



NUNAVUT'S INFRASTRUCTURE GAP

EXECUTIVE SUMMARY





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ABOUT THIS REPORT

This report was commissioned by Nunavut Tunngavik Inc. (NTI), the organization that represents the territory's 33,000 Inuit and their rights under the *Nunavut Agreement*. NTI is governed by a Board of Directors elected by Inuit 16 years of age and older, including six members nominated by Nunavut's three Regional Inuit Associations: the Kitikmeot Inuit Association, the Kivalliq Inuit Association, and the Qikiqṭani Inuit Association.

Defining (and fixing) Nunavut's infrastructure deficit is a crucial project of Inuit self-determination.

Closing the infrastructure gap is one of the core priorities established by the NTI board for the 2018–21 period.¹ Inuit Tapiriit Kanatami, the national organization representing Canada's 65,000 Inuit, has identified eliminating the infrastructure deficit as a core priority for Inuit Nunangat more broadly.²

This comprehensive research project measures the infrastructure gap between Nunavut and the rest of Canada. This work represents a necessary first step in efforts to close this gap — next steps will require further leadership from Inuit organizations and meaningful partnership with local, territorial, and federal governments.³

1 Nunavut Tunngavik Inc., "Niriuttaarijat - Nunavut Tunngavik Incorporated 2018–2021 Priorities," 2018, <https://www.tunngavik.com/2019/09/27/niriuttaarijat-nunavut-tunngavik-incorporated-2018-2021-priorities/>.

2 Inuit Tapiriit Kanatami, "Arctic and Northern Policy Framework: Inuit Nunangat," 2019, <https://www.itk.ca/wp-content/uploads/2019/09/20190907-arctic-and-northern-policy-framework-inuit-nunangat-final-en.pdf>.

3 See Nunavut Tunngavik Incorporated and Government of Nunavut, Katujjiqatigiinni Protocol, <https://www.tunngavik.com/2020/01/21/katujjiqatigiinni-protocol/>.

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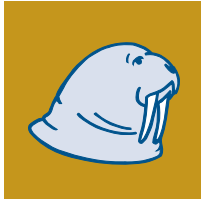
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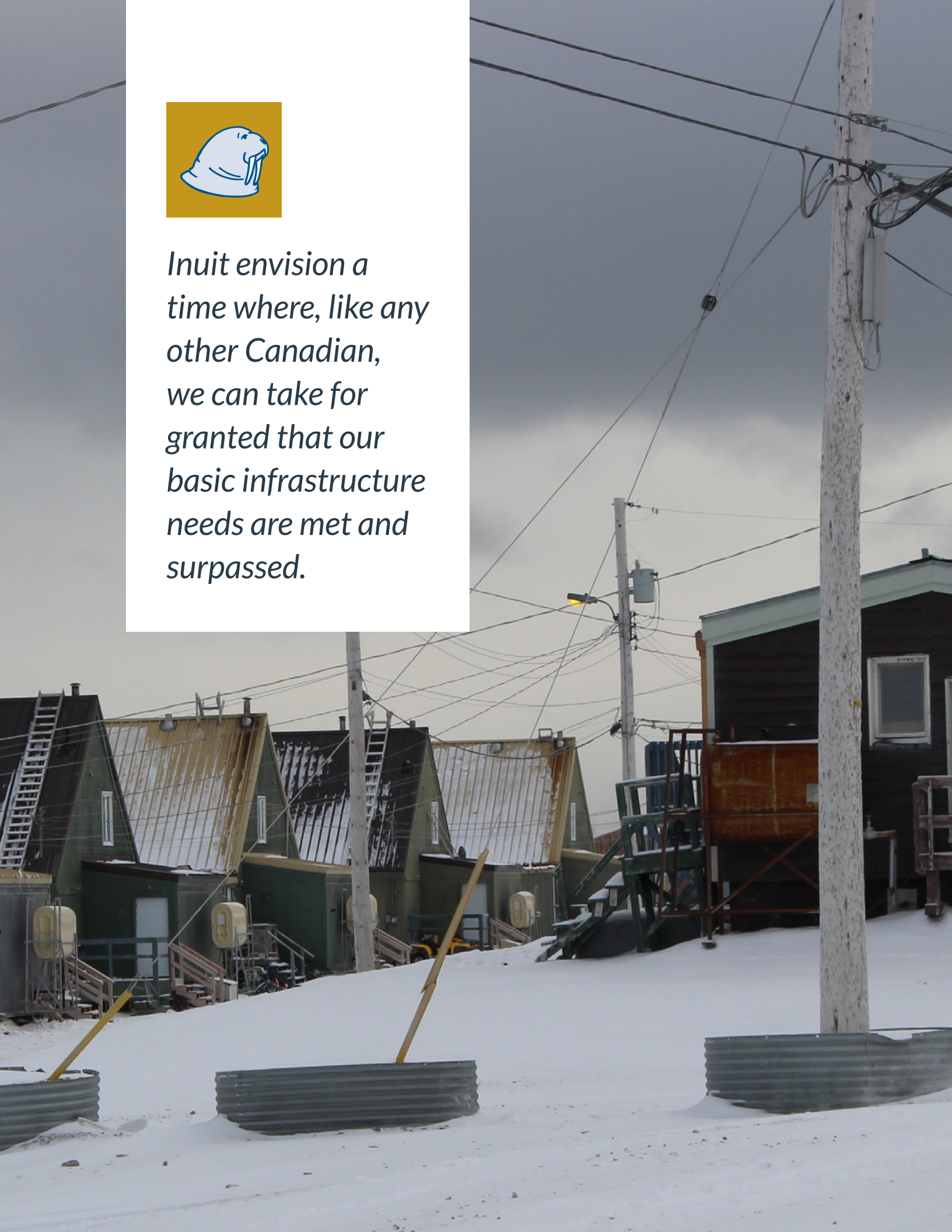
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Inuit envision a time where, like any other Canadian, we can take for granted that our basic infrastructure needs are met and surpassed.



LETTER FROM THE PRESIDENT

As the first comprehensive examination of Nunavut's infrastructure deficit, the final report of the Nunavut Infrastructure Leadership Initiative aims to provide a thorough analysis of several gaps in infrastructure between Nunavut and the rest of Canada. Commissioned to support the renewed relationship between Inuit and the Crown, this gap analysis is a key element of the Nunavut Tunngavik's Board of Directors 2018 Strategic Objectives.



While the revelations contained in this report may be shocking to some, the aim of the report is not so much to draw attention on the deplorable state of infrastructure in our communities, as it is to set the premise for a renewed engagement with our partners on fulfilling the aspirations of Inuit. Inuit have been clear on our aspirations: we want, among other things, a robust and sustainable harvesting economy. We expect to have banking and health services in Inuktitut. We expect to have an education system that supports Inuktitut and our world view as Nunavut Inuit. Like the average Canadian, we want to ensure that we can provide for our families, our loved ones, and contribute to our communities.

For millennia, Inuit have been self-reliant, providing for our own needs through our resourcefulness, innovation, and tenacity. Despite attempts to disrupt the societal fabric, of which self-reliance is foundational, Inuit continue to work hard to ensure that we have the structures in place to continue our pivotal role in self-determination. With the research behind this report we have new evidence to help define the true nature of the challenges, and the potential for change, embedded within Nunavut's infrastructure deficit.

Nunavut Inuit want to pursue infrastructure projects that will have a positive impact and benefit for Inuit – for our economic, cultural, and social wellness. In short, we expect to participate as full partners in the development of Nunavut in Canadian Confederation. And we have been consistent in working to fulfill this expectation.

Whether through the Arctic and Northern Policy Framework's focus on infrastructure; our active participation on the Inuit Crown Partnership Committee, where we continue to work with the federal government to fulfill its commitment to eliminate the infrastructure deficit in Inuit Nunangat by 2030; or in meeting the [Katujjigatigiinniq Protocol](#) objective of co-developing with the Government of Nunavut a Long-Term Infrastructure Strategy for Nunavut, we will keep advocating for meaningful solutions to our infrastructure challenges.

With this report, I believe we have an opportunity to turn the conventional narrative of infrastructure needs in the Arctic on its head. That together, with our federal and territorial partners we can develop a new collective understanding of Nunavut's infrastructure needs that respects our aspirations and roles.

Inuit envision a time where, like any other Canadian, we can take for granted that our basic infrastructure needs are met and surpassed. The information gathered in this report is not only valuable and informative, but it can act as a catalyst for our partners to put into action initiatives that will meet our infrastructure needs so that one day, we may, again, thrive and contribute positively to the broader Canadian society.

Taima,

A handwritten signature in black ink, reading "Aluki Kotierk". Above the signature is a small, stylized drawing of a person's head and shoulders.

Aluki Kotierk
President, Nunavut Tunngavik Inc.

