

**Vol. 1
Community
Priorities**

Infrastructure for a Sustainable Gjoa Haven



**Prepared for the Government of
Nunavut By Aarluk Consulting Inc.
Approved by the Hamlet Council of
Gjoa Haven February 22, 2011**

Infrastructure for a Sustainable Gjoa Haven

Volume One: Community Priorities

A report prepared for the Government of Nunavut by Aarluk Consulting Inc.

Approved by the Hamlet of Gjoa Haven February 22, 2011 and submitted to the Government of Nunavut, Department of Community and Government Services

Acknowledgements

Through the fall of 2009 and winter of 2010, twenty-three Nunavut communities prepared Integrated Community Infrastructure Sustainability Plans (ICISPs). ICISPs will help communities identify and achieve goals for environmental, cultural, social and economic sustainability.

The result of the process will be an infrastructure plan for each community that is long-term, reflects community goals and priorities, meets the needs and interests of all residents and groups, and is based on sustainability principles and goals. In the short-term, these plans will provide a useful and practical framework for identifying and justifying future infrastructure projects.

More broadly, these plans represent a first step in the broader process of creating a long-term, comprehensive sustainability plan for each Nunavut community.

The development of the ICISPs was coordinated by the Nunavut Community Infrastructure Advisory Committee (NCIAC) and the Government of Nunavut's Department of Community and Government Services (CGS).

Funding for the development of the ICISPs was provided under the Gas Tax Fund (GTF) of the Government of Canada.

We would particularly like to thank the Hamlet Council, Hamlet Staff, GN Staff and participants in the Gjoa Haven planning workshop for their assistance in this planning.

Contents

1	Executive Summary.....	6
2	Guide to the Report	7
3	Overview of the Community.....	8
4	Community Sustainability Goals and Priorities.....	10
5	Summary of Community Infrastructure Needs	11
5.1	Community Infrastructure Needs, By Time Frame	11
6	Community Infrastructure Profile.....	21
6.1	Public Services Infrastructure.....	22
6.1.1	Hamlet Office	22
6.1.2	Municipal Garages and Buildings.....	23
6.1.3	Municipal Vehicles	24
6.1.4	Law Enforcement / RCMP	25
6.1.5	Fire Services	25
6.1.6	Search and Rescue	26
6.1.7	Power/Energy System Infrastructure	26
6.2	Economic Infrastructure.....	28
6.2.1	Traditional Economy	28
6.2.2	Transportation - Road Maintenance Vehicles and Equipment.....	28
6.2.3	Transportation – Airport Infrastructure	30
6.2.4	Transportation – Marine.....	31
6.2.5	Communications	32
6.2.6	Commercial Facilities	33
6.3	Cultural Infrastructure.....	33
6.3.1	Culture, Heritage, Language and Arts.....	33
6.3.2	Recreation Facilities	34
6.3.3	Elders and Youth Facilities	35
6.4	Health and Wellness Infrastructure	35
6.5	Education Infrastructure	36
6.5.1	Elementary / High School.....	36
6.5.2	Day Care	37
6.5.3	Adult Education.....	38
6.6	Housing Infrastructure	38

6.6.1	Public Housing.....	38
6.6.2	Staff Housing.....	40
6.7	Environmental Infrastructure.....	41
6.7.1	Water	41
6.7.2	Waste Water and Sewage Disposal	42
6.7.3	Solid Waste Disposal.....	43
7	Appendices.....	44
7.1	List of Tables.....	44
7.2	Acronyms.....	45
7.3	Key Definitions and Terms	45

1 Executive Summary

Between 2005 and 2015 the Government of Nunavut (GN) will receive \$97.5 million from the federal Gas Tax Fund to support environmentally sustainable municipal infrastructure projects that help ensure cleaner air, cleaner water and reduced greenhouse gas emissions. Those funds will be managed by the Nunavut Community Infrastructure Advisory Committee (NCIAC), which is mandated to work with Nunavut communities to define their long-term infrastructure requirements and priorities, and to help link those needs to a framework of integrated community sustainability planning.

