.
Constituency	For members of the First Nation to borrow from when constructing, buying or renovating housing units on-reserve
Mandate	To improve housing outcomes in a First Nation through promoting home ownership.
Period	Unavailable
How Funding is Accessed	The First Nation must save or earn enough money to start the fund. Once in place the fund will grow through interest payments on debts. Currently most of the funds come from interest payments and some from annual allocations from ISC. <sup>83</sup>
Delivery	Individuals borrow money from the fund to buy or build housing. They pay the agreed upon interest rate as they pay off their debt which grows the fund and makes more money available for more housing projects over time.
Funding	The current maximum loan to individuals \$200,000.00 <sup>84</sup>
Challenges/Outcomes	The amount of loans available are limited to the size of the fund. There are long waitlists for this program. Nevertheless, the community has very strong housing outcomes. <sup>85</sup>

<b>Community Housing Development Programs – Ex. Cree Nation Government Community Private Housing Initiative<sup>86</sup></b>	
Oversight	Run independently by the Cree Nation Government.
Constituency	For the housing authorities and members of the Cree Nation to borrow from when constructing housing units on Cree Territory.
Mandate	To improve housing outcomes in a First Nation through promoting home ownership, develop robust real estate markets in communities and bring the cost of construction closer to what it is in similar non-native communities.
Period	The program was announced in June 2020.
How Funding is Accessed	The applicant must meet the credit criteria of a financial institution to loan them their required costs before having

<sup>82</sup> Six Nations Of The Grand River, "Housing," Six Nations Of The Grand River, accessed June 28, 2021, <http://sixnations.ca/HousingAuthority.htm>.

<sup>83</sup> Christopher Alcantara, "Certificates of Possession and First Nations Housing: A Case Study of the Six Nations Housing Program," *Canadian Journal of Law and Society* 20, no. 2 (2005): 183–205, <https://doi.org/10.1353/jls.2006.0019>, 190.

<sup>84</sup> Six Nations Of The Grand River, "Housing."

<sup>85</sup> Alcantara, 193.

<sup>86</sup> Bill Namagoose, "Press Release – \$100M Private Housing Initiative Fund," The Grand Council of the Crees (Eeyou Istchee), June 2, 2020, <https://www.cngov.ca/press-release-june-2/>; Cree Nation Government, "Community Private Housing Initiative," The Grand Council of the Crees (Eeyou Istchee), accessed June 28, 2021, <https://www.cngov.ca/community-private-housing/>.

	access to the subsidy. The applicant must also submit construction plans to the program.
Delivery	Provides a subsidy to individuals building new primary residences or Cree Local Governments building multi-unit housing for their community.
Funding	The Cree Nation Government provided \$100 million to fund the subsidies for this program.
Challenges/Outcomes	No program review available.

<b>Private Financial Institutions – Ex. BMO On-reserve Housing Loan Program<sup>87</sup></b>	
Oversight	Run by the BMO Financial Group.
Constituency	Individual band members in First Nations with agreements with BMO.
Mandate	Give on-reserve First Nations access to private financing for home purchases, construction and renovation.
Period	Unavailable
How Funding is Accessed	First Nations must enter the program with BMO which gives their members who hold certificates of possession or other proof of residency access to loans for housing purchase, construction or major renovations.
Delivery	The loans are securitised using the certificate of possession or other proof of residency temporarily given to the Band who holds it for the duration of the loan. If the Band also defaults the loan would be covered by a program like the Ministerial Loan Guarantee or the FNHMF.
Funding	Regular BMO mortgage funding for individual applicants.
Challenges/Outcomes	No program review available.

<sup>87</sup> BMO, "Bank of Montreal - Aboriginal Banking - Creating an On-Reserve Housing Loan Program," accessed July 9, 2021, [https://www.bmo.com/aboriginal/en/loan\\_program.html](https://www.bmo.com/aboriginal/en/loan_program.html).



## First Nations Housing-Related Associations

<b>First Nations National Building Officers Association (FNNBOA)<sup>88</sup></b>	
Oversight	Organizational Structure Unclear
Constituency	Represents First Nation housing officers (FNHOs).
Mandate	<ol style="list-style-type: none"> <li>1. Represent workers (technical service providers) in First Nations communities</li> <li>2. Establish national standards for minimum core competencies for housing officers</li> <li>3. Establish a national certification and a national accreditation process</li> <li>4. Aid capacity development in this sector</li> <li>5. Advocate for better building and renovation practices and more generally for housing policy with better outcomes for First Nations<sup>89</sup></li> </ol>
Period	Since 2004.
Why was the Organization Established	FNHOs wanted a way for their skills and training to be recognized outside of the reserve where they worked. Founded to be proactive to anticipated certification requirements from the federal government. <sup>90</sup>
Delivery	<p>Provide resources on building, building codes, health, maintenance, financing, etc. specific to First Nations conditions.</p> <p>For members who they represent they provide a number of workshops, technical advice, best practices, access to, peer-to-peer communication and a number of other services. They create publicly available podcasts with in-depth information on First Nations housing.</p> <p>Teleinspections for homes on remote reserves where it may be difficult to get a building inspector.<sup>91</sup></p>
Funding	Members fees and workshops.
Challenges/Outcomes	No organizational review available.

<sup>88</sup> "About FNNBOA," First Nations National Building Officers Association, accessed June 29, 2021, <https://www.fnnboa.ca/about-fnnboa>.

<sup>89</sup> "About FNNBOA."

<sup>90</sup> Cheryl Petten, "Organization Wants Certification," *Windspeaker* 22, no. 6 (September 2004): 17–17.

<sup>91</sup> "Resources," FNNBOA - First Nations National Building Officers Association, accessed May 26, 2021, <https://www.fnnboa.ca/fnnboa-resources>.

<b>First Nations Housing Professionals Association (FNHPA)</b>	
Oversight	Run by a board of directors and split into member services and student services for their focuses on certification and education, respectively.
Constituency	First Nations housing managers and other housing management professionals.
Mandate	The FMHPA works to build a better housing stock through certifying and training housing professionals in First Nations. <ol style="list-style-type: none"> <li>1. Provide national standards</li> <li>2. Deliver education and certification programs</li> <li>3. Facilitating communication and knowledge-sharing<sup>92</sup></li> </ol>
Period	Since 2018
Why was the Organization Established	Founded by a group of over 25 housing professionals to raise the profile and capacity of First Nations housing management. <sup>93</sup>
Delivery	The FMHPA does not work directly with First Nations leadership, but with First Nation individuals who play important rolls in housing management within First Nations communities. They work to provide First Nations with competent housing professionals and ultimately boost housing, social and economic outcomes.
Funding	Membership fees from individuals and organizations. <sup>94</sup>
Challenges/Outcomes	No organization review available.

<sup>92</sup> First Nations Housing Professional Association, "About FNHPA," FNHPA, accessed July 7, 2021, <https://fnhpa.ca/about-fnhpa.html>.

<sup>93</sup> First Nations Housing Professional Association.

<sup>94</sup> First Nations Housing Professional Association, "Become a Member," FNHPA, accessed July 7, 2021, <https://fnhpa.ca/about-fnhpa.html>.

First Nations Financial Authority (FNFA)	
Oversight	Board of directors.
Constituency	First Nations who have signed up for the First Nations Fiscal Management Act (FNFMA) and seek services (107 member First Nations),
Mandate	To “provide financing, investment, and advisory services” to First Nations who chose to participate in the act. <sup>95</sup> Allows First Nations to collectively access capital markets and take on short- and long-term debt at lower interest rates than would otherwise be possible. First Nations must borrow against their source revenues. <sup>96</sup>
Period	Since the FNFMA was passed in 2006.
Why was the organization established	Established by the First Nations Fiscal Management Act to increase First Nations access to capital markets.
Delivery	<b>Financing services:</b> allow member First Nations to access provincial/municipal loan rates to meet community priorities. It connects First Nations looking for funding with investors. <b>Investment Services:</b> provide member First Nations with cash management instruments that assist in their capital planning and financing. <b>Advisory Services:</b> aid First Nations with planning their loan financing strategy.
Funding	Ongoing funding for the organization is unclear.
Challenges/Outcomes	No organization review available.