INTRODUCTION

Infrastructure is the essential foundation of a thriving economy and effective public services. Infrastructure delivers the water we drink and the power that heats our homes. Infrastructure includes our roads and sidewalks, our ports and airports, our health care and education systems. Infrastructure provides the broadband that connects us to our neighbours and to other parts of the world.

The 1993 *Nunavut Agreement* affirmed a commitment to support the self-determination and economic, cultural and social development of Nunavut Inuit. But Canada's newest territory was created with a legacy of inequity that has left core promises in the *Nunavut Agreement* unfulfilled.

Three things are clear:

- › a **substantial infrastructure gap** exists between Nunavut and the rest of Canada;
- › this gap has **significant adverse impacts** on Nunavut Inuit; and
- › **attention, investment, and action** are needed to close the gap.

The Government of Canada has made a series of commitments to closing that gap, including those in the 2019 Arctic and Northern Policy framework,¹ the Inuit-Crown Partnership Committee agenda,² and the Inuit Nunangat Housing Strategy.³

1 Government of Canada, "Canada's Arctic and Northern Policy Framework," 2019, <https://www.rcaanc-cirnac.gc.ca/en/g/1560523306861/1560523330587>.

2 Inuit Tapiriit Kanatami, "Inuit-Crown Partnership Committee Continues Progress on Shared Priorities — Inuit Tapiriit Kanatami," 2020, <https://www.itk.ca/inuit-crown-partnership-committee-continues-progress-on-shared-priorities/>.

3 Inuit Tapiriit Kanatami and Government of Canada, Inuit Nunangat Housing Strategy, 2019, <https://www.itk.ca/wp-content/uploads/2019/04/2019-Inuit-Nunangat-Housing-Strategy-English.pdf>.

However, although Nunavut's infrastructure gap is frequently mentioned, including by elected leaders, little has been done to measure the size of the gap. This kind of evidence-based account of the infrastructure deficit is needed to determine the level of investments required to support a quality of life for Nunavut Inuit that is on par with the rest of Canada.

The infrastructure gap cannot remain just a talking point, recognized but not remedied. To support efforts to understand and close the gap, this study compares the quality and quantity of infrastructure serving Nunavut Inuit to what is available in other parts of Canada.

Measuring the gap lays a foundation for a detailed needs assessment and infrastructure plan developed in partnership with the Governments of Nunavut and Canada and grounded in an Inuit vision for Nunavut's future. It also makes clear the urgency and scale of investment needed to live up to government commitments to Nunavut Inuit.

To directly compare the gap between Nunavut and the rest of Canada, this report uses 55 indicators across a wide range of infrastructure priority areas (e.g. housing, drinking water, roads), drawing on a wide variety of data sources.

In all 18 of the infrastructure priority areas measured, Nunavut faces a significant and quantifiable infrastructure gap with the rest of Canada.

Each infrastructure gap detailed in this report represents a real barrier to economic, health, and educational opportunities for Nunavut Inuit. Together, these indicators quantify an equity gap that is **substantial**, that **compounds** and is reinforced across many types of infrastructure, and, if unaddressed, will **continue to grow**.

Lived impacts of the gap on Nunavut Inuit

Nunavut's infrastructure deficit has effects on the economic health and institutional capacities within the territory. However, even a high-level analysis of the infrastructure gap should not overlook the immediate and personal impacts on individual wellbeing.

The infrastructure gap directly contributes to poverty and lowers the quality of life for Nunavut Inuit. It is felt in food insecurity, overcrowded housing, and limited economic opportunity. As an example, young men in Nunavut aged 20–24 die at six times the rate of Canadians of the same age cohort.⁴ As a result of the infrastructure gap, Nunavut Inuit are often forced to leave the territory altogether to access critical services:

- › A shortage of health care infrastructure and services means that approximately half of the children born to Nunavut Inuit are delivered in Southern hospitals.⁵ Mothers are forced to leave weeks before their due date and welcome their child into the world far from the supports of their community.
- › Health care infrastructure for childbirth in the territory is limited to the Qikiqtani General Hospital in Iqaluit and a birthing centre in Rankin Inlet. Since 2017, funding has been available from the federal Non-Insured Health Benefits program for someone to accompany expectant mothers, but this still means being separated from other children, family and community for weeks at a major life moment.⁶

4 CBC News, "N.W.T. and Nunavut Continue to Have Highest Workplace Death Rate in Country," 2020, <https://www.cbc.ca/news/canada/north/nwt-nunavut-day-of-mourning-1.5547391>.

5 Michele LeTourneau, "Bring Birthing Home to Communities, Say Advocates," Nunavut News, accessed June 9, 2020, <https://nunavutnews.com/nunavut-news/bring-birthing-home-to-communities-say-advocates/>.

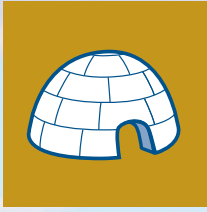
6 Hilary Bird, "In Swift Policy Change, Pregnant Nunavut Women to Get Escorts When Travelling to Give Birth," CBC News, April 2017, <https://www.cbc.ca/news/canada/north/pregnant-women-health-canada-nunavut-1.4067761>.

- › Getting treatment for a serious or chronic illness can mean living away from home (e.g. in Ottawa) for a long stretch of time. For parents, accompanying one child may mean separation from other children for months. There are currently no addictions or trauma treatment centres in Nunavut.
- › Nunavut Inuit have limited opportunities to pursue post-secondary education or training in their communities, or even within the territory. For example, heavy equipment training for mining and infrastructure is concentrated in Morrisburg, Ontario.
- › An enduring lack of Inuktitut-based public education means the number of fluent professionals who can work and provide service in the mother tongue of Nunavut Inuit remains limited.



- › For Nunavut Inuit with disabilities, a lack of locally available services can mean a heartbreaking choice to leave their community behind altogether to access reliable supports for themselves or their family members.⁷
- › For those who enter the federal corrections system, a lack of facilities in the territory mean serving a custodial sentence far from home with little connection to family.

7 Research interview, 2020 – for more, see the section on Accessibility in Part III, Cross-cutting factors.



INFRASTRUCTURE DEVELOPMENT AS A COMMITMENT TO INUIT EQUITY

The infrastructure gap drives an equity gap between Nunavut Inuit and other Canadians. Critical housing shortages exacerbate the tuberculosis epidemic and other health outcomes and limit the expansion of economic opportunity.⁸

Slow and unreliable Internet service limits access to education and economic opportunity. Limited port and harbour infrastructure results in a significant share of the economic activity from Nunavut's fisheries going to other provinces or countries and drives up the costs of everything produced in Nunavut for export — from artwork to minerals — and everything imported, including essential food and construction supplies.

Inuit social and cultural well-being and the continued importance of Inuit Qaujimajatuqangit (Inuit knowledge and societal values) also depends on appropriate infrastructure. Article 33 of the *Nunavut Agreement* emphasizes the rights of Inuit to cultural heritage in Nunavut and the importance of institutions and infrastructure to support that role.

But without museum and cultural infrastructure in Nunavut to house and display collections of Inuit heritage, the Government of Nunavut funds institutions in the South to hold Inuit artifacts.⁹

A lack of space to store or prepare country food undermines food sovereignty. Additionally, many communities lack adequate spaces for the transmission of cultural knowledge, including community feasts.¹⁰

Measuring the gap with a Canada-wide baseline does not presume a future in which Southern-designed solutions are delivered to address Inuit-specific challenges. This report puts Nunavut's infrastructure gap within the context of Northern and Inuit-specific realities.

8 Nunavut Tunngavik Incorporated, "Nunavut Inuit Left Out of the Canadian Middle Class," 2019, <https://www.tunngavik.com/2019/03/20/nunavut-inuit-left-out-of-the-canadian-middle-class/>.