In 2009 GN and the NCIAC began to develop community-specific Integrated Community Infrastructure Sustainability Plans (ICISPS). This is an important preliminary step in the development of broader, more comprehensive Integrated Community Plans (ICPs), which would integrate ICISPS with other community plans for economic development, health and wellness, and other areas.

The ICISP initiative focused on identifying priority infrastructure investments, looking primarily at network infrastructure like roads, bridges, water and wastewater systems), buildings, and equipment. The plans were to be developed through a series of community consultations, research of existing plans and priorities, key person interviews, and a framework of initial sustainability goals prepared by NCIAC and expanded by each community.

Preparation for the Gjoa Haven ICISP began in the fall of 2009. The community consultation meeting was held on April 22, 2010. A draft was provided to Council for review and approved on February 22, 2011. The ICISP was revised to reflect their input, and was submitted to CGS as a final report on this community's planning process.



The specific infrastructure investment priorities identified by the people of Gjoa Haven are set in table format in this volume, and explored in greater depth in Volume 2 of this report.

2 Guide to the Report

This report summarizes the findings and recommendations of a planning process conducted by the Government of Nunavut and the Hamlet of Gjoa Haven from fall 2009 to spring 2010.

Section 1, the Executive Summary, describes the background and goals of this planning process, and summarizes the key findings set out in these two volumes.

Section 3 provides a brief overview of community demographics.

Section 4 summarizes the criteria used by this project and by community participants to set sustainability infrastructure priorities.

Section 5 presents community infrastructure priorities of the community in tabular format, organized by priority. The table also identifies infrastructure projects eligible for funding under the Gas Tax Fund.

Section 6 identifies the community's existing infrastructure systems, and the main elements that make up each system. It describes the current condition and capacity of such systems and any issues identified in relation to them. Finally, this section identifies infrastructure investment that is already planned as well as recommendations for future infrastructure investment that supports community sustainability goals and is based on community priorities identified during consultations.

Volume Two of the report includes;

- A list of the documents consulted and people interviewed in the development of this plan;
- A list of participants at community meetings;
- A fuller profile of Gjoa Haven, including a discussion of demographic and socio-economic conditions, and trends that are likely to influence community infrastructure needs and investments in the future, as well as existing community vision statements and major community goals related to infrastructure.
- A comprehensive set of community infrastructure sustainability goals based on document review, interviews, and the community consultation meetings.

3 Overview of the Community

Gjoa Haven is situated at 68 38'N, 95 53'W on King William Island in Nunavut's Kitikmeot region. It is in the Mountain Time zone as a preference, to harmonize with Yellowknife, which is the centre one travels through, in and out of Gjoa Haven. The community is southwest of Taloyoak, southeast of Cambridge Bay and directly north of Baker Lake and Winnipeg.

The 2006 Census reported the total population of Gjoa Haven to be 1065 of which approximately 51.6% were female and 48.4% male.

Gjoa Haven's population grew 9% between 1996 and 2001, and 11% between 2001 and 2006. This rate of growth was slightly higher than the territorial average of 10.2% in the same time period. Based on these rates of growth the estimated population of Gjoa Haven in 2020 is 1,290.

Gjoa Haven's population is relatively young, with nearly 38.5% of the population under the age of 15. In Nunavut 34% of the population is under the age of 15 compared with the 18% of the Canadian population in this age cohort. The average age of residents is 19.9 years, slightly lower than the average age of all Nunavut residents at 23 years, and significantly lower than the general Canadian population which averages 39 years of age.

The economy in Gjoa Haven can be characterized as mixed, with traditional subsistence activities, including hunting, fishing, trapping and gathering, coinciding with wage based economic activities. Residents participate in a variety of occupations, but are predominantly employed in: trades, transport and equipment operators and related occupations; social science, education, government service and religion occupations; and sales and service occupations. However the wildlife economy continues to play an important role in Gjoa Haven and contributes to the foundation of Inuit culture and economy.

