



Draft Final Report

Evaluation of the Other Community Infrastructure and Activities Program

March 2024

Evaluation Branch
Strategic Policy and Partnerships Sector



GCDOCS # 122472728

Indigenous Services
Canada

Services aux
Autochtones Canada

Canada

TABLE OF CONTENTS

LIST OF ACRONYMS	4
EXECUTIVE SUMMARY	5
MANAGEMENT RESPONSE AND ACTION PLAN	9
Overall Management Response	9
Management Response and Action Plan Matrix	10
1. INTRODUCTION	18
2. PROGRAM CONTEXT AND DESCRIPTION	19
2.1 Program Context	19
2.2 Changing Landscape	19
2.3 Program Profile	20
2.4 Program Governance and Management	23
2.5 Project Prioritization and Selection.....	24
2.6 Project Tracking and Inspections	25
3. EVALUATION SCOPE AND METHODOLOGY	27
3.1 Evaluation Scope and Issues	27
3.2 Lines of Evidence	28
3.3 Challenges and Limitations	29
3.4 Integrating Culturally Appropriate Practices and Methods.....	29
4. FINDINGS ON RELEVANCE: MEETING FIRST NATIONS COMMUNITY INFRASTRUCTURE NEEDS	31
4.1 Alignment with Government of Canada Priorities	31
4.2 Community Infrastructure Gaps: Existing and Emerging Needs	32
4.3 Existing and Emerging Challenges.....	41
5. FINDINGS ON EFFECTIVENESS: PROVIDING BETTER SERVICES AND CLOSING THE INFRASTRUCTURE GAPS	44
5.1 Achieving Results.....	44

5.2 Program Design and Delivery	48
5.3 Performance Data and Data Systems	53
5.4 Unintended Outcomes.....	55
5.5 Fire Protection	56
6. FINDINGS ON EFFICIENCY: BETTER WAYS IN DELIVERING THE PROGRAM .	61
6.1 Alignment with Other Programs and Departments	61
6.2 Asset Management Planning and Lifecycle Approach	63
6.3 Other Cost-efficiency Practices and Observations	64
7. SUPPORTING SERVICE TRANSFER: FUTURE OF THE PROGRAM	67
8. CROSSCUTTING FINDINGS ACROSS THREE EVALUATIONS: INFRASTRUCTURE PROGRAMS AS A WHOLE	71
9. CONCLUSIONS AND RECOMMENDATIONS	75
APPENDIX A: PROGRAM LOGIC MODEL	77

LIST OF ACRONYMS

ACRS	Asset Condition Reporting System
AFN	Assembly of First Nations
CFMP	Capital Facilities and Management Program
FNIF	First Nations Infrastructure Fund
FNIHB	First Nations and Inuit Health Branch
FNIP	First Nations Infrastructure Investment Plan
ICMS	Integrated Capital Management System
IFMO	Indigenous Fire Marshal's Office
IFSD	Institute of Fiscal Studies and Democracy
ISC	Indigenous Services Canada
NIFSC	National Indigenous Fire Safety Council
OCI	Other Community Infrastructure and Activities Program
O&M	Operations and maintenance

EXECUTIVE SUMMARY

This evaluation of Indigenous Services Canada's (ISC's) Other Community Infrastructure and Activities (OCI) program was conducted as outlined in ISC's Five-Year Departmental Evaluation Plan and further to the Treasury Board *Policy on Results*.¹ The evaluation was undertaken to provide a neutral, evidence-based assessment of program relevance, effectiveness, and efficiency. It also presents findings concerning climate change, service transfer, Gender-Based Analysis Plus, and impacts of the COVID-19 pandemic on the program to the extent possible. Moreover, given the interlinkages of the program with two other ISC infrastructure-related evaluations undertaken during the same period, i.e. the On-Reserve Housing (ORH) program and the Education Facilities (EF) Program, this evaluation also highlights crosscutting findings across the three evaluations with the view to provide a more holistic perspective to inform ISC's infrastructure programs.

Background

Administered under the Capital Facilities and Maintenance Program (CFMP), which is the Government of Canada's main vehicle to support community infrastructure for First Nations on reserves, the OCI program covers a wide range of areas and activities concerning community infrastructure that is not housing, education facilities, or water and wastewater. The OCI program provided funding to First Nations under seven initiatives: 1) Other Community Infrastructure (including seven sub-assets); 2) Engagement and Proof of Concept; 3) National Indigenous Fire Safety Council (formerly the Indigenous Fire Marshall Office Project); 4) Lubicon Lake Band community Infrastructure Buildout Project; 5) Asset Management Planning; 6) Co-development of Infrastructure Plans; and 7) Ventilation. Under the Other Community Infrastructure initiative, the seven sub-assets are Roads and Bridges, Energy systems, Connectivity, Structural Mitigation, Fire Protection, Cultural and Recreational Facilities, and Planning and Skills Development.

Since the last evaluation of the OCI program in 2015,² First Nation communities have been experiencing ongoing changes that have affected community infrastructure on reserve and its delivery. Such changes include population growth on reserves; challenges around supply chains, construction costs, inflation, and competition for labour, which were exacerbated by the COVID-19 pandemic; and communities experiencing more frequent and severe weather conditions due to climate change.

Evaluation Scope and Methodology

Covering a five-year period from April 2016 to March 2021, the evaluation was conducted by ISC Evaluation with support from a third-party evaluation firm. The evaluation employed a mixed-methods approach that included multiple lines of evidence: literature and document review; administrative and financial data analysis; an online survey with 83 completed questionnaires for the OCI program; interviews with 32 individuals representing First Nations, First Nations partner and technical organizations, as well as ISC staff both at the national and

¹ Treasury Board *Policy on Results*: www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=31300

² ISC website: www.rcaanc-cirnac.gc.ca/eng/1467300208069/1537884442650#chp2

regional levels; two focus groups with members of a First Nation in Alberta and a First Nation in Ontario; and a case study on fire protection. To the extent possible, data collection activities for the OCI program evaluation were integrated with activities for the evaluations of the On-Reserve Housing Program and the Education Facilities Program to reduce the burden in the engagement of ISC regional staff and First Nation communities and organizations.

The focus of the evaluation is on the funded activities delivered under the CFMP by ISC's Regional Operations Sector. Several OCI initiatives and components were not covered by the evaluation taking into consideration the timing of past evaluation activities and funding announcements, including the Solid Waste Program, Lubicon Lake Band community Infrastructure Buildout Project, Asset Management Planning, Ventilation, and distinctions-based community infrastructure engagement and planning.

Main Findings

Relevance

The evaluation finds a continued need for the OCI program and its alignment with ISC and Government of Canada's priorities; however, the magnitude of existing and future demands of community infrastructure far exceeds the funding available. A few intensifying or emerging factors, including population growth on-reserve and the growing needs of diverse segments of the communities, most notably those with mental health challenges, disabilities, youth, and seniors, have placed additional pressure on already limited resources. COVID-19 in particular highlighted communities' need for emergency preparedness and the lack of community infrastructure to address such circumstances. In addition, climate change has placed increasing stress on community infrastructure and the need to increase resiliency to the impacts of climate change. While the OCI program is deemed relevant in addressing some community infrastructure gaps, its relevance is limited as some essential areas under the OCI program (such as roads and bridges, fire protection, and cultural and recreational facilities) went unmet for an extended period.

Effectiveness

The evaluation examined the extent to which the OCI program has been effective in supporting First Nation communities to construct and upgrade community infrastructure in their communities, to develop the capacity to plan and manage community infrastructure, and to maintain their ISC-funded assets. The evaluation finds that the OCI program delivered numerous projects to First Nations communities which helped meet the needs and address community infrastructure gaps on-reserve; however, the reliability and sustainability of these assets could not always be ensured due to funding constraints and program design. Moreover, the CFMP's overarching objectives of maximizing the lifecycle of assets, mitigating health and safety risks, and ensuring assets meet applicable codes and standards were not fully achieved. The availability and reliability of performance data continue to be an issue as identified by the evaluation. In reporting on the achievement of the program, there is a lack of performance data and the department mostly uses data at the output level as specified in the program Logic Model (Annex A); alternative performance measurement approaches were proposed to measure the success of the infrastructure investment on reserve more effectively by integrating a wellbeing or human rights-centered lens.

The evaluation also looked at the effectiveness of the funding approach, oversight, and support of program delivery, including the First Nations Infrastructure Investment Plan (FNIIP) process. The evaluation finds that the current planning over five years does not support strategic long-term planning and asset management principles; also the prioritization criteria used in the FNIIP process does not sufficiently consider emerging key factors identified by the communities such as public health, climate change, and accessibility. Issues identified in accessing OCI program funds included the timing of funds, application criteria and rationale for the approval of proposal-based funds, community capacity, access inequality, and transparency. Further, a lack of regular maintenance due to funding availability and backlogs, compounded by worsened weather conditions and lesser quality of materials, resulted in the lifespans of community infrastructure being shorter than elsewhere in Canada.

In addition to the expected outcomes of the program, the evaluation finds that the OCI program provided increased employment and training opportunities as well as social and economic impacts within the community, and the community infrastructure built increased community pride.

Efficiency

The evaluation assessed the extent to which the OCI program demonstrated efficiency and economy. The findings suggested that while the program has implemented initiatives to generate more efficiency in program delivery, opportunities exist to improve cost-efficiency and generate more value for money through more integrated planning based on lifecycle asset management principles, applying a whole-of-community approach based on the unique needs and realities of the communities and taking more proactive and preventative measures in repairs and maintenance of investments.

The evaluation finds that the OCI program is delivered using an asset-focused approach and the planning and approval of OCI program projects could not always be aligned with investments in other sub-assets under the CFMP, which had resulted in instances where schools and housing units were built without proper enabling features such as connecting roads, sidewalks, street lighting, and fencing to protect from wildlife. The delivery of infrastructure funding by asset categories under the CFMP made it difficult to align processes and deadlines, hindering the coordination of funding sources.

Further, cost-efficiencies in the OCI program were not fully achieved as a result of insufficient maintenance and repair, and project approval decisions tend to opt for the lower-costs options rather than based on long-term asset management planning. Moreover, the evaluation noted a lack of a cohesive approach towards capacity building for asset management, which inhibits the efficiency in delivering community infrastructure outcomes. Related to capacity issues, there was a high turnover of staff, in both ISC and First Nation communities, which resulted in inefficiencies due to loss of capacity and additional efforts by First Nations.

Crosscutting Findings

The evaluation of the OCI program was conducted simultaneously with the evaluations of the ORH program and EF program. These evaluations revealed that ISC's infrastructure programs share many similarities when it comes to the challenges being faced, from funding insufficiency,

program design and delivery, capacity and staff turn-over, to data and results measurement. Moreover, the findings point out the interlinkages among the programs that are integral to take into consideration in closing the infrastructure gaps on reserve. More specifically, the infrastructure programs have sometimes been delivered in silo due to the nature of targeted investments and the interlinkages among the programs are not always sufficiently considered and integrated in the planning and approval of the infrastructure projects through the FNIIP process across the various sub-asset categories. This resulted in a loss of efficiencies and missed opportunities to better meet communities' needs and achieve better health and safety.

Recommendations

Based on the findings of the evaluation, it is recommended that ISC:

1. Better support community-led infrastructure planning and prioritization to meet First Nations' needs:
 - 1.1 Review and adapt community infrastructure planning processes to better support First Nations in having reliable, sustainable, and community-led infrastructure;
 - 1.2 Explore opportunities to better align program design and implementation with the evolving priorities identified in this evaluation by First Nations to address the unique needs in their communities, which could include health outcomes, climate change, and accessibility;
2. Prioritize or allocate dedicated funding or efforts to areas identified as top needs or gaps by the communities:
 - 2.1 Conduct an analysis to identify the barriers for communities that are smaller, more remote and with lesser resources in accessing funds;
 - 2.2 Remove barriers in accessing the fire protection capital funding by building in more flexibility in the three-tiered funding approach and examine ways to ensure the O&M funding for fire protection is used for its intended purpose;
 - 2.3 Further assist and support communities with their capacity development activities to manage and maintain their community infrastructure and service transfer;
3. Improve data quality in departmental systems, including to establish clear definitions of the fields and categories used in the ICMS Project Tracking module to help ensure data entry is consistent to improve data quality;
4. Implement strategies to mitigate impacts of staff turnover to better support collaboration with First Nations.

MANAGEMENT RESPONSE AND ACTION PLAN

Overall Management Response

Overview

- This Management Response and Action Plan was developed to address recommendations presented in the Evaluation of the Other Community Infrastructure and Activities Program. It was developed by ISC-Regional Infrastructure Delivery Branch (RIDB) and ISC-Community Infrastructure Branch (CIB) in collaboration with the Evaluation Directorate.
- RIDB and CIB recognize the findings outlined in the evaluation regarding the performance and delivery of the Other Community Infrastructure and Activities Program.
- The Evaluation provides four recommendations to improve the delivery and effectiveness of the Other Community Infrastructure and Activities Program. All recommendations are accepted, and the attached Action Plan identifies specific activities to move towards meeting these recommendations. The Program would like to note that while we concur with the recommendations related to funding in principle and continue to seek funding through the avenues available, funding decisions are beyond direct program control.

Assurance

- The Action Plan presents appropriate and realistic measures to address the evaluation's recommendations, as well as timelines for initiating and completing the actions. Over the next two years, the department will proceed with a phased response to analyse, develop and implement operational and policy improvements to the Other Community Infrastructure and Activities Program, in consideration of our departmental priorities and ongoing initiatives to modernize the delivery of on-reserve community infrastructure programs and services.
- Many action items involve engagement with partners and relevant stakeholders, with changes to be implemented following these discussions. A status update on this Management Response and Action Plan will be conducted by the Evaluation Directorate regularly and presented to the Departmental Performance Measurement Evaluation Committee to monitor progress and activities.
- The phased approach recognizes program complexities and provides time to engage First Nations and other partners in a meaningful development process.

Management Response and Action Plan Matrix

Recommendations	Actions	Responsible Manager (Title/Sector)	Planned Start and Completion Dates	Status and Rationale
<p>Better support community-led infrastructure planning and prioritization to meet First Nations' needs:</p> <p>1.1 Review and adapt community infrastructure planning processes to better support First Nations in having reliable, sustainable, and community-led infrastructure.</p>	We do concur.			
	We will:			
	<p>1) Advance the initiative to review and modernize ISC's infrastructure policy and funding delivery models that support long-term, whole-of community infrastructure planning in collaboration with First Nations partners.</p>	DG CIB; Directors of HISRD and IPMCMD	Start Date: May 2023 Completion: December 2023	<p>Status:</p> <p><input type="checkbox"/> Fully Implemented <input checked="" type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete</p> <p>Update/Rationale: ISC officials are currently engaging First Nation partners, through regional engagement sessions, on the modernization of infrastructure policy and funding delivery models.</p> <p>As of: May 2023</p>
<p>2) Update and modernize O&M national funding formulas including annual updates to the cost indices to keep pace with inflation</p>	DG CIB; Director HISRD DG RIDB; MIPD (to work in collaboration with ESDPP for O&M Education Facilities,	Start Date: 2021 Completion: Ongoing	<p>Status:</p> <p><input type="checkbox"/> Fully implemented <input checked="" type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete</p>	

		including teacherages)		<p>Update/Rationale: Budget 2021 provided ongoing funding increases for the operation and maintenance of OCI assets. The national funding formulas for OCI O&M were updated and modernized to provide significant increases to annual allocations by asset. The updated formula funding allocations started to flow to First Nations in 2022-2023 and are ongoing.</p> <p>As of: 2021</p>
1.2 Explore opportunities to better align program design and implementation with the evolving priorities identified in this evaluation by First Nations to address the unique needs in their communities, which could include health outcomes, climate change, and accessibility.	We do concur.			
	We will:			
	<p>1) Develop a plan for further collaboration between Regional Operations branches and regions, including First Nations and Inuit Health Branch, to better support health outcomes in First Nation communities.</p>	DG CIB, DG RIDB, RO, RDGs	<p>Start Date: March 2024 Completion: July 2024</p>	<p>Status:</p> <p><input type="checkbox"/> Fully implemented <input type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete</p> <p>Update/Rationale: <i>Scoping/assessing start date</i></p> <p>As of:</p>
<p>2) Integrate climate change mitigation and</p>	DG RIDB, Directors of SOD and SPMR	<p>Start Date: November 2023</p>	<p>Status:</p> <p><input type="checkbox"/> Fully Implemented</p>	

	adaptation considerations and resiliency tools, aligned with ISC's Climate Change Strategy, into project selection decisions and implementation.		Completion: March 2025	<input type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete Update/Rationale: <i>Scoping/assessing start date</i> As of:
	3) Develop a plan that best supports First Nation identified accessibility needs on reserve.	DG RIDB DG CIB	Start Date: TBD Completion: TBD	Status: <input type="checkbox"/> Fully Implemented <input type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete Update/Rationale: <i>Scoping/assessing start date</i> As of:
Prioritize or allocate dedicated funding or efforts to areas identified as top needs or gaps by First Nations communities: 2.1 Conduct an analysis to identify gaps in addressing First Nations' needs, including communities that are smaller, more remote and with lesser resources.	We do concur.			
	We will:			
	1) Conduct a review and analysis of existing studies and reports that identify gaps in addressing First Nations' needs, including smaller, more remote communities.	DG CIB; DG RIDB	Start Date: February 2024 Completion: September 2024	Status: <input type="checkbox"/> Fully Implemented <input type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete Update/Rationale: As of:

<p>2.2 Remove barriers in accessing the fire protection capital funding by building in more flexibility in the three-tiered funding approach and examine ways to ensure the O&M funding for fire protection is used for its intended purpose.</p>	<p>1) Update the three-tiered funding approach as part of the Fire Protection Level of Service Standard to be more responsive to the needs of First Nations.</p>	<p>DG CIB; Director HISRD</p>	<p>Start Date: May 2023 Completion: April 2024</p>	<p>Status:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Fully Implemented <input checked="" type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete <p>Update/Rationale: The AFN and ISC co-developed a Fire Protection Strategy, which was published May 2023. This strategy will inform the review and updates to the current Fire Protection Level of Service Standard (LoSS).</p> <p>External engagements will begin in Fall 2023 with a goal of publishing an updated standard by April 1, 2024.</p> <p>As of: May 2023</p>
<p>2.3 Further assist and support communities with their capacity development activities to manage and maintain their community infrastructure and service transfer.</p>	<p>1) Advance institution and capacity development in support of service transfer, in partnership with First Nations-led organizations, to advance self-determined service delivery models that will address the needs and priorities identified by member</p>	<p>DG CIB; Directors HISRD and IPMCMD</p>	<p>Start Date: April 2022 Completion: March 2028</p>	<p>Status:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Fully Implemented <input checked="" type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete <p>Update/Rationale: Budget 2021 provided \$55.1 million over four years for institution building, which supports transfer partners to build their capacity, detail their asset management plan, scope of service delivery and</p>

	<p>communities. All models are opt-in and First Nations-led.</p> <p>This may include the development of policy reforms that aim to increase the options available to First Nations for funding infrastructure on reserves including human capacity considerations.</p>			<p>standards, as well as refine their business plan.</p> <p>As of: April 2022</p>
3. Improve data quality in departmental systems, including to establish clear definitions of the fields and categories used in the ICMS – Project Tracking module to help ensure data entry is consistent to improve data quality.	We do concur.			
	We will:			
	<p>1) Extend the ACRS Inspection program to provide data that forecasts future capital investment needs for existing infrastructure and ensures a comprehensive inspection of major components of each asset.</p>	<p>DG, RIDB; Director SPMR</p> <p>DG, CIB; Director HISRD</p>	<p>Start Date: April 2022</p> <p>Completion: March 2026 and ongoing</p>	<p>Status:</p> <p><input type="checkbox"/> Fully Implemented</p> <p><input checked="" type="checkbox"/> Partially Implemented</p> <p><input type="checkbox"/> Implementation did not Commence</p> <p><input type="checkbox"/> Obsolete</p> <p>Update/Rationale: The extended ACRS program was piloted nationally in 2021-22 and received positive feedback. In 2022-23 regions and First Nations were supported through ongoing proposal-based funding to</p>

			begin implementing the extended inspections. As of: April 2022
	2) Update ICMS to allow for import and export of the capital investment forecasts from the extended ACRS inspection program and create reports to be generated from ICMS.	DG, RIDB; Director SPMR DG, CIB	Start Date: April 2022 Completion: December 2024 and ongoing Status: <input type="checkbox"/> Fully Implemented <input checked="" type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete Update/Rationale: ICMS has been updated to support the data elements from an E-ACRS inspection. The Inspection module in ICMS has been updated with the addition of a 'Compact Inspection' export-import. As of: April 2022
	3) Conduct an analysis of the data collected in ICMS – Project Tracking module to determine its reliability and assess information gaps to implement improvements related to data quality and lead a regional standardization business process exercise (tools and practices) in the ICMS – Project Tracking	DG, RIDB; Director SPMR	Start Date: July 2024 Completion: July 2026 Status: <input type="checkbox"/> Fully Implemented <input type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete Update/Rationale: <i>Scoping/assessing start date</i> As of:

	module to ensure a common understanding and usage of the data to improve reliability and the planification and tracking of infrastructure investments.			
4. Implement strategies to mitigate impacts of staff turnover to better support collaboration with First Nations.	We do concur.	Responsible Managers:		
	We will:			
	1) Review existing human resources, succession and onboarding plans, processes and guides, and develop strategies to ensure new staff have been sufficiently trained to carry out their duties in working with First Nations.	DG RIDB DG CIB RO, RDGs	Start Date: March 2024 Completion: December 2024	Status: <input type="checkbox"/> Fully Implemented <input type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete Update/Rationale: <i>Scoping/assessing start date</i> As of:
2) Review communities of practice and other knowledge sharing tools/forums to develop a toolkit to improve collaboration, information sharing and knowledge transfer during staff turnover.	DG RIDB DG CIB	Start Date: March 2024 Completion: December 2024	Status: <input type="checkbox"/> Fully Implemented <input type="checkbox"/> Partially Implemented <input type="checkbox"/> Implementation did not Commence <input type="checkbox"/> Obsolete Update/Rationale: <i>Scoping/assessing start date</i>	

				As of:
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1. INTRODUCTION

This document constitutes the report for the evaluation of Indigenous Services Canada's (ISC's) Other Community Infrastructure and Activities (OCI) program. The evaluation was conducted by ISC's Evaluation and Policy Re-design Directorate in accordance with the Treasury Board *Policy on Results* and Section 42.1 of the *Financial Administration Act* as part of ISC's Five-Year Departmental Evaluation Plan 2022-2023.