9 Research Interview, 2020.

10 Research interview, 2020.



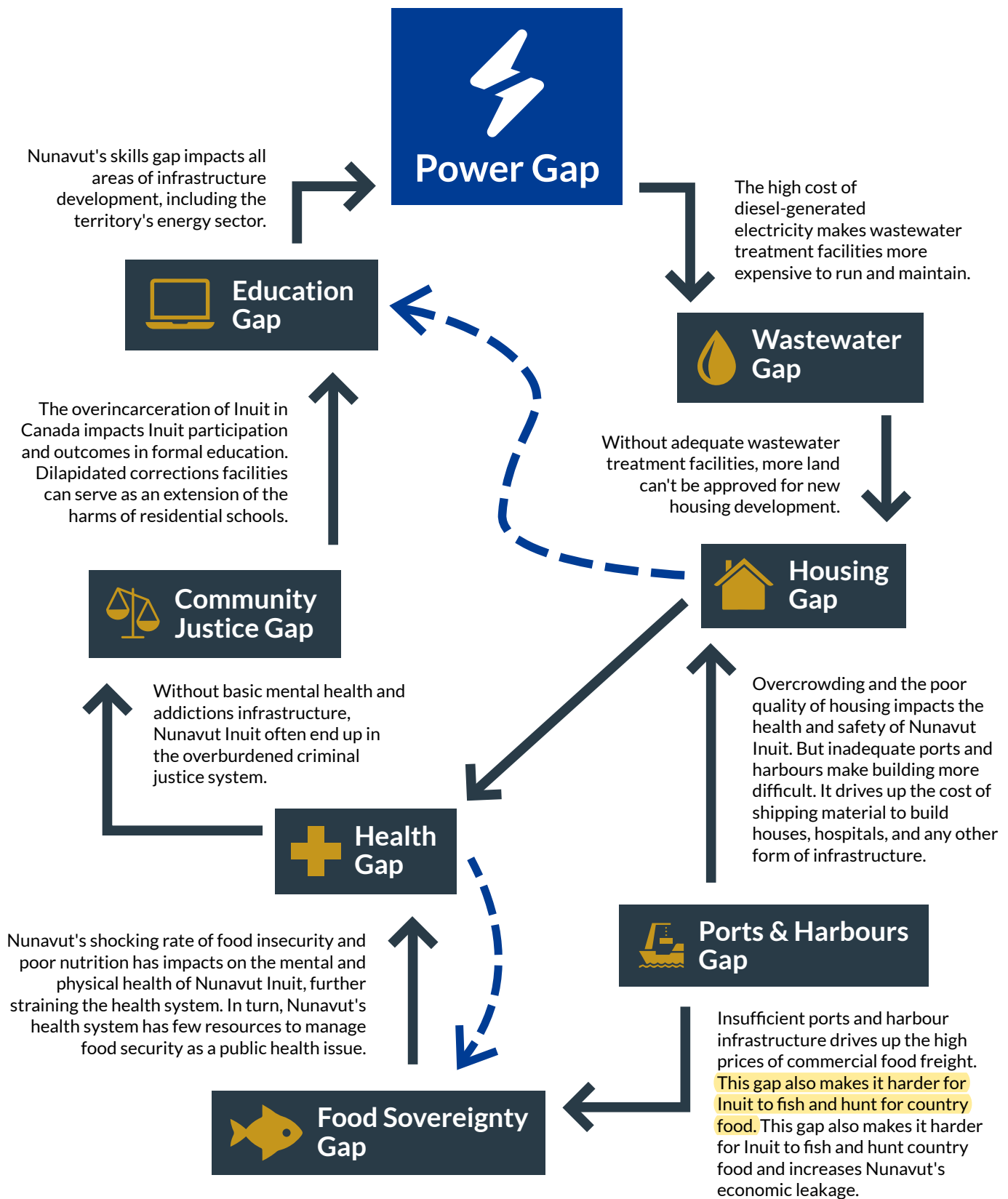
The infrastructure gaps reinforce one another

Nunavut's true infrastructure deficit cannot be measured or fully addressed as an aggregate of isolated deficits: the system-level impacts are greater than the sum of each area. Nunavut's overall lack of appropriate infrastructure makes everything more difficult, more expensive, or both. This makes it more challenging to close the gap, even where there are innovative solutions.

Infrastructure gaps do not exist in silos, instead they intersect and overlap, amplifying the impact of each gap in a combined experience. The illustration on the following page is an example of how infrastructure gaps have compounding and even cyclical effects, creating an infrastructure "trap" that makes it harder to close the gap and makes life more challenging for Nunavut Inuit.

The interconnection of infrastructure creates opportunities as well as challenges. Just as each "distinct" infrastructure deficit has impacts and consequences beyond a specific sector, targeted investments that address key infrastructure gaps can lead to broad downstream benefits. For example, more effective broadband could drastically expand the capacity of local infrastructure to deliver essential services within Nunavut.

Nunavut's overall lack of appropriate infrastructure makes everything more difficult, more expensive, or both. This makes it more challenging to close the gap, even where there are innovative solutions.



While this image is designed to visualize how Nunavut's infrastructure gap compounds and self-reinforces, it does not capture the many relationships between all infrastructure priority areas. The dotted lines visualize just some of these additional relationships.

OVERVIEW

To quantify the gap, this report groups 18 infrastructure priority areas into three categories — **energy and environment**, **people and communities**, and **connections**.

The report also includes analysis on key “**cross-cutting factors**” which impact all areas. These cross-cutting factors help to explain both the overall state of the infrastructure (e.g. readiness for climate change adaptation) and the capacity to effectively serve Nunavut Inuit (e.g. the accessibility of public-facing infrastructure to Nunavut Inuit with disabilities).

Each of these priority areas is the subject of its own profile on the state of infrastructure in Nunavut and how it compares with the rest of Canada. In some cases, Nunavut’s infrastructure is **inadequate** and fails to meet the needs of Nunavut Inuit. In other cases, Nunavut’s infrastructure is in **poor repair**, making assets less efficient or unsafe for use. Finally, in some cases, infrastructure is simply **absent**.

Some priority areas within this report, such as housing, reflect all three of these conditions. There is (a) an inadequate complement of suitable housing stock to meet public need and market demand; (b) a significant portion of housing in acutely poor repair; and (c) an overall acute shortage of housing in Nunavut.

Below are examples of findings from this report, and how these gaps can be quantified to demonstrate infrastructure inequities for Nunavut Inuit. These represent only a small sample of the analysis contained in this report. For a more detailed summary of findings by priority area, see page 22 of this Executive Summary.

Categories of infrastructure & priority areas



Energy & environment

- > Power
- > Drinking water
- > Wastewater
- > Solid waste
- > Emergency response & protection



People & communities

- > Housing
- > Food sovereignty
- > Health
- > Education
- > Community, culture & recreation
- > Community justice



Connections

- > Ports & harbours
- > Telecommunications
- > Roads & sidewalks
- > Air
- > Customs & tourism
- > Banking
- > Rail

Cross-cutting factors of infrastructure

- > Skills & human capacity
- > State of repair
- > Climate change adaptation
- > Energy efficiency & environmental sensitivity
- > Accessibility
- > Governance & ownership

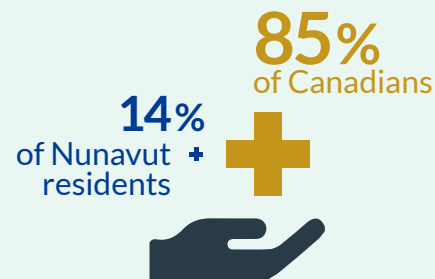
BY THE NUMBERS

Inadequate infrastructure

HEALTH

The overall access of Nunavut Inuit to health care is significantly worse than the Canadian average. Outside Nunavut's regional hubs, only limited health services are available to residents. Nunavut has the fewest staffed and operational hospital beds per capita in the country: people often fly out of the territory for even routine medical procedures. Over a third of Nunavut's health budget goes to medical travel costs and paying for out-of-territory hospital care.

Have a regular health care provider:



The average length of a runway in Nunavut is less than half



the length of runways found in major airports in Canada

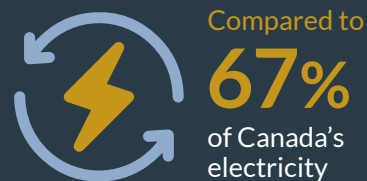
AIR

Air travel is the only way to reach communities year-round, including for the delivery of life-sustaining supplies such as food and fuel. However, the average length of runway in Nunavut (4,599 feet) is less than half the length of runways found at major airports in Canada. As a result, only smaller planes can access many of the territory's communities.

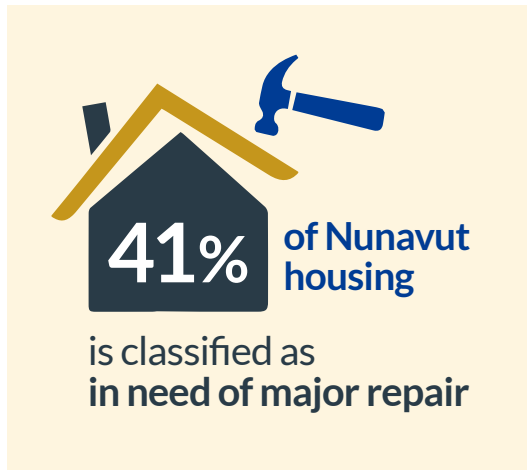
POWER GENERATION

Nunavut is the only territory with no regional power grid. Each of the 25 communities relies on its own diesel plant, and therefore depends on diesel fuel to generate power. There are significant expenses and environmental risks associated with importing approximately 50 million litres of diesel fuel via sealift and storing it in communities for electricity generation.