Gjoa Haven experiences lower participation rates¹ and higher unemployment rates than for the Territory as a whole. In the 2006 Census it was reported Gjoa Haven had a participation rate of 61.4% and an unemployment rate of 29.6%. This compares to the territorial participation rate of 65.3% and an unemployment rate of 15.6% in 2006.

With respect to educational achievement the 2006 Census reported that, among the population age 15 and over, 69.7% had no certificate, diploma or degree (including high school), while 6.8% reported the highest level of educational achievement to be high school certificate or equivalent.

¹ The participation rate is defined as the percentage of the population aged 15 and over that is in the labour force and either employed or unemployed.

9% of the population reported a trades or apprenticeship-related certification or diploma as their highest level of educational achievement. With respect to other post-secondary education outcomes, 9% of residents reported a non-university diploma or certificate and 3.8% reported a university certificate, diploma or degree.

Consultations in Gjoa Haven identified the following community concerns that could be considered impediments to sustainability if not addressed during planning and community growth in the future:

- Community self sufficiency can only be achieved if infrastructure planning considers is “holistic” – meaning when one piece of infrastructure is developed, the plan considers its impact on other infrastructure systems such as water usage, power usage, waste creation, and the staff housing requirements.
- With respect to infrastructure, economic growth for the community is dependent on improvements to infrastructure, particularly in the following areas:
 - Transportation (access roads, marine harbour)
 - Power, energy and fuel
 - Housing
 - Education
 - Health
 - Water, Solid Waste and Sewage



4 Community Sustainability Goals and Priorities

As part of the Gjoa Haven planning workshop, community participants supported eight general sustainability goals that should guide infrastructure for a sustainable Gjoa Haven. For a sustainable future, community infrastructure should:

1. Meet basic human needs.
2. Achieve a sustainable economy and self-reliance.
3. Ensure equitable access for all residents and financial sustainability.
4. Promote individual and community health and well-being.
5. Use resources efficiently.
6. Reduce waste and hazardous waste.
7. Protect and promote Inuit culture, heritage and language.
8. Protect the environment and eco-systems.

5 Summary of Community Infrastructure Needs

5.1 Community Infrastructure Needs, By Time Frame

Table 1 below sets out Gjoa Haven's Integrated Community Infrastructure Sustainability Plan. It identifies infrastructure needs and priorities in the short-term (ST – within the next 5 years), medium term (MT – within 5 to 10 years) and long-term (LT – within 10 to 15 years). These priorities are based on community consultations, the current condition and capacity of existing infrastructure, and community-identified goals, priorities and needs for future infrastructure development.

Each infrastructure investment priority is linked with the sustainability goals that it supports.

Table 1. Integrated Community Infrastructure Sustainability Plan

Infrastructure System and Asset Description	Issues and Action Required (New/Replace/Renovate or Repair)	Sustainability Goals Supported by Investment				
		Environment	Economic	Social	Cultural	Other Community Goals
SHORT-TERM INFRASTRUCTURE PRIORITIES						
Hamlet Office Vol. 1, Sec. 6.1.1 Vol. 2, Sec. 5.1	Renovate Hamlet Office		✓	✓		
Municipal Garages and Buildings Vol. 1, Sec. 6.1.2 Vol. 2, Sec. 5.2	Renovate Hamlet Warehouse	✓	✓			
Municipal Garages and Buildings Vol. 1, Sec. 6.1.2 Vol. 2, Sec. 5.2	8-bay Garage	✓	✓			
Municipal Vehicles Vol. 1, Sec. 6.1.3 Vol. 2, Sec. 5.3	Replace Municipal Vehicles that are at end of useful life		✓			
Law Enforcement/ RCMP Infrastructure Vol. 1, Sec. 6.1.4 Vol. 2, Sec. 5.4	New Staff House for RCMP	✓	✓	✓		