Planning of the evaluation took place in 2021 and the preliminary evaluation work was conducted between August and November 2021. Most data collection activities occurred between March and September 2022. Preliminary findings were finalized in October 2022. The final evaluation report is to be approved in winter 2024.

Data collection activities for the evaluation were coordinated with those for two other infrastructure-related evaluations being conducted within the same timeframe, i.e. Evaluation of the Education Facilities program and Evaluation of the On-Reserve Housing program, to maximize engagement efforts and reduce the burden for ISC program staff and First Nation communities and organizations in the data collection process, as well as to identify crosscutting issues in the evaluation findings across the three evaluations.

Report Structure and Sections

To provide the context for the evaluation findings, a description of the OCI program and the changing landscape of the program is presented in the next section followed by the evaluation's focus and methodology. Subsequent sections present the evaluation findings of program relevance, effectiveness, efficiency, and ISC efforts to support service transfer of the OCI program to First Nations. Findings about COVID-19 and climate change are included in the relevance, effectiveness, and efficiency sections as appropriate, rather than in separate sections. In addition, given that a key aspect of ISC's vision is to "support and empower Indigenous peoples to independently deliver services and address the socio-economic conditions in their communities",³ findings relevant to service transfer are presented in a separate section.

Given the cross-cutting issues identified among the abovementioned three infrastructure-related evaluations, the findings across the three evaluations are presented in a section following the findings on the OCI program with the view to provide a more holistic perspective on the infrastructures on-reserve as a whole. The final section summarizes the key findings and presents recommendations for program improvement and to support the achievement of results moving forward.

³ ISC Mandate published on the Government of Canada website. Mandate (sac-isc.gc.ca) www.sac-isc.gc.ca/eng/1539284416739/1539284508506

2. PROGRAM CONTEXT AND DESCRIPTION

2.1 Program Context

The OCI program supports First Nation communities in their efforts to have reliable and sustainable infrastructure by providing funding to plan, design, construct, acquire, operate, and maintain community infrastructure assets and facilities, as well as to coordinate training and undertake capacity-building activities related to community infrastructure.

ISC funds the community infrastructure under the authority as set out in the Capital Facilities and Management Program (CFMP), which is ISC's main vehicle to support community infrastructure for First nations on reserves, including the OCI Program. Complementary to the CFMP fund, ISC also supports general community infrastructure through the First Nations Infrastructure Fund (FNIF), which is part of the OCI program.

ISC's OCI program is not the only federal initiative funding community infrastructure on-reserve in First Nations communities. Infrastructure Canada is a key player that also funds community infrastructure for First Nations communities, for example through the Federal Gas Tax Fund, and Building Canada Fund (from 2007 to 2014).

2.2 Changing Landscape

ISC has been supporting on-reserve community infrastructure for decades.⁴ The last evaluation of the OCI program was completed in 2015 covering the period from 2010-11 to 2015-16. Over the past several years First Nation communities have experienced ongoing changes that have affected community infrastructure on-reserve and its delivery.

The Indigenous population grew by 9% from 2016 to 2021, nearly doubling the rate of the non-Indigenous population over the same period (5%)⁵, although the population of Status First Nations living on reserve grew little (i.e. 0.6% increase) during this period as per Statistics Canada 2021 Census⁶, many First Nations interviewees of this evaluation indicated that they had observed more members returning to live on reserve in their communities, which had become more diversified in various segments of the population including youth, single individuals, single parents, seniors, and those with disabilities or special needs.

⁴ In 2017, the Department of Indian Affairs and Northern Development was dissolved and the departments of Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and Indigenous Services Canada (ISC) were established so as to separate the process of designing and rebuilding new relationships with Indigenous Peoples from the administration of the *Indian Act*. Where CIRNAC is responsible for continuing to modernize institutional structures and governance so that Indigenous Peoples can build capacity that supports the implementation of their vision of self-determination, ISC's primary responsibilities are focused on capacity building to improve access to high-quality services, and to support Indigenous Peoples in assuming control of the delivery of services at the pace and in the ways they choose.

⁵ Statistics Canada 2021 Census. Retrieved from: www150.statcan.gc.ca/n1/daily-quotidien/220921/dq220921a-eng.htm

⁶ Status First Nations people in Canada: A snapshot from the 2021 Census. <https://www150.statcan.gc.ca/n1/pub/41-20-0002/412000022023004-eng.htm>

The COVID-19 pandemic has exacerbated existing housing and infrastructure issues on reserve and has long-term implications for the planning and design of housing and community infrastructure. In addition, challenges around supply chain issues, construction costs, inflation, and competition for labour became more acute during the pandemic.

Due to climate change, First Nations communities have been experiencing more frequent and severe weather conditions, which further stress infrastructure and highlight the need for more durable housing. The impacts are even more evident for remote communities as the durations of winter roads diminish.

With the Government of Canada's continuous commitment towards reconciliation with the Indigenous peoples and support for nation to nation relationships and self-determination, First Nations are increasingly more attuned to taking control of programs and services in making decisions affecting their communities through capacity development and strategic planning as they move towards self-determination and jurisdiction over community infrastructure.

2.3 Program Profile

Capital Facilities and Maintenance Program

According to the 2016 CFMP Program Manual, the CFMP invests in the planning, design, construction, renovation, acquisition, and operations and maintenance of community infrastructure that supports First Nations to build healthy, safe, and prosperous communities and enables engagement in the economy. Through the CFMP, more than \$2 billion per year is invested in four program areas, including housing, education facilities, water and wastewater systems, and other community infrastructure. Program activities are governed by the terms and conditions of the *Contributions to support the construction and maintenance of community infrastructure* Transfer Payment Program Authority.

ISC allocates funding for the construction and the maintenance of community infrastructure to First Nations at a regional-level through formula, proposal-based project funding, or a combination of both. Formula-based funding includes operation and maintenance funding, formula-based minor capital funding, and housing funds. While proposal-based funding, including all targeted funds, covers acquisition, construction, renovation, or repair projects, whether they are major or minor projects.

Funded under three streams, i.e. operations and maintenance, minor capital for projects under \$1.5 million, and major capital for projects over \$1.5 million, the intended objectives of the CFMP are to make investments that:

- Maximize the lifecycle 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.

Contributions to eligible recipients under the CFMP provide financial assistance to plan, construct, acquire, operate, and maintain community capital facilities and services (infrastructure, including schools) and housing (residential) consistent with approved policies

and standards. This assistance is provided to First Nations on reserves, as well as First Nations and other eligible recipients on Crown land or recognized Indian land.

Other Community Infrastructure and Activities (OCI) Program

The OCI program falls under the Core Responsibility of “Governance and Community Development Services” in ISC’s 2022-23 Departmental Results Framework and contributes to the Departmental Result of “Indigenous people have reliable and sustainable infrastructure”.

Administered under the CFMP, the OCI program funding is provided to First Nations on-reserve and First Nations and other eligible recipients on Crown land or recognized Indian land and covers a wide range of areas and activities concerning community infrastructure that is not housing, education facilities, or water and wastewater. The OCI program provided funding to First Nations under seven initiatives: 1) Other Community Infrastructure (including seven sub-assets); 2) Engagement and Proof of Concept; 3) National Indigenous Fire Safety Council (formerly the Indigenous Fire Marshall Office Project); 4) Lubicon Lake Band community Infrastructure Buildout Project; 5) Asset Management Planning; 6) Co-development of Infrastructure Plans; and 7) Ventilation.

Under the Other Community Infrastructure Activity, the seven sub-assets are:⁷

1. **Roads and bridges** – roads and bridges within the community and off-reserve to provide critical access to communities;
2. **Energy systems** – alternative energy projects such as solar, hydroelectric, wind power, and preliminary studies; and energy efficiency projects such as generator upgrades, energy-efficient lighting, and building improvements;
3. **Connectivity** – high-speed backbone transport networks, broadband points of presence, local access networks, community satellite equipment;
4. **Structural mitigation** – dikes, sea walls, natural infrastructure, fire breaks, and erosion-control measures aimed at mitigating floods, landslides, wildfires, etc.
5. **Fire protection** – fire prevention and educational programming, capacity development and training, and fire services infrastructure, equipment, and assets, such as fire halls, firefighting vehicles;
6. **Cultural and recreational facilities** – cultural centres, pow-wow grounds, youth and senior centres, playgrounds, sports fields, and arenas;
7. **Planning and skills development** – community, capital, or infrastructure planning and training and awareness related to supporting community infrastructure.

From 2016-17 to 2020-21 (evaluated period), ISC provided an average annual base (A-base) funding of \$367.9 million to support the OCI program activities. During the evaluated period, the OCI program also received time-limited targeted (B-base) funding through Budget announcements for a total of approximately \$940 million from 2016-17 to 2020-21, mostly delivered through the FNIF.

⁷ There are now eight sub-assets, in addition to Solid Waste, within the Other Community Infrastructure and Activities Program. Band Administration Buildings were added as a separate sub-asset in 2022. A band administrative building is defined as a building, or space in a building, used as office space in which departmental program or band administrative and managerial activities take place. It includes band offices, administrative buildings and band council buildings.

More specifically, these targeted funds have been derived from the following sources (some are beyond the evaluated period):

- **Building Canada Fund:** \$128 million from 2016-2024;
- **Budget 2014:** \$37 million from 2016-20, for structural mitigation;
- **Budget 2016:** \$255 million from 2016-18, for fundamental infrastructure on reserves; and \$76.8 million from 2016-18, for culture and recreation infrastructure;
- **Budget 2017:** from 2018-21, \$352.1 million, for other community infrastructure and the Lubicon Lake Band community buildout; \$15 million for asset management planning; and \$15 million for engagement and proof of concept;
- **Budget 2019:** \$48 million from 2020-24 for structural mitigation; \$10 million from 2019-22 to create the National Indigenous Fire Safety Council; and \$29.4 million for a top-up of the federal Gas Tax Fund for other community infrastructure;
- **2020 Fall Economic Statement:** additional Budget 2017 funding for other community infrastructure (\$1.13 billion for 2021-28), engagement and proof of concept (\$38.8 million for 2021-26), asset management planning (\$9.3 million from 2023-26), co-development of infrastructure plans (\$25.9 million from 2021-23), and ventilation (\$9.09 million from 2021-22);
- **Gas Tax Fund:** a permanent and ongoing funding source. As of December 31, 2020, \$181 million was provided directly to ISC regional offices to be allocated to on-reserve First Nations communities in provinces on a per capita basis, using on-reserve population data, through the FNIF. From 2018-19 and 2021-22, \$59.1 million top-up; and
- **Climate Action Incentive Fund (Carbon Pricing):** CFMP and FNIF top-up of \$1.6 million from the federal fuel charge for fiscal year 2019-20.

First Nations Infrastructure Fund

The FNIF is a complementary source of funding to the CFMP and is managed under the same management processes and controls as the CFMP. The FNIF is designed to ensure that general community needs are not overlooked while addressing health and safety priorities such as water, schools, and housing, by employing a specific set of criteria.

The goal of the FNIF is to improve the quality of life and the environment for First Nations by assisting First Nations to improve and increase public infrastructure. The FNIF provides flexibility in project categories, in recognition of the range of infrastructure pressures in First Nations communities. The FNIF is the main source of funds for eligible infrastructure projects that includes all seven OCI program sub-assets, and Solid Waste.

Program Expenditure

The following table summarizes the OCI program expenses (both A-base and B-base) over the evaluation period. Overall, the OCI program spent approximately \$2.64 billion over five years, which was split between seven regions, two territories, and headquarters (HQ). Across the regions and territories, Ontario spent the most at \$671.6 million followed by Manitoba at \$518.0

million and British Columbia at \$423.7 million. The lowest expenditure among the regions was in the Atlantic region of \$164.60 million.

Table 2.1: OCI Program Expenditures by Region from 2016-17 to 2020-21 (in \$)

Region	2016-17	2017-18	2018-19	2019-20	2020-21	Total
ATL	38,175,670.07	34,846,584.41	30,957,537.11	34,321,405.15	26,293,961.98	164,595,158.72
QC	54,424,495.00	48,302,965.00	35,267,160.00	35,348,981.00	38,176,211.00	211,519,812.00
ON	117,773,712.25	167,013,064.24	155,019,949.40	120,684,278.77	111,147,312.74	671,638,317.40
MA	118,813,719.71	137,912,921.99	94,227,167.88	88,375,419.43	78,745,991.29	518,075,220.30
SA	66,309,377.19	54,132,143.38	44,264,339.57	42,749,195.14	39,825,136.90	247,280,192.18
AB	91,636,074.85	73,300,724.08	52,705,781.47	66,283,840.88	67,824,790.53	351,751,211.81
BC	101,992,392.37	112,236,034.99	81,205,524.00	64,981,203.33	63,312,538.00	423,727,692.69
YK	6,128,780.50	11,353,393.38	3,554,527.50	3,542,687.13	3,132,637.62	27,712,026.13
NWT	0	0	0	9,678.88	4,000,000.00	4,009,678.88
HQ	1,692,225.00	1,665,800.00	3,740,795.00	4,468,542.04	7,108,687.88	18,676,049.92
Total	596,946,446.94	640,763,631.47	500,942,781.93	460,765,231.75	439,567,267.94	2,638,985,360.03

Source: ISC financial reporting

2.4 Program Governance and Management

Given the number of areas covered under the program, multiple branches and sectors at ISC are involved in the management and delivery of the OCI program:

- **The Regional Infrastructure Delivery Branch (RIDB) of the Regional Operations Sector** manages all of the OCI program's sub-asset categories, except for fire protection and solid waste;
- **The Land and Economic Development Sector** manages the Solid Waste sub-asset category;
- **The Community Infrastructure Branch (CIB) of the Regional Operations Sector** manages fire protection and is also responsible for the policy development, procedures, and directives for program delivery.

The Operations and Service Delivery Committee and the Regional Operations Senior Management Committee chaired by Regional Operations Senior Associate Deputy Minister, provides departmental senior-level oversight for the program and ensures consistency of strategic decisions of the CFMP within the Regional Operations Sector and with the rest of the Department.

In addition to the Regional Operations Sector, the First Nations and Inuit Health Branch (FNIHB) also plays an important role in the implementation of the OCI program. The Environmental Public Health Division housed within the FNIHB and its environmental public health officers work directly with First Nations to inspect community facilities where there are concerns about health and safety risks and provide advice and guidance about how to minimize these risks. The environmental public health officers also assist communities in reviewing infrastructure project proposals from a public health perspective.

2.5 Project Prioritization and Selection

First Nation communities own and operate community infrastructure facilities and systems on reserve. First Nations are responsible for maintaining existing assets and building new ones. ISC regional offices assist First Nations in developing infrastructure investment plans, managing capital projects, operating, and maintaining existing assets. The Council of a First Nation is expected to ensure that applicable codes and standards are met, and First Nations are responsible for hiring qualified professionals who are expected to familiarize themselves with and abide by applicable standards and requirements related to operating and maintaining community infrastructure.

The OCI Program is delivered under the CFMP authorities as detailed in its terms and conditions, and funds flow through the contributions to support the construction and maintenance of community infrastructure. The CFMP requires First Nations to identify all eligible infrastructure projects through their First Nation Infrastructure Investment Plan (FNIIP). ISC allocates funding for the construction and maintenance of infrastructure to First Nations at a regional level through formula or proposal-based project funding, or a combination of both.

According to the 2016 CFMP Program Manual, proposal-based funding is used by the CFMP to provide financial support to First Nations to invest in capital infrastructure assets. Contribution amounts, for the construction of new or the renovation of existing assets, are determined by regional offices on the basis of proposals submitted by First Nation recipients. Regional offices work with First Nations to identify their future and priority infrastructure investment needs through the FNIIP. Planning for all projects is done in conjunction with First Nations communities on an annual basis alongside asset inspections that take place every three years. Emerging priorities are taken into consideration in the allocation of funding. Funding decisions are made ensuring that funding be directed at health and safety priorities following the National Priority Ranking Framework and asset-specific priority ranking frameworks.

To determine the level of program funding to be allocated to regions, various funding allocation methodology options are developed in collaboration with subject matter experts. These options are reviewed by various senior management committees (including regional representation) for their recommendation and endorsement before being approved by the Senior Assistant Deputy Minister of Regional Operations. Funding can be allocated annually or multi-year depending on budget. Once regional allocations are approved, the funding is distributed through regional offices to First Nations through contribution agreements. In-year funding management is constantly reviewed and adjusted to ensure all funding is expended. CFMP funding for the Operations and Maintenance (O&M) of capital-funded assets is usually provided on an annual basis and forms part of First Nation contribution agreements.

First Nations Infrastructure Investment Plan (FNIIP)

As indicated on ISC's website⁸, the FNIIP is a planning tool to help ISC assess infrastructure needs and strategically plan infrastructure investments in First Nations communities across

⁸ ISC website, updated 2023-07-28. First Nations Infrastructure Investment Plans. <https://www.sac-isc.gc.ca/eng/1440084290678/1533645718223>

Canada. FNIIPs are how ISC manages CFMP funding and are developed in partnership with First Nations based on community-identified infrastructure needs, which covers all CFMP asset areas. The deadline for a First Nation to submit their infrastructure investment plan to a regional office is September 30 of each year; however, First Nations can make adjustments to their plan at any time throughout the year to reflect any changes in community priorities. Investments are prioritized through the National Priority Ranking Framework (NPRF), a planning tool that helps direct funding to the highest priorities using a consistent and transparent process across all regions. Higher-ranked projects are placed in earlier years of the plan, while lower-ranked projects are placed in later years. The amount of money available to support projects identified in the FNIIP varies from year to year due to time-limited, targeted funding programs.

National Priority Ranking Framework

The prioritization of proposed projects is based on several factors covered under the NPRF, including:

- Protection of health and safety as well as assets (assets require upgrading or replacement to meet appropriate standards);
- Health and safety improvements (upgrades of existing assets, new construction/acquisition projects to mitigate an identified significant risk to health and safety);
- Recapitalization/major maintenance (extend the useful operating life of a facility or asset, or maintain the original service level of the asset); and
- Growth (anticipated community growth requiring new construction, expansion, or procurement of assets to maintain the level of service standards).

2.6 Project Tracking and Inspections

ISC uses the Integrated Capital Management System (ICMS), a web-based application consisting of several modules including assets, bands, budget, deficiencies and inspections, O&M, and project tracking, to track projects. The ICMS is used by ISC staff responsible for the construction, operations and maintenance of capital assets. Regional staff enter project information reported by First Nations into the ICMS and update project information as appropriate.

The department has been using the Asset Condition Reporting System (ACRS) as the inspection tool to collect and record data on the condition of on-reserve assets. The condition of each asset is expected to be assessed every three years⁹, according to the ACRS inspection cycle. Inspections are formal on-site reviews by professional inspectors of Assets and Water and Wastewater systems. Asset inspection information includes General Condition Rating, O&M Rating, estimated remaining life and deficiencies. Additional inspection information for buildings includes management plans, grounds, exterior and interior conditions, mechanical systems, building substructure, and safety and fire protection systems.

⁹ During the pandemic, ACRS inspections were put on hold for two years, some schools may not be inspected for four years.

The ACRS inspections generate a list of deficiencies for the First Nations and ISC's regional offices then work with First Nations through the annual FNIP planning process to address any identified repairs and maintenance work needed to preserve investments. Projects are then tracked through a Project Tracking module in the ICMS. Regional offices have engineers and other employees who are available to guide First Nations and third-party contractors regarding compliance with policies and codes. With the exception of Alberta, whose ACRS inspections are performed by the Technical Services Advisory Group, regional offices also contract engineering firms to perform cyclical ACRS inspections.

3. EVALUATION SCOPE AND METHODOLOGY

3.1 Evaluation Scope and Issues

The coverage of the evaluation took into consideration the mandatory requirements under the *Financial Administration Act* and the Treasury Board *Policy on Results*. The focus of the evaluation was also informed by findings from previous evaluations and audits, as well as program needs and the ongoing work on program reform.

While examining both A-base and B-base funded activities of the OCI program delivered through the CFMP authority over a five-year period from April 2016 to March 2021, the evaluation focused on relevance, effectiveness, and efficiency issues, and sought evidence to support crosscutting issues concerning service transfer and impacts of climate change. A Gender-Based Analysis Plus lens was integrated where appropriate from the perspective of the diverse segments of the populations on-reserve.