<sup>95</sup> FNFA, “History, Mission and Mandate,” First Nations Financial Authority, accessed June 30, 2021, <https://www.fnfa.ca/en/about/mission-and-purpose/>.

<sup>96</sup> FNFA, “First Nations Fiscal Management Act,” First Nations Financial Authority, accessed June 30, 2021, <https://www.fnfa.ca/en/about/authorities-fma-legislation/>.

<b>First Nations Financial Management Board (FMB)</b>	
Oversight	Board of directors, accountable to the Minister of Indigenous Services.
Constituency	First Nations who have signed up for the First Nations Fiscal Management Act (FNFMA) and seek services (226 member First Nations). <sup>97</sup>
Mandate	<ol style="list-style-type: none"> <li>1. Sets standards for First Nations financial management.</li> <li>2. Support First Nations in managing their finances.</li> <li>3. Review and audit First Nations Financial Practices.</li> <li>4. Support First Nations in collaboration with other governments and with policy formation.</li> <li>5. Support borrowing with the FNFA and revenue collection with the FNTC.<sup>98</sup></li> </ol>
Period	Since the FNFMA was passed in 2006.
Why was the organization established	Established by the First Nations Fiscal Management Act to increase First Nations financial management capacity.
Delivery	Certifies that First Nations have satisfactory financial management boards which allow them to have access to capital markets through the FNFA and establish property taxes through the FNTC.
Funding	Ongoing funding for the organization is unclear.
Challenges/Outcomes	No organization review available.

<sup>97</sup> FMB, "Our Mandate," First Nations Financial Management Board, accessed June 30, 2021, <https://fnfmb.com/en/about-fmb/our-mandate>.

<sup>98</sup> FMB.

<b>First Nations Tax Commission (FNTC)</b>	
Oversight	Commissioners, appointed by the responsible Minister.
Constituency	First Nations who have signed up for the First Nations Fiscal Management Act (FNFMA) and seek services (123 Member First Nations). <sup>99</sup>
Mandate	<ol style="list-style-type: none"> <li>1. Support First Nations Jurisdiction</li> <li>2. Reconcile Interests in Communities (tax base vs tax burden).</li> <li>3. Promote Transparency</li> <li>4. Support Sustainable Economic Development</li> <li>5. Educate</li> <li>6. Promote Harmonization with Provincial Systems</li> <li>7. Foster Administrative Effectiveness<sup>100</sup></li> </ol>
Period	Since the FNFMA was passed in 2006.
Why was the organization established	Established by the First Nations Fiscal Management Act to help First Nations develop stable tax revenues.
Delivery	<p>Regulation and support for property tax and land revenue laws.</p> <p>Help First Nations exercise jurisdiction over on-reserve property taxation.</p> <p>Train First Nations property tax administrators.</p> <p>Assist First Nations to develop stable revenues.<sup>101</sup></p>
Funding	Ongoing funding for the organization is unclear.
Challenges/Outcomes	No organization review available.

<sup>99</sup> Indigenous Services Canada, "First Nations Fiscal Management," legislation and regulations; reference material; resource list, Government of Canada, July 16, 2019, <https://www.sac-isc.gc.ca/eng/1393512745390/1591985622069>.

<sup>100</sup> FNTC, "FUNCTIONS AND SERVICES," First Nations Tax Commission, accessed June 30, 2021, <https://fntc.ca/functions-services/>.

<sup>101</sup> FNTC.

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Alcantara, Christopher. "Certificates of Possession and First Nations Housing: A Case Study of the Six Nations Housing Program." *Canadian Journal of Law and Society* 20, no. 2 (2005): 183–205. <https://doi.org/10.1353/jls.2006.0019>.

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## Appendix 2

Spending Data (2016-2023)									
Department	Program	2015-16 - Expenditures	2016-17 - Expenditures	2017-18 - Expenditures	2018-19 - Expenditures	2019-20 - Expenditures	2021-22 - Planned Spending	2022-23 - Planned Spending	2023-24 - Planned Spending
Canada Mortgage and Housing Corporation	Assistance for housing needs	\$ -	\$ -	\$ -	\$ 1,945,677,797.72	\$ 1,864,981,221.00	\$ 2,265,253,483.00	\$ 2,265,253,483.00	\$ 2,265,253,483.00
Canada Mortgage and Housing Corporation	Financing for housing	\$ -	\$ -	\$ -	\$ 37,528,853.58	\$ 214,889,871.33	\$ 807,530,246.00	\$ 807,530,246.00	\$ 807,530,246.00
Canada Mortgage and Housing Corporation	Funding Under Long-Term Commitments for Existing Social Housing (program no longer active)	\$ 1,670,346,270.15	\$ 1,690,482,335.49	\$ 1,640,302,630.54	\$ -	\$ -	\$ -	\$ -	\$ -
Canada Mortgage and Housing Corporation	Funding for New Commitments of Affordable Housing (program no longer active)	\$ 282,953,018.40	\$ 1,353,290,491.59	\$ 891,609,672.41	\$ -	\$ -	\$ -	\$ -	\$ -
Canada Mortgage and Housing Corporation	Housing Support (program no longer active)	\$ 12,150,673.78	\$ 25,735,114.53	\$ 91,856,770.24	\$ -	\$ -	\$ -	\$ -	\$ -
Department of Indigenous Services	Housing (program no longer active)	\$ -	\$ -	\$ -	\$ 359,204,116.32	\$ -	\$ -	\$ -	\$ -
Department of Indigenous Services	Housing	\$ -	\$ -	\$ -	\$ -	\$ 371,227,459.96	\$ 138,777,038.00	\$ 138,253,035.00	\$ 127,447,747.00

## Appendix 3

### Questionnaire

IFSD's work is informed by OCAP® principles. You have the right to rescind your participation at any time in the research process and any information you shared will be destroyed. Only IFSD employees directly engaged in this project will work with data shared by First Nations. All data will be aggregated and anonymized prior to producing the report for the Assembly of First Nations (AFN).

**Single-family dwelling:** Detached unit; built for residential purposes; with at least one bedroom for every resident over 18 or one bedroom for a couple (married, common-law, etc.) or one bedroom for every two residents under 18.

**Minor repairs:** Renewal or basic maintenance of a few parts of the dwelling.

**Major repairs:** Renewal or replacement of several parts of the dwelling, e.g. roof, flooring, plumbing, heating, insulation, etc.

- 1) How many liveable residential dwellings exist in your First Nation (include all residential dwellings)? [text box]
- 2) How many of these units:
  - a. Require major repairs [text box]
  - b. Require minor repairs [text box]
  - c. Lack waste water and sewer water infrastructure [text box]
- 3) What are the average construction costs (in regular times) to build an average new single-family dwelling in your First Nation? [text box]
- 4) What is the average size of a single-family dwelling in your First Nation (in m<sup>2</sup> or in square feet)? [text box]
- 5) Which dwelling types exist in your First Nation? Select all that apply.
  - a. Single-family detached dwelling
  - b. Mobile home
  - c. Elder lodge/Seniors residence
  - d. Apartment building
  - e. Multiplex (two or more units)
  - f. Emergency or support home
  - g. Other [text box]
- 6) Do you have the housing units you need in your First Nation? [Yes/No]
  - a. If no, how many units of each type of residence are required:
    - i. Single-family detached dwelling
    - ii. Mobile home
    - iii. Elder lodge/Seniors residence
    - iv. Apartment building