Infrastructure System and Asset Description	Issues and Action Required (New/Replace/Renovate or Repair)	Sustainability Goals Supported by Investment				
		Environment	Economic	Social	Cultural	Other Community Goals
Search and Rescue Vol. 1, Sec. 6.1.6 Vol. 2, Sec. 5.5	New Search and Rescue Facility		✓		✓	
Power/ Energy Infrastructure Vol. 1, Sec. 6.1.7 Vol. 2, Sec. 5.7	New Diesel Tanks		✓	✓		
Traditional Economy Vol. 1, Sec. 6.2.1 Vol. 2, Sec. 5.8	Replace Community Freezer with Underground Freezer	✓	✓	✓	✓	
Road Maintenance Vehicles and Equipment Vol. 1, Sec. 6.2.2 Vol. 2, Sec. 5.9	Gravel Source / Quarry Site		✓			
Road Maintenance Vehicles and Equipment Vol. 1, Sec. 6.2.2 Vol. 2, Sec. 5.9	Bridge to Granular Source		✓			
Road Maintenance Vehicles and Equipment Vol. 1, Sec. 6.2.2 Vol. 2, Sec. 5.9	New Snow Fencing on Water Road	✓	✓	✓		

Infrastructure System and Asset Description	Issues and Action Required (New/Replace/Renovate or Repair)	Sustainability Goals Supported by Investment				
		Environment	Economic	Social	Cultural	Other Community Goals
Airport Infrastructure Vol. 1, Sec. 6.2.3 Vol. 2, Sec. 5.10	Renovate Airport Runway (short to long term)		✓	✓		
Airport Infrastructure Vol. 1, Sec. 6.2.3 Vol. 2, Sec. 5.10	Repair Airport Terminal	✓	✓	✓		
Marine Infrastructure Vol. 1, Sec. 6.2.4 Vol. 2, Sec. 5.11	Breakwater	✓	✓		✓	
Communications Vol. 1, Sec. 6.2.5 Vol. 2, Sec. 5.12	New Radio System	✓	✓	✓	✓	
Culture, Heritage, Language and Arts Vol. 1, Sec. 6.3.1 Vol. 2, Sec. 5.14	Visitor Centre		✓	✓	✓	
Recreation Facilities Vol. 1, Sec. 6.3.2 Vol. 2, Sec. 5.15	Swimming Pool			✓	✓	

Infrastructure System and Asset Description	Issues and Action Required (New/Replace/Renovate or Repair)	Sustainability Goals Supported by Investment				
		Environment	Economic	Social	Cultural	Other Community Goals
Recreation Facilities Vol. 1, Sec. 6.3.2 Vol. 2, Sec. 5.15	Renovate Arena			✓	✓	
Elders and Youth Facilities Vol. 1, Sec. 6.3.3 Vol. 2, Sec. 5.16	Renovate Youth Centre			✓	✓	
Health and Wellness Infrastructure Vol. 1, Sec. 6.4 Vol. 2, Sec. 5.17	Repair Continuing Care Centre			✓	✓	
Elementary / High School Vol. 1, Sec. 6.5.1 Vol. 2, Sec. 5.18	Expand / Renovate Junior High School		✓	✓	✓	
Elementary / High School Vol. 1, Sec. 6.5.1 Vol. 2, Sec. 5.18	Repair Access Road to School			✓		
Public Housing Vol. 1, Sec. 6.6.1 Vol. 2, Sec. 5.21	Renovation of existing housing		✓	✓	✓	