For relevance, the evaluation focused on the ongoing and emerging needs of First Nations' other community infrastructure. For effectiveness and efficiency, the focus was on the extent to which the OCI program has achieved its intended outcomes, as well as the performance of program design, delivery, and governance.

What's not Covered in This Evaluation

While other federal departments such as Infrastructure Canada receive funding to support community infrastructure on reserve under their respective departmental mandate, this evaluation focuses exclusively on ISC's OCI program and it is not horizontal, i.e. it does not cover the funds and programs delivered or administered by other departments. The focus of the evaluation is on the funded activities delivered under the CFMP by ISC's Regional Operations Sector.

The Solid Waste sub-asset under the OCI program initiative was not included since an evaluation of the Solid Waste Program was completed in 2021.¹⁰ The Lubicon Lake Band Community Infrastructure Buildout Project was not included in the evaluation as a significant amount of investment was approved over nine years, i.e. 2018-19 to 2026-27, which requires the attention of a separate evaluation at a later date.

Several other OCI program components were not to be covered by this evaluation mainly due to considerations about timing and availability of evidence during the evaluation period:

- Asset Management Planning (\$15M, 2018-19 to 2022-23);
- Ventilation (\$9M from 2021-22); and
- Distinctions-based Community Infrastructure Engagement and Planning (\$26M from 2021-23).

¹⁰ Full evaluation report can be found at Evaluation of the First Nations Solid Waste Management Initiative (sac-isc.gc.ca): www.sac-isc.gc.ca/eng/1640350964188/1640351002909?wbdisable=true

Crosscutting Issues with Other Infrastructure-related Evaluations

Two other evaluations were conducted during the same period as the OCI program on other infrastructure-related programs under the CFMP, i.e. Education Facilities program and the On-Reserve Housing program, which were subject to the same authority and requirements under the CFMP and involved overlapping regional contacts and First Nations partners across the three programs.

To reflect the similarities, independencies, and other crosscutting issues across the three programs in delivering infrastructure programs and services to First Nations communities, the Evaluation team assessed these crosscutting aspects that apply to all three evaluations to provide a more holistic view to inform ISC's infrastructure program and service delivery beyond a single program.

3.2 Lines of Evidence

To the extent possible, data collection activities for the OCI program evaluation were integrated with activities for the evaluations of the Education Facilities and the On-Reserve Housing Program to reduce burden in the engagement of First Nation communities and organizations and to realize efficiencies where applicable.

Six lines of evidence were used to support the evaluation of the OCI program, of which the survey was administered across the three above-mentioned evaluations.

- **Literature and Document Review** – Relevant departmental documents such as Treasury Board submissions, ISC reports, briefing notes, and correspondence; presentations (including those available through the 5th National First Nations Housing Forum that took place in 2022, which covered community infrastructure issues); as well as key studies completed or sponsored by First Nations partners were reviewed.
- **Administrative and Financial Data Analysis** – Available financial and performance/monitoring data, progress reports, project files were analyzed.
- **Key Informant Interviews** – 32 interviews (both internal and external) were completed with 38 individuals from 4 First Nations, 3 Tribal Councils, 1 First Nations Technical Services Organization, 4 First Nations Provincial/Territorial Organizations, and 1 First Nation National Organization, i.e. the Assembly of First Nations (AFN); within ISC, 9 NCR program staff (including CIB, RIDB, FNIHB), as well as 10 regional staff across all seven regions.
- **Survey with Funding Recipients** – A survey integrating all three programs (i.e. Education Facilities, the On-Reserve Housing and OCI) was conducted with voluntary First Nations community recipients targeting a total of 1,098 invitees across 588 First Nations across Canada. Of the 226 completed surveys, 83 surveys were on the OCI program.
- **Focus Group** – Two focus groups were conducted with members of a First Nation community - one in Alberta (small size community in Zone 2) and the other in Ontario (a medium-sized community in Zone 1); and
- **Case Study** – A case study on fire protection in First Nations' communities included document review and interviews with 28 key informants, of which 15 were ISC program staff (both national and regional) and 13 were external representatives from First Nations

communities and organizations such as fire chiefs, National Indigenous Fire Safety Council and Aboriginal Firefighters Association, First Nations Emergency Services Society and Independent First Nations Alliance.

3.3 Challenges and Limitations

Limitations to the interpretation of survey, interview, and focus group results are related to the distribution of sample demographic characteristics. While regional representation was obtained and the data can be illustrative of the experiences of many First Nations and reported with confidence, it is not necessarily representative of all First Nation communities across Canada.

- **Survey:** As follow-up was limited or not possible in many instances, this led to a smaller final sample size. While the overall sample size remained large enough to report results, one region (the Atlantic region) is underrepresented in the final data.
- **Interviews:** While efforts were made to obtain feedback from across all regions, not all contacted responded to the invitation or declined to participate. Regional representation was obtained for the OCI program for all regions except Saskatchewan and Manitoba. Moreover, some First Nation respondents were new to their role and as such were not familiar with all aspects of the program, hence they may not be able to confidently report on their communities' experiences and outcomes related to the program beyond the time spent in their current role.
- **Focus group:** There was a significant challenge in recruiting the focus groups with First Nations community members/end-users of infrastructure facilities. Despite the best efforts to engage approximately 60 communities, only two focus groups were conducted in Alberta (a small-sized community in Zone 2) and Ontario (a medium-sized community in Zone 1).
- **Financial and Administrative Data:** Considerable challenges were experienced in obtaining financial and administrative data to support evaluation findings. Despite the readily available First Nations Targeted Infrastructure Investment Quarterly Reports published on GCpedia¹¹, when seeking information beyond total number of projects completed and funding invested under each asset, e.g. expenditures by project type, by project sub-category, by zone, and total recipient funding requests, etc., the data was found not to be well populated in ICMS, which posed usability issues. Moreover, as regions manage their own data entry into ICMS based on information reported by First Nations, consistency was also raised as an issue in how certain fields and categories were interpreted across regions.

Given the wide coverage of the OCI program including miscellaneous sub-asset areas and initiatives, the evaluation could not assess each of the areas in-depth however identified findings concerning specific areas where possible.

3.4 Integrating Culturally Appropriate Practices and Methods

To support ISC Evaluation's mandate to integrate co-development principles and implement evaluation methods and approaches with Indigenous peoples and partners that are more centered on Indigenous worldviews and knowledge systems, the Evaluation team has sought

¹¹ GCpedia: https://www.gcpedia.gc.ca/wiki/Report_Archive

opportunities where possible to integrate more culturally appropriate practices in the evaluation process, including:

- Engaged key First Nations partners at key milestones, including evaluation planning, preliminary findings, and final evaluation report;
- Collaborated with First Nations partners in finalizing the evaluation approach and instruments (i.e. Interview Guide and Survey Questionnaire) by considering Indigenous perspectives about data collection methods;
- Integrated Opening and Closing ceremonies and storytelling in some group discussions and engagement activities where appropriate;
- Shared evaluation-related findings and results with First Nations partners and participants respecting the principle of reciprocity;
- Hired a consulting firm versed in Indigenous evaluation approaches and methods to support data collection with First Nations partners and community representatives and members;
- Ensured a sufficient representation of First Nations participants in data collection, where a majority of interviewees were composed of First Nations community members, administration, technical organization, and partners; a survey targeting First Nations communities only; and focus groups with First Nations community members;
- Established a First Nation Evaluation Advisory Committee for the Evaluation of the Education Facilities Program, which is composed of representatives including Chief and First Nation infrastructure technical organizations. Given the linkages and similarities among infrastructure evaluations, the relevant advice from the Committee on evaluation conduct and methodologies was used to inform the evaluation of the OCI program, where applicable;
- Used a more narrative style and citations where appropriate in providing qualitative evidence to support evaluation findings with the intention to convey feedback from First Nation communities.

4. FINDINGS ON RELEVANCE: MEETING FIRST NATIONS COMMUNITY INFRASTRUCTURE NEEDS

The evaluation examined the extent to which the OCI program has met the existing and emerging needs of the reserves in accessing reliable and sustainable community infrastructure on reserve. The evaluation finds that the magnitude of existing and future demands of other community infrastructure far exceeds the funding available. While the OCI program is deemed relevant in addressing some community infrastructure gaps, its relevance is limited as some essential areas under the OCI program went unmet for an extended period.

A few intensifying or emerging factors, including population growth on-reserve, impacts of climate change and COVID-19, and the growing needs of diverse segments of the communities have placed additional pressure on already limited resources. COVID-19 in particular highlighted communities' need for emergency preparedness and the lack of community infrastructure to address such circumstances. In addition, climate change has placed increasing stress on community infrastructure and the need to increase resiliency to the impacts of climate change.

4.1 Alignment with Government of Canada Priorities

Finding #1: The OCI program aligns with ISC and the Government of Canada's priorities.

According to a report from the Canadian Council for Public-Private Partnerships entitled *Bridging the First Nations Infrastructure Gap*, the infrastructure deficit for First Nations on reserve alone was estimated at \$30 billion in 2016. The deficit is due in part to the remoteness of some communities, a range of socio-economic challenges, outdated operations and maintenance policies, and decades of under-funding. In addition, current investments are not keeping pace with population growth, the rate of inflation, and the needs of First Nation communities.¹²

Activities under the OCI program are aligned with the Government of Canada's priorities to address infrastructure gaps on-reserve. The Prime Minister's 2021 Mandate Letter to the Minister of Indigenous Services indicated:

*"To achieve equity, you will continue to collaborate with Indigenous partners by working together to close socio-economic gaps and improve access to high-quality services. This includes continuing work to eliminate all remaining long-term drinking water advisories, and closing the infrastructure gap by 2030, with a focus on building sustainable and affordable housing."*¹³

¹² P3's: Bridging the First Nations Infrastructure Gap (pppcouncil.ca): www.pppcouncil.ca/web/P3_Knowledge_Centre/Research/P3_s__Bridging_the_First_Nations_Infrastructure_Gap.aspx?WebsiteKey=712ad751-6689-4d4a-aa17-e9f993740a89

¹³ Retrieved from: <https://pm.gc.ca/en/mandate-letters/2021/12/16/minister-indigenous-services-and-minister-responsible-federal-economic>

The OCI program contributes to ISC's core responsibility of Governance and Community Development Services and contributes to the departmental result of "Indigenous people have reliable and sustainable infrastructure". The evaluated OCI program areas contribute to the departmental result through the following activities and objectives:

- **Energy systems** – First Nations communities are enabled to implement efficiency or clean energy-related projects;
- **Structural mitigation** – First Nations communities are more resilient to natural hazardous events;
- **Cultural and recreation facilities** – First Nations communities have a place to support language, culture, and wellness;
- **Roads and bridges** – First Nations communities are enabled to access emergency services and businesses;
- **Connectivity** – First Nations communities have the infrastructure to access high-speed internet (configured at 50/10 Mbps);
- **Fire protection** – First Nations communities are equipped with fire assets (e.g., fire halls, fire equipment) and annually updated Emergency Management Plans covering each of the following assets: water systems, wastewater systems, schools, and fire halls;
- **Planning and skills development** – First Nations communities have enhanced awareness and understanding to enable capacity-building and readiness for self-determination through community and infrastructure planning;
- **Engagement and proof of concept** – First Nations communities are enabled for the transfer of service delivery through infrastructure delivery models that are designed to reflect the priorities of First Nations through inclusive and responsive decision management practices; and
- **National Indigenous Fire Safety Council** – First Nations communities have enhanced capacity to improve community safety and resiliency.

4.2 Community Infrastructure Gaps: Existing and Emerging Needs

For the OCI program to be relevant, it must support First Nations in addressing their community infrastructure gaps. As such, it is important to understand the magnitude of the existing and emerging needs related to community infrastructure to ensure the OCI program helps address these needs.

Finding #2: Community infrastructure on-reserve gaps are large and growing, with a substantial proportion of assets being more than 30 years old and some assets reaching the end of their lifecycles; Communities are struggling to meet their community infrastructure needs due to issues concerning funding, workforce and capacity.

A 2021 study by the AFN found that the majority of the investment in First Nations' infrastructure occurred between the 1980s and early 2000s, with some assets predating 1940.¹⁴ The study also noted that 18% of infrastructure assets on First Nation reserves are in poor or very poor condition and reaching their end of life. However, the condition of First Nation infrastructure assets varies depending on the remoteness of the community. Communities close to urban centres (i.e. in Zone 1)¹⁵ had on average 15% of infrastructure rated as poor or very poor, whereas remote, fly-in communities (i.e. in Zone 4)¹⁶ had 25% of infrastructure assets in poor or very poor condition.

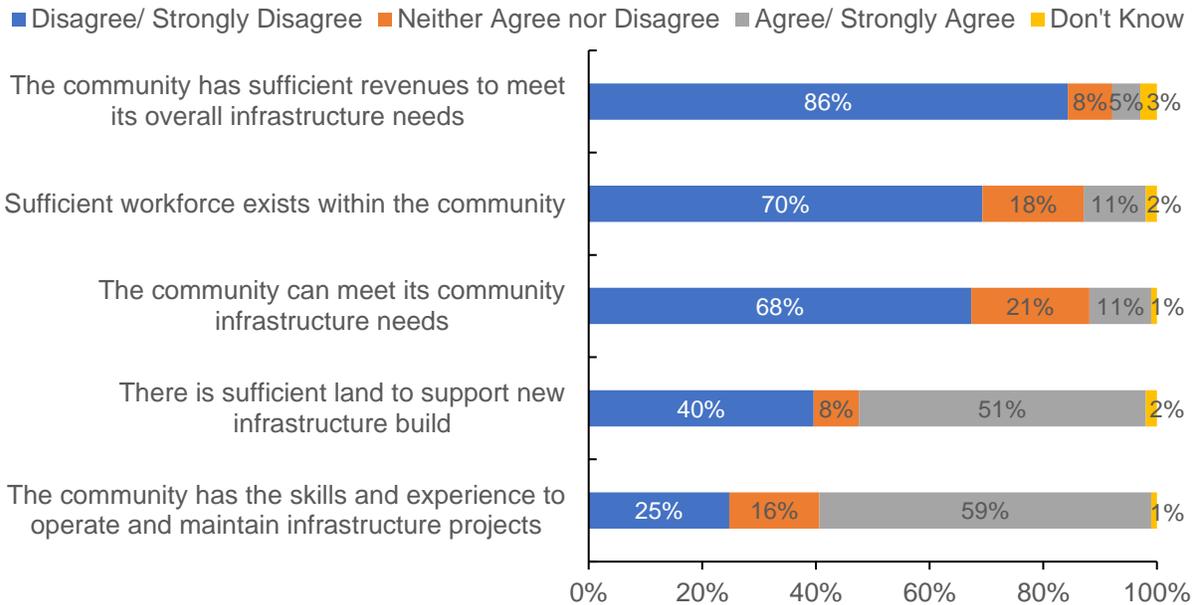
The majority of survey respondents (86%) indicated that their community has insufficient revenues to meet their overall infrastructure needs and a further 68% indicated that their community cannot meet its infrastructure needs. Although 59% of survey respondents agreed that their community has the skills and experience to operate and maintain infrastructure projects, there appears to be a lack of sufficient workforce within many communities (70% disagreed that a sufficient workforce exists within their community) suggesting that these communities must rely on external workers to construct and maintain at least a portion of their infrastructure assets (Figure 4.1).

¹⁴ First Nations Asset Needs Study (2021). Assembly of First Nations. Retrieved from: www.afn.ca/wp-content/uploads/2021/12/2.-21-11-29-National-Infrastructure-Assessment-Interim-Report-EN.pdf

¹⁵ Zone 1 communities are within 50 km of the nearest service centre with year-round road access.

¹⁶ Zone 4 are communities with no year-round road access to a service centre.

Figure 4.1: Current Community Needs



ISC Evaluation Survey 2022 (Question: To what extent do you agree with the following statements about your community? Respondents n=83.)

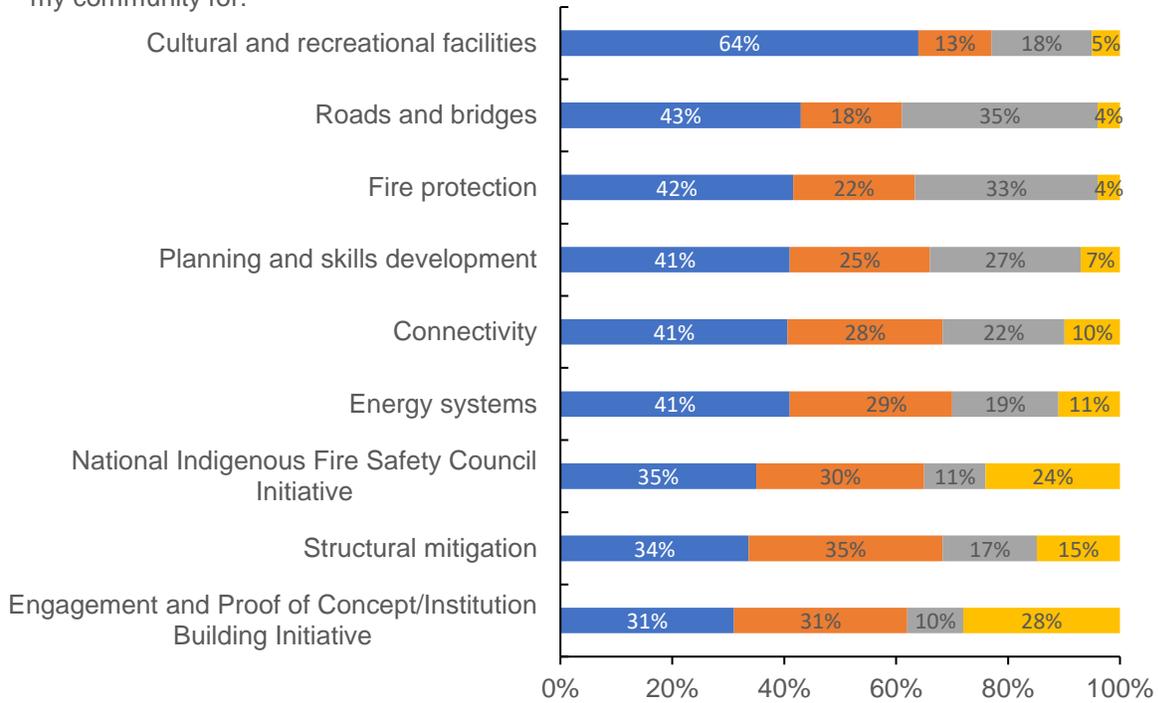
Finding #3: While none of the OCI program’s sub-assets and initiatives have been able to fully address community infrastructure needs, some areas in particular were indicated such as roads and bridges, fire protection, and cultural and recreational facilities.

When asked whether the OCI program responded to their community infrastructure needs, nearly half of the survey respondents (48%) disagreed or strongly disagreed, as compared to 17% who agreed or strongly agreed. When being asked in particular whether each of the evaluated OCI program’s sub-assets and initiatives responded to their community need, as shown in the figure below, cultural and recreational facilities infrastructure was most often identified by respondents as need not met by their community (64%). Over four in ten survey respondents also indicated that their community needs were not being met for several other assets including roads and bridges (43%), fire protection (42%), planning and skills development (41%), connectivity (41%), and energy systems (41%) (Figure 4.2).

Figure 4.2: Agreement with Extent OCI Program Responds To Community Needs

■ Disagree/ Strongly Disagree ■ Neither Agree nor Disagree ■ Agree/ Strongly Agree ■ Don't Know

The Other Community Infrastructure and Activities program responds to the need in my community for:



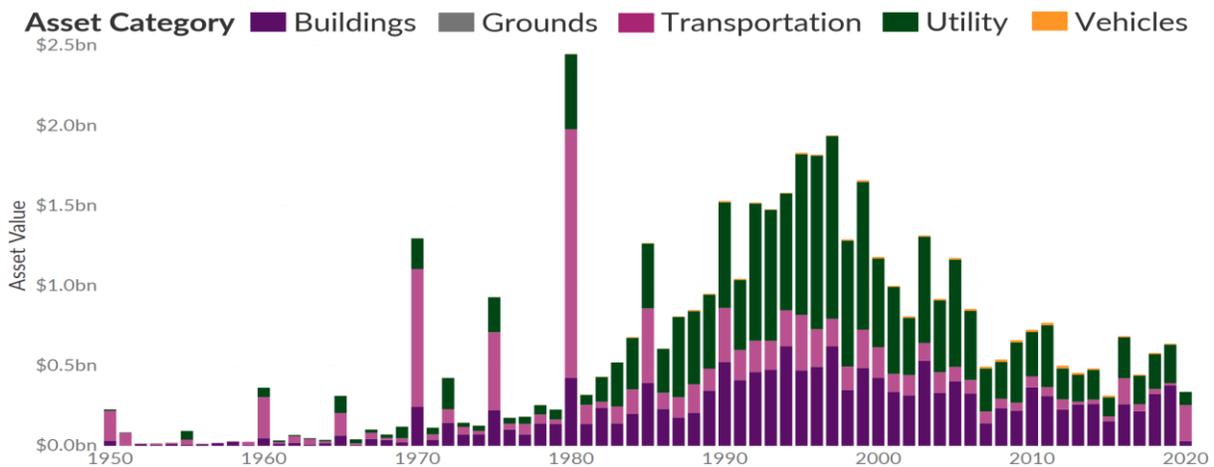
ISC Evaluation Survey 2022 (Question: To what extent do you agree with the following statements?
Respondents n=83.)