- v. Multiplex (two or more units)
  - vi. Emergency or support home
  - vii. Other [text box]
- 7) Do you have or have access to the resources (financial, human, materials, etc.) necessary to build the dwellings needed in your First Nation? [yes/no]
- 8) If not, why not? Select all that apply.
- a. Lack of funding/money
  - b. Limited access to materials, e.g. lumber, copper, etc.
  - c. Materials are too expensive
  - d. Labour is unavailable
  - e. Labour is too expensive
  - f. Challenge accessing contractor
  - g. Challenge accessing skilled trades
  - h. Inadequate financing options
  - i. No available land
  - j. Lack of planning
  - k. Governance matters or a lack of administrative-management capacity
- 9) How many liveable homes in your First Nation are:
- a. Subsidized by an individual (private sources) [text box]
  - b. Subsidized by Indigenous Services Canada or other federal government source [text box]
- 10) Has your First Nation planned or studied its housing needs over the next three to five years? [y/n]
- 11) What factors influence building costs in your First Nation? [select all that apply]
- a. Limited or no year-round-road access
  - b. Proximity to an urban centre (200km or less)
  - c. Cost of materials
  - d. Cost of labour
  - e. Governance matters or a lack of administrative-management capacity
  - f. Other [text box]
- 12) What factors influence housing needs in your First Nation? Select all that apply.
- a. Increase in population due to return of First Nations to reserve
  - b. Increase in population with individuals coming of age
  - c. Increase in family formation
  - d. Economic growth and employment prospects
  - e. High unemployment
  - f. Poverty
  - g. Sub-standard, unhealthy, or unsafe existing housing
  - h. Geographic isolation
  - i. Urban centres are too expensive
  - j. Connection to territory and community
  - k. Preferential location of reserve territory
  - l. Other [text box]
- 13) We welcome your comments and feedback. For instance, what are challenges you have experienced with housing? What are successes you have had in



building needed housing? What should IFSD know about housing in your First Nation? [text box]

14) May IFSD contact you to further discuss housing in your First Nation? [Yes/No]

## Questionnaire

Les travaux de l'IFPD reposent sur les principes de PCAP® (propriété, contrôle, accès et possession des données). Vous avez le droit de vous retirer à tout moment du processus de recherche, et toute information que vous auriez communiquée sera alors détruite. Seuls les membres du personnel de l'IFPD qui contribuent directement à ce projet auront accès aux données communiquées par les Premières Nations. Toutes les données recueillies seront agrégées et anonymisées avant la production du rapport destiné à l'Assemblée des Premières Nations (APN).

**Logement unifamilial** : Unité individuelle, construite à des fins résidentielles, comportant au moins une chambre pour chaque résident de 18 ans et plus ou une chambre pour un couple (marié, en union libre, etc.), ou une chambre pour chaque groupe de deux résidents de moins de 18 ans.

**Réparations mineures** : Rénovation ou entretien de base de quelques éléments du logement.

**Réparations majeures** : Rénovation ou remplacement de plusieurs éléments du logement : toiture, revêtement de plancher, plomberie, chauffage, isolation, etc.

- 1) Combien y a-t-il de logements résidentiels habitables dans votre Première Nation (inclure tous les logements résidentiels)? [zone de texte]
- 2) Combien de ces logements :
  - a. Nécessitent des réparations majeures [zone de texte]
  - b. Nécessitent des réparations mineures [zone de texte]
  - c. Sont dépourvus d'infrastructures d'évacuation des eaux usées et des eaux d'égout? [zone de texte]
- 3) Quels sont les coûts de construction moyens (en temps normal) d'un nouveau logement unifamilial moyen dans votre Première Nation? [zone de texte]
- 4) Quelle est la superficie moyenne d'un logement unifamilial dans votre Première Nation (en mètres carrés ou en pieds carrés)? [zone de texte]
- 5) Quels types de logements y a-t-il dans votre Première Nation? Choisir toutes les réponses applicables.
  - a. Logement unifamilial individuel
  - b. Maison mobile
  - c. Pavillon des aînés/Résidence pour personnes âgées
  - d. Immeuble à logements multiples
  - e. Multiplex (deux unités ou plus)
  - f. Foyer d'urgence ou de soutien
  - g. Autre [zone de texte]
- 6) Y a-t-il dans votre Première Nation toutes les unités de logement dont vous avez besoin? [Oui/Non]

- a. Si non, combien d'unités de chaque type de logement sont nécessaires :
  - i. Logement unifamilial individuel
  - ii. Maison mobile
  - iii. Pavillon des aînés/Résidence pour personnes âgées
  - iv. Immeuble à logements multiples
  - v. Multiplex (deux unités ou plus)
  - vi. Foyer d'urgence ou de soutien
  - vii. Autre [zone de texte]
  
- 7) Avez-vous les ressources (financières, humaines, matérielles, etc.) nécessaires, ou avez-vous accès à de telles ressources, pour construire les logements dont votre Première Nation a besoin? [Oui/Non]
  
- 8) Si non, pourquoi pas? Choisir toutes les réponses applicables
  - a. Manque de financement/d'argent
  - b. Accès limité aux matériaux (bois, cuivre, etc.)
  - c. Les matériaux sont trop chers
  - d. La main-d'œuvre n'est pas disponible
  - e. La main-d'œuvre coûte trop cher
  - f. Difficulté à trouver un entrepreneur
  - g. Difficulté à trouver des ouvriers spécialisés
  - h. Options de financement inadéquates
  - i. Pas de terrains disponibles
  - j. Manque de planification
  - k. Problèmes de gouvernance ou manque de capacité de gestion administrative
  
- 9) Dans votre Première Nation, combien de maisons habitables sont :
  - a. Subventionnées par un particulier (sources privées) [zone de texte]
  - b. Subventionnées par Services aux Autochtones Canada ou une autre source fédérale [zone de texte]
  
- 10) Est-ce que votre Première Nation a planifié ou étudié ses besoins de logement pour les trois à cinq prochaines années? [o/n]
  
- 11) Dans votre Première Nation, quels facteurs influencent les coûts de construction?  
[Choisir toutes les réponses applicables]
  - a. Accès routier durant toute l'année limité ou inexistant
  - b. Proximité d'un centre urbain (200 km ou moins)
  - c. Coût des matériaux
  - d. Coût de la main-d'œuvre
  - e. Problèmes de gouvernance ou manque de capacité de gestion administrative
  - f. Autre [zone de texte]
  
- 12) Dans votre Première Nation, quels facteurs influencent les besoins de logement?  
[Choisir toutes les réponses applicables]
  - a. Hausse de la population imputable au retour d'individus dans la réserve

- b. Hausse de la population, avec atteinte de l'âge de la majorité d'un certain nombre d'individus
- c. Accroissement du nombre de familles formées
- d. Croissance économique et perspectives d'emploi
- e. Chômage élevé
- f. Pauvreté
- g. Les logements existants sont inadéquats, insalubres ou non sécuritaires
- h. Isolement géographique
- i. Les centres urbains sont trop chers
- j. Sentiment d'appartenance au territoire et à la communauté
- k. Emplacement préférentiel du territoire de la réserve
- l. Autre [zone de texte]

13) Nous aimerions connaître vos commentaires et votre rétroaction. Par exemple, quels problèmes avez-vous rencontrés au sujet du logement? Pouvez-vous citer des réussites dans la construction des logements nécessaires? Que devrait savoir l'IFPD au sujet du logement dans votre Première Nation? [zone de texte]

14) Est-ce que l'IFPD peut vous contacter pour discuter davantage de la question du logement dans votre Première Nation? [Oui/Non]



## **Appendix 4**

### **Closing the Gap: Cost Estimates of Housing and Related Infrastructure need in First Nations**

The Assembly of First Nations is working with the Institute of Fiscal Studies and Democracy (IFSD) at the University of Ottawa to map current and future housing needs in First Nations to estimate the costs to close gaps and look to the future through the lens of well-being.

This project has two parts:

- 1) Estimate the investments required for current and future housing needs in First Nations.
- 2) Identify indicators that can assist in determining a well-being focused framework for housing.

#### **Our ask to First Nations**

This work will depend on the support and collaboration of service providers. IFSD is seeking First Nations to share their experiences by serving as a case study for this project (see Appendix 1 for an overview of the case study ask).

#### **Why participate?**

This study is designed to be a bottom-up cost analysis that uses actual cost data and experiences to define housing needs in First Nations. The accuracy of a cost estimate is improved when the data used comes from those on the ground.

The more granular data First Nations can share for this work, the more reflective this work will be of the reality on the ground. We need your help to make this work as real as possible. As the experts in First Nations, you are uniquely placed to identify housing needs and the factors influencing needs.