Infrastructure System and Asset Description	Issues and Action Required (New/Replace/Renovate or Repair)	Sustainability Goals Supported by Investment				
		Environment	Economic	Social	Cultural	Other Community Goals
Water Vol. 1, Sec. 6.7.1 Vol. 2, Sec. 5.23	Repair Water Access Road			✓		
Water Vol. 1, Sec. 6.7.1 Vol. 2, Sec. 5.23	Replace Waterhouse Pump Station	✓	✓	✓	✓	
Water Vol. 1, Sec. 6.7.1 Vol. 2, Sec. 5.23	Repair Water Reservoir Tank			✓		
Water Vol. 1, Sec. 6.7.1 Vol. 2, Sec. 5.23	Replace Pipe from Water Lake to Reservoir			✓		
Wastewater and Sewage Disposal Vol. 1, Sec. 6.7.2 Vol. 2, Sec. 5.24	Expand or Replace Sewage Lagoon	✓	✓	✓	✓	
Solid Waste Vol. 1, Sec. 6.7.3 Vol. 2, Sec. 5.25	Expand or Replace Solid Waste Site	✓	✓	✓	✓	

Infrastructure System and Asset Description	Issues and Action Required (New/Replace/Renovate or Repair)	Sustainability Goals Supported by Investment				
		Environment	Economic	Social	Cultural	Other Community Goals
MEDIUM-TERM INFRASTRUCTURE PRIORITIES						
Municipal Garages and Buildings Vol. 1, Sec. 6.1.2 Vol. 2, Sec. 5.2	3-bay Mechanic’s Garage	✓	✓	✓		
Municipal Vehicles Vol. 1, Sec. 6.1.3 Vol. 2, Sec. 5.3	Replace all Municipal Vehicles on a five-year rotating cycle		✓			
Road Maintenance Vehicles and Equipment Vol. 1, Sec. 6.2.2 Vol. 2, Sec. 5.9	Access Roads			✓	✓	
Road Maintenance Vehicles and Equipment Vol. 1, Sec. 6.2.2 Vol. 2, Sec. 5.9	Erosion and Drainage Systems	✓		✓		
Communications Vol. 1, Sec. 6.2.5 Vol. 2, Sec. 5.12	Upgrade Telephone Service		✓			

Infrastructure System and Asset Description	Issues and Action Required (New/Replace/Renovate or Repair)	Sustainability Goals Supported by Investment				
		Environment	Economic	Social	Cultural	Other Community Goals
Communications Vol. 1, Sec. 6.2.5 Vol. 2, Sec. 5.12	Upgrade Internet Service		✓			
Commercial Facilities Vol. 1, Sec. 6.2.6 Vol. 2, Sec. 5.13	New Warehousing / Housing / Offices / Fuel for Oil / Mining Exploration		✓	✓	✓	
Commercial Facilities Vol. 1, Sec. 6.2.6 Vol. 2, Sec. 5.13	New hotel		✓	✓	✓	
Elders and Youth Facilities Vol. 1, Sec. 6.3.3 Vol. 2, Sec. 5.16	New Elders / Youth Camp			✓	✓	
Health and Wellness Infrastructure Vol. 1, Sec. 6.4 Vol. 2, Sec. 5.17	Convert old Health Centre into Wellness Centre			✓	✓	
Elementary / High School Vol. 1, Sec. 6.5.1 Vol. 2, Sec. 5.18	Renovate High School			✓	✓	

Infrastructure System and Asset Description	Issues and Action Required (New/Replace/Renovate or Repair)	Sustainability Goals Supported by Investment				
		Environment	Economic	Social	Cultural	Other Community Goals
Public Housing Vol. 1, Sec. 6.6.1 Vol. 2, Sec. 5.21	Service building lots zoned for residential development of various density		✓	✓		
Public Housing Vol. 1, Sec. 6.6.1 Vol. 2, Sec. 5.21	Construction of new units for single persons, and large families			✓	✓	
Staff Housing Vol. 1, Sec. 6.6.2 Vol. 2, Sec. 5.22	New 5-plex GN Staff Housing for Health, with Garages (located near health centre)	✓	✓	✓		
LONG-TERM INFRASTRUCTURE PRIORITIES						
Power/ Energy Infrastructure Vol. 1, Sec. 6.1.7 Vol. 2, Sec. 5.7	New Renewable Energy	✓	✓			
Power/ Energy Infrastructure Vol. 1, Sec. 6.1.7 Vol. 2, Sec. 5.7	Tank Farm Expansion		✓	✓		
Communications Vol. 1, Sec. 6.2.5 Vol. 2, Sec. 5.12	Cell Phone Service		✓	✓		