Roads and Bridges

The survey responses were echoed by interviewees. Communities that rely on winter roads have seen the winter season shortening and there is a need to construct more permanent roads. Fly-in communities have additional infrastructure gaps, as their runways and radar systems cannot accommodate large aircraft. The limitations on aircraft size due to the lack of appropriate infrastructure limit the delivery of materials and the ability to conduct community-wide evacuations.

According to a 2021 National First Nations Assets Needs Study conducted by the AFN, the last significant investments on roads and bridges on-reserve were done in 1970-1980 (Figure 4.3), which illustrates that some major investments are reaching 40-50 years of service towards their lifecycle.

Figure 4.3: Value of On-Reserve Infrastructure Investment by Year



Buildings: Community facilities

Grounds: Ports/wharfs

Transportation: Roads/bridges

Utilities: Water, wastewater, solid waste, electrical (*Largest/larger expenses over the years.)

Source: National First Nations Assets Needs Study by the Assembly of First Nations

The chart also indicates that the utilities asset category including water, wastewater, solid waste, and electrical are overall the largest expenses over the years when compared with other categories. This echoes an observation from the majority of First Nations interviewees that their community's priorities to provide safe drinking water, wastewater facilities, and housing meant other community infrastructure needs often went unmet for years, especially for major public infrastructure. Some indicated that the lack of funding for roads, bridges, and structural mitigation has become a safety issue as they can collapse due to deterioration.

Fire Protection

From 2016-17 to 2020-21, ISC provided a total of \$169.2 million (both A-base and B-base) and an average of \$33.8 million per year for fire protection (Table 4.1), which covered areas in:

- Capital investments, e.g. fire trucks, fire halls:
- Operation and maintenance of capital investments; and
- Firefighter training.

From 2019-20 to 2021-22, ISC also provided a total of \$6,597,900 to support the creation of the Indigenous Fire Marshal Office.

Table 4.1: ISC Expenditures on Fire Protection (not including the creation of the Indigenous Fire Marshal Office) by Region from 2016-17 to 2020-21 (in \$)

Region	2016-17	2017-18	2018-19	2019-20	2020-21	Total
ATL	2,840,427.32	4,618,410.31	4,455,936.45	3,215,904.60	3,858,700.05	18,989,378.73
QC	5,226,216.00	2,579,992.00	2,443,294.00	2,664,251.00	3,144,058.00	16,057,811.00
ON	9,347,473.00	11,175,547.00	6,884,517.40	6,215,695.00	5,962,619.00	39,585,851.40
MA	6,803,633.49	6,858,124.00	4,648,812.17	4,116,825.73	4,084,904.00	26,512,299.39
SA	3,647,883.00	3,305,448.00	2,013,939.24	1,711,814.00	2,166,351.50	12,845,435.74
AB	14,407,517.85	5,758,150.08	3,544,388.20	1,821,478.00	4,501,235.00	30,032,769.13
BC	3,627,587.00	8,499,400.00	5,399,263.00	3,412,889.00	1,728,856.00	22,667,995.00
YK	230,354.00	286,212.53	143,828.04	141,973.92	108,456.61	910,825.10
HQ	310,000.00	353,600.00	442,100.00	349,000.00	133,400.00	1,588,100.00
Total	46,441,091.66	43,434,883.92	29,976,078.50	23,649,831.25	25,688,580.16	169,190,465.49

Source: ISC financial reporting

When dividing the \$33.8 million across the 634 First Nations communities in Canada, if each community were to receive funding in a given year, they would receive only \$53,000 annually to maintain all aspects of fire protection services. The evaluation team could not find a comprehensive baseline study identifying the scale of needs for fire protection in First Nations communities, however, both fire chiefs and technical organizations being interviewed indicated the lack of funds to support effective fire protection. A study conducted by the Office of the Chief Coroner for Ontario to review fire death in First Nations from 2008-2017, stated “Indigenous people continue to receive fewer services and less funding, putting them at greater risk of harm and specifically, greater risk of experiencing fatal fires regarding living conditions on reserve.”

The Government of Canada’s Standing Committee on Indigenous and Northern Affairs presented a report in June 2018,¹⁷ which indicated hearing First Nations fire services suffer from underfunding and struggle to obtain the resources necessary to protect their communities, and that without adequate fire protection funding, they often struggle to buy new equipment, and to hire and train new firefighters. The problems are further exacerbated in remote and semi-remote areas, where the accessibility of training and equipment is already limited. As part of the report, evidence also included hearing from community members that ISC’s funding formula is dated and insufficient for any community attempting to provide fire protection training to volunteers and community members.

Cultural and Recreational Facilities

According to the survey results, cultural and recreational facilities have been ranked as the highest in terms of the OCI program not responding to community needs at 64%, far more than all the other OCI program categories ranging from 31% to 43% (Figure 4.2). This trend can be likely attributed to the increasing awareness and need of communities for self-determination. Several ISC staff commented that due to limited budgets, funding tends to focus on urgent

¹⁷ From the Ashes: Reimagining Fire Safety and Emergency Management in Indigenous Communities <https://publications.gc.ca/site/eng/9.857983/publication.html>

infrastructure needs that prioritize health and safety over other infrastructure needs such as cultural and recreational facilities which tend not to be funded sufficiently.

The need can be further demonstrated according to ISC reporting. During the evaluated period, 217 cultural and recreational infrastructure projects such as community centers, radio stations, sports fields, community playgrounds, youth centers and pow-wow arbours were funded with 201 completed and 16 ongoing. This covers less than one-third of the First Nations communities over the five-year period. Moreover, by looking at the expenditures over the same period (Table 4.2), a total of \$92.2 million was invested across eight regions, which approximately averages \$2.3 million per region per year, which would be minimal when further dividing among the First Nations communities. The table also illustrates that several regions had zero investments in the area over multiple years.

Table 4.2: ISC Investments on Cultural and Recreational Projects 2016-17 to 2020-21

INVESTMENTS PER REGION						
Region	Expenditures (\$M)					Totals
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021 (Q4)	
ATL	3.9	0.5	0	0	0	4.4
QC	10.8	0.8	0	0	0	11.6
ON	1.4	1.4	0	0.5	0	3.3
MA	6.8	11.6	5.4	1.0	1.7	26.5
SA	13.7	0.8	0	0	0	14.5
AB	5.1	1.0	0.3	0.9	2.2	9.5
BC	6.0	12.0	1.7	1.8	0	21.4
YK	0	0	0	0	0	0
HQ	0.9	0	0	0	0	0.9
Total	48.7	28.2	7.3	4.1	3.8	92.2

Source: ISC Results and Delivery Scorecard as of March 31, 2021¹⁸

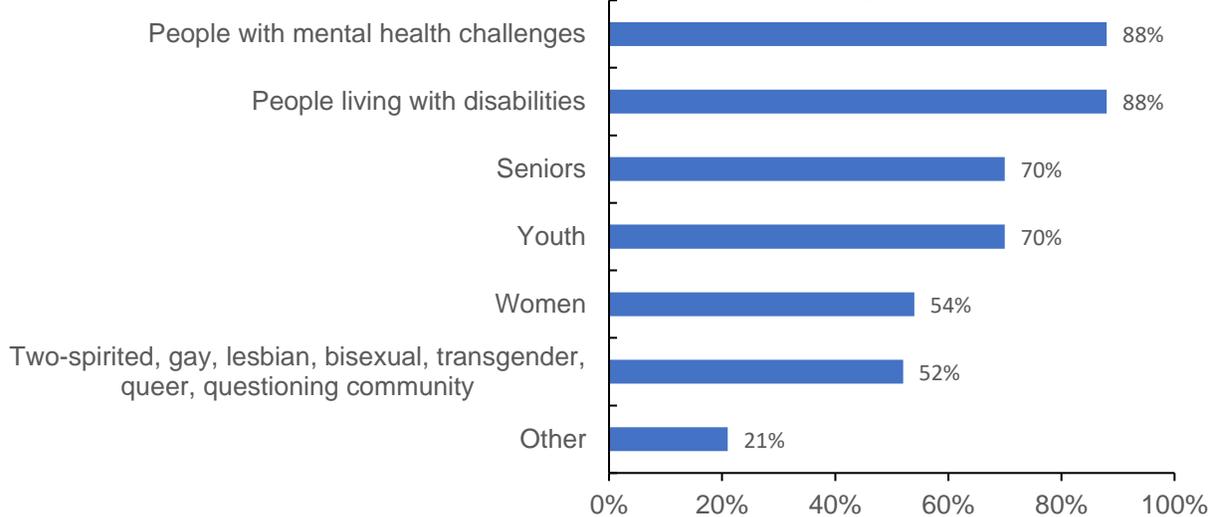
Finding #4: First Nation communities have increasing needs to address accessibility issues in community infrastructure and other diverse segments of their community populations, most notably those with mental health challenges, disabilities, youth, and seniors.

Several First Nation interviewees identified the need for better accessibility to buildings and other assets in the community, such as wheelchair accessibility in community buildings, recreational facilities, sidewalks and street lighting, and upgrades to heating, ventilation, and cooling systems. A few noted that their funding applications for such projects are unsuccessful due to limited funds, and they looked to address these needs through own-source and/or other funding sources. Others noted the need for adequate space for social programs (e.g., for youth, seniors, and those with special needs), and facilities such as emergency and homeless shelters, and safe places for those fleeing domestic violence.

¹⁸ culture_and_recreation_score_card.pdf (gcpedia.gc.ca):
www.gcpedia.gc.ca/gcwiki/images/e/ed/culture_and_recreation_score_card.pdf

These findings reflect that of survey respondents, where 41% indicated that the OCI program was not serving diverse segments of the population in their community, as compared to 16% who responded the opposite. The most frequently mentioned groups that respondents felt were not being served by the OCI program included people with mental health challenges, and people living with disabilities. Other groups mentioned included children and land base users (e.g., hunters and trappers) (Figure 4.4).

Figure 4.4: Groups Not Supported by OCI Program



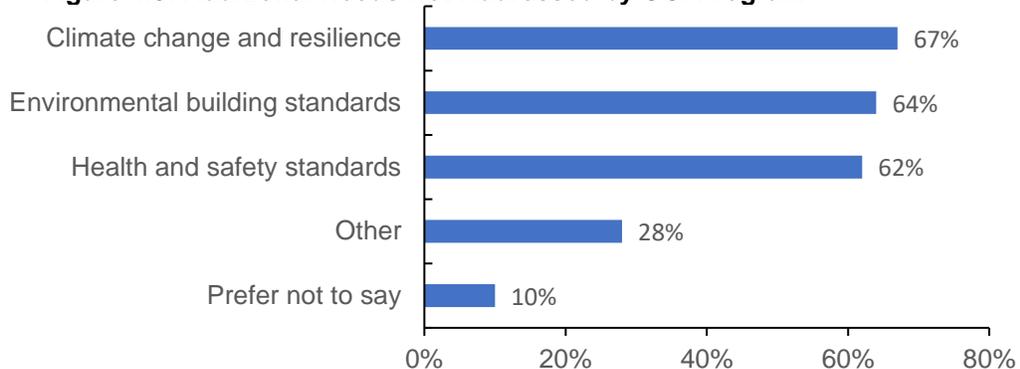
ISC Evaluation Survey 2022 (Question: Which of the following groups is not being adequately served by the OCI program? Asked of those who disagreed or strongly disagreed OCI program serves diverse segments of the community's population. Multiple responses permitted. Respondents n=33.)

As per ISC staff, addressing the needs of specific segments of the population has not been a primary consideration as the OCI program was designed as universal in applying to all community residents; however, codes and standards were being adapted in many First Nation communities to help ensure those with disabilities have access to community buildings, but such efforts appeared to be modest due to the lack of available funds. Moreover, there has not been an analysis of meeting the needs of diverse populations in First Nations communities.

Finding #5: Climate change is increasingly and negatively impacting community infrastructure; however, there is currently no centralized approach in planning and design taking into consideration infrastructure resiliency to address and mitigate these impacts on communities.

Most of the survey respondents indicated the following not being addressed by the OCI program: climate change and resilience (67%); environmental building standards (64%); and standards for health and safety (62%). Mentions of “other” needs not being addressed noted by 28% of survey respondents included the infrastructure’s capacity to accommodate community growth, emergency preparedness, and renewable and/or alternative energy programs (Figure 4.5).

Figure 4.5: Additional Needs Not Addressed by OCI Program



ISC Evaluation Survey 2022 (Question: Which of the following infrastructure needs are not being addressed by the OCI program? Asked of those who disagreed or strongly disagreed OCI addressed community needs. Multiple responses permitted. Respondents n=39.)

The level of awareness and experience of the effects of climate change varies across the country; with the more prominent effects observed in the western provinces and remote, northern communities. Across the country, climate change effects experienced by First Nation communities and mentioned by interview respondents include forest fires, flooding, bank erosion, permafrost melting, heat waves, and zoonotic changes (i.e. ticks and Lyme disease, mosquitoes and Nile virus).

Many interviewees noted that damage to infrastructure due to recent climate-change-related natural disasters (e.g., fires, floods, shortened ice road season, drainage problems, erosion, and landslides) have impacted infrastructures such as roads, fire protection, and structural mitigation. Damage from weather-related events takes more time and money to repair, in part due to the delay in the supply and increased costs of these materials, but also because the damage is becoming more severe. They indicated a need to better plan for climate change and integrate these considerations into new infrastructure projects to better protect existing infrastructure.

Remote communities were identified by some respondents as being especially vulnerable to climate-change-related natural disasters, due to their remoteness and the lack of sufficient infrastructure in these communities. For example, the lack of all-weather roads and the size of airports inhibit the response time to bring in emergency responders or evacuate members of their community. Poor connectivity inhibits how a community is informed of pending threats and emergency protocols/procedures. Not only does climate change decrease the lifecycle of assets, but climate change also impacts new construction. While building standards are changing to respond to climate change (to ensure climate resiliency), respondents noted that the funding budgets have not sufficiently increased to accommodate these higher costs. Areas impacted by floods and fire require more preparation to ready the land for construction, which requires separate funding.

ISC respondents indicated that ISC has no centralized approach to address climate change impacts on reserve. They also noted the lack of alignment between ISC and existing energy efficiency funding programs from other federal agencies, the provinces, and public utilities. Many First Nation and government respondents stated that community plans need to consider

infrastructure resilience and include energy efficiency in the design, construction and renovation of community infrastructure.

Some First Nation respondents stated that more could be done to increase their communities' resilience to climate change and shared some limitations in their attempts. A few indicated that they struggled to secure funding to address crisis mitigation issues such as upgrading culverts and ditches to help protect their community from flooding; Others noted that lack of funding to acquire and maintain emergency vehicles and equipment reduces their community's ability to combat climate disasters; Some have considered investing in wind and solar energy but have been unsuccessful in getting such projects funded, which resulted in remote communities continuing to rely on diesel generators – the dependency of diesel also directly impacts the local environment, contributing to the climate change issues.¹⁹

4.3 Existing and Emerging Challenges

Existing and emerging challenges inhibiting First Nation communities' ability to address their other community infrastructure needs include the amount of available funding, capacity to manage infrastructure, increased construction costs, and the availability of skilled labour, as well as the impact of the COVID-19 pandemic.

Finding #6: First Nation community infrastructure has not received sufficient funding for many years with some assets not being funded over an extended period to address more urgent needs concerning health and safety. This also affected their ability to maintain facilities and leverage funding for housing.

A recent study by the AFN has forecasted the need for over \$80 billion in capital (for renewal, growth, and upgrades) and O&M (for existing assets and new growth) infrastructure investment over the next 20 years.²⁰ The difference is significant in comparison with the expenditures of the OCI program, which was \$2.64 billion from 2016-17 to 2020-21.

The majority of First Nation respondents reported challenges in obtaining funding for roads and bridges, structural mitigation, fire protection, and cultural and recreational facilities, as roads, bridges, and structural mitigation are very costly and the OCI program funding cannot fully address these types of projects. Some respondents indicated that they struggled to get funding to improve drainage in ditches, culverts, and for other storm system issues, or for upgrades to improve accessibility to community areas and buildings.

Many also indicated that the amount of funding they received for infrastructure O&M only covered about 50% or less of their costs, which had an impact on the maintenance of critical assets such as fire halls in poor condition. Other First Nation respondents noted that the lack of infrastructure funding has ripple effects. For example, they cannot leverage funding for housing

¹⁹ At this time and until they can be connected to the grid, remote communities rely on diesel generation for energy and heat due to safety issues. Communities can reduce their diesel generation consumption by having access to renewable energy systems.

²⁰ Estimates factoring in population growth and upgrades in meeting new regulatory requirements. First Nations Assets Needs Study (December 2021). Special Chiefs Assembly, Assembly of First Nations. Retrieved from: www.afn.ca/wp-content/uploads/2021/12/2.-21-11-29-National-Infrastructure-Assessment-Interim-Report-EN.pdf.

because they do not receive funding to build the roads, or to bring water, sewer infrastructure, and electricity to the lots, thus adding to their housing gaps.

Finding #7: Capacity continues to be a challenge, especially in smaller First Nations that struggle to plan and develop community infrastructure.

First Nation communities, particularly smaller ones, lack the capacity to plan, to identify, or to develop their community facilities and infrastructure. Some communities do not make the best use of their FNIIP perhaps because there are higher priority needs within the community, or a lack of collaboration among those responsible for community infrastructure and those who update the FNIIP. While First Nation technical service organizations do assist communities with such tasks, they note that the community must reach out to them for assistance. Some community interviewees noted that with few staff to manage their infrastructure, there is no time or resources for planning or developing projects.

Interviewees from all categories (communities, organizations, and government) noted that many smaller First Nations are also at a disadvantage when having to compete for proposal-based projects as they often do not have the capacity within their community to create strong proposals and do not have the funds to hire external consultants to develop their proposals. These respondents mentioned the processes for funding infrastructure favour strong proposal writing over needs within communities; this perpetuates poor socioeconomic conditions for communities with lower capacity. ISC staff noted that capacity development should be promoted as a higher priority funding area due to its essential role in communities. First Nation organizations stated that to keep strong capacity in communities, staff must be paid with a competitive salary.

Finding #8: COVID-19 has not only posed additional challenges in implementing infrastructure projects and highlighted the lack of community infrastructure, but also exacerbated other existing challenges in relation to construction costs, skilled labour within the community.

Survey respondents detailed how the COVID-19 pandemic has impacted their communities with 59% indicating that COVID impacted their community to a great extent and a further 30% saying the pandemic somewhat impacted their communities. Both interviewees and survey respondents identified several impacts on infrastructure experienced by their communities as a result of the COVID-19 pandemic, including:

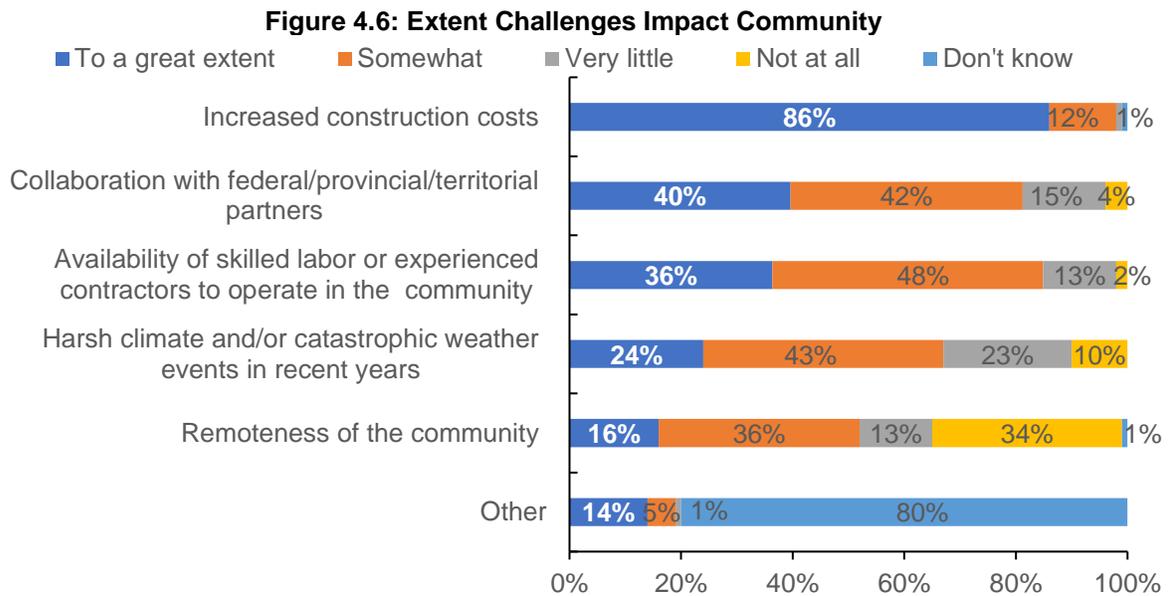
- Delays in construction projects due to a shortage of workers and supply chain issues;
- Increased cost of material which caused shortfalls for pre-COVID tenders and budgets;
- Postponed field work (e.g., inspections) and facility/infrastructure maintenance due to lack of staff, supplies and focus on essential services only; and,
- Delayed project and strategic planning due to stay-at-home orders and a focus on providing essential services.

COVID also had a direct impact on the delivery of the OCI program, including cost inflation, project delays, and stoppage of work where communities were closed. The costs related to infrastructure projects during COVID increased for several reasons. Because of isolation requirements, some communities had to finance workers' camps to ensure urgent projects were

completed. Issues with supply chains impacted the availability of materials, which in turn increased their costs. Project delays were caused by the availability of materials, the difficulty accessing manpower, and the inability to access communities that were closed. Other respondents noted a reduction in the amount of collaboration between First Nations and ISC staff as they could no longer meet in person and poor connectivity in some First Nations limited their ability to meet virtually.