#### **Data and participation**

This research will be informed by OCAP® principles. As an affiliate of the University of Ottawa, the Institute of Fiscal Studies and Democracy (IFSD) is guided by ethical research guidelines respecting Indigenous Peoples and complies with the Tri-Council Policy Statement on the Ethical Conduct for Research Involving Humans in its work.

All data shared by First Nations will be held on password protected cloud-storage system (OneDrive), accessible only to IFSD staff engaged in this project. Any locally held data will be stored on IFSD research laptops only. Any physical copies of data or data shared on USB keys will be kept in a locked cabinet in a locked office at IFSD's office.

Participants can withdraw at any time and any data shared with IFSD will be destroyed.

**About IFSD**

IFSD is a research institute that uses money as a tool to analyze and solve public policy challenges. Led by Canada's first Parliamentary Budget Officer, Kevin Page, IFSD works in Canada and abroad to lend decision-support to governments, the broader public and private sectors. IFSD specializes in costing, performance, institutional design, and implementation. Since 2018, IFSD has been collaborating with First Nations and First Nations child and family services agencies on the costing, design and delivery of child and family services. IFSD is pleased to continue its work in this area, collaborating with and learning from those serving communities.

## Appendix 1 – Case studies

First Nations serving as case studies will be asked to share their current and future housing needs, to share how their individual context impacts their housing supply, and to review factors that influence cost and need.

As contributors and partners in this work, First Nations will support the development of a representative portrait of housing needs and cost. The information shared will be applied to develop cost estimation analysis and to inform the development of a well-being focused performance framework.

**IFSD's standard practice is to anonymize all information shared by First Nations, unless they wish to be identified by name and provide permission to do so.**

IFSD recognizes the demands on your time and is committed to working with your availability. IFSD will work with First Nations to schedule a virtual discussion via MS Teams, Zoom, phone or another platform. **IFSD depends on your insight and contributions to ensure representation and validity of its work.**

Guiding themes for the discussion include:

- a) Tell us about your First Nation.
- b) Tell us about the state of housing in your First Nation.
- c) Tell us about factors that influence housing needs, e.g. population growth, cost, etc.
- d) Cost data on construction costs for housing units in your First Nation.
- e) The typical size and capacity of housing units in your First Nation.
- f) The time and resources needed to build a housing unit, e.g. does it take months or years? Is financing accessible?
- g) Does your First Nation access federal funding to support housing developments?
- h) Tell us about financing homes on reserve:
  - i. Accessing/attempting to access federal funding
  - ii. Individually funded homes
  - iii. Other financing tools
  - iv. Successes or challenges in financing housing in your First Nation
- i) Estimating housing needs:
  - i. Can you plan housing needs in your First Nation?
  - ii. Does your First Nation develop or update a housing plan?
- j) How could housing needs be met in your First Nation?
- k) What's your ideal vision of housing in your First Nation?
- l) How should housing needs be measured now and into the future?
- m) Are there indicators that should be measured to plan for housing needs in First Nations?
- n) What resources would your First Nation require to:
  - i. Meet current housing needs
  - ii. Meet future housing needs

- iii. Develop a well-being focused plan for housing

## **Cartographier les besoins actuels et futurs en matière de logement des Premières Nations**

L'Assemblée des Premières Nations collabore avec l'Institut des finances publiques et de la démocratie (IFPD), à l'Université d'Ottawa, pour cartographier les besoins actuels et futurs en matière de logement des Premières Nations, afin d'estimer combien il en coûterait pour combler les lacunes et d'envisager l'avenir dans une optique de bien-être.

Ce projet comprend deux volets :

- 1) Estimer les investissements requis pour combler les besoins de logement actuels et futurs des Premières Nations.
- 2) Déterminer les indicateurs pouvant aider à établir un cadre de logement axé sur le bien-être.

### **Notre demande aux Premières Nations**

Ce travail nécessitera le soutien et la collaboration des Premières Nations. L'IFPD demande aux Premières Nations de faire connaître leurs expériences en servant d'étude de cas pour ce projet (voir l'annexe 1 pour un aperçu de la demande de faire l'objet d'une l'étude de cas).

### **Pourquoi participer?**

Cette étude consiste à procéder à une analyse ascendante des coûts, basée sur des données chiffrées réelles et des expériences concrètes pour définir les besoins de logement des Premières Nations. Une estimation de coût est habituellement plus précise quand les données employées proviennent des intervenants qui œuvrent sur le terrain.

Plus les données fournies par les Premières Nations seront granulaires, plus cette étude reflétera la réalité du terrain. Nous avons besoin de votre aide pour obtenir des résultats qui se rapprochent le plus possible de la réalité. En tant qu'experts, vous occupez une position unique pour établir les besoins de logement et cerner les facteurs qui influencent les besoins.

### **Données et participation**

Cette recherche reposera sur les principes de PCAP® (propriété, contrôle, accès et possession des données). En tant qu'organisme affilié à l'Université d'Ottawa, l'IFPD respecte les lignes directrices sur l'éthique de recherche concernant les peuples autochtones et se conforme dans toutes ses activités à l'Énoncé de politique des trois Conseils sur l'éthique de la recherche avec des êtres humains.

Toutes les données communiquées par les Premières Nations seront versées sur un système de stockage infonuagique protégé par mot de passe (OneDrive), accessible uniquement au personnel de l'IFPD participant au projet. Les données conservées localement seront stockées exclusivement sur les ordinateurs portables de recherche

de l'IFPD. Toute copie matérielle des données, de même que les clés USB contenant des données, seront conservées dans un classeur verrouillé situé dans une pièce verrouillée des bureaux de l'IFPD.

Les participants peuvent se retirer à tout moment. Toutes les données communiquées à l'IFPD seront alors détruites.

### **À propos de l'IFPD**

L'IFPD est un institut de recherche qui utilise l'argent comme outil pour analyser et résoudre des problèmes de politique publique. Sous la gouverne de Kevin Page, premier directeur parlementaire du budget du Canada, l'IFPD offre un soutien décisionnel aux gouvernements, ainsi qu'au secteur public en général et au secteur privé, tant au Canada qu'à l'étranger. L'IFPD se spécialise dans le chiffrage des coûts, le rendement, la conception des institutions et la mise en œuvre. Depuis 2018, l'IFPD collabore avec les Premières Nations et les agences de services à l'enfance et à la famille des Premières Nations au sujet du chiffrage, de la conception et de la prestation des services à l'enfance et à la famille. L'IFPD est heureux de poursuivre son travail dans ce domaine en collaborant avec les personnes qui servent leurs communautés et en apprenant de ces individus.

## Annexe 1 - Études de cas

Les Premières Nations servant d'études de cas seront invitées à communiquer leurs besoins de logement actuels et futurs, à indiquer comment leur contexte particulier influence l'offre de logement et à énumérer les facteurs qui influent sur les coûts et les besoins.

À titre de parties prenantes et de partenaires dans ce travail, les Premières Nations contribueront à brosser un tableau représentatif des besoins et des coûts en matière de logement. L'information communiquée servira à effectuer une analyse d'estimation des coûts et à éclairer l'élaboration d'un cadre de rendement axé sur le bien-être.

**L'IFPD a pour pratique normale d'anonymiser toutes les informations communiquées par les Premières Nations, à moins qu'une Première Nation souhaite être identifiée par son nom et en donne l'autorisation.**

L'IFPD est conscient que ce travail exigera de votre part un certain temps et s'engage à tenir compte de votre disponibilité. Nous contacterons les Premières Nations pour planifier une discussion virtuelle sur MS Teams, sur Zoom, au téléphone ou sur une autre plateforme. **Vos observations et vos contributions seront indispensables pour assurer la représentativité et la validité des travaux de l'IFPD.**

Voici quels seront les thèmes directeurs de la discussion :

- a) Parlez-nous de votre Première Nation.
- b) Parlez-nous de la situation du logement dans votre Première Nation.
- c) Parlez-nous des facteurs qui influencent les besoins de logement : croissance démographique, coûts, etc.
- d) Données chiffrées sur les coûts de construction des unités de logement dans votre Première Nation.
- e) Taille et capacité typiques des unités de logement dans votre Première Nation.
- f) Temps et ressources nécessaires pour bâtir une unité de logement; par exemple, cela prend des mois ou des années? Du financement est-il accessible?
- g) Est-ce que votre Première Nation se prévaut du financement fédéral pour soutenir ses projets de construction de logements?
- h) Parlez-nous du financement des résidences dans la réserve :
  - i. Accès/Tentative d'accès au financement fédéral
  - ii. Résidences financées individuellement
  - iii. Autres mécanismes de financement
  - iv. Réussites ou problèmes dans le financement du logement dans votre Première Nation
- i) Estimation des besoins de logement :
  - i. Pouvez-vous planifier les besoins de logement de votre Première nation?
  - ii. Est-ce que votre Première Nation élabore ou met à jour un plan de logement?