NONE of Nunavut's energy is produced by renewable resources



Infrastructure in poor repair

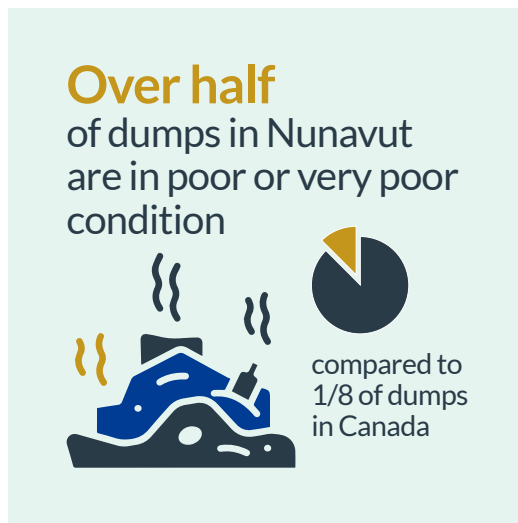
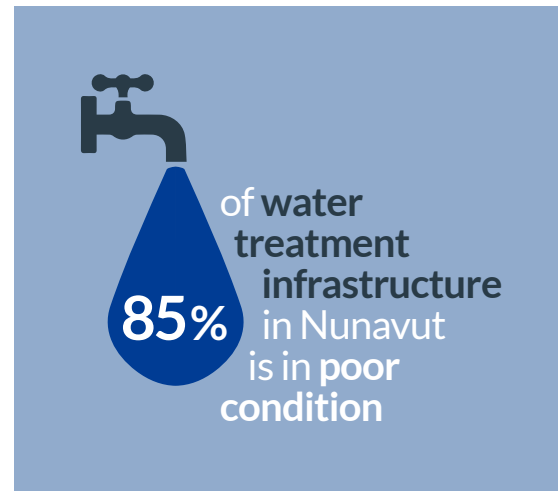


HOUSING

Nunavut has a staggering rate of housing requiring major repairs. The scale of this problem has been increasing: in Nunavut, the share of homes requiring major repairs doubled from 20.2 percent in 2006 to 41 percent in 2018. The Canada-wide average is 7.1 percent. Exposure to mould, a lack of insulation, broken windows, and malfunctioning heating systems are some of the more common issues facing older Nunavut homes.

DRINKING WATER

Geographic, economic, and infrastructure challenges are serious obstacles to providing safe and clean drinking water in Nunavut. Nunavut has the lowest per capita residential water use in Canada, at 153 litres per capita per day compared to 220 litres per capita for the Canadian average.



WASTE DISPOSAL

Dumps are the most rudimentary form of solid waste disposal infrastructure. Unfortunately, dumps are twice as prevalent in waste disposal infrastructure in Nunavut as they are in the rest of Canada, and more than half of Nunavut's dumps are in poor condition. All communities except for three practice open burning of waste, which exposes residents to harmful pollutants.

Absence of infrastructure

PORTS & HARBOURS

Every community in Nunavut depends on summer sealifts for supplies. Safe access to waterways is critical to support fisheries and strengthen Inuit food sovereignty. Yet, out of 95 ports overseen by Transport Canada nationally, none are in Nunavut. Out of 25 communities, 24 have no harbour where residents can safely access waterways and park marine vessels.

Out of 1010

harbours in Canada

Only 1
is in Nunavut

despite having
about 40%
of Canada's shoreline.



Nunavut is the only province or territory where there is no access* to



internet speeds over 25 Mbps

In 2018, the weighted average of residential internet speeds for Canadians was **126 Mbps**

*residential access

TERRESTRIAL FIBRE LINES

Nunavut is the only Canadian province or territory without access to broadband delivered by fibre cable. GEO satellite internet is the *only* way Nunavut Inuit can connect to the web, despite its being significantly slower and less reliable than fibre-delivered internet.

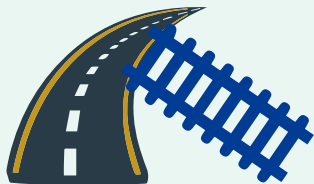
HERITAGE & MUSEUM INFRASTRUCTURE

Article 33.2.4 of the *Nunavut Agreement* states, “there is an urgent need to establish facilities in the Nunavut Settlement Area for the conservation and management of a representative portion of the archaeological record.” Yet essential collections of Inuit heritage are kept in the South for lack of space to house and display them.



Nunavut has
no heritage centre
to protect
our collections,
our culture.

More than **140,000** artifacts
are housed outside of the territory



Nunavut is the only province or territory with **no highways or railways**

HIGHWAYS, RAILWAYS & NATIONAL LINKAGES

Unlike other provinces and territories, Nunavut has no connection to the national highway system or to any rail network. Moreover, no roads connect any of Nunavut's communities with any other.



Cross-cutting factors

Addressing the infrastructure gap will require not only substantial investment and collaboration, but also the consideration of the contexts in which infrastructure is developed. The following six cross-cutting (or system-wide) factors are included in this report to explain this system-wide context.



SKILLS & HUMAN CAPACITY

- › A skilled labour market and adequate infrastructure are interdependent. Infrastructure cannot be built and maintained without trained workers. In turn, Inuit training and education cannot take place without the infrastructure to support it.
- › Because of a shortage of local labour, many infrastructure projects in Nunavut face unique limitations and cost pressures.
- › Articles 23 to 26 of the *Nunavut Agreement* are designed to improve Inuit participation in the waged labour market. But despite these obligations, Inuit participation in the workforce remains disproportionately low.



CLIMATE CHANGE

- › Canada's Arctic faces the potential for extreme change under a range of scenarios, including warming at two to three times the global average.
- › Climate change impacts the effectiveness and lifespan of buildings, transportation, and marine infrastructure.
- › The risk to Nunavut infrastructure is greater than the Canadian average given the unique nature of Nunavut's geography and economy (e.g. permafrost, coastal communities). Resilient infrastructure is key to mitigating these risks.
- › A 2018 report from the Auditor-General of Canada found that Nunavut was not adequately prepared to respond to climate change.
- › The risks to Nunavut's infrastructure include greater repair needs, the need to bury pipes at deeper and deeper depths, damage to paved airport runways, and flash floods.
- › The significant backlog of infrastructure needs and limited financial and planning capacity makes it more difficult to secure climate-resilient infrastructure – even if that investment would save money in the long-term through lowered maintenance costs and extended asset life.



ENERGY EFFICIENCY & ENVIRONMENTAL SENSITIVITY

- › Infrastructure in Nunavut is less energy-efficient and more likely to have negative environmental impacts than in communities elsewhere in Canada. The extent to which Nunavut's infrastructure is sensitive to the local Arctic ecosystem is important for a range of public policy goals.
- › Energy-efficient infrastructure can help reduce local pollution while supporting broader territorial efforts to address climate change.



ACCESSIBILITY

- › Accessibility “means that everyone can get to and use information and spaces and places”, regardless of disability or impairment. In Nunavut, people with disabilities face a number of barriers across many types of infrastructure.
- › These include a lack of barrier-free housing options, an absence of sidewalks and paved roads, and limited accessible ground transportation. The limited options and services can push individuals and families to make difficult choices about their ability to thrive in Nunavut.



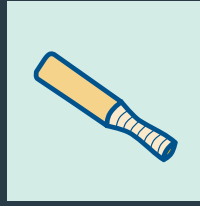
STATE OF REPAIR

- › Much of Nunavut infrastructure is operating close to or beyond its projected useful lifespan, including essential services like power stations, water pipes, and health centres. Nunavut faces particular challenges to keep infrastructure in good repair. Mould, fires, leaks, and shifts in permafrost can render infrastructure unusable until repairs are made.
- › Waiting for necessary supplies to be ordered and then shipped via sealift can prolong the amount of time a facility or asset is out of commission. State of repair challenges can also compound. A struggling ventilation system will contribute to the spread of mould, which can spread across entire rooms and structures. A broken or underperforming furnace may cause a pipe to freeze and then break, leading to flooding or spilled sewage.
- › In 2012, a single burst pipe near the Iqaluit high school spilled nearly 20 million litres of water, effectively draining the city's reservoir. With limited resources and capacity, repair needs compete directly with new investment.



GOVERNANCE & OWNERSHIP

- › Implementation of the *Nunavut Agreement* calls for an approach to infrastructure that includes a focus on promoting Inuit self-determination. Efforts to close the infrastructure gap without recognizing the particular governance and ownership context of the territory would fail to allow Nunavut Inuit to determine their future.
- › Other aspects of governance and ownership include the limited role of the private sector and the impact of other orders of government. The unique governance and ownership environment makes it more difficult to secure investment and effectively manage assets, as some communities and institutions have significant scale and capacity challenges.



*Nunavut's
infrastructure
gap cannot
remain just a
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recognized but
not remedied.*

CLOSING THE GAP

The infrastructure gap between Nunavut and the rest of Canada is clear to anyone who lives in or visits the territory. It is felt by Nunavut Inuit in every aspect of their lives. The legacies of colonial approaches and under-investment create barriers that make it difficult for Nunavut Inuit to thrive today. In turn, the investment (and under-investment) decisions made today will impact Nunavut and Canada for decades to come.

Nunavut stands out in Canada in many ways. It is Canada's newest, youngest, and fastest-growing territory. It is also Canada's only Indigenous-majority territory defined by a unique structure created by the *Nunavut Agreement* to ensure Inuit self-determination.