Many respondents noted that the pandemic highlighted the lack of community facilities. For example, many communities do not have hospitals and have to use schools and community centres to treat those with COVID and/or evacuate them to non-Indigenous communities. Further, communities do not have the facilities to support their front-line workers. As a result, the front-line workers brought in to assist communities brought COVID into the communities. Temporary isolation units such as tents that were erected were not suited for the winter climate and more permanent structures that were brought in could not be repurposed when no longer needed for isolation. Several respondents called for better emergency planning in First Nation communities and their involvement in regional emergency planning to better co-ordinate the response of local communities.

The increased costs of construction were a challenge indicated by 98% of survey respondents (across the three programs) with 86% indicating being impacted to a great extent and 12% being somewhat impacted. Another impactful community challenge was the shortage of skilled labour or experienced contractors within the community (36% of survey respondents indicated to a great extent and 48% indicated as somewhat impacted by the shortage) (Figure 4.6).



ISC Evaluation Survey 2022 (Question: To what extent does each of the following present challenges in your community? Respondents n=83.)

5. FINDINGS ON EFFECTIVENESS: PROVIDING BETTER SERVICES AND CLOSING THE INFRASTRUCTURE GAPS

The evaluation examined the extent to which the OCI program has been effective in supporting First Nation communities to construct and upgrade infrastructure in their communities, develop the capacity to plan and manage community infrastructure and maintain their ISC-funded assets. The evaluation also looked at the effectiveness of the funding approach, oversight, and support of program delivery, including the FNIP process.

The evaluation finds that the OCI program has implemented numerous projects for First Nations communities and helped meet the needs and address infrastructure gaps on-reserve; however, the reliability and sustainability of these community infrastructures could not always be ensured due to funding constraints and program design. Moreover, the CFMP's overarching objectives of maximizing the lifecycle of assets, mitigating health and safety risks, and ensuring assets meet applicable codes and standards were not fully achieved.

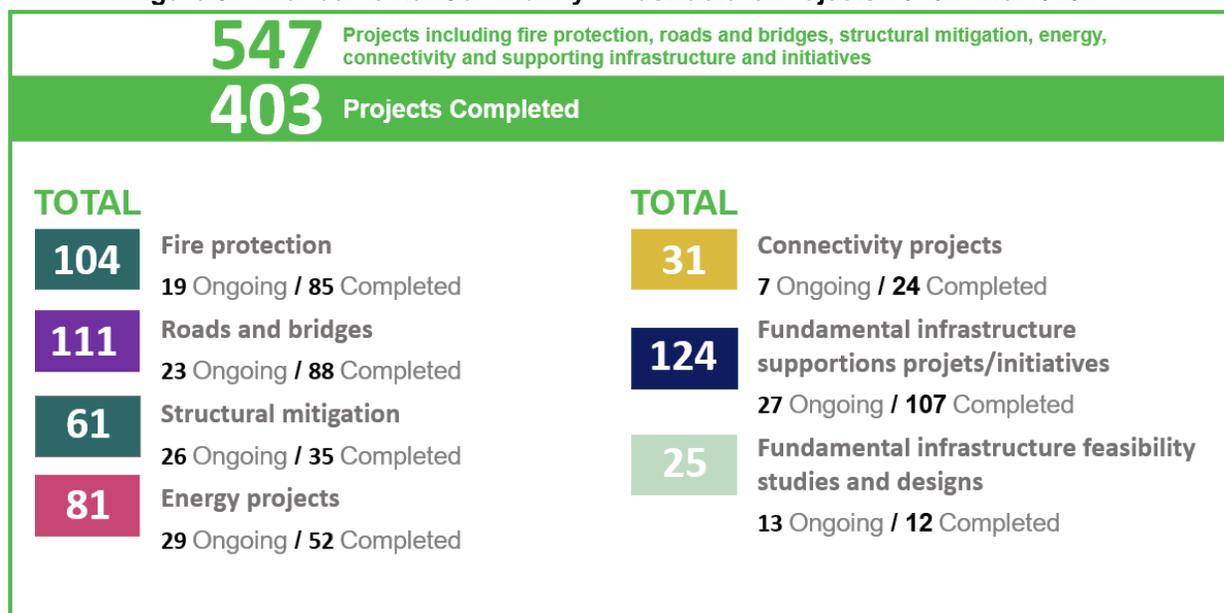
5.1 Achieving Results

Finding #9: The OCI program delivered numerous community infrastructure projects and has helped address some infrastructure gaps in First Nation communities.

The evaluated OCI program components, i.e. the seven sub-asset categories and two initiatives, were reported under two categories: 1) fundamental infrastructure and 2) culture and recreation. The results on culture and recreation were illustrated under Section 4.2 Community Infrastructure Gaps: Existing and Emerging Needs. The fundamental infrastructure category covers fire protection, roads and bridges, structural mitigation, energy, connectivity, and other OCI program initiatives.

As per ISC reporting, since 2016, and as of March 2021, ISC has invested \$566 million in targeted funding towards 547 fundamental OCI program projects on reserves across Canada. Of these projects, 403 are complete. These investments are estimated to be benefiting 495 First Nation communities serving approximately 422,000 people. The specific project breakdowns among the sub-asset categories and the regional expenditures can be referred to in Figure 5.1 and Table 5.1, respectively.

Figure 5.1: Fundamental Community Infrastructure Projects 2016-17 to 2020-21



Source: ISC Fundamental Infrastructure Targeted Investments Results and Delivery Scorecard

Table 5.1: Community Infrastructure Investments per Region 2016-17 to 2020-21

INVESTMENTS PER REGION						
Region	Expenditures (\$M)					Totals
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021 (Q4)	
ATL	9.0	7.8	9.2	7.8	6.2	40.0
QC	9.9	17.7	6.9	6.3	8.0	48.8
ON	9.6	53.8	11.8	18.9	11.5	105.6
MA	31.5	49.0	24.1	7.7	10.4	122.7
SA	11.3	14.1	3.9	13.1	9.2	51.5
AB	37.1	25.2	4.0	6.8	7.2	80.2
BC	32.2	34.9	19.1	15.3	7.0	99.6
YK	2.6	8.7	0.6	0.5	0.5	12.8
NWT	0	0	0	0	4.0	4.0
HQ	0	1.0	0	0	0	1.0
Total	134.1	212.2	79.5	76.5	64.0	566.2

Source: ISC Results and Delivery Scorecard as of March 31, 2021²¹

However, more than half (52%) of survey respondents disagreed that the OCI program helped address community infrastructure gaps in their community. Similar sentiments were expressed by respondents about specific community infrastructure needs identified in Figure 5.2. Additional community infrastructure gaps mentioned by survey respondents included: aging infrastructure; capital needs that have not been addressed in the last five years; consideration for remoteness

²¹ culture_and_recreation_score_CARD.pdf (gcpedia.gc.ca):
www.gcpedia.gc.ca/gcwiki/images/e/ed/culture_and_recreation_score_card.pdf

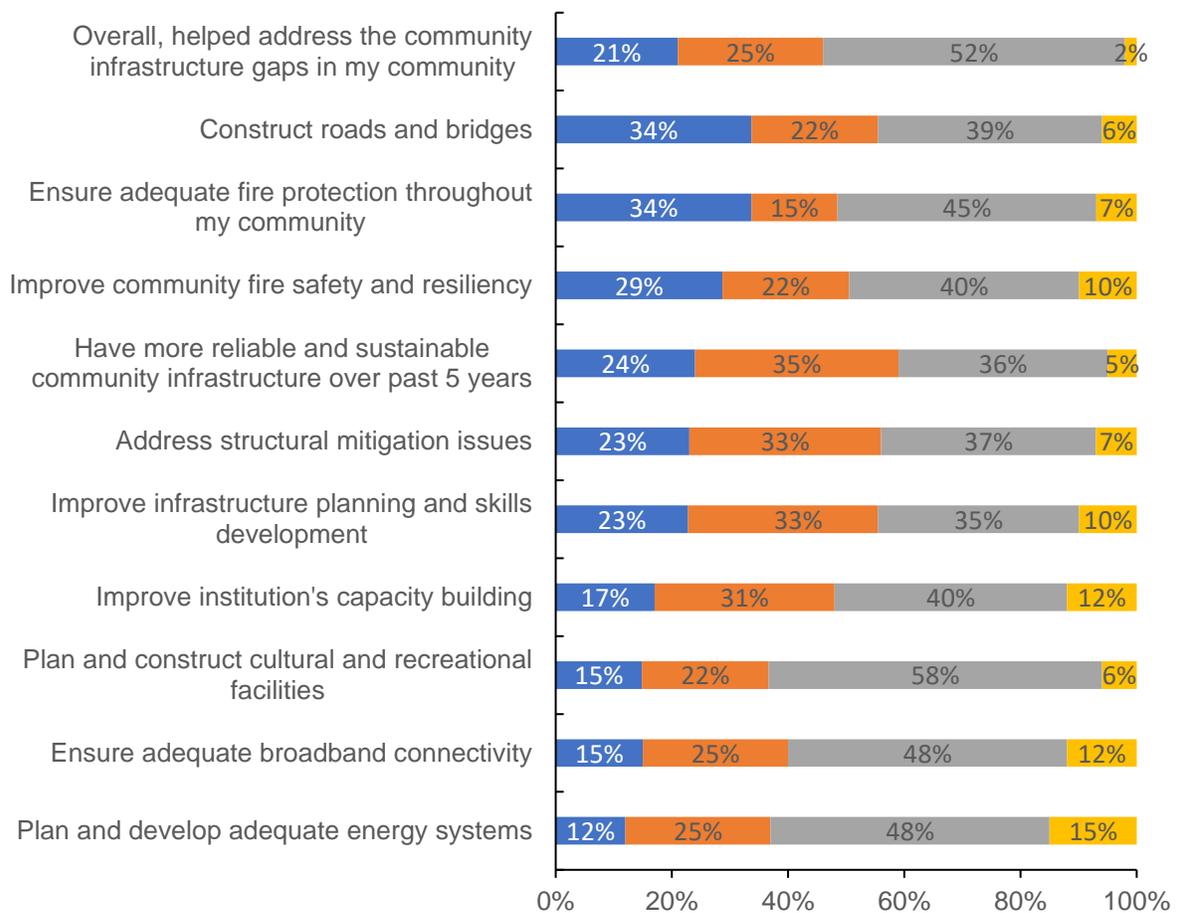
or rural location of community; and decades of inadequate funding leading to major infrastructure issues such as road maintenance, and fire protection.

First Nation interviewees also noted that inadequate funding means they cannot effectively address the needs of various segments of their population such as providing sidewalks and wheelchair ramps to access community buildings. Many First Nation respondents indicated that to fund most projects for other community infrastructure and related activities they looked to combining OCI program funding with other funding sources such as from other programs, own revenue, and partnerships. This was echoed by ISC staff: “Drainage and structural mitigation are very expensive. Some projects are \$20 million, but the region only gets one million a year.”

Figure 5.2: Agreement with Extent OCI Program Helps Community

■ Agree/ Strongly Agree ■ Neither Agree nor Disagree ■ Disagree/ Strongly Disagree ■ Don't Know

The Other Community Infrastructure and Activities program helps my community to:



ISC Evaluation Survey 2022 (Question: To what extent do you agree with the following statements about how the OCI program helps your community? Respondents n=83.)

Finding #10: Despite the overall satisfaction for the OCI program was low, many viewed the quality of the OCI program's services offered by ISC as having improved over the

past five years, and that some improvements in capacity development, community engagement, alternative energy, and connectivity were reported for some communities.

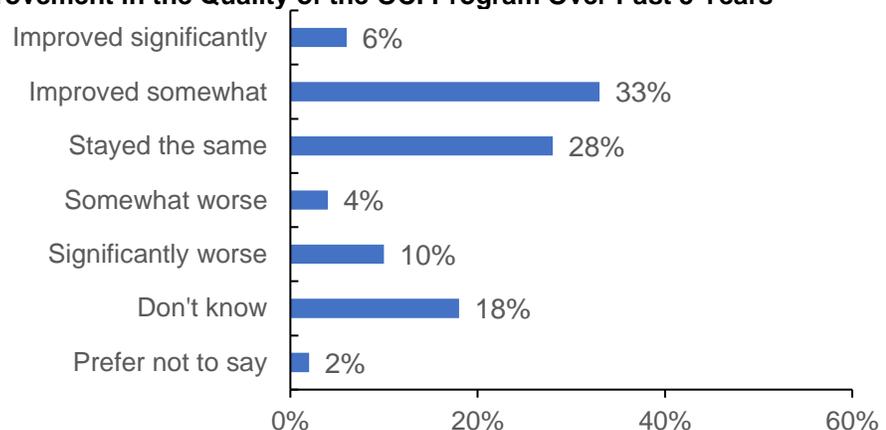
According to the survey results, 23% of survey respondents were satisfied as compared to those who were dissatisfied (39%) with the OCI program. Reasons for dissatisfaction included a lack of capacity, funding, and support for community infrastructure needs and requirements to meet legislated codes. Reasons for satisfaction with the OCI program included acknowledging that the funding has assisted the community with planning and capacity building, and gratitude for the funding received.

Some First Nation respondents noted that the OCI program funding they have received helped:

- Increase their communities' capacity through asset management courses (planning and skills development category);
- Conduct community engagement to discuss service transfer (engagement and proof of concept category);
- Harness solar power to realize efficiencies and to reduce their carbon footprint (alternative energy systems category); and
- Increase connectivity broadband for some First Nations in Alberta and Ontario (connectivity category).

A greater proportion of survey respondents stated that the quality of the OCI program's services offered at the community level had improved over the past five years (39% compared to 28% who viewed that the quality had stayed the same, and 14% that indicated the quality of the program was worse than five years ago) (Figure 5.3).

Figure 5.3: Improvement in the Quality of the OCI Program Over Past 5 Years



ISC Evaluation Survey 2022 (Question: How has the quality of the OCI services offered at the community level changed over the past five years or so, has it... Total may not add to 100% due to rounding. Respondents n=83.)

Reasons for improved quality included seeing some improvements such as better communication with ISC, small funding increases to upgrade equipment, and improved

community capacity to manage infrastructure assets but stressing the need for more funding, the anticipation of funding for fire and waste-related equipment, and upcoming infrastructure construction. Reasons for the decreased quality of the OCI program included little to no funding or support for infrastructure, and shortage of manpower causing project delays.

5.2 Program Design and Delivery

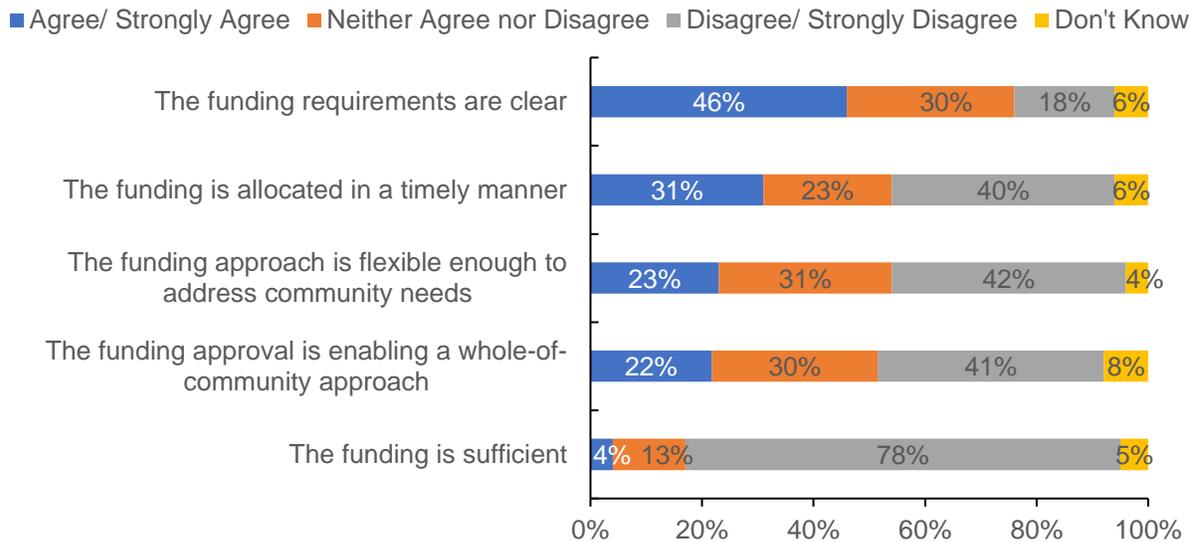
Finding #11: The current OCI program funding model and allocation cycles limit the ability of First Nations communities to build community infrastructure. Predictable, sustainable, and flexible funding is necessary to support more long-term and strategic planning.

The majority (78%) of survey respondents and virtually interviewed indicated that the OCI program funding was insufficient given that A-base funding has not been increased in decades and the program has been relying on time-limited B-base funds through budget announcements over the years, which was seen as a 'band-aid' solution that addressed the most urgent gaps but not predictable and sustainable. Both First Nation and government respondents stated that this funding model was constraining and did not allow for long-term planning. The majority of respondents supported committed, long-term, flexible funding so that communities can plan strategically, and many suggested the funding be for twenty years or more to reflect the lifecycle of an infrastructure, otherwise, it disincentivizes communities from developing strategic plans and realizing the maximum values for investments.

The AFN Special Chiefs Assembly resolution 12/2021 recognized support for closing the infrastructure gap by 2030, which urged the federal government to commit to sustained long-term funding over the next five to fifteen years. Resolution 18/2022 re-affirmed the need for long-term predictable funding and for the government to “transition the insufficient housing and infrastructure investment commitment timeframes of 5 to 10 years to long-term commitments of 25 to 30 years or more to provide on-going, predictable, and sustainable funding.”

When being asked whether the funding approach is flexible enough to address community needs, 42% of the survey respondents disagreed (see Figure 5.4). Reasons for why respondents disagreed were provided by 17% of survey respondents, included: the funding approach needs to allow for greater flexibility and priority decision-making on community infrastructure projects; and it needs to better align with the timing of the construction season and should consider inflation.

Figure 5.4: Agreement with Funding for OCI Program



ISC Evaluation Survey 2022 (Question: The following questions are about ISC funding for the Other Community Infrastructure and Activities program. To what extent would you agree with the following statements? Respondents n=83.)

Funding Allocation Cycles

When being asked whether the funding allocation is timely to address community needs, 31% agreed as compared to 40% who disagreed (see Figure 5.4). Several interviewees noted that funding can be ill-timed in relation to their construction season causing delayed or postponed projects. Infrastructure projects are dependent on building seasons, which could vary among communities depending on their location. For example, communities that are easily accessible or located in southern regions of the country would prefer to receive funding in early spring so they can begin projects immediately. Northern communities require funding mid-winter so they can move materials using the ice roads and are prepared to begin construction when the ground thaws. This could help explain the split of opinions of survey respondents.

The current funding allocation aligned with the federal government’s fiscal cycle, where annual funding approval and regional allocation take place towards end of March or early April, does not necessarily allow for optimal timelines for construction, and the impacts are most evident in remote communities. For other in-year approved projects, funding could arrive in the regions anytime during the year. ISC staff also indicated that for new budget funds, funding could be allocated to regions later than March-April. Both internal and external interviewees noted that the timing of funding can be a challenge as it could be allocated late in the construction season when communities receive their funds.

Related to the timing of funding are the timelines for spending the funds. First Nation respondents noted that they are required to spend their funding within a given period, usually within the fiscal year in which funding is received. However, delayed receipt of funds impacts project timelines and therefore it cannot always be spent within the specified timelines.

Communities must then request extensions to expand the timeline for spending the funds, which in turn can impact reporting timelines and can jeopardize future funding approvals if reporting is submitted late.

Finding #12: The current OCl program funding process through FNIIP is effective for identifying projects, but not for funding them or planning long-term community infrastructure; the prioritization criteria being used in the FNIIP process do not sufficiently consider public health and environment-related standards and considerations, as well as the areas not being sufficiently funded for many years.

First Nation respondents were divided as to the effectiveness of the FNIIP. Many indicated that the FNIIP was effective for identifying projects. Some First Nation respondents used the FNIIP five-year plan to guide their longer-term planning. However, many First Nation respondents indicated that their FNIIP was ineffective in getting projects funded. They likened the FNIIP to a wish list. Some expressed frustration with having projects remain on the list for years that may never be funded. One respondent noted that they use the FNIIP solely as a planning tool and do not expect that a project listed on the FNIIP will get funded. Moreover, some First Nation respondents indicated that the FNIIP, while useful for new projects, was not effective for planning upgrades or repairs.

“First Nations do not really plan well beyond the first year because they don’t have any indication that they will get funding the following year, so the best they can say is what I need next year without expecting it to be funded. That is the weakness of the FNIIP.”

External Interviewee

Program recipients also raised issues about FNIIP prioritization criteria, justification, and transparency around funding decisions. Some mentioned having to complete the FNIIP yearly but not receiving any explanation from ISC for the reasons they did not get funding. Many interviewees mentioned that with limited funding, the focus on ‘urgent health and safety’ in ranking projects left other projects unfunded for years only until the infrastructure became unsafe to be prioritized. With ACRS inspections focusing on repairs and maintenance work needed to preserve the infrastructure investments, public health-related factors may not be equally considered. Also, environment-related standards and considerations, as well as impacts of climate change are not currently fully integrated in the current infrastructure planning process.