Infrastructure System and Asset Description	Issues and Action Required (New/Replace/Renovate or Repair)	Sustainability Goals Supported by Investment				
		Environment	Economic	Social	Cultural	Other Community Goals
Public Housing Vol. 1, Sec. 6.6.1 Vol. 2, Sec. 5.21	Construction of new units of all sizes			✓	✓	

6 Community Infrastructure Profile

This part of the report provides a concise overview of infrastructure systems and elements currently in place in the community. For each system, it describes:

- The current condition and capacity of each system
- Any issues identified with the system
- Investments that are already planned
- Recommendations for sustainable infrastructure investment based on community-identified priorities

For the purposes of this part, community infrastructure systems are organized under the following broad categories:

- Public Services Infrastructure
- Economic Infrastructure
- Cultural Infrastructure
- Health and Wellness Infrastructure
- Education Infrastructure
- Housing Infrastructure
- Environmental Infrastructure



6.1 Public Services Infrastructure

6.1.1 Hamlet Office

Table 2. Hamlet Office

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Old Economic Development Office	1960	2000	(-10)	
Community Complex, Offices & Council Chambers	1984	2024	14	
Department Public Works	1980	2020	10	
Economic Development Office				
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. There are no planned additional investments in relation to the Hamlet Office, but community consultations revealed that 500k was invested in 2010 to evaluate structure and that they would be getting a generator. Hamlet Council identified investment in Hamlet office renovations as priority 1 out of 9 in the 2010 NCIAC biennial planning process. For more details refer to Section 5.1.4 in Volume 2. 			
Recommendations	<ul style="list-style-type: none"> Renovate Hamlet Office (short term) 			

6.1.2 Municipal Garages and Buildings

Table 3. Municipal Garages and Buildings

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
3 Bay Garage #1	1980	2020	10	
3 Bay Garage #2	1984	2024	14	
4-Bay Parking Garage,				
Hamlet Storage (Old RCMP),				
Maintenance Garage	1993	2033	23	
Maintenance Storage Building #1	1980	2020	10	
Maintenance Storage Building #2	1980	2020	10	
Office/Shop/Warehouse/Garage				
3 Bay Garage #3	2003	2043	33	
Search & Rescue ATCO Trailer	1978	2018	8	
Cargo Container Storage	1980	2020	10	
DPW Maintainer shop				
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. Hamlet Council identified investment in renovations to the Hamlet warehouse as priority 5 out of 9, an 8 bay garage as priority 6 out of 9, and a new 3 bay mechanics garage as priority 8 out of 9 in the 2010 NCIAC biennial planning process. For more details refer to Section 5.2.4 in Volume 2 			

Recommendations	<ul style="list-style-type: none"> • Renovate Hamlet Warehouse (short term) • New 8-bay Garage (short term) • New 3-bay Mechanic’s Garage (medium term)
------------------------	--

6.1.3 Municipal Vehicles

Table 4. Municipal Vehicles

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Ford - F150 Pickup	1995	2002	(-8)	
Ford - Ranger	2003	2010	0	
Ford - F150 Extended Cab	2003	2010	0	
2002 Ford F150 4x4	2007	2014	4	
2001 Ford F150 4x4	2007	2014	4	
Ford E450 Super Duty Cutaway	2006	2013	3	
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> • No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. • No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 			
Recommendations	<ul style="list-style-type: none"> • Replace Municipal Vehicles that are at end of useful life (short term) • Replace all Municipal Vehicles on a five-year rotating cycle (medium term) 			