- j) Comment les besoins de logement de votre Première Nation pourraient-ils être satisfaits?
- k) Quelle serait votre vision idéale de la situation du logement dans votre Première Nation?
- l) Comment les besoins de logement devraient-ils être mesurés, maintenant et à l'avenir?
- m) Y a-t-il des indicateurs qui devraient être mesurés pour planifier les besoins de logement des Premières Nations?
- n) De quelles ressources votre Première Nation aurait-elle besoin pour :
  - i. Combler ses besoins de logement actuels
  - ii. Combler ses besoins de logement futurs
  - iii. Élaborer un plan de logement axé sur le bien-être



## Appendix 5

### 1. General Principles of Planning a Residential Build:

Building any structure requires acquisition and knowledge of the terrain, consumable resources, and specialized labour and equipment. Each of these components is critically important, and a build is likely to fail if any part is missing. These components can interact to create feedback loops between one another that inform the viability of a build project. For example, the terrain can negatively affect the access to consumable resources or labour. But, if given the will and budget, a build project could fly-in labour and make massive changes to the terrain. Overall, a build project could overcome nearly all terrain constraints if given the time and money. The three influencing factors of terrain, resources, and labour are discussed in turn.

#### a. Terrain considerations:

The most important aspect of the build is acquiring and understanding the terrain of the build site. Simply put, build site is a primary requirement for construction, and without understanding the characteristics of the terrain you will be unable to complete your build. Assuming the land required for the build has been acquired, one must turn their attention to the build environment.

Broadly speaking, the terrain characteristics are the most important aspect of any commercial or residential build project. There multiple terrain characteristics that cannot be reviewed in a single note. For simplicity, three broad categories will be considered: geographic characteristics, infrastructure characteristics, and access to supply lines.

Geographic considerations are those that stem from the location of the build, such as the expected weather over the course of a year, risk of extreme weather events, or load bearing capacity of the ground. These considerations greatly impact the structure being built, as each one would change the resources or labour required to complete the build.

A 2017 study published in *Procedia Engineering* found that if for any reason the terrain in question requires deviations from the original building plan, then demand for additional goods and services will lead to budget overruns (Bauer, 2017). They can also impact the project through weather delays, or entire seasons where building is not feasible.

The second consideration is the site's access to existing infrastructure such as electricity, water, and sewage and waste services. These aspects are important for both the structure being built, and for the team completing the build. If there is not suitable access to these types of infrastructure it could change the design of the structure or lead to secondary facilities being brought in to allow the construction team to complete the project.

The third broad category is the proximity to functional supply lines such as properly rated roads and highways, airfields, or ports. Any build, regardless of size, will require many raw resources to be shipped to the build site (possibly from other regions), workers to be able to transit in and out, and the transport of large machinery. Being able to properly source these resources through the existing infrastructure and being certain

that the infrastructure can handle the wear and tear associated with a build project, are both vital to the efficient operation of a build environment.

**b. Resource Considerations:**

The resource considerations of a build refer to various raw inputs that will be required to complete the build project. In the case of a residential build this would most likely include things such as wood, glass, plastics, and cement. The resource considerations are related to two things: the scale of the project being built (both an individual unit, and the overall amount if it is a large project), and the impact the geography can have on the structure (e.g., does the structure require special resources to protect it from weather).

**c. Labour and equipment considerations:**

The labour and equipment considerations are by far the most dependent of the variables. The labour and equipment requirements are directly related to the terrain, and the structure being built. The labour required includes, but is not limited to, the general builders, special equipment operators, electricians, plumbers, and foremen. But, as the site becomes in need of more aggressive changes (such as clearing forest or brush, site remediation, removal of bedrock, specialised foundations etc.), more specialized labour may be needed. In some cases, where the labour must be imported, there is also the possibility that additional facilities will have to be created to house the incoming workers. While this is unlikely to be the case in an urban environment, remote or isolated build environments would have to consider this prior to beginning the project.

**2. Cost Drivers of a Residential Build**

Once the build has been planned, and the characteristics of the geography, resources, and labour have been properly noted, you can begin costing the project. Using the insight gained from the initial planning will be instrumental to properly costing the project. The major drivers of residential structure costs can be broken into acquisition costs, resource costs, labour and equipment costs, and risk adjustments.

**Acquisition costs:** Acquisition costs are those relating to not only acquiring the land for the build, but should also include secondary expenses such as permits, environmental reviews, or other pre-build considerations. While these expenses are usually minimal compared to the overall cost of the build, they are vital to its completion.

**Resource costs:** These costs relate to sourcing and transporting the relevant resources to the build site. The prices of resources will be largely dependent on the current and forecasted prices (depending on the length of the build), the ease of access to the building site, and their availability near the build environment. The primary driver of the resource costs are the current prices of the resources required. As the prices change, or the risk that they change in the future increases, it will become increasingly more expensive to source resources for a build project. The second driver relates to the cost to transport the resources into the build site. Depending on the remoteness of the build, or the quality of the roads, this can be costly to transport it into the site. Finally, the supply of the resources in the area can cause major changes in the resource costs. This is because in either a very active build environment where resources are in high demand, or in a remote environment where the base rate for resources is low, the build

is likely to have to ship in additional resources. This leads to increased costs dependent on the distance and method of shipping.

**Labour and equipment costs:** Labour and equipment costs relate to the costs of hiring and transporting enough specialized workers and equipment in and out of the build site. In general, the same principles of supply and demand discussed above extend to labour and equipment (Halsall, 2018). The build would first consider the labour and equipment available to them in proximity, and the cost to transport that labour or equipment to the site. If the closest supply is insufficient to undertake the project, additional costs will be accrued to bring in labour and equipment from other areas. In addition, build environments can have trouble securing labour before projects begin. A 2018 study published in the *Journal of Management in Engineering* found that “Engineering staff with knowledge of construction and inspection tends to live in areas of greater population near urban areas...staffing is a constant problem in that there are not many people who want to work in areas that have no (limited) running water or sewer system” (Tran, 2015). Many build sites could require extra infrastructure investment to operate effectively, causing further costs to be incurred if the site requires additional electric, hydro, or wastewater infrastructure.

**Risk adjustments:** The final type of costs that should be accounted for are related to the risk profile of the build. Many large-scale projects are prone to increased costs for several reasons, including changes in commodity or currency prices, delays affecting availability of resources, labour, or equipment, or the risk of vital equipment breaking. Any of these risks could cause major impacts on the final price of a build and should be considered prior to costing a project.

### 3. Estimating the Cost of a Residential Build

The cost of a build project is typically estimated by looking at data from similar build projects in the same location, or ones considered to be close enough for comparison. For example, major metropolitan areas such as Toronto and Vancouver will have detailed datasets for the cost of various components, labour, and permits required to complete a build. These datasets would normally be reviewed, and used as a preliminary estimate that is later updated to reflect a risk adjustment, and more accurate cost information acquired through consultations with the providers of the building materials, labour, land, etc.

In the case of rural or isolated projects, such rich datasets are unavailable, and the risk adjustments are much larger. With this in mind, to accurately assess the cost of a remote or isolated build project, a team would have to evaluate the supply chain constraints (such as the locally available supplies, and transport), geographic constraints (such as ground quality, inclement weather risk, flooding risk, etc.), and labour constraints of each project individually. Because of the number of factors that must be considered, and the impact they can have, heuristics from building cost estimations in remote places are limited. If a cost estimate or cost review for a remote build was needed, a methodology would have to be designed and a data set acquired or built.