Access to Environmental Public Health Officers (EPHO) services to support service standards can mitigate risks for housing, water, wastewater systems, and public buildings. EPHOs bridge infrastructure and health outcomes by promoting public health standards, and monitoring and preventing public health risks at all stages of infrastructure planning, design, construction, and operation. For environment-related, consistent climate-informed infrastructure standards and mapping over the next 20-40 years to indicate how infrastructure should be constructed to mitigate and adapt to climate change impacts are urgently needed, especially for remote communities where health risks are more prominent.

“You need to provide the adequate support to protect investments, but also to protect the health and safety of communities so, for example, that the water treatment plants keep on producing water for the First Nations from a health perspective.”

Many respondents across all categories (government, First Nations community and organizations) indicated limitations in relation to the prioritization process for OCI program funding, noting that much funding had been allocated to water and it is still a high priority in some regions, which leads to less or no funding for other OCI program projects, such as recreation facilities and cultural centers due to low priority compared to water.

Respondents from external organizations noted that the FNIIP does not encourage First Nations to plan infrastructure beyond a few years, mainly because communities do not know what if any, projects will get funding from year to year. Both internal and external respondents agreed that the FNIIP and the associated funding should span beyond five years, suggesting that the duration be extended to twenty years or more. They stated that funding determined on a yearly basis (or even on a five-year basis) disincentivizes communities from developing strategic long-term plans to adequately support their investments. They noted that major infrastructure such as water treatment plants should last for up to 50 years and funding should be provided for the lifecycle of the facility.

Finding #13: Several issues were identified in accessing OCI program funds through the proposal-based process concerning application criteria, approval rationale, community capacity, access inequality, transparency, and communications.

While a large number of survey respondents agreed the OCI program funding requirements were clear (46% compared to 18% who disagreed) (Figure 5.4), many expressed concerns about accessing proposal-based funding. Several challenges in accessing infrastructure funds through the application process were cited by many First Nation respondents, including complicated and time-consuming applications; restrictive criteria; and the lack of timeliness for funds received and the associated fiscal restraints on using those funds.

Interviewees noted that the application process was lengthy and complicated. Eligible funding requires communities to meet specific and, in some cases, multiple layers of criteria. As a result, communities sometimes lacked the expertise to prepare successful proposals. Some indicated that the proposal-based approach is fundamentally inequitable as it creates a bias toward more organized, wealthier communities that can afford to pay consulting firms to develop proposals. Moreover, some First Nations reported that the timeline to apply for funding was too short, making it more difficult for communities with limited capacity to access funding.

Many ISC interviewees commented about the lack of small communities submitting proposals for OCI program funding. One regional staff estimated that 10% to 15% of their communities lack the capacity to develop proposals and have to rely on external consultants. However, if the community does not have the funds to hire these consultants nor the capacity to develop the proposals internally, they miss out on potential funding opportunities.

Both internal and external interviewees stated the need for greater transparency around how proposals are assessed and the rationale for when proposals are denied. Many First Nation communities desire more understanding around how funding decisions are made and how funding is distributed. Some First Nations suggested the government produce an annual report to show who received funding, the amount of funding received, and what was funded. The

report should also include a rationale for what was spent and, if applicable, why any allocated funds were not used. The AFN flagged transparency as a key issue.

“All First Nations have issues understanding how to access funds. At headquarters, they push First Nations to regional offices. First Nations always think they are in line for schools, but in reality, there is no actual list. ISC does not keep records or status of how First Nations are in line to access funds nationally. Transparency is [a] huge issue here.”

AFN representative

Some First Nation respondents noted that the specific criteria for eligible funding limited innovation. They indicated that the focus was on projects meeting pre-existing check boxes rather than facilitating flexible and innovative approaches. Several ISC respondents also noted that the OCI program lacked flexibility indicating that “targeted funding was putting fences around things” and that the funding criteria should allow for more integration among the program’s sub-categories.

First Nation respondents also suggested that ISC could do more to communicate information about available funding for infrastructure from the OCI program and other related programs or initiatives. They noted that often when new funding is announced, there is little engagement with communities. For example, one First Nation respondent mentioned that previously field services officers gave workshops to First Nations and tribal councils to inform them about available funding for the upcoming year.

In addition, the proposal-based funding allocation approach was also viewed as not reflecting the First Nation care and control principles by some as communities are dependent on how ISC staff review their proposals and prioritize the allocations.

Finding #14: The funding amount received for community infrastructure is not sufficient to conduct necessary repairs and maintenance to achieve the maximum lifecycle for community infrastructure on reserve.

Through the CFMP, there are three funding streams, i.e.:

- **O&M:** Funding provided to First Nations for the maintenance and operation of existing assets (formular-based);
- **Minor Capital:** Funding provided to First Nations for construction, acquisition, renovation or minor repair projects with value below \$1.5 million (can be both formular or proposal-based); and
- **Major Capital:** Funding provided to First Nations for specific, construction, acquisition, renovation or significant repairs projects with value exceeding \$1.5 million (proposal-based).

The O&M and Minor Capital streams fund the repair and maintenance projects and activities needed to mitigate the most urgent health and safety risks and help ensure existing and new education facilities achieve their full lifecycles. First Nation respondents indicate that the funding cannot cover their backlogs of repairs, especially major repairs. The majority of First Nation respondents commented that their funding for repair and maintenance was inadequate and it impacted their ability to effectively maintain their infrastructure leading to further deterioration. A lack of regular maintenance due to the backlogs, compounded by worsened weather conditions

and lesser quality of materials, resulted in the lifespans of community infrastructure shorter than elsewhere in Canada.

The funding for repairs and maintenance has remained static over the years, which means fewer maintenance dollars are available per asset. First Nation respondents indicate that the funding cannot cover their backlogs of repairs, especially major repairs. Many First Nation respondents noted that they do not have the funding to complete regular maintenance on community infrastructure, which leads to infrastructure becoming a hazard to the community due to deterioration and lack of upkeep. For example, one First Nation respondent noted that failure to address drainage issues increased the flooding risk to their community. Another First Nation respondent indicated that slow response times for fires and other emergencies can lead to increased damage and loss of lives.

Many interviewees shared that First Nations who have the capacity and are wealthier put money aside for O&M that allows them to do the maintenance and complete repairs, but those with less capacity, experience, and money use the totality of their funding to build or renovate those in need. ISC respondents acknowledged that the formula-based O&M funding is inadequate, suggesting that using a population-based formula creates an unfair disadvantage for smaller communities as the costs to maintain some infrastructure can be the same as for larger communities. In addition to lack of funding, training and capacity development in operation and maintenance were indicated as a gap by many interviewees.

Finding #15: COVID-19 related funding was viewed as timely and effective in helping communities in addressing the unprecedented situation.

The majority of First Nation respondents acknowledged that receiving COVID related funding was timely and helpful as it allowed those responsible to better respond to the impacts of COVID in their community. A few First Nation respondents indicated that the funding was directed towards equipping first responders and establishing perimeter security, while others directed funding towards creating protocols and updating their emergency preparedness plans. Many ISC respondents observed that the COVID related funding was delivered efficiently and in a timely manner. The implementation and guidelines for spending COVID related funding were generally viewed as clear to most recipients.

5.3 Performance Data and Data Systems

Finding #16: In reporting on the achievement of the program, there is a lack of performance data mostly at the output level; Alternative performance measurement approaches were proposed to measure the success of the infrastructure investment on reserve more effectively by integrating a wellbeing or human rights centred lens.

Currently, the OCI program reports on results using data such as the number of projects and the amount of funds spent. While these data are useful in demonstrating the scale of investments and implementation efforts, they do not fully correspond to what communities and partners view as the most appropriate way of measuring success with community infrastructure outcomes and closing the infrastructure gaps on-reserve. Moreover, reporting results at the output level does not demonstrate to what extent the program has achieved its outcome by providing reliable and

sustainable community infrastructure to First Nations communities, given the lack of repair and maintenance.

Canada's first Federal Housing Advocate, Marie-Josée Houle, suggested during the 2022 First Nations Housing Forum to go beyond the number of units built and apply a human rights-centered approach, which values participation, non-discrimination, equity, transparency, empowerment, and respect for human rights and obligations. Similarly, the Institute of Fiscal Studies and Democracy (IFSD) has proposed implementing a wellbeing centered housing and infrastructure performance measurement framework by assessing service level performance. According to the IFSD, applying the well-being lens to infrastructure helps transform the First Nations infrastructure investment narrative from focusing on fixing legacy issues to a holistic system-wide approach on-reserve.

Finding #17: Data availability and reliability remain as issues in project tracking, reporting and capturing asset conditions.

Data availability and sufficiency were identified as an issue by both internal and external respondents. Many interviewees, both internal and external, noted that the actual extent of infrastructure gaps was unknown or under reported due in part to lack of available data on the condition and needs of First Nations infrastructure. Some indicated that infrastructure project data were not sufficiently captured in the ICMS. Others noted that the ACRS was not up to date to capture the current condition of infrastructure assets for many First Nations communities. While the ACRS is intended to assess a community's infrastructure, many noted that the system does not provide helpful information in determining the true costs of maintenance.

Consistency was raised as a concern in relation to data entry into the ICMS and interpretation of the various fields in the ICMS among users. As projects are self-reported by First Nations, regions must enter the data they receive from First Nations into the ICMS. While regional officers make every effort to ensure accuracy when entering project information into the ICMS, their interpretations of certain fields and requirements may vary, as there is not a set of specified definitions associated with these fields. This created inconsistency in data entered not just among regions but also users in the same region, which resulted in discrepancy on project data and unreliability in reporting. Moreover, regional practices vary on what to enter into the ICMS, with some entering only funded projects into the ICMS, others entering all project proposals. Further, during the evaluated period, limitations existed on verifying the accuracy of the data entered into the ICMS. While data review takes place at the national level on a quarterly basis, data entry and verification mostly took place at the regional level. Finally, regions indicated the challenge of obtaining data from First Nations in the first place, which could be delayed by one to three years in some regions and the received data could be missing or incomplete.

During the evaluation data collection, the evaluators learned that some features were not available in the ICMS for tracking projects to certain causes. For example, impacts of projects in strengthening resilience to the effects of climate change could not be measured due to a lack of tagging ability for projects. Also, ISC staff noted the extent to which A-base funding contributes to the achievement of intended program outcomes could not be sufficiently measured as there was no performance information related to A-base funding tracked in ICMS. There was also

deficiency in linking the financial system and the ICMS, the example of which was provided under section 3.3 Challenges and Limitations of this report.

First Nation respondents expressed their desire that ISC should streamline their reporting processes. For example, using an online system whereby new data can be entered or updated and fed into the reports would help ease the reporting burden for First Nations.

5.4 Unintended Outcomes

The evaluation collected information about unintended outcomes, which are other outcomes in addition to the expected OCI program outcomes, i.e. Indigenous peoples have reliable and sustainable community infrastructure.

Finding #18: The OCI program provided increased employment and training opportunities as well as social and economic impacts within the community, and the community infrastructure built increased community pride.

The most frequently mentioned positive unintended impact of the OCI program was the employment opportunities and skills training provided by major infrastructure construction. However, one First Nation respondent noted that many of these opportunities are short-term employment, which does not support economic growth in a sustaining and meaningful way. Some noted the downside of gaining skills and training was that members may leave the community in search of employment.

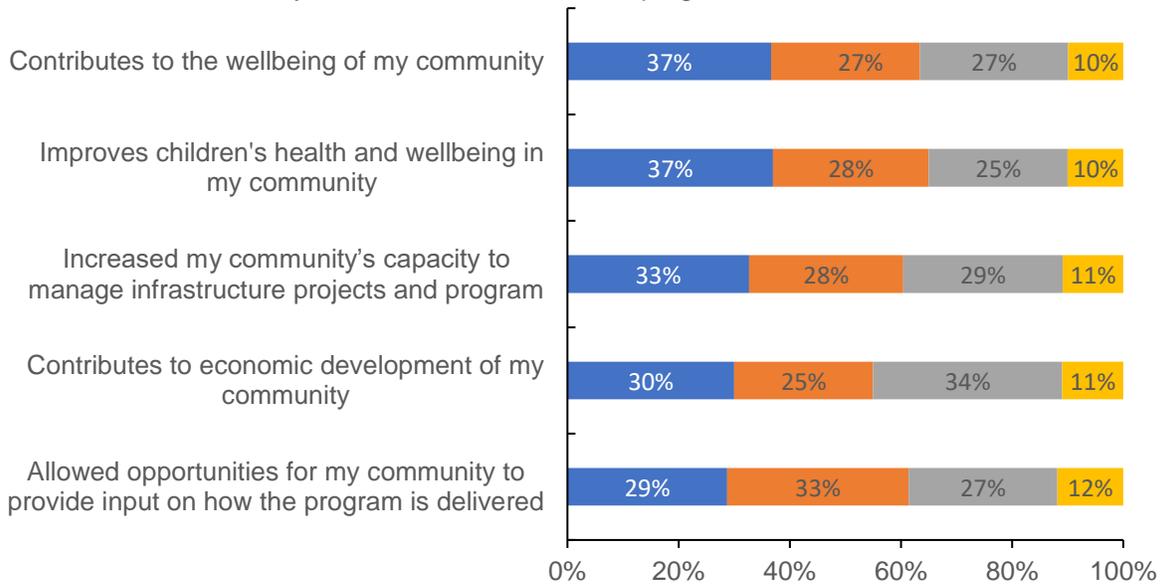
Other positive impacts included more green space and increased health and well-being due to the installation of new water lines and sports facilities. Some ISC respondents noted the positive impacts of increase connectivity including opportunities for economic development, virtual access to educational materials and programs, e-justice, and virtual access to health professionals.

Survey respondents were more likely to agree than disagree that the OCI program had positive social impacts on their community including contributing to community wellbeing, improving their children's health and well-being, and increasing the community's capacity to manage infrastructure. However, fewer than one-third agreed that the OCI program contributed to the economic development of their community, and only 29% agreed that the OCI program allowed opportunities for their community to provide input on how the program is delivered (Figure 5.56). Respondents who agreed with the above statements were asked to provide concrete examples of community improvements as a result of the OCI program. A total of 20% of respondents provided examples including upgraded water treatment, increased community safety due to well-maintained roads, and anticipation for new projects scheduled to start.

Figure 5.5: Agreement with Social and Economic Impacts of OCI Program on Community

■ Agree/ Strongly Agree ■ Neither Agree nor Disagree ■ Disagree/ Strongly Disagree ■ Don't Know

The Other Community Infrastructure and Activities program:



ISC Evaluation Survey 2022 (Question: To what extent would you agree with the following statements?
Respondents n=83.)

5.5 Fire Protection

Fire protection is one of the sub-asset areas funded under the OCI program. It is a known fact that First Nations communities are not properly equipped to fight life-threatening and devastating fires. It has been well documented that existing conditions in many First Nations communities have led to unsafe living conditions where housing is prone to fire, disproportionate to non-Indigenous communities. The 2018 Report of the Standing Committee on Indigenous and Northern Affairs (the Committee) noted that First Nations people are ten times more likely to lose their lives to structural fires than non-Indigenous Canadians. Ontario Coroner's report showed that First Nations children aged 0 to 9 years are 86 times more likely than non-First Nations children to die in a fire. In particular, the report highlighted the lack of safe and secure housing in First Nations communities as "an ongoing systemic issue" placing First Nations people on reserve at especially high risk of fire, fire-related loss of life and injury.

The Standing Committee on Indigenous and Northern Affairs raised various issues in 2018 about ISC delivery of fire protection services, including underfunding, a hindering tiered funding approach, outdated funding formula, the lack of fire codes and standards, as well of the absence of a data collection system. Given the significance of the subject matter and continuous tragedies and loss of life due to fires on-reserve, the evaluation included a case study to examine in more detail ISC's fire protection sub-asset, which highlighted the following findings.

Finding #19: ISC's fire protection continued to experience the issues raised by the Committee in 2018, i.e. underfunding based on the outdated funding formula, a hindering tiered funding approach, a lack of fire codes and standards, as well of the absence of data collection system; Despite no change has been made to ISC's funding model during the evaluated period, some initiatives are taking place to explore options.

As illustrated previously in Section 4.2 Community Infrastructure Gaps: Existing and Emerging Needs, fire protection has not been sufficiently funded . The annual A-base funding amount has not changed for years. Both internal and external interviewees indicated that the A-base funding is far from sufficient to support the various investments required to support fire protection on-reserve. The lack of funding is not only experienced by First Nations communities but also by ISC staff. Some shared that the current approach to fire protection cannot be regarded as a program as such, considering there are few, if any, dedicated program staff at the regional levels, and those responsible for managing the fire protection funding stream are often doing as an adjunct to their primary responsibility.

For many years, funding for fire protection infrastructure (and OCI programming generally) has been reliant on time-limited B-base funds made available through budget announcements. Regional offices are provided with funding allocations from headquarters to which they apply funding methodologies that can include formula based funding methodologies with fire protection considerations. The 2018 Standing Committee report singled out ISC's formula, a population-based approach to determining levels of funding for particular criticism, noting that this systematically disadvantaged small communities. First Nations leaders and officials who participated in the Committee hearings called for a funding approach that is "needs-based instead of one that's formula-based." Virtually all internal and external case study participants reiterated the view that these regional formula-based funding models are not able to properly assess or respond to critical community fire protection needs and disadvantages smaller communities. All participants proposed that funding amounts should be determined based on assessed risk and demonstrated community need.

"The [federal fire protection] system is broken. The formula-based funding approach that's been in place for three decades, four decades, is not working. When you treat every First Nation exactly the same way, with a formula, you're setting yourself up for failure. Every First Nation is unique and they have their own issues."

Ontario Native Firefighters Association

"I don't think the per cap makes sense. I mean, it doesn't work. Whether you are a community of 350 people or 3000, you still have a risk of a fire occurring. There are certain fixed costs that are independent of community size. You need a truck and a fire hall. You have to maintain that building. The approach requires long-term base funding."

ISC program staff

Moreover, seeking funding through a proposal-based approach was seen as inadequate to support ongoing fire prevention activities as it takes much time to prepare, review, and prioritize a project before it is approved if it gets approved. The First Nations interviewees stated that when the risks are so high, the costs of inaction or delayed action, i.e. death and injury, are

unacceptably dire. ISC staff shared that in a few regions, e.g. Atlantic and British Columbia, ISC has been working closely with Indigenous partners to conduct community-based fire protection infrastructure needs assessment, which leads to jointly developed community plan. They considered this as a proactive approach to meeting communities' needs should funds be made available to address the identified needs.

First Nations respondents who were interviewed during the evaluation reiterated the deficiency in allocating fire protection funding through a tiered approach under the Fire level of service standard under the CFMP terms and conditions, which hinders the ability for communities to gain the maximum level of capital funding. Currently, First Nations communities' experience is that they must meet the requirements of one tier to receive funding for the next: 1) fire prevention and education; 2) capacity building and training; and 3) capital investments (fire protection infrastructure and equipment). They noted that while the fundamental logic of a stage-based model of change and capacity development is sound, the tiered approach delays getting the fire trucks, equipment, and other fire protection infrastructure to where they could be critically needed in a timely manner.

The lack of data tracking on fires on-reserve remains an issue. Based on document review and interviews, ISC stopped collecting data regarding on-reserve fires in 2010, which resulted in a lack of a national reporting framework for ISC to know the exact death toll of on-reserve fires. Also, while national building and fire codes are enforced through contracts for ISC-funded new builds, First Nations are not subject to provincially legislated codes for infrastructure not funded by ISC, where each community is responsible for enforcing their own construction and fire safety standards. No national standards were established for First Nations communities during the evaluation period; however, the establishment of the Indigenous Fire Marshal's Office (IFMO) was intended to address some of the data and standards issues.

Finding #20: The National Indigenous Fire Safety Council (formerly the Indigenous Fire Marshal's Office) was established and has delivered several activities to support capacity development, research, incident reporting systems, and fire prevention and publish education; Despite developing education programs on building and fire standards, work has not started in establishing the applicable fire and building codes for First Nations.

ISC announced a B-base funding of \$9.97 million over three years, starting 2019-20, to the Aboriginal Firefighters Association of Canada to establish the IFMO, which would promote fire safety and prevention, undertake public education, and support the use of fire safety, building codes and regular building inspections in Indigenous communities. The funding supported Indigenous partners in establishing a new IFMO, including how the Office would be structured and governed, its mandate, and any associated legislation. On May 7, 2020, the IFMO project became the National Indigenous Fire Safety Council (NIFSC) on the advice of the project's National Advisory Committee following engagement feedback from Indigenous communities and stakeholders that took place since October 2018. ISC renewed its funding support to the NIFSC in 2022 over 2 years.

The establishment of the IFMO was to address a recommendation put forward by the Committee in 2018. The First Nations community witnesses supported the creation of the IFMO in particular to address issues concerning data and standards and saw it to act as a coordinator,

to collect data on incidents in First Nations communities, to support an incident reporting system, and to establish fire and building codes and standards and monitor compliance.

According to the update published on the NIFSC website dated October 1, 2021, a total of 76 education programs were being developed for delivery in seven areas: community safety education, governance of fire services, community infrastructure and engineering support, fire department management, fire inspections, fire investigations, and fire department operations. In 2020-21, 51 programs were completed. Of these programs, several were to support the adoption and application of codes. No progress was reported by the NIFSC about the establishment of fire and building codes and standards for the First Nations communities during the evaluated period; however, it was reported that following engagements, the NIFSC had abandoned a legislative and compliance and enforcement approach to fire protection, and is now advancing an organization that is focused primarily on data collection, research, direct program delivery to communities, and general education/prevention initiatives.