But as this study illustrates, Nunavut too often stands out because of the infrastructure gap faced by Nunavut Inuit. Through the Inuit-Crown Partnership Committee and other processes, the federal government has acknowledged and committed to close that gap. However, without clarity on the scale of the gap, and what it will take to close that gap, these commitments may not drive concrete, measurable action.

The 55 indicators across 18 priority areas in this report provide a comprehensive picture of the scope and scale of the infrastructure gap between Nunavut and the rest of Canada. While some gaps are more acute than others, they are interlinked and add pressure to one another.

It is clear that the gap makes every aspect of life in Nunavut more expensive, undermines health and education outcomes for Nunavut Inuit, and threatens Arctic ecosystems. It is also clear that significant attention, investment, and action is needed now to close the gap.

Nunavut Inuit are ready to build a long-term infrastructure plan that lays a foundation for a thriving future. By partnering with Nunavut Inuit to develop an infrastructure plan to close these gaps, Canada can live up to the promises of the *Nunavut Agreement*, expand economic opportunity that benefits all of Canada, and show real leadership as an Arctic nation.

READ NEXT >

To learn more about the unique circumstances of Nunavut that contribute to the territory's infrastructure gap, see Nunavut's infrastructure gap in context on the following page.

To review the summary of report findings by infrastructure priority area, see page 18.

By partnering with Nunavut Inuit to develop an infrastructure plan to close the gap, Canada can live up to the promises of the Nunavut Agreement.

NUNAVUT'S INFRASTRUCTURE GAP IN CONTEXT

GEOGRAPHY

- › Nunavut Inuit live in 25 separate communities. Every community in Nunavut is fly-in, fly-out, and is inaccessible to elsewhere in Nunavut or to the rest of Canada by car or train. Communities can be accessed by boat (sealift), but only in the summer when shipping paths are clear of ice. For comparison, only about 9 percent of people in the Northwest Territories (NWT), 0.8 percent of the population in Yukon, and 0.18 percent of Ontarians live in fly-in only communities.¹¹
- › The distances between these communities are vast. The distance between Nunavut's northernmost and southernmost communities is 2,214 km (about the distance between Ottawa and Miami), and between Nunavut's easternmost and westernmost communities is 2,096 km, spanning three time zones.
- › Nunavut has a population of about 38,400. Only three of Nunavut's 25 communities have a population greater than 2500 people (most notably, Iqaluit has about 8,250). As of 2018, ten communities had a population of fewer than 1,000 residents.¹²



Image by Maximilian Dörrbecker (Chumwa) - Own work, using this file by Flappiefh, CC BY-SA 2.5, <https://commons.wikimedia.org/w/index.php?curid=46895498>

IMPLICATIONS OF GEOGRAPHY

- › Because of these distances and the lack of transportation links, **Nunavut communities cannot share infrastructure assets or resources.** Each community must have its own local infrastructure: for example, a power plant, a drinking water plant, an ice skating rink, or a bank branch — or go without.

- › Any item brought in from outside (from construction-grade rebar to cars to a bag of apples) must arrive either via plane or sea freight (which arrives once or twice a year during the summer months). The added cost of shipping and logistics makes almost every facet of infrastructure development more expensive in Nunavut.
- › Because of these geographic constraints and the small population, there are few economies of scale to be found in Nunavut. This makes per-capita infrastructure spending much higher and makes it less likely that the private sector will provide infrastructure in areas they typically do elsewhere (such as housing or telecommunications).

11 Government of Canada, "Status of Remote/Off-Grid Communities in Canada," August 2011.

12 Government of Nunavut, "Population Data - Population Estimates by Sex, Age Group, Region and Community, 2018," accessed July 31, 2020, <https://www.gov.nu.ca/executive-and-intergovernmental-affairs/information/population-data>.

GOVERNANCE

- › The population of Nunavut is 85 percent Inuit. Inuit living in Nunavut are citizens of both a Canadian and Inuit democracy.¹³ Nunavut is both a sub-national political jurisdiction of Canada and a sovereign Inuit jurisdiction protected through the *Nunavut Agreement*. In Nunavut, a territorial government represents the interests of both Inuit and non-Inuit residents of Nunavut. There are also powerful, constitutionally-recognized Inuit organizations that represent Inuit as sovereign people.
- › Within Nunavut, three Regional Inuit Associations (RIAs) represent Inuit in each of Nunavut's three regions. The RIAs are the Kitikmeot Inuit Association, the Kivalliq Inuit Association, and the Qikiqtani Inuit Association. Both NTI and RIAs actively work with governments and industries on behalf of Nunavut Inuit, including on infrastructure development. Inuit organizations are often directly involved in the planning and development of regional infrastructure through their subsidiary organizations, such as development corporations.
- › For example, in 2019, the Qikiqtani Inuit Association and the Government of Canada signed the Tallurutiup Imanga and Tuvaijuittuq agreements. These agreements not only set out plans to establish new marine conservation areas, they also included more than \$190 million in associated infrastructure funding for the region, including small craft harbours and multi-use facilities.¹⁴

13 Natan Obed, "Our Inuit Democracy in Canada," *Arctic Journal*, February 28, 2018, <http://arcticjournal.ca/inuit-forum/inuit-democracy-canada/>.

14 Qikiqtani Inuit Association, "Tallurutiup Imanga and Tuvaijuittuq Agreements," 2019, <https://www.qia.ca/tallurutiup-imanga-and-tuvaijuittuq-agreements/>.



INFRASTRUCTURE GAP AS A COLONIAL LEGACY

- › Nunavut is one of four Inuit regions that make up Inuit Nunangat. Inuit have inhabited Inuit Nunangat for millennia. Inuit have a distinct cultural identity and a relationship with the land that exists outside Western colonial frameworks and market systems.
- › In the mid-20th century, colonial interference with Inuit ways of life increased significantly. In the 1940s, the Crown designated Inuit as "wards of the state." Inuit were compelled to move into permanent settlements and to abandon Inuit societal values, including semi-nomadic migration.
- › The locations of these settlements were largely determined by Canada's trade and military interests, and sometimes resulted in Inuit being relocated thousands of kilometres away from where they lived.¹⁵ For example, the Government of Canada relocated several Inuit families from Inukjuak in Northern Quebec to Grise Fiord, on Ellesmere island. Because of these displacements, families needed to adjust — often in desperate circumstances to different weather, wildlife migration patterns, and survival needs.
- › Inadequate infrastructure was put in place. What existed was not well-adapted for Inuit societal realities or Northern climate realities.

15 Qikiqtani Inuit Association, Qikiqtani Truth Commission Final Report: Achieving Saimaqatigiingniq, 2013, https://www.qtcommission.ca/sites/default/files/public/thematic_reports/thematic_reports_english_final_report.pdf.



ABOUT OUR RESEARCH

The research for the report was completed between fall 2019 and spring 2020, and included data analysis, research interviews, circumpolar case studies, and literature review. The main approach is to compare the state of infrastructure in Nunavut with that in other provinces and territories and, where possible, to a Canadian average. The research was guided by input from an external advisory panel and the participation of the Qikiqtani Inuit Association, the Kitimeot Inuit Association, and the Kivalliq Inuit Association.

DATA GAPS

This research highlighted a number of data gaps. Some are Canada-wide. Nunavut, and the North more broadly, are frequently overlooked and excluded from national data.

For example, Nunavut is left out of regularly reported data on solid waste; Environment Canada's own policy guidance on solid waste management in the North simply assumes the average from the rest of Canada applies and relies on a one-time waste audit of Whitehorse.¹⁶

Other data sets report on Nunavut in categories combined with the other territories or other regional groups. Data gaps also emerge where policymakers use a minimum population or other threshold to decide what to track; the Canada Mortgage and Housing Corporation reports on housing starts only for local areas with populations of more than 10,000, which excludes all Nunavut communities.

These gaps make comparisons more challenging and policymaking and infrastructure planning for Nunavut Inuit more difficult.