### 4. The effects of remoteness on the cost of a build environment

The effect of increased costs in remote and isolated areas will have a major impact on any large-scale building projects. Due to high resource and labour requirements of large build environments, many building projects in remote environments will have to import the required materials and labour (Halsall, 2018). In a 2010 study focusing on the construction challenges of remote locations, researchers from the University of Adelaide (Mcanulty et al.) conducted interviews with the management staff of 75 construction firms with experience in remote and isolated build environments. They found that over 90% of respondents agreed (58.7%), or strongly agreed (37.3%), that the availability of materials had a considerable impact on productivity. In addition, they found that most respondents believed the climate of remote areas impacted the build productivity (97%), the difficulty of procuring materials causes major problems (84%), and that pricing for remote locations is more difficult than city locations (77%). The study found that the top four areas of concern among these companies were: 1) Personnel, 2) Productivity, 3) Procurement, and 4) Cost Management.

The impact these problems can have on the price of a build environment are apparent in a Canadian context. According to the Altus 2018 Construction Cost Guide, building in northern or remote communities could cost considerably more than metropolitan areas.

## **5. Potential approaches to estimating the impact of remoteness**

There are a handful of approaches that can be used to adjust spending for remote or isolated areas, ranging in complexity and accuracy. While the preferred method for construction companies and contractors is to send a team to the field, this is not always feasible for large scale costing or groups with limited resources. There are a handful of approaches that can be used to account for various levels of remoteness. The list from least complicated and resource intensive to most is the use of: benchmarking, heuristics, and modeling.

### **a. Benchmarking**

The simplest approach to costing remote build projects is through benchmarking. Similar to the format provided by the Altus Canadian Costing Report 2018, benchmarking would see the build cost applied to a basic inflator depending on the region of the build. This could be designed in several different ways, but the most reasonable would be to use the average square foot cost of a standardized residential build for major cities in each region in Canada. This is by far the simplest and quickest manner of forecasting price variability but will see large swings in its accuracy. Given that this type of data exists for only major cities, or provincial and territorial capitals, it is possible that the forecast will underestimate the impact of remoteness, or building project risks, and could see fluctuating accuracy when applied to real world projects.

### **b. Heuristics (“rules of thumb” / multipliers)**

A slightly more complicated approach could involve the use of a set of heuristics to create a set of multipliers for remote build projects. While this method would allow for a better approximation of building costs, it would require a period of data gathering and analysis to be conducted to create the multipliers. The data gathering could possibly be done by working with a statistically relevant number of local governments in various conditions (such as with or without road access), to try to isolate the effects of a number

of the traits. Using this data, the impact of various conditions on the price of a remote build could be estimated. For example, these indicators could include if the build site is accessible by road, within “X” kilometres of a major shipping hub, or the expectation of extreme weather. The build cost would then be multiplied by the sum of the impacts of each of those choices (ex. 25% increase for no roads, 15% increase for being within 100km of a shipping hub, 0% increase for no extreme weather). While this method of estimation would be more time consuming on the design phase, it would allow for a more accurate estimation of the price of a build project. Once designed it would also be able to be coded into a data tool and applied quickly to any number of future building projects. Its major drawbacks would be that it fails to account for the specifics of each of the build environments and could miscalculate the price of a build if the statistical analysis causes spurious results.

### **c. Modeling**

A more accurate, but much more time-consuming activity, would be to forecast out each of the build projects or areas separately. This method would allow for a more accurate assessment to be made on the available resources and labour in each region, if labour or resources would have to be shipped in, the geographic features (such as ground type, or prevalence of inclement weather), and the possible risk factors of the build. An example of the variables that may be included would be:

- The expected cost of labour per unit of housing;
- The expected cost of resources per unit of housing;
- The expected cost of shipping and freight transport;
- And secondary costs associated with hooking up water, power, or other municipal services.

This method would allow for more accurate estimates to be made for each of the building environments, and the potential risks each area faces. In contrast to the previous methods, while this is feasible for a low number of sites, a national or provincial project could affect hundreds of communities, and see the required analysis greatly increase.

## References

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## Appendix 6

Range of Current Housing Needs Housing Units								
	Housing Stock	Overcrowding	Migration	Replacement	New units for pop growth	Minor renovations	Major renovations	Servicing New Lots
<b>Atlantic</b>								
High	8369	1870	1329	339	501	3987	1634	3330
Base	7650	1441	1159	254	440	3467	1416	2746
Low	6931	1011	990	169	388	2947	1198	2171
<b>Quebec</b>								
High	17659	5414	2543	264	572	2260	5366	7594
Base	15545	4860	1895	210	491	1679	4932	6514
Low	13431	4306	1247	156	440	1098	4498	5464
<b>Ontario</b>								
High	26896	6607	18080	4456	780	8746	8950	24541
Base	25518	5785	13159	3950	708	7809	8272	18929
Low	24140	4964	8237	3445	678	6872	7594	13358
<b>Saskatchewan</b>								
High	22590	11746	15610	2961	1571	10451	6098	28061
Base	17871	8524	13597	1819	1210	7454	5023	22685
Low	13153	5302	11585	676	844	4458	3948	17305
<b>British Columbia</b>								
High	19502	5321	20202	2665	609	5740	6170	24026
Base	18158	4398	16084	2156	553	4982	5274	19384
Low	16814	3474	11967	1647	498	4225	4377	14743
<b>Yukon</b>								
High	1656	347	2084	304	19	654	548	2352
Base	1486	241	1233	210	18	545	418	1427
Low	1317	135	382	117	13	436	287	499
<b>Alberta</b>								
High	22759	8075	18590	3899	850	8121	7250	25446
Base	20312	6501	14569	3034	739	6617	6380	20220
Low	17866	4927	10548	2170	629	5112	5510	14994
<b>Manitoba</b>								
High	23332	6032	14705	2396	605	11958	5791	20128
Base	18459	4377	12809	1471	467	8529	4770	16747
Low	13586	2723	10913	547	336	5101	3750	13374
<b>Northwest Territories</b>								
High	5297	1111	6667	971	18	2091	1753	7483
Base	4755	771	3945	673	15	1742	1336	4524
Low	4213	432	1223	376	13	1394	919	1565
<b>Total high</b>	148058	46523	99809	18253	5524	54008	43560	142960
<b>Total base</b>	129754	36899	78451	13779	4642	42825	37821	113177
<b>Total low</b>	111451	27274	57092	9304	3839	31642	32081	83474