Another concrete delivery by the NIFSC is the creation of a National Incident Report System to collect essential fire incident data on reserve as relevant fire occurrence data collection was discontinued nearly a decade ago. NIFSC also set out a research approach in 2020 to learn and describe the fire risk in First Nations communities, using data collected through the National Incident Report System to triangulate and fill the gap in fire incident data as it pertains to Indigenous Peoples and communities. This past year, NIFSC's research agenda took a wholesome approach and investigated six areas: apparatus recycling, research capacity and oversight at the NIFSC, community-based fire research, diversity and inclusion, fire safety messaging, and the potential impact of a fire ambassador program to address person and place-focused interventions.

When interviewing the broader First Nations community members and technical organizations for the evaluation of the OCI program (not for the fire protection case study specifically), few could speak to success stories or lessons-learned with respect to the NIFSC. One respondent noted that the Council had supported the community in updating their emergency preparedness plan. Another respondent stated that they were working with the Council on solutions to increase fire protection throughout their reserve and improve arrival times for attending fires and emergencies.

Finding #21: The current ISC fire protection O&M funding may not always be used towards fire protection in First Nations communities; Further, ISC's infrastructure capital funding focus on fire suppression investments (such as fire trucks, fire halls) does not sufficiently consider the use of fire prevention and early suppression equipment (such as smoke alarms, residential sprinkler systems, fire extinguishers) to achieve better fire safety.

Both internal and external interviewees pointed out that having fire protection as a sub-asset area under the OCI program means that First Nations communities are not obliged to use the O&M funds allocated for fire protection purposes as, upon receiving the fund, they may choose to use the fund for other activities at a higher priority determined by the chief and council. As a result of this, fire protection is getting an even smaller investment out of the already limited fund; also, this means the real impacts of ISC's investments cannot be accurately assessed as it is not possible to track these changes.

About funding not being used to support fire protection-related activities, First Nations respondents also indicated that ISC's current funding approach does not provide salaries for fire chiefs and other key personnel required to coordinate and maintain effective fire protection on reserve, nor does it support first responders who frequently reported experiencing mental health traumas due to firefighting (often fatal). As volunteerism continues to decline among younger First Nations members, the lack of funding for salaries is becoming an increasing concern in meeting fire safety needs on-reserve.

Currently, ISC's fire protection infrastructure projects focus on funding fire trucks and fire halls for fire suppression measures, not as much on prevention and early suppression equipment such as smoker alarms, fire extinguishers, and residential sprinkler systems. This could be lost opportunities in preventing fire incidents on reserve. From 2019 through 2023, the NIFSC's National Incident Report System has recorded 574 structural self-reported fires on reserve, which resulted in the death of 68 people and caused injury to 25 others, of which 498 occurred in buildings with no smoke alarms with 64 deaths and 19 injuries.²² Literature review showed that functioning smoke alarms reduce house fire death risk by 50% and sprinklers contain fire to its ignition origin in up to 97% of the cases studied.²³ While the operation of sprinkler systems depends on a functioning water system in the community, which is not reliable in many First Nations communities, the comparatively smaller investments in fire alarms and extinguishers could be highly effective.

Finding #22: The roles and responsibilities overlap between the Fire Protection sub-asset under the OCI program and the Emergency Management program, which created confusion and additional pressure on fire protection.

Under ISC's Emergency Management Assistance Program, eligible emergencies include flood, storm, earthquake, and wildfire, and project funding covers fire prevention and preparedness capacity building. The evaluation team noticed that many First Nations respondents were not clear about the distinctions between the OCI program's fire protection and that under the Emergency Management Assistance Program and often spoke of the two interchangeably. Also, with increasing wildfires occurring on reserve, there is an increasing demand for the use of fire trucks and firefighters, which poses additional pressure on the already limited resources for residential firefighting.

²² Self-reported fires are sourced from information reported by First Nation fire-departments or individuals, which may not coincide with the conclusions of a fire investigation.

²³ "Interventions for Preventing Residential Fires in Vulnerable Neighbourhoods and Indigenous Communities: A Systematic Review of the Literature". April 2022. International Journal of Environmental Research and Public Health 19(9):5434 DOI:10.3390/ijerph19095434. LicenseCC BY 4.0 (PDF) Interventions for Preventing Residential Fires in Vulnerable Neighbourhoods and Indigenous Communities: A Systematic Review of the Literature (researchgate.net)

6. FINDINGS ON EFFICIENCY: BETTER WAYS IN DELIVERING THE PROGRAM

The evaluation assessed the extent to which the OCI program demonstrated efficiency and economy. The findings suggested that while the program has implemented initiatives to generate more efficiency in program delivery, opportunities exist to improve cost-efficiency and generate more value for money through more integrated planning based on lifecycle asset management principles, applying a whole-of-community approach based on the unique needs and realities of the communities and taking more proactive and preventative measures in repairs and maintenance of investments. Moreover, findings suggest that the OCI program could be better aligned with other ISC infrastructure programs and with the initiatives of other federal departments to create more efficient delivery of funding and enhanced support to First Nation communities.

6.1 Alignment with Other Programs and Departments

Finding #23: Multiple federal departments deliver community infrastructure programs for First Nations, which was found to create inefficiencies for those trying to navigate and access the various funding sources available.

ISC respondents noted that there were over 100 infrastructure-related programs for First Nations within the federal government, all with different terms and conditions for funding agreements, which resulted in misalignment due to a lack of integration and complexity of the programs within the infrastructure portfolio. For instance, Infrastructure Canada funds capital infrastructure projects through programs such as the Investing in Canada Plan²⁴. The communities expected that ISC would be funding the operations and maintenance to support these investments on an ongoing basis, which is not under the CFMP mandate. Several First Nation and ISC respondents also noted challenges with provincial jurisdictional matters that hinder the completion of projects funded by the OCI program. For example, First Nations often rely upon provincial infrastructure as a feeder into the community's water line and must work with provinces on road construction and maintenance.

While many respondents (government, First Nations communities, and organizations) stated there was little alignment between the OCI program and other initiatives of other federal departments, several indicated that they could pool the funds received from ISC with other funding sources to complete infrastructure projects. A successful example was given where an alternative energy project was funded as a result of ISC regional staff's lead and coordination among five parties including Natural Resources Canada, Infrastructure Canada, and the province.

Finding #24: The asset-focused and project-based approach in delivering the OCI program without systemic integration with other asset areas under the CFMP and other ISC infrastructure programs has not only resulted in more administrative burdens on First Nations but also lost opportunities to better support them in addressing the needs and priorities identified by their communities from a whole-of-community lens.

²⁴ Infrastructure Canada website. Retrieved from: www.infrastructure.gc.ca/plan/funding-financement-eng.html

During the evaluated period, i.e. 2016-17 to 2020-21, while the planning for OCI projects was community-driven in principle stemming from the FNIIPs developed by the communities, the approach in prioritizing and approving OCI projects through targeted capital funding was based on the overarching National Priority Ranking Framework (NPRF) and asset-specific sub-priority ranking frameworks (SPRF) are decision-making tools used to provide a basis for assessing proposals submitted by First Nations for capital projects on a comparable national scale, and to ensure that the highest priority projects are funded first.

To determine the level of targeted OCI capital funding to be allocated to regions, a formula-based allocation methodology specific for the OCI programs was used, considering factors such as number of communities, on-reserve population, etc., with the intention to provide flexibility to the regions in delivering OCI projects in their regions. The regions must work within the national funding allocation framework under each CFMP asset area, which can vary across assets in terms of funding formulas and allocation processes. Moreover, how regions prioritize and allocate their funding from budget allocations to First Nations also vary, due to regional priorities, asset-specific factors and other obligations and commitments, etc. Given these complexities, while the regions make every effort to coordinate across the different asset areas and timing of projects to be more community-centered, it may not always be possible to perfectly coordinate and synchronize projects across different CFMP assets and OCI sub-assets, including off-site and supporting infrastructure²⁵ such as upgrades to roads, water, sewer, fencing and fire sprinkler systems, etc. This resulted in cases where housing units and schools were built without proper enabling features and hence could not be used immediately in a safe and effective manner.

Moreover, the project-based and proposal-based approach means that the administrative burdens are on First Nations to request funding for projects under various sub-assets which were not guaranteed to be approved at the same time. Many First Nation community and organization respondents, along with government respondents suggested that to create a more efficient OCI program, a community-based lens was needed. One First Nation respondent noted that poor infrastructure affects all aspects of the community, pointing to the connection between infrastructure and the health and safety of community residents. Several ISC respondents observed that while energy efficiency, climate change, and public health are identified as cross-cutting issues, they are not well-integrated into ISC's programming. Linking various elements of programs together would also allow the department to use funding more efficiently.

In addition to infrastructure-related outcomes, community infrastructure also has cross-over impacts on health and social outcomes, as well as general community well-being. Many ISC and other government interviewees suggested that integrating public health into community infrastructure planning would make the program and overall health spending more efficient. For example, funding environmental public health officers through the infrastructure program would realize better health and safety outcomes. Further, co-developing more appropriate health indicators with First Nations could better support community infrastructure planning and project ranking.

²⁵ While recognizing it is necessary to support ancillary investments, given high needs related to constructions and renovations and limited funding available, off-site and supporting infrastructure is not always funded under a school project.

6.2 Asset Management Planning and Lifecycle Approach

Finding #25: Cost-efficiencies in the OCI program were not fully achieved as a result of insufficient maintenance and repair, and project approval decisions tend to opt for lower-cost options rather than based on long-term asset management planning.

Most First Nation respondents indicated that the delivery of the OCI program was not cost-effective and suggested that increased asset management capacity within First Nations communities would help to better plan for and develop solutions to make the program more cost-effective. As noted previously, many communities relied on external consultants to help prepare proposals, design projects, and conduct needs assessments. Having professionals such as engineers and project managers in the community would be more cost-effective.

The importance of asset management was raised by many respondents, as it is crucial in assessing the condition of infrastructure assets, estimating costs for repairs and upgrades, and accommodating community growth to facilitate planning to extend the lifespan and value of infrastructure. Both First Nation and ISC respondents agreed that having a fully developed asset management plan allows them to outline what is needed to manage the asset, including the required funds for human resources to operate and maintain community assets, and the adequate support to protect investments and uphold the health and safety of community assets.

Moreover, due to budget limitations, the communities opted to use lesser quality materials that do not withstand the effects of local climate and the increasing effects of climate change, which has further reduced the efficiency of infrastructure funding as facilities experience accelerated deterioration. Many First Nation respondents indicated that making the program cost-effective required long-term asset management plans. Such planning included a needs assessment and up-to-date data on the condition of their asset inventory (i.e., asset management). This planning allowed communities to build efficiencies and develop a proactive approach to community infrastructure management.

Other First Nation respondents pointed to outdated allocation formulas that do not reflect the rising costs of materials, delivery fees, and inflation. They noted that the outdated formulas mean the funding does not cover the actual costs to build, forcing communities to build less expensive facilities that are less resistant to harsh weather conditions and climate change.

Many First Nation respondents pointed to the need for up-to-date databases that would help develop asset management plans. While ACRS provides information on the condition of infrastructure assets, it requires an inspection by a certified ACRS inspector every three years. Many First Nations do not have such professionals and must contract this work to an external consultant. As such, many First Nation respondents called for funding to train community members to complete these inspections. Respondents say that having this expertise in-house would be a more efficient use of OCI program funds and would help First Nations prepare for service transfer.

Asset management is also tied to long-term capital planning as it takes into consideration lifecycle maintenance costs and timelines. Many First Nation respondents noted that long-term planning allows their communities to build efficiencies and more effectively manage their infrastructure portfolio, which in turn increases the efficacy of their OCI programs. For example,

by assessing the life expectancy of an asset and the costs of upgrades or repairs, they can compare this to replacement costs and determine whether the repair or replacement of the asset is more fiscally appropriate. Other First Nation respondents noted that providing core funding over an extended period would also be more cost-effective as the community can plan how best to use the funds for the upgrades and repairs of these assets. Some ISC respondents noted that most OCI program projects require planning that includes sustainable and predictable funding, but that OCI program funding budgets are limited and have narrow timelines (e.g., a set amount per year over 2-3 years).

Finding #26: There is a lack of a cohesive approach towards capacity building for asset management, which inhibits the efficiency in delivering community infrastructure outcomes.

Many First Nation respondents cited the lack of trained staff as the main reason inhibiting the reform of their community infrastructure programs and in turn making their programs less efficient or cost-effective. They noted that the lack of repair crews, project managers and support staff to help administer community infrastructure meant they were less focused on efficiency as they were struggling to manage assets. Many communities relied on costly external consultants for support in preparing proposals, reports, and needs assessments, and in hiring inspectors to ensure buildings and assets met construction standards.

As noted previously in the Relevance Section of this report, professional training, and capacity development remains a gap in the OCI program. First Nations desire the internal capacity and resources to adequately plan for community infrastructure as part of strategically developing all community infrastructure. This includes the expertise to assess and manage infrastructure assets and lifecycle planning, and for succession planning to ensure best practices are carried forward to future program managers. First Nation and ISC respondents indicated that the OCI program could better support communities to develop their capacity and implement asset management programming long-term across all assets.

Most First Nation respondents indicated that they were developing the capacity to operate and maintain their community infrastructure, while only a few communities indicated that they had developed this capacity. Some respondents indicated that they look to their tribal council for advice and support, while others noted that programs such as the Circuit Rider Training Program for water helped develop capacity within their community.

6.3 Other Cost-efficiency Practices and Observations

Finding #27: High turnover of staff across infrastructure programs, both ISC staff and First Nations, results in inefficiencies due to loss of capacity and additional efforts by First Nations.

First Nation community and organization respondents observed that the high turnover of both First Nations and ISC staff has hindered their ability to deliver their infrastructure programs. The high turnover of First Nation staff due to burnout or staff taking on positions outside of the community means that communities must invest additional effort and funding to train new staff. The turnover also results in less efficient management of infrastructure as there are fewer staff to complete infrastructure maintenance, leading to further deterioration. ISC staff turnover

impacts First Nation communities as knowledge and lessons learned are not always transferred to new staff. Several First Nation respondents indicated that the time spent developing relationships with ISC staff and helping them to understand their community's infrastructure situation and unique needs is lost when the ISC staff leave, and they must anew with other ISC staff.

The high turn-over of ISC staff in infrastructure programs was raised by many First Nations respondents (including partners and communities), which was viewed as an inefficient management practice of infrastructure programs as there was no sufficient knowledge transfer following the departure of staff. Based on an assessment of the staffing numbers across the three programs (including both NRC and Regions)²⁶, the data reviews that there has been a total of 829 counts of turnovers, including both new hires and departures from 2016-17 to 2020-21 (Table 6.1).

Table 6.1: Staff Hiring and Departure Across the ORH, EF and OCI Programs 2016-17 to 2020-21

Turnover	Fiscal Year	Q1	Q2	Q3	Q4	Total
Hiring	2016-17	9	14	27	20	70
	2017-18	20	18	7	10	55
	2018-19	16	16	22	41	95
	2019-20	29	44	22	49	144
	2020-21	19	12	9	11	51
Departure	2016-17	10	6	8	9	33
	2017-18	14	26	10	6	56
	2018-19	10	13	37	32	92
	2019-20	35	37	44	27	143
	2020-21	40	20	15	15	90
Total Turnover	Five-year	202	206	201	220	829

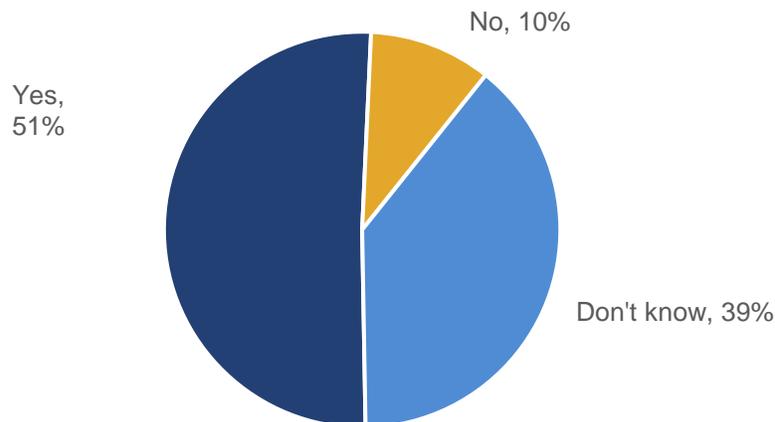
Source: ISC Human Resources reporting

Finding #28: Some noted that the program was cost-effective as many First Nations identified community infrastructure costs borne by their communities that could be considered by ISC to include in the OCI program.

Some costs that are directly tied to building and maintaining community infrastructure are not eligible under the OCI program. As a result, First Nations communities need to pocket those costs to access the OCI program funding. More than half (51%) of the survey respondents indicated their communities paid for costs that were not covered by the OCI program which could be considered by ISC to include. Of note, 39% of respondents indicated that they did not know whether there were infrastructure-related costs borne by their community that should be included in the OCI program (Figure 6.1).

²⁶ Due to regional set-ups in delivering programs, where housing, education facilities and other community infrastructure can be place in the same organization, the HR data is not available for a specific program.

Figure 6.1: Infrastructure Related Costs Borne By Community Not Covered By OCI Program



ISC Evaluation Survey 2022 (Question: Are there infrastructure related costs borne by your community that are not covered by the OCI program but could be considered by Indigenous Services Canada to include? Total may not add to 100% due to rounding. Respondents n=83.)

The uncovered or insufficiently covered costs identified by First Nations included:

- administration fees (for example, meeting time);
- insurances;
- legal services;
- fire protection including insufficient fire hall maintenance costs, insufficient fire protection equipment, defibrillators, jaws of life, and fire protection brigades;
- salt sheds, snowplows, and snow removal;
- maintenance of generators; and
- maintenance of renewable energy projects.

When discussing other costs borne by their community that are not covered by the program, some First Nation respondents indicated that often they will use their own source revenues for infrastructure repairs and construction when OCI program funding is insufficient or when ISC funds have been delayed. Some First Nation respondents noted that for some projects they are reimbursed by ISC at a later date; however, fees to borrow the money are not recovered. Better timing of funding would allow communities to avoid construction delays and related cost increases.

“It can take as few as a couple of months to a few years to receive ISC funding for a project. In order to keep the project moving forward, some First Nations will pay from their own source funding and when the ISC funds come through, they will repay the funds borrowed/used from the other source.”

First Nation respondent

7. SUPPORTING SERVICE TRANSFER: FUTURE OF THE PROGRAM

To support the ISC mandate of transferring services to Indigenous peoples, the evaluation examined the progress made in relation to the transfer of the OCI program, collected challenges and best practices, and identified additional support required by First Nations partners and communities.

Finding #29: As ISC continues its efforts to support service transfer of community infrastructure, there appears to be limited awareness among First Nation communities of ISC's initiatives to support engagements and institution building in relation to service transfer.

ISC has been supporting First Nations partners since 2017 to engage with First Nations and develop and deliver infrastructure service delivery models that suit the needs and priorities identified through these engagements while recognizing and implementing the inherent right to self-determination. The focus of the work is to create new models for First Nations service delivery. ISC has provided \$108.9 million (until 2025-26) under the CFMP authority to support engagements and institution-building related to transferring community infrastructure services.²⁷ Up to date, community infrastructure-related transfer initiatives and proof-of-concept projects include:

At the national level:

- The National First Nations Housing and Related Infrastructure Strategy was developed by a working group of representatives from the AFN and the Government of Canada;
- The First Nations Infrastructure Institute is scoping and developing models for policy and training, as well as procurement and project management standards.²⁸

At the regional level:

- The First Nations Housing and Infrastructure Council of British Columbia is developing a scope and service delivery model to transfer housing and community infrastructure in BC;
- In Alberta, the Blackfoot Confederacy Tribal Council is engaging in housing and infrastructure service transfer within the Blackfoot Confederacy Nations (Siksika, Pikanii, Blood Tribe);
- In Saskatchewan, the First Nations Capital and Infrastructure Agency of Saskatchewan signed a framework agreement with ISC. The organization is in the interim operations phase before transfer and its model covers all housing and community infrastructure;
- The Chiefs of Ontario are developing an approach for the Ontario Regional First Nations' Housing strategy as part of the housing and related infrastructure transfer initiative; and

²⁷ Government of Canada website. Transferring infrastructure service delivery to First Nations webpage. Retrieved from: <https://sac-isc.gc.ca/eng/1575318593525/1575318624018>.

²⁸ The First Nations Infrastructure Institute is an Indigenous-led initiative that will support Indigenous communities and organizations to plan, procure, own and manage their infrastructure assets on their lands. The Institute will be fully operational once it has been established through an amendment to the *First Nations Fiscal Management Act*. It is expected that the process will commence in 2022. <https://fnii.ca/faq>.

- The Confederacy of Mainland Mi'kmaq is engaging with its eight-member First Nations on a service delivery model for housing and infrastructure services.

Despite these initiatives that have taken place over the past few years, multiple First Nation community and organization representatives indicated that their communities were not aware of any ISC initiatives related to service transfer. It was noted that engagement related to service transfer was not at the individual First Nation level but with groups of First Nations (e.g., tribal councils) and First Nation associations (e.g. the AFN). One interviewee suggested that this lack of awareness at large may come from the fact that the ISC Minister and senior management have not talked publicly about service transfer and that the ISC website contains little on the topic.