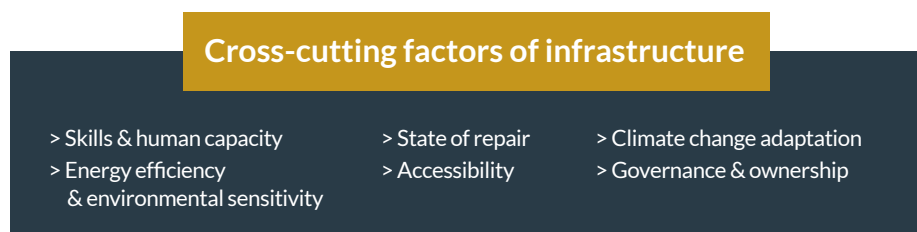
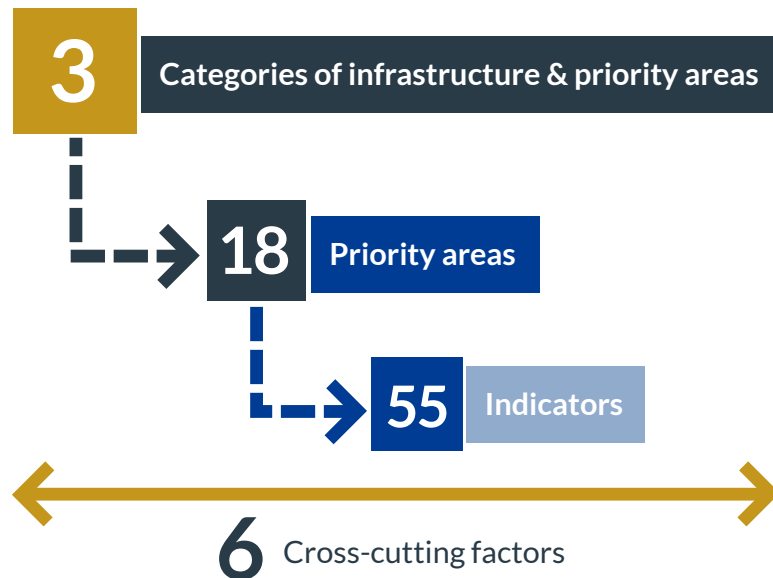
¹⁶ Environment and Climate Change Canada, "Solid Waste Management for Northern and Remote Communities," 2017, http://publications.gc.ca/collections/collection_2017/eccc/En14-263-2016-eng.pdf.

Summary of findings by priority area

The report uses 55 indicators across 18 infrastructure priority areas to measure the gap between Nunavut and rest of Canada, drawing on a wide variety of data sources.

The study groups the infrastructure areas into three categories: **energy and environment**; **people and communities**; and **connections**.

The report also includes analysis on key “**cross-cutting factors**” which impact all areas. These cross-cutting factors help to explain both the overall state of the infrastructure (e.g. readiness for climate change adaptation) and the capacity to effectively serve Nunavut Inuit (e.g. the accessibility of public-facing infrastructure to Nunavut Inuit with disabilities).





Energy & environment infrastructure

Communities rely on a variety of infrastructure to interact safely with their environment. This includes core public infrastructure that provides power and water and disposes of waste. The difference between Nunavut and the rest of Canada in this type of infrastructure is glaring.

Some of these differences are shaped by geography or environment. For example, Nunavut does not have the same access to potential hydro-electric power sources as other jurisdictions. Above-ground “utilidor” systems are a unique adaptation used to prevent pipes from freezing in Arctic environments.

In many of Nunavut’s communities, sewage and water trucks replace concealed pipes and sewers. High fixed-costs to build infrastructure and deliver services, such as power plants or water treatment facilities for 25 communities that cannot share any infrastructure is an added challenge.

But many differences, such as unlined dump sites with open burning of waste, reflect under-investment that leaves Nunavut Inuit with poorer quality infrastructure than their Canadian or circumpolar neighbours.

The fact that Nunavut’s power stations cannot rely on a transmission grid is a result of regional and Arctic limitations; the fact that so many power stations have been allowed to age beyond their projected lifespan is not.

The limits of water treatment infrastructure, including a heavy reliance on trucked water supplies, leave Nunavut Inuit with less reliable access to clean water than people in other Canadian provinces or territories.

POWER

- › Nunavut is the only territory with no regional power grid. Each of the 25 communities relies on its own diesel plant.
- › Nunavut has the second lowest power generation per capita of provinces and territories. PEI has lower local capacity but is able to rely on imported power from New Brunswick.¹⁷ Limited power is an obstacle to economic development, especially for energy-intensive industries.
- › Nunavut is the only territory or province with no substantial source of renewable energy. Two-thirds of electricity produced nationally comes from renewable sources.¹⁸ The federal government has committed to moving all remote communities off diesel by 2030.¹⁹
- › Nunavut has the lowest electricity consumption per capita, coupled with the highest prices (before subsidies are taken into account).²⁰

17 Canada Energy Regulator, “Provincial and Territorial Energy Profiles,” accessed June 4, 2020, <https://www.cer-rec.gc.ca/nrg/ntgrtd/mrkt/nrgsstmprfls/index-eng.html>.

18 Canada Energy Regulator.

19 Prime Minister of Canada, “Minister of Natural Resources Mandate Letter,” 2019, <https://pm.gc.ca/en/mandate-letters/2019/12/13/minister-natural-resources-mandate-letter>.

20 Canada Energy Regulator, “Provincial and Territorial Energy Profiles - Nunavut,” 2020, <https://www.cer-rec.gc.ca/nrg/ntgrtd/mrkt/nrgsstmprfls/nu-eng.html>.

DRINKING WATER

- › Nunavut is distinct from the rest of Canada in that it is largely reliant on trucked water. Only 14 percent of Nunavummiut (Nunavut residents) are served by piped water.²¹
- › While 92 percent of Nunavummiut are served by drinking water plants (above the Canadian average), the capacity of facilities is lower, relying on chlorination rather than the multi-barrier standard endorsed by the Canadian Council of Ministers of Environment.²²
- › Approximately 85 percent of water treatment infrastructure in Nunavut is in poor condition. Nationally the majority of water infrastructure is in good or very good condition.²³
- › Nunavut faces by far the highest cost of operating and maintaining drinking water infrastructure, spending ten times the Canadian average to maintain drinking water plants with a lower standard of water service.²⁴

WASTEWATER

- › Twenty-two communities in Nunavut have trucked wastewater systems. They are among only 0.5 percent of Canadians who are served by sewage haulage.²⁵
- › Nunavut's pipes are more likely to be in poor repair. Nationally, ten percent of pipes are rated in poor or very poor condition, while in Nunavut 40 percent are.²⁶
- › Nunavut communities generally rely on lagoon systems rather than wastewater treatment plants. These can be effective but are also in disproportionately poor condition. Only 22.5 percent of Nunavut lagoons are reported to be in good or very good condition, compared to 60 percent nationally.²⁷

SOLID WASTE

- › All communities except three in Nunavut practice some open burning of waste, given limited infrastructure.²⁸ This process exposes residents to harmful pollutants and is banned in most of Canada and the circumpolar Arctic.
- › Basic dumps, many of which were not professionally designed, make up 88 percent of Nunavut's waste disposal infrastructure, nearly double the 46 percent national average.²⁹
- › More than half of dumps in Nunavut are in poor or very poor condition, compared to one-in-eight Canada-wide..³⁰

21 National Collaborating Centre for Environmental Health, "Small Drinking Water Systems: Who Does What in Nunavut?," March 2014, https://www.nccch.ca/sites/default/files/SDWS_Who_What_Nunavut.pdf.

22 Statistics Canada, "Population Served by Drinking Water Plants," 2019, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810009301>; Kiley Daley et al., "Municipal Water Quantities and Health in Nunavut Households: An Exploratory Case Study in Coral Harbour, Nunavut, Canada," *International Journal of Circumpolar Health* 73, no. 1 (January 31, 2014): 23843, <https://doi.org/10.3402/ijch.v73.23843>.

23 Infrastructure Canada and Statistics Canada, "Inventory Distribution of Publicly Owned Potable Water Assets by Physical Condition Rating," 2018, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3410019601>.

24 Statistics Canada, "Operation and Maintenance Costs of Drinking Water Plants," Biennial Drinking Water Plants Survey, accessed June 11, 2020, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810010301>.

25 Canadian Water Network, "Canada's Challenges and Opportunities to Address Contaminants in Wastewater Supporting Document 2," 2018, <http://cwn-rce.ca/wp-content/uploads/projects/other-files/Canadas-Challenges-and-Opportunities-to-Address-Contaminants-in-Wastewater/CWN-Report-on-Contaminants-in-WW-Supporting-Doc-2.pdf>.

26 Infrastructure Canada and Statistics Canada, "Inventory Distribution of Publicly Owned Wastewater Assets by Physical Condition Rating," 2016, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3410022601>.

27 Infrastructure Canada and Statistics Canada.

28 Laurie Giroux, "State of Waste Management in Canada Prepared for: Canadian Council of Ministers of Environment," 2011.

29 Infrastructure Canada and Statistics Canada, "Inventory of Publicly Owned Solid Waste Assets," 2018, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3410023601>.

30 Infrastructure Canada and Statistics Canada, "Inventory Distribution of Publicly Owned Solid Waste Assets by Physical Condition Rating," 2018, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3410024001>.