Range of Capital Cost of Housing Needs (\$ Millions)								
	Overcrowding	Migration	Replacement	New units for pop growth	Minor renovations	Major renovations	Servicing New Lots	Total current needs
<b>Atlantic</b>								
High	326.8	244.2	61.4	89	45.5	81.3	113	961.2
Base	251.8	213.1	46	78.2	39.6	70.4	93.2	792.3
Low	176.8	182	30.6	69	33.6	59.6	73.7	625.3
<b>Quebec</b>								
High	1595.2	669	75.5	164	87	437.8	441.1	3469.6
Base	1431.9	498.5	60.1	140.9	64.7	402.4	378.4	2976.9
Low	1268.7	328	44.7	126.1	42.3	367	317.4	2494.2
<b>Ontario</b>								
High	1876.8	4741.9	1271	222.4	221.7	657.6	1101.1	10092.4
Base	1643.4	3451.2	1126.7	201.7	197.9	607.7	849.3	8078
Low	1410.1	2160.4	982.5	193.2	174.2	557.9	599.3	6077.6
<b>Saskatchewan</b>								
High	2737.5	3629.6	683.6	365.2	128.9	320.3	863.7	8728.7
Base	1986.6	3161.7	419.9	281.4	91.9	263.8	698.2	6903.5
Low	1235.6	2693.7	156.2	196.3	55	207.4	532.6	5076.8
<b>British Columbia</b>								
High	1581.1	6160.7	800.6	179.9	90.6	342.5	983.8	10139.1
Base	1306.7	4905	647.7	163.5	78.6	292.7	793.8	8188
Low	1032.3	3649.3	494.9	147	66.7	243	603.7	6236.9
<b>Yukon</b>								
High	121.7	751.7	103.9	6.8	24.4	56.4	96.7	1161.7
Base	84.5	444.8	72.1	6.4	20.4	43	58.7	729.8
Low	47.3	137.9	40.2	4.9	16.3	29.6	20.5	296.7
<b>Alberta</b>								
High	2137.8	4921.3	1032.1	225.1	151.2	476.3	1035.6	9979.5
Base	1721.1	3856.9	803.3	195.8	123.2	419.2	822.9	7942.2
Low	1304.3	2792.4	574.4	166.4	95.2	362	610.2	5905
<b>Manitoba</b>								
High	1477.6	3602.1	586.8	148.2	151.6	299.6	745.4	7011.2
Base	1072.3	3137.7	360.5	114.3	108.1	246.8	620.2	5659.9
Low	666.9	2673.3	134.1	82.3	64.7	194	495.3	4310.6
<b>Northwest Territories</b>								
High	413.7	2483.1	361.6	6.5	81.5	188.2	321	3855.7
Base	287.3	1469.3	250.8	5.6	68	143.4	194.1	2418.5
Low	160.9	455.5	139.9	4.7	54.4	98.7	67.1	981.2
Total high	12268.2	27203.6	4976.5	1407.1	982.5	2859.9	5701.4	55399.2
Total base	9785.5	21138.1	3787	1187.9	792.4	2489.4	4508.8	43689.1
Total low	7302.9	15072.6	2597.6	990	602.2	2119	3319.9	32004.3



## Appendix 7

### Zone 1

#### Key Attributes

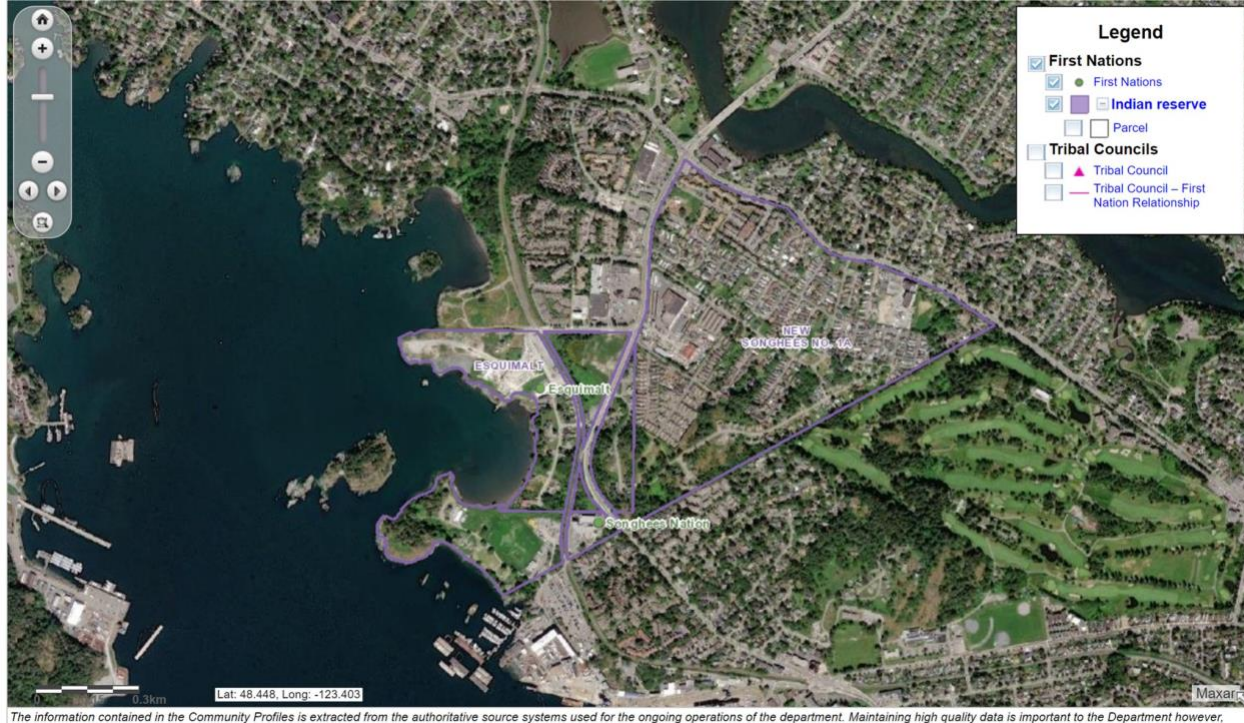
- The First Nation is closer than 50 Km to the nearest service center and has year-around road access.
- Zone 1 First Nations can either be surrounded by or outside nearby service centers.
- They have relatively good access to physical infrastructure that comes from the urban centers.
- They have relatively easy access to the human capital that is available in urban centers.
- Low construction costs compared to more remote First Nations.
- Good access to health and other services concentrated in urban/service centers.
- Good access to materials for building and repairs.
- May have better business opportunities due to their proximity to large populations.
- Access to groceries at urban or near urban prices.
- Connection to the land may be lower in zone 1 due to landscapes that have been drastically altered by the presence of settlers.

#### Zone 1 Songhees Nation Key Facts

- Geography:
  - Zone 1
    - Year around road access to the nearby (less than 50 Km) service center of Victoria, BC.
  - Environmental Index C
    - Between 45- and 50-degrees latitude
- Population: 590
- Housing units
  - 26% overcrowded
  - 60% personal ownership of dwellings
  - 25% need minor repairs
  - 36% need major repairs
- Labour force:
  - 54% participation rate
  - 44% employment rate
  - 18% unemployment rate
  - Medium employment income in 2015: \$18 621
- Physical infrastructure needs like drinking water are met by BC's Capital Regional District's infrastructure system

- Access to First Nations services on-reserve as well as all the services available in Greater Victoria.
- Access to economic and tourist activity in the Greater Victoria Area
  - 44% employment rate (Statcan 2016)
  - 18% unemployment rate (Statcan 2016)
- Developed their own land code under the First Nations Land Management Act.
  - Are in or pursuing other sectoral self-governance initiatives.
- Mild weather conditions.
- Community description of relationship to the land:
  - “The development of a modern city makes it more difficult to experience the landscape that is home to the ləkʷəŋən. However, footprints of traditional land use are all around us, and this land is inseparable from the lives, customs, art, and culture of those who have lived here since the beginning.”<sup>102</sup>

### Songhees Nation Map



### Zone 1 Mohawks of the Bay of Quinte Key Facts

- Geography
  - Zone 1:
    - Less than 50 Km from Belleville, Ont.
  - Environmental Index A
    - Less than 45 degrees latitude

<sup>102</sup> Songhees Nation. “ləkʷəŋən Traditional Territory.” *Songhees Nation Website*. Date N/A. [Link](#)

- Population: 2 080
- Housing units
  - 2% overcrowded
  - 70 % personal ownership of dwellings
  - 21% need minor repairs
  - 27% need major repairs
- Labour force:
  - 53% participation rate
  - 49% employment rate
  - 9% unemployment rate
  - Medium employment income in 2015: \$25 280
- Very strong housing program and use of Certificates of Possession to promote home ownership.
- A large and relatively wealthy First Nation
- The Nation has developed strong housing and other management capacity.

### Mohawks of the Bay of Quinte Nation Map



### Zone 2

#### Key Attributes

- “The First Nation is between 50 Km and 350 Km from the nearest service center and has year-around road access.”<sup>103</sup>

<sup>103</sup> Indigenous and Northern Affairs Canada. “Tribal Council Detail.” *Government of Canada*. Date modified: April 9, 2019. [Link](#)



- Relatively likely to have houses in ABS housing need.
- Higher than urban center cost of building materials
  - Goods must be transported medium to long distances from the nearest service center.
  - Difficulties accessing human capital.
    - Impacts unit and infrastructure development and maintenance.
- May be attached to infrastructure and/or power grids or may require their own
  - May be close to energy projects or may require their own infrastructure for energy and other needs.
- Based on location and latitude the First Nation may have climate adaptation needs.
- Satellite-based internet is likely slower than that in urban communities.
- Inferior access to health care services.
  - Must be driven long distances or air lifted to other centers for access to full hospital services.
- Economic opportunities vary by proximity to resources projects, service centers and tourism opportunities.