When asked their satisfaction level regarding ISC's efforts to transfer the OCI program, survey respondents provided a mixed view, with 45% being neutral as compared to 30% who were satisfied and 21% who were dissatisfied. While survey respondents were not specifically asked whether they were aware of any ISC activities to transfer service, 45% suggests there may be a lack of awareness about ISC service transfer efforts among First Nations.

A greater proportion of survey respondents from a First Nation within a 50km proximity of a service centre were satisfied with ISC's efforts to transfer delivery of the OCI program to First Nation communities (39% compared to 13% of those in communities between 50km to 350km of a service centre).²⁹ Reasons for satisfaction with efforts to transfer delivery of the OCI program to First Nation communities included having qualified staff and professionals to deliver and oversee infrastructure projects, better communication with community members to understand and address infrastructure needs in the community, and the ability to fund O&M gaps. Reasons for dissatisfaction included not having the resources needed to address long-standing infrastructure issues, calls for a study to determine which services can be readily transferred, and uncertainty as to the degree of autonomy when services and the OCI program are transferred.

Finding #30: While First Nations communities are at different stages in service transfer, the vast majority not being in a position to assume control of their community infrastructure program; While many have begun to take steps to prepare for service transfer, they indicated the importance of meeting the right conditions before taking control.

The extent to which First Nation communities indicated they had the capacity to operate a housing program varied among respondents. According to ISC staff, regional variances exist, and while some regions are well-positioned for service transfer, other regions are not. It was suggested that service transfer will need to be customized and cannot be rushed. Other government respondents indicated focusing on creating the right conditions (e.g. sufficient long-term funding in place) before transferring the OCI program.

²⁹ Other remoteness categories have total responding of less than 10 which are too unreliable to report as a percentage.

According to the respondents, the right conditions include: 1) having the capacity to manage community infrastructure, 2) having reliable and sustainable funding, and 3) addressing the existing community infrastructure conditions. While many First Nation respondents were supportive of having control of their community infrastructure, they were adamant that they were not interested in taking ownership of the program as is. They stress that the government should provide sufficient funding to address infrastructure gaps before transferring the program to communities.

First Nation respondents overwhelmingly agreed that funding for capacity development was needed to better position First Nations for service transfer. Specifically, these respondents called for more support for asset management, long-term planning, and project management to better deliver and manage community assets and infrastructure. The majority of First Nation respondents indicated that the greatest challenge they faced with service transfer was having the human resources to deliver the OCI program. They noted that to build their internal capacity they need qualified staff to administer the program and develop internal processes and policies. Some First Nation respondents argued that by having qualified internal staff, they would rely less on consultants.

A few First Nation respondents indicated that they were currently engaging with ISC to discuss the process for a potential service transfer. These respondents indicated that their communities want to move from just meeting basic needs through a reactionary approach, to being able to sustain themselves and prosper; however, they called for a stable source of funding to develop this capacity.

“Capacity funding is the link in the chain that prevents more progress for communities.”

ISC staff

Some respondents (government, First Nation communities, and organizations) indicated that communities needed to develop their capacity to better manage and implement projects before they could consider service transfer. Many First Nations rely on outside consultants for project management; however, one respondent noted that if the community does not provide oversight, projects can incur costs overages, delayed timelines, or not meet the needs of the community. Other First Nation respondents noted that having in-house project managers increased communities' capacity and readiness for service transfer.

The training and capacity building for community leaders were also raised by some respondents, given the importance of community leadership in the process of service transfer. The appropriate training could support the leaders in managing their community infrastructure portfolio and applying better building practices, as well as financial and human resources more effectively. The focus group participants noted that the First Nation governance cycle was too short to effectively help the community. A four-year cycle similar to that of non-Indigenous governments would be more effective for their Council as opposed to the current two-year cycle.

Finding #31: Some best practices were observed or suggested to support service transfer.

When asked to describe best practices to facilitate service transfer, some First Nation respondents stressed the importance of having qualified staff to manage infrastructure, support

the chief and council, and establish a long-term plan to develop and maintain their infrastructure assets. First Nation respondents indicated the need for long-term capital planning with a 50-year horizon. Respondents expressed that planning should be the responsibility of the community, to dictate their infrastructure priorities and develop self-reliance. Long-term planning requires funding to support strong leadership and develop qualified staff within the First Nation.

Other ISC respondents indicated that services related to major infrastructure require the participation of many partners and ISC should promote more networking opportunities to encourage First Nations to develop partnerships that could fund or provide support for their infrastructure projects. As well, other ISC respondents cited the need for clearer messaging by ISC leadership to First Nations as a means to moving forward with service transfer.

8. CROSSCUTTING FINDINGS ACROSS THREE EVALUATIONS: INFRASTRUCTURE PROGRAMS AS A WHOLE

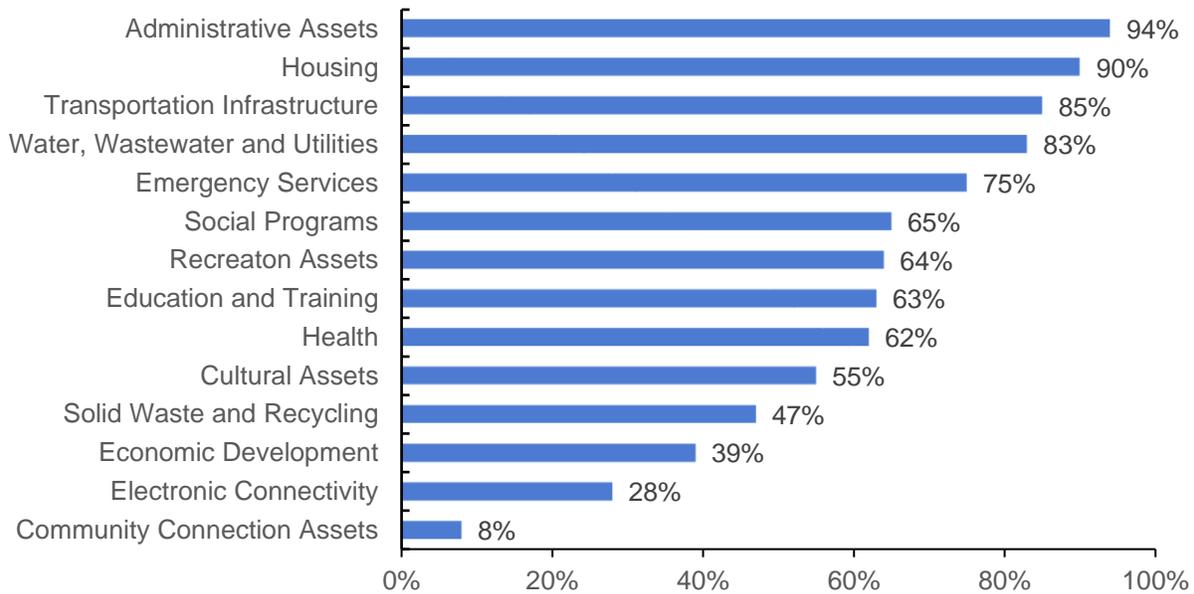
The evaluation of the OCI program was conducted simultaneously with the evaluations of the On-Reserve Housing program and the Education Facilities program. While each evaluation resulted in findings specific to its program, the findings across the three evaluations illustrate the similarities of the challenges being faced by programs and First Nations communities and the interlinkages among the programs that are integral to taking into consideration as a whole in closing the infrastructure gaps.

Crosscutting Finding #1: In terms of needs and challenges, the infrastructure programs are facing similar challenges in meeting the needs of First Nations communities and addressing the infrastructure needs on-reserve across infrastructure categories, i.e. housing, education facilities, and other community infrastructure.

While all three programs are dealing with emerging and additional challenges in meeting communities' needs as a result of COVID-19 and climate change, as well as population growth on-reserve and the growing needs of diverse segments of the communities, a few sustaining key challenges were experienced across the three programs about funding, capacity development, data systems, and ISC staff turnover.

In 2022, ISC's regional offices worked with First Nations leadership across the country to identify their community-specific infrastructure needs. The exercise was intended to help communities begin closing infrastructure gaps and improve the overall health and well-being of community members. Top needs to be addressed included housing, transportation Infrastructure (such as roads and bridges), emergency services (including fire protection), recreation assets, education, and training (Figure 8.1).

Figure 8.1: Community Demand by Infrastructure Category



Source: First Nations input provided to ISC in 2022

Despite experiencing similar challenges, regional variances exist in implementing the three programs. Some regions consistently received the least funding across the infrastructure categories. Financial data show that over the five-year evaluated period from 2016-17 to 2020-21, the Atlantic region received the least for all three programs (due to smaller population base and existing self-governing agreements that fund infrastructure), as compared to Ontario and Manitoba, which topped the expenditures.

Table 8.2: Program Expenditures Across Regions from 2016-17 to 2020-21 (in \$)

Region	ORH	EF	OCI
ATL	51,140,036.85	62,533,810.77	164,595,158.72
QC	143,678,612.00	96,690,238.00	211,519,812.00
ON	394,999,647.13	414,519,648.01	671,638,317.40
MA	445,647,541.68	546,662,956.93	518,075,220.30
SA	247,939,882.25	279,458,695.83	247,280,192.18
AB	243,188,661.16	359,727,203.30	351,751,211.81
BC	217,398,242.58	102,189,604.00	423,727,692.69
HQ	13,165,947.02	15,864,489.94	27,712,026.13
Total	1,757,158,570.67	1,877,646,646.78	2,616,299,631.23

Source: ISC HR reporting

Crosscutting Finding #2: In terms of implementation, the infrastructure programs have been delivered within asset siloes and the interlinkages among the programs cannot always be sufficiently integrated in the planning and approval of the infrastructure projects through the FNIP process across the various sub-asset categories. This resulted in the loss of efficiencies and missed opportunities to better meet communities' needs and achieve better health and safety.

Currently, the planning and approval of infrastructure projects through the FNIIP process is per each sub-asset and does not take into consideration investments in other sub-assets under the CFMP. This has resulted in instances where housing or education facilities were built without proper enabling features funded under the OCI program, e.g. connecting roads, sidewalks, electricity, fire protection features, in which case the housing or education facilities could not be used immediately in a safe and effective manner. The administrative burdens are on First Nations to request funding for projects under various sub-assets which were not guaranteed to be approved at the same time.

In addition to infrastructure-related outcomes, community infrastructure also has cross-over impacts on health and social outcomes, as well as general community well-being. The current programs do not prioritize public health to preventatively address health and safety concerns. Integrating public health into community infrastructure planning would make the program and overall health spending more efficient. For example, funding environmental public health officers through the infrastructure program would realize better health and safety outcomes. Further, co-developing more appropriate health indicators with First Nations could better support infrastructure planning and project ranking.

Crosscutting Finding #3: In terms of achieving results, the infrastructure programs have not fully achieved their expected outcomes of providing reliable and sustainable infrastructure to First Nations on reserve due to a lack of long-term asset management planning using a lifecycle asset approach.

As specified in the 2016 CFMP Program Manual, life cycle analysis is required in the feasibility study for each proposed option to reflect the total costs in relation to the management of an asset, including construction, operation, maintenance, major maintenance and disposal. However, currently, the operation and maintenance activities and costs are not funded when a new asset is to be built. Also, as all three programs are using a project-based approach, for minor capital projects, First Nations need to seek approval for the maintenance and repair work associated with the asset separately through the FNIIP process after the construction is completed. For O&M activities, as it is formular-based and that the formular has been dated, the funds may not reflect the actual needs of the work. Due to a lack of funding for operation and maintenance, as well as the backlog of repairs, this resulted in some assets not getting the necessary maintenance and repair in a timely manner, which resulted in their early deterioration.

Asset management is crucial in assessing the condition of infrastructure assets, estimating costs for repairs and upgrades, and accommodating community growth to facilitate planning to extend the lifespan and value of infrastructure. Having a fully developed asset management plan would allow First Nations communities to outline what is needed to manage the asset, including the required funds for human resources to operate and maintain community assets, and the adequate support to protect investments and uphold the health and safety of community assets.

Crosscutting Finding #4: In terms of measuring results, the infrastructure programs have been reporting data at the output level. The success of infrastructure investments should also be assessed from the socioeconomic and well-being lens to better assess the progress in closing the infrastructure gaps.

The infrastructure programs currently report on results using data such as the number of projects and the amount of funds spent. While these data are useful in demonstrating the scale of investments and implementation efforts, they do not fully correspond to what communities and partners view as the most appropriate way of measuring the success of community infrastructure outcomes and closing the infrastructure gaps on-reserve. Moreover, reporting results at the output level does not demonstrate to what extent the program has achieved its outcome by providing reliable and sustainable community infrastructure to First Nations communities, given the lack of repair and maintenance.

Canada's first Federal Housing Advocate, Marie-Josée Houle, suggested during the 2022 First Nations Housing Forum to go beyond the number of units built and apply a human rights-centered approach, which values participation, non-discrimination, equity, transparency, empowerment, and respect for human rights and obligations. Similarly, the IFSD has proposed implementing a well-being-centered housing and infrastructure performance measurement framework by assessing service level performance. According to the IFSD, applying the well-being lens to infrastructure helps transform the First Nations infrastructure investment narrative from focusing on fixing legacy issues to a holistic system-wide approach on reserve.

Crosscutting Finding #5: In terms of service transfer, the infrastructure programs are exploring options for reforming their ways of delivering the services and programs to First Nations as part of Canada's commitment to closing the infrastructure gap by 2030, which will support service transfer.

To meet the federal government's commitment to close the infrastructure gap facing Indigenous communities by 2030, significant changes are required to provide First Nations communities with tools to advance community priorities and allocate funding accordingly. The AFN proposed several resolutions during their 2021 and 2022 Annual General Assemblies related to infrastructure and urged the federal government to commit to sustained long-term funding over the next five to fifteen years. One resolution in particular highlighted the need for long-term predictable funding and challenged the government to "transition the insufficient housing and infrastructure investment commitment timeframes of 5 to 10 years to long-term commitments of 25 to 30 years or more to provide on-going, predictable, and sustainable funding."

Recognizing the barriers existing within its infrastructure programs, in particular the asset-by-asset approach through targeted investments and siloed programming, ISC has been working with First Nations to create the conditions needed to facilitate long-term funding and First Nation self-determined infrastructure service delivery. Starting in spring 2023, ISC will engage with First Nations on ways to improve how infrastructure programs are delivered on reserve. This builds off of the work that the Department started in 2022 when ISC engaged with First Nations to identify infrastructure gaps.

The progress made following the reform of infrastructure programs will support the transfer of infrastructure services and programs. Building on the service transfer initiative already in place, ISC is partnering with First Nations organizations to advance First Nations self-determination in housing and community infrastructure. With funding from ISC, First Nations organizations will determine new models of service delivery, including infrastructure services, that meet their own diverse needs, priorities, and approaches.

9. CONCLUSIONS AND RECOMMENDATIONS

Although significant investments have been made by the OCI program to address community infrastructure gaps on reserve, the program did not fully address the needs of First Nation communities. Such needs as identified by First Nations respondents during the evaluation include the areas not being sufficiently funded under the OCI program's sub-asset areas such as roads and bridges, fire protection, and cultural and recreational facilities. Despite being designed to provide much needed essential services to the communities, OCI projects could not always be prioritized when comparing with water and housing projects for example. The impacts of climate change, COVID-19, and the growing needs of diverse segments of the communities, including supporting those with disabilities and special needs, have also placed additional pressure on community infrastructure requirements. Moreover, a few sustaining key challenges were experienced by First Nations communities concerning funding, capacity development, data systems, and staff turnover.

In relation to program effectiveness and efficiency, areas of improvement exist in the design and delivery of the OCI program to better support the achievement of the expected outcomes, i.e. to provide reliable and sustainable infrastructure to First Nations. Many community facilities may not meet health and safety standards as a result of a lack of maintenance and repair. Barriers exist to better fire protection. The asset-focused and project-based approach funded through time-limited sources resulted in inefficiencies in maximizing ISC's investments and missed opportunities to better serve the First Nations communities. The current planning and prioritization process for other community infrastructure through the FNIIP does not sufficiently and systematically consider across asset areas and factors such as public health and environment, climate change and accessibility, which are essential in achieving the outcomes associated with the CFMP.

Finally, as ISC continues to explore alternate funding models and options for service transfer to provide longer-term funding and help build capacity among participating First Nations and move them closer to assuming control of their education facilities, it is important to raise more awareness about service transfer and its initiatives among First Nation communities to serve that purpose.

Based on the evaluation's findings, it is recommended that ISC:

1. Better support community-led infrastructure planning and prioritization to meet First Nations' needs:

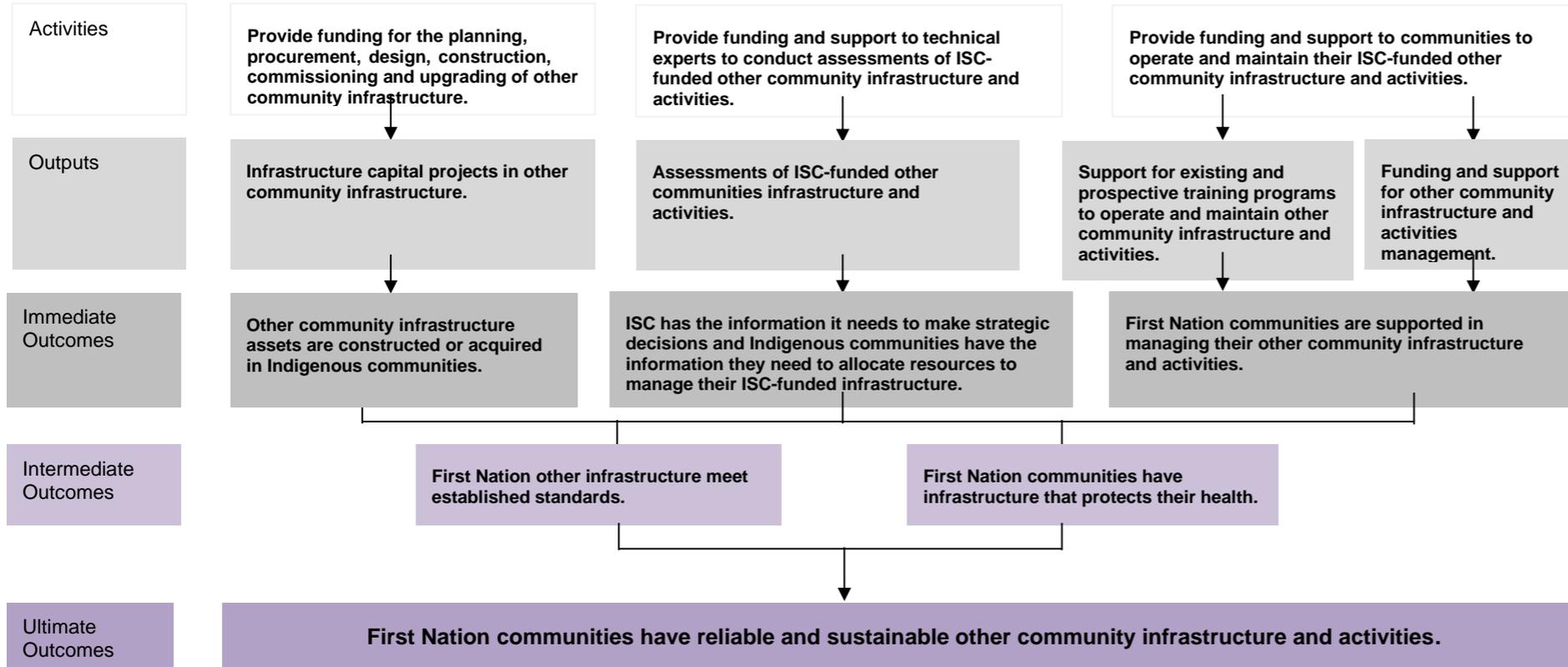
1.1 Review and adapt community infrastructure planning processes to better support First Nations in having reliable, sustainable, and community-led infrastructure (Supported by Findings #4, #23, #24, Crosscutting Finding #2);

1.2 Explore opportunities to better align program design and implementation with the evolving priorities identified in this evaluation by First Nations to address the unique needs in their communities, such as embedding health outcomes, climate change, and accessibility (Supported by Findings #5, #6, #12, #13);

2. Prioritize or allocate dedicated funding or efforts to areas identified as top needs or gaps by the communities:
 - 2.1 Conduct an analysis to identify the barriers for communities that are smaller, more remote and with lesser resources in accessing funds (Supported by Finding #13);
 - 2.2 Remove barriers in accessing the fire protection capital funding by building in more flexibility in the three-tiered funding approach and examine ways to ensure the O&M funding for fire protection is used for its intended purpose (Supported by Findings #14, #19, #20);
 - 2.3 Further assist and support communities with their capacity development activities to manage and maintain their community infrastructure and service transfer (Supported by Findings #7, #26, #30, Crosscutting #5);
3. Improve data quality in departmental systems, including to establish clear definitions of the fields and categories used in the ICMS Project Tracking Module to help ensure data entry is consistent to improve data quality (Supported by Findings #16, #17);
4. Implement strategies to mitigate impacts of staff turnover to better support collaboration with First Nations (Supported by Findings #16, #17).

APPENDIX A: PROGRAM LOGIC MODEL

Other Community Infrastructure and Activities Program Logic Model³⁰



Source: Program Information Profile Approved in 2018