EMERGENCY RESPONSE & PROTECTION

- › The Canadian Arctic has no year-round dedicated marine search and rescue assets.³¹
- › Of the 26 Inshore Rescue Boat Stations operated by the Canadian Coast Guard, only one is in Nunavut.³²
- › Two-thirds of Nunavut communities identified a need for new fire halls or major renovations to existing fire halls.³³ Some communities have no room for equipment or personnel, or have stations without running water.
- › Limited water supply also makes it more challenging to fight fires. Nunavut experiences fire damage that is much higher than other provinces and territories.³⁴



People & communities

Nunavut is the country's only Indigenous-majority territory, has the youngest and fastest-growing population in Canada, and has one of the country's fastest-growing economies. If properly resourced and empowered, Nunavut Inuit will have an important role in shaping the future of both Nunavut and Canada. However, without meaningful interventions and investments in social infrastructure, the benefits of Nunavut's growth will be uneven and leave its people even further behind.

HOUSING

- › A shortage of housing means that Nunavummiut face by far the highest rate of overcrowding in Canada. Thirty-five percent of households do not have enough bedrooms, compared to 5 percent nationally.³⁵ Overcrowding affects health, safety, and education outcomes and contributes to the spread of tuberculosis.
- › Two in five homes in Nunavut are in need of major repair, nearly six times the national average.³⁶ Exposure to mould, malfunctioning heating, and other challenges can make for unsafe living conditions.
- › Without an active private housing market, 75 percent of renter households live in public housing.³⁷ Nunavummiut households are 12 times more likely to be on waitlists for public housing (24 percent compared to 1.9 percent nationally).³⁸

31 Senate of Canada, "When Every Minute Counts: Maritime Search and Rescue," 2018, <https://sencanada.ca/en/info-page/parl-42-1/pofo-sar-maritime/>.

32 Canadian Coast Guard, "Station Locations," 2019, <https://www.ccg-gcc.gc.ca/search-rescue-recherche-sauvetage/irb-esc/station-location-emplacement-eng.html>.

33 From ICSP plans, see for example: ICSP Toolkit, "Infrastructure Plan for Grise Fiord," 2019, <http://toolkit.buildingnunavut.com/en/Community/Plan/b17ac5f3-8273-41ec-9982-a1f700f2d229>.

34 Government of Nunavut, "Department of Community and Government Services OFFICE OF THE FIRE MARSHAL 2017 ANNUAL REPORT," 2017.; Mahendra Wijayasinghe, "Fire Losses in Canada Year 2007 and Selected Years," 2011.

35 Statistics Canada, "Housing Suitability and Dwelling Condition, by Tenure Including Social and Affordable Housing," accessed June 3, 2020, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4610004301>.

36 Statistics Canada.

37 Statistics Canada, "The Daily – First Results from the Canadian Housing Survey, 2018," accessed June 3, 2020, <https://www150.statcan.gc.ca/n1/daily-quotidien/191122/dq191122c-eng.htm>.

38 Statistics Canada, "Waitlist Status Including Length of Time, by Tenure Including Social and Affordable Housing," accessed June 3, 2020, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4610004201>.

- › Despite police-reported intimate partner violence at a rate 14 times the national average, Nunavut has only five emergency shelters for victims of abuse, with 113 percent occupancy during a recent national survey (the Canada-wide average was 78 percent).³⁹

FOOD SOVEREIGNTY

- › Nunavummiut experience the highest rate of food insecurity in Canada by a wide margin; 58 percent face food insecurity compared with 13 percent nationally.⁴⁰
- › Even after subsidies from the Nutrition North Canada program, the price of staple foods in Nunavut is significantly higher than the Canadian average. ⁴¹ In 2017, 2.5kg of flour cost almost \$14 in Nunavut, compared with about \$5 nationally.⁴²
- › With only three CFIA-licensed food manufacturing establishments, much of the seafood harvested in Nunavut waters is processed offshore or in either Newfoundland and Labrador or Kalaallit Nunaat (Greenland).⁴³
- › Many communities also have shortages of infrastructure to support country food, such as community freezers, community kitchens, and heated warehouse space for snowmobiles and harvesting equipment.

HEALTH

- › Nunavut has the fewest staffed and operational hospital beds per capita in the country, with 1,095 persons per bed, compared to a national average of 409.⁴⁴ All of these beds are located in Iqaluit.
- › With few services available in communities, Nunavut spends the most on out-of-jurisdiction healthcare and travel by a wide margin. Per capita spending is twice that of the Northwest Territories and 43 times that of Manitoba.⁴⁵ Little cancer screening is available, and half of births take place out-of-territory.
- › With a shortage of mental health options, Nunavut has the highest suicide rate in Canada, more than five times higher than the national average, at 54.7 persons per 100,000, compared with 10.3 per 100,000 persons nationally.⁴⁶ Nunavut's first addictions treatment centre remains years away from opening.

39 Statistics Canada, "35-10-0051-01: Victims of Police-Reported Violent Crime and Traffic Violations Causing Bodily Harm or Death, by Type of Violation, Sex of Victim and Age of Victim," 2018, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3510005101&pickMembers%5B0%5D=1.14&pickMembers%5B1%5D=6.20180101&pickMembers%5B2%5D=5.2>. Highest percentage reported experiencing both physical and sexual abuse (although comparable information was unavailable for both territories on sexual abuse). ; Statistics Canada, "Occupancy for Short-Term Facilities, by Urban or Rural Area, Province or Territory, April 18, 2018," 2018, <https://www150.statcan.gc.ca/n1/pub/85-002-x/2019001/article/00007/tbl/tbl07-eng.htm>.

40 Statistics Canada, "The Daily – Canadian Community Health Survey: Household Food Insecurity in Canada, 2017/2018," 2020, <https://www150.statcan.gc.ca/n1/daily-quotidien/200218/dq200218e-eng.htm>.

41 Government of Nunavut, "Economic Data, Food Price Survey 2017," accessed July 23, 2020, <https://www.gov.nu.ca/executive-and-intergovernmental-affairs/information/economic-data>.

42 Government of Nunavut. "Economic Data, Food Price Survey 2017"

43 List available at Canadian Food Inspection Agency, "Safe Food for Canadians Licence Registry," 2020, <https://www.inspection.gc.ca/webapps/foodlicenceregistry/en/>.

44 Canadian Institute for Health Information, "Hospital Beds Staffed and In Operation, 2018-2019," 2020, <https://www.cihi.ca/en/quick-stats>.

45 Data on spending on out-of-jurisdiction health care is sourced from the Health Canada, "Canada Health Act Annual Report 2018-2019 - Canada.Ca," 2020, <https://www.canada.ca/en/health-canada/services/publications/health-system-services/canada-health-act-annual-report-2018-2019.html>.

46 Centre for Suicide Prevention, "Cross-Canada Comparison Statistics - Centre for Suicide Prevention," 2019, <https://www.suicideinfo.ca/resource/cross-canada-comparison-statistics/>.

- › Nunavut residents are the least likely in Canada to have a regular healthcare provider, at 13.9 percent compared to the national average of 84.9 percent.⁴⁷

EDUCATION

- › With schools and community learning centres in each of the 25 communities, Nunavut Inuit can complete high school and some adult education in their communities.⁴⁸
- › However, Nunavut Inuit have few post-secondary options close to home, and no Inuit-led university or research centre. More than 39 percent of Nunavummiut aged 20–24 are out of formal education and the labour force, compared to 7 percent nationally.⁴⁹
- › Nunavut has childcare spaces for only 18 percent of children younger than 6 (compared with 29 percent nationally) and 11 percent of all children 0–12 (compared with 27 percent nationally).⁵⁰ This makes it harder for Nunavut Inuit to pursue education and employment.
- › The share of the working age population with less than high school education in Nunavut is 42 percent compared with 8 percent nationally.⁵¹ This reflects both infrastructure gaps and legacies of colonial approaches to education.⁵²

COMMUNITY, CULTURE & RECREATION

- › Without connections between communities, Nunavut communities cannot use regional models to provide services, which is typical elsewhere in Canada.
- › More than 11,000 people in Nunavut, or just under a third of the total population, live in a community with no access to a bricks-and-mortar library.⁵³
- › A shortage of adequate community spaces makes it difficult to hold cultural events like community feasts and support the transmission of Inuit cultural knowledge through the generations.
- › Despite the objectives of Article 33 of the *Nunavut Agreement*, the Government of Nunavut pays to house many of Nunavut's cultural collections at the Canadian Museum of Nature in Ottawa or the Winnipeg Art Gallery.⁵⁴

COMMUNITY JUSTICE

- › Nunavut has a higher rate of incarcerated persons than any jurisdiction in Canada, spending ten times as much per capita as the Canadian average.⁵⁵ Nunavut's prisons have had significant over-crowding, requiring prisoners to be transferred out of territory.

47 Canadian Institute for Health Information, "Nunavut - Has a Regular Health Care Provider," accessed June 9, 2020, <https://yourhealthsystem.cihi.ca/hsp/indepth?lang=en#/indicator/074/2/C191/>.

48 Auditor General of Canada, "Support for High School Students and Adult Learners," 2019, https://www.oag-bvg.gc.ca/internet/English/nun_201906_e_43388.html.

49 Statistics Canada; Council of Ministers of Education, "Education Indicators in Canada: An International Perspective 2019," 2019, <https://www150.statcan.gc.ca/n1/en/catalogue/81-604-X>.