#### Zone 2 Tootinaowaziibeeng Treaty Reserve Key Facts

- Geography
  - Zone 2:
    - About 2h and 40 min from Brandon, MB (238 Km) and
  - Environmental Index C
    - Between 50- and 55-degrees latitude
    - Manitoba
- Population: 355
- Housing units
  - 17% overcrowded
  - 90% Band housing
  - 17% need minor repairs
  - 62% need major repairs
- Labour force:
  - 40% participation rate
  - 31% employment rate
  - 26% unemployment rate
  - Medium employment income in 2015: \$13 792
- Dispersed rather than concentrated housing.
- Lack of adequate shelter as defined by the community in 2011.
  - “housing that would protect them from the harsh climate, that would foster human dignity and emotional well-being and that would support (rather than undermine) health”<sup>104</sup>
  - Lower square foot per person (300 sq ft.) than provincial average (413 sq ft.)

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<sup>104</sup> Larcombe, Linda. Et al. “Housing Conditions in 2 Canadian First Nations Communities.” *International Journal of Circumpolar Health*. 2011. [Link](#)

- However only 20% of respondents indicated that they felt crowded.
- Most homes were bungalows with crawlspaces.
- Primarily uses electricity for home heating.
- Damaged windows and doors were widespread.
- Mould on the main walls, ceilings or floors in 19% of houses and in the crawlspace of 12% of houses.
  - More likely an underestimate than an overestimate.
- 11% of households surveyed relied on a traditional diet.

## Tootinaowaziibeeng Treaty Reserve Nation Map



### Zone 2 Ditidaht Key Facts

- Geography
  - Zone 2:
    - About 2h and 40 min from Brandon, MB (238 Km) and
  - Environmental Index B
    - Between 45 and 50 degrees latitude
- Population: 150
- Housing units
  - 77% overcrowded
  - 28% personal ownership of dwellings
  - 59% rental but non-band housing
  - 34% need minor repairs
  - 31% need major repairs
- Labour force:
  - 60% participation rate
  - 55% employment rate
  - 17% unemployment rate

### Ditidaht Nation Map



### Zone 3

#### Key Attributes

- “The First Nation is farther than 350 Km from the nearest service center and has year-around road access.”<sup>105</sup>
- Based on location and latitude the First Nation is likely to have large climate adaptation needs.
- Costing of importing resources high as they must travel long distances from population centers.
- More Likely to have houses in ABS housing need.
  - Disrepair/overcrowding
- High cost of building materials
  - Goods must be transported extremely long distances from the nearest service center.
  - Difficulties accessing human capital.
    - Impacts unit and infrastructure development and maintenance.
- Require their own water, waste and other infrastructure
  - They often have low quality infrastructure resulting in boil water advisories among other issues in some communities.
  - May rely on diesel/gas/wood for heating needs.
- High cost of Groceries

<sup>105</sup> Moazzami, Bakhtiar. “Remoteness Indicators and First Nation Education Funding.” *Assembly of First Nations*. April 2018. Page 20. [Link](#)

- Access to local sources of nutrition through hunting, fishing or other techniques may be important both culturally and nutritionally.
- Based on location and latitude the First Nation may have large climate adaptation needs.
- Satellite-based internet is likely slower than that in urban communities.
- Far inferior access to health care services.
  - Must be driven extremely long distances or air lifted to other centers for access to full hospital services.
- Some communities have few economic opportunities with high unemployment rates.
  - Others have developed resource or tourism sectors.

### Zone 3 Cree Nation of Wemindji Key Facts

- Geography:
  - Zone 3
    - The First Nation is over 350 Km by road from the nearest service center of Val-d'Or, Quebec.
  - Environmental Index C
    - Between 50 and 55 degrees latitude
- Population: 1 385
- Housing units
  - 17% overcrowded
  - 70% Band housing
  - 35% need minor repairs
  - 40% need major repairs
- Labour force:
  - 64% participation rate
  - 52% employment rate
  - 18% unemployment rate
  - Medium employment income in 2015: \$31 808
- Part of the Cree Nation.
- Part of the FNHMF credit enhancement program.
- Example of community that has developed a strong community, housing stock and economy.
- Uses eco-tourism to support its economy.
- The Nation “has exceptional infrastructure, and facilities to meet the needs of the Youth, the Elders, others with special needs, and the animals that share the land with the community” (FNHMF)

### Cree Nation of Wemindji Nation Map





## Zone 4

### Key Attributes

- No year-round road access to an urban/service center
  - Split into sub zones based on the distance to the nearest service center with subzone 0 being less than 50 Km from the nearest service center and subzone 6 being greater than 480 Km from the nearest service center.
- Most likely to have houses in ABS housing need
  - Disrepair/overcrowding.
  - Crowded and poorly ventilated housing.
- High cost of building materials
  - Goods must be flown or boated in depending on the community.
  - Difficulties accessing human capital.
    - Impacts unit and infrastructure development and maintenance.
- Require their own water, waste and other infrastructure
  - They often have low quality infrastructure resulting in boil water advisories among other issues in some remote communities.
  - Likely to rely on oil/diesel/wood for heating
- High cost of Groceries
  - Access to local sources of nutrition through hunting, fishing or other techniques may be important both culturally and nutritionally.
  - More likely to rely on a traditional diet
- Based on location and latitude the First Nation may have large climate adaptation needs.
- Satellite-based internet is likely slower than that in urban communities.

- Significantly inferior access to health care services.
  - Must be air lifted to other centers for access to full hospital services.
  - High rates of TB and other communicable diseases.
- Few economic opportunities with unemployment rates as high as 85% in some communities.

#### Zone 4 Attawapiskat Key Facts

- Geography:
  - Zone 4
    - No year around road access to the nearest service center of Timmins, Ont.
    - Accessible by ice road to Moosonee, Ont in the winter.
  - Sub-zone 6
    - Greater than 480 km from Timmins, On.
  - Environmental Index C
    - Between 50 and 55 degrees latitude
- Population: 1460
- Housing units
  - 31% overcrowded
  - 30% personal ownership of dwellings
  - 18% need minor repairs
  - 65% need major repairs
- Labour force:
  - 49% participation rate
  - 33% employment rate
  - 33% unemployment rate
  - Medium employment income in 2015: \$18 368
- Documented poor housing conditions:
  - Housing shortage
  - Over crowding
  - Some units in disrepair
  - Long waitlists for new units
- Ongoing tap water crisis
- “A lack of funding had resulted in an acute housing shortage, forcing people to live in moldy homes, tents, abandoned construction trailers and cabins with no heat in -15 to -20 Celsius temperatures”<sup>106</sup>

#### Attawapiskat Nation Map

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<sup>106</sup> Pasternak, Shiri. “The Fiscal Body of Sovereignty: to ‘Make Live’ in Indian Country.” Department of Middle Eastern, South Asian, and African Studies, Columbia university, New York, NY, USA. 2015. [Link](#)



#### Zone 4 Nisga'a Village of Gitwinksihlkw

- Geography:
  - Zone 4
    - No year around road access to the nearest service center of Timmins, Ont.
    - Accessible by ice road to Moosonee, Ont in the winter.
  - Sub-zone 1
    - Between 50 Km and 160 Km from Terrace, B.C.
  - Environmental Index D
- Between 55 and 60 degrees latitude
- Population: 200
- Housing units
  - 23% overcrowded
  - 80% personal ownership of dwellings
  - 18% need minor repairs
  - 40% need major repairs
- Labour force:
  - 73% participation rate
  - 57% employment rate
  - 23% unemployment rate
- Part of the Nisga'a Nation
- Party of the Nisga'a Modern Treaty
  - Operates a unique fee simple property ownership system where Nisga'a can



## Nisga'a Village of Gitwinksihlkw Nation Map