50 Martha Friendly et al., Early Childhood Education and Care in Canada 2016, 2018, <https://www.childcarecanada.org/sites/default/files/ECEC-in-Canada-2016.pdf>.

51 Statistics Canada; Council of Ministers of Education, "Education Indicators in Canada: An International Perspective 2019."

52 Statistics Canada; Council of Ministers of Education.- data for extended time graduation rates not available for Nunavut. Data not available for Yukon or Nova Scotia.

53 Based on calculations from list of libraries from the Nunavut Library Service "Nunavut Public Library Services," accessed June 7, 2020, <https://www.publiclibraries.nu.ca/> and 2016 population estimates from the Government of Nunavut here: Government of Nunavut, "Population Estimates," 2016, https://www.gov.nu.ca/sites/default/files/population_estimates_report_july_1_2016.pdf.

54 Government of Nunavut, "Heritage Collection," accessed June 8, 2020, <https://www.gov.nu.ca/culture-and-heritage/information/heritage-collection>.

55 Nunatsiaq News, "Nunavut Has the Highest Incarceration Rate for Adult Offenders in Canada: Stats Can," March 14, 2017, https://nunatsiaq.com/stories/article/65674nunavut_home_to_highest_rate_of_adult_offender_in_canada_stats_can/.

- › There are no federal corrections facilities in Nunavut, meaning those serving sentences of more than two years are housed far from home, typically in Gravenhurst, ON or Laval, QC.⁵⁶ This arrangement falls outside international standards for the treatment of prisoners.
- › Nunavut's traveling circuit court lacks appropriate places to meet, often meeting in school gyms or community halls in which the safety and privacy of victims cannot be ensured. The need to travel and the lack of broadband options cause significant delays in the justice system.⁵⁷



Connections

The infrastructure that connects Nunavut with Canada and the world — and the absence of that infrastructure — defines many of the challenges and opportunities that Nunavut Inuit experience in their daily lives. The difficulty and cost of getting people and goods to and from Nunavut's communities undermines food security and other aspects of quality of life, and limits the opportunity for Inuit-led economic development.

PORTS & HARBOURS

- › Today Nunavut has no public ports, compared with 95 across the rest of Canada (one is under construction in Iqaluit).⁵⁸ With ocean-going ships unable to unload directly, all cargo has to be “double-handled” using transport barges.
- › The state of community harbours undermines community resupply and fishing. Of the 1,010 small craft harbours overseen by Fisheries and Oceans Canada, Nunavut has only one.⁵⁹

TELECOMMUNICATIONS

- › Nunavut is the only province or territory entirely reliant on satellite internet. As a result, the fastest possible speed available in Nunavut (15 Mbps) is eight times slower than the Canada-wide average, as of 2018.⁶⁰ The national target is 50 Mbps for download speeds.
- › 86 percent of Canadian households have access to unlimited data packages and 94 percent have access to broadband speeds of at least 25 Mbps.⁶¹ No Nunavut households have access to this level of service.
- › It would cost a single Nunavut Inuit household at least \$7,000 in annual fees to access the level of data use in the average Canadian household.⁶²

56 Correctional Service Canada, “Institutional Profiles,” accessed June 11, 2020, <https://www.csc-scc.gc.ca/institutions/index-eng.shtml>.

57 Department of Justice Canada, “Canada’s Court System,” 2015, <https://canada.justice.gc.ca/eng/csj-sjc/ccs-ajc/pdf/courten.pdf>.

58 Government of Nunavut, “Nunavut Small Craft Harbours Report” 2006, <https://www.gov.nu.ca/economic-development-and-transportation/documents/nunavut-small-craft-harbours-report>.

59 Fisheries and Oceans Canada, “Harbours List,” 2019, <https://www.dfo-mpo.gc.ca/sch-ppb/list-liste/harbour-list-liste-port-eng.html>.

60 All numbers in this paragraph from Open Government Portal (CRTC).

61 Open Government Portal.

62 Calculations based on advertised plans from Northwestel and Qiniq.

ROAD & SIDEWALKS

- › Nunavut is the only territory with no connections to the National Highway System and no roads between communities. On average, other provinces and territories have 200 times more roads than Nunavut.⁶³
- › With no paved sidewalks, Nunavut Inuit have high exposure to dust (creating respiratory health problems and poor pedestrian safety).⁶⁴
- › About 2 percent of the Nunavut road network is paved, compared with a national average of 40 percent.⁶⁵

AIR

- › Nunavut relies heavily on air travel to move people and goods, including perishable foods, while limited infrastructure makes travel times longer, arrival times less reliable, and journeys more costly.
- › Nunavut has only two paved runways. The number of jet aircraft certified to land on gravel is dwindling as older jets reach the end of their service lives. By comparison, the Northwest Territories has six paved runways.
- › Only four Nunavut runways are longer than 6,000 feet, the typical distance needed for modern narrow-body jets.⁶⁶

CUSTOMS & TOURISM

- › Nunavut has the fewest businesses providing travel accommodation,⁶⁷ and they are disproportionately small (typically less than 30 rooms).⁶⁸
- › The territory is served by only one Canadian Border Services Agency office out of 1,100 nationally. The Northwest Territories has eight, Yukon nine, and PEI ten.⁶⁹
- › Tourism contributes less of a share of the territory's GDP than anywhere else in Canada.⁷⁰

BANKING

- › Nunavut has 2.9 bank branches per 10,000 people, near the Canadian median, but fewer than one-third of communities have branches.⁷¹ Nunavut has the fewest ATMs per capita of any province or territory.⁷²

63 Transport Canada, "Transportation in Canada 2018," accessed June 5, 2020, <https://www.tc.gc.ca/eng/policy/transportation-canada-2018.html>. Statistical Addendum, Table R02

64 Raihan K. Khan and Mark A. Strand, "Road Dust and Its Effect on Human Health: A Literature Review," *Epidemiology and Health* (Korean Society of Epidemiology, 2018), <https://doi.org/10.4178/epih.e2018013>.

65 Research Interviews, 2020.

66 Based on data from NAV Canada

67 Innovation Science and Economic Development Canada, "Canadian Industry Statistics," accessed June 7, 2020, <https://www.ic.gc.ca/app/scr/app/cis/search-recherche>.

68 HLT Advisory, "Branded Hotel Inventory in Canada," 2015, <https://www.hlta.ca/hlt-case-study-branded-hotel-inventory-canada-2015/>.

69 Canada Border Services Agency, "Nunavut - Directory of CBSA Offices and Services," accessed June 10, 2020, <https://www.cbsa-asfc.gc.ca/do-rb/provinces/nu-eng.html>.

70 Statistics Canada, "The Daily – Provincial and Territorial Tourism Satellite Account, 2014," 2018, <https://www150.statcan.gc.ca/n1/daily-quotidien/181010/dq181010b-eng.htm>.

71 Canadian Bankers Association, "Bank Branches in Canada by Province," 2018, <https://cba.ca/bank-branches-in-canada>.

72 Canadian Bankers Association, "Number of ABMs in Canada by Province," 2018, <https://cba.ca/abms-in-canada>.

- › Driven by a lack of competition and service, average spending on financial services in Nunavut is 30 percent higher than the Canadian average.⁷³
- › With fewer bank branches, Nunavut Inuit are far less likely to benefit from government-assisted savings plans. Take-up of Canada Education Savings Grants is one-tenth the national average; for Canada Learning Bonds targeted to low-income children it is one-twentieth.⁷⁴ Nunavummiut are half as likely to contribute to RRSPs as other Canadians, which makes it harder to access home ownership.⁷⁵

RAIL

- › Nunavut is the only province or territory without some form of rail connection. By comparison, half of surface freight arriving in the Northwest Territories comes by rail from Alberta.⁷⁶

73 Statistics Canada, "Household Spending, Canada, Regions and Provinces," accessed June 6, 2020, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110022201>; Statistics Canada, "Household Spending, Three Territorial Capitals," accessed June 6, 2020, <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1110023301>.

74 Employment and Social Development Canada, "Canada Education Savings Program: 2018 Annual Statistical Review," accessed June 6, 2020, <https://www.canada.ca/en/employment-social-development/services/student-financial-aid/education-savings/reports/statistical-review.html#h2.4.3>.

75 Statistics Canada, "Registered Retirement Savings Plan Contributors - Canada, Provinces and Territories," accessed June 11, 2020, <https://www150.statcan.gc.ca/n1/daily-quotidien/180216/t001d-eng.htm>.

76 Government of Yukon, "Northern Connections: Multi Modal Transportation for the North," accessed June 17, 2020, https://gov.nu.ca/sites/default/files/files/Northern_connections.pdf.



This is the time for real leadership. By working with Nunavut Inuit, the Governments of Canada and Nunavut can help close the infrastructure gap so that we may expand economic opportunity, improve our collective well-being and fully realize our rights under the Nunavut Agreement.