6.1.4 Law Enforcement / RCMP

Table 5. Law Enforcement

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
RCMP Detachment	1998			
Staff Housing (2)				
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 			
Recommendations	<ul style="list-style-type: none"> New Staff House for RCMP (short term) 			

6.1.5 Fire Services

Table 6. Fire Services

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Fire Hall	1980	2020	10	
FL80 Freightliner Fire Tanker Truck	2002	2022	12	
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2010. For more details see Volume 2, Section 5.5.4 			

Recommendations	<ul style="list-style-type: none"> No recommendation identified
------------------------	--

6.1.6 Search and Rescue

Table 7. Search and Rescue

Asset	Acquired	Projected Useful Life	Remaining Life	Issues
Infrastructure Priorities and Planned Investments		<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 		
Recommendations		<ul style="list-style-type: none"> New Search and Rescue Facility (short term) 		

6.1.7 Power/Energy System Infrastructure

Table 8. Energy Infrastructure

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
QEC Power Plant	1977	2017	7	<ul style="list-style-type: none"> In fair condition; Identified as a priority by QEC
720 kW Generator	1995	2018	8	

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
550 kW Generator	2009	2046	36	
550 kW Generator	2009	2048	38	
2 Diesel tanks				
4 Gasoline tanks (2 tanks at old airport)				
6 Jet A-1 tanks (1 tank at old airport, 1 tank at airport)				
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> • No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. • No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. • Power plant identified by QEC as a priority 			
Recommendations	<ul style="list-style-type: none"> • New Diesel Tanks (short term) • New Renewable Energy (long term) • Tank Farm Expansion (long term) 			

6.2 Economic Infrastructure

6.2.1 Traditional Economy

Table 9. Traditional Economy

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Area Wildlife Office				
Community Freezer				<ul style="list-style-type: none"> Not utilized, because too costly to operate
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 			
Recommendations	<ul style="list-style-type: none"> Replace Community Freezer with Underground Freezer (short term) 			

6.2.2 Transportation - Road Maintenance Vehicles and Equipment

Table 10. Road Maintenance Vehicles and Equipment

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Delco HP Washer 2100XL	2000	2018	8	
BOMAG Packer BW6	1993	2011	1	

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Caterpillar Integrated Tool Carrier 1T38F	1995	2013	3	
Champion Grader 730A	1994	2012	2	
Ford Backhoe 4500	1975	1993	(-17)	
Gorman Rupp Pump 86A2-F4L	2000	2018	8	
Tenco Snow Blower	1998	2016	6	
Caterpillar D6N Tractor	2005	2023	13	
Caterpillar Integrated Tool Carrier 1T38G11	2007	2026	16	
Caterpillar 140G Dozer	1980	1998	(-12)	
Ford - LNT 8000	1995	2002	(-8)	
Ford - F800	1991	1998	(-12)	
Ford Conventional 'H' Truck	1998	2005	(-5)	
Sterling Acterra Gravel Truck	2008	2015	5	
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. Hamlet Council identified investment in snow fencing as priority 3 out of 9 and an erosion and a drainage study and subsequent civil works as priority 7 out of 9 in the 2010 NCIAC biennial planning process. For more details refer to Section 5.9.4 in Volume 2 			

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Recommendations		<ul style="list-style-type: none"> • New Gravel Source / Quarry Site (short term) • Bridge to Granular Source (short term) • Snow Fencing on Water Road (short term) • Repair Access Roads (medium term) • Erosion and Drainage Systems (medium term) 		

6.2.3 Transportation – Airport Infrastructure

Table 11. Airport

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Gjoa Haven Airport	2003			
Tank Farm				
Taxiway/Apron	1997			
Runway	1997			
FEC	1999			
Runway Edge Lighting	1999			
Truck - Runway (pickup/other)	2003			
Truck - Dump/Plow S/A	2005			

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Snowblower - Mounted	1998			
Packer - Wobbly Wheel	1975			
Packer - Wobbly Wheel	1998			
Packer - Wobbly Wheel	2003			
Packer - Vibratory	1993			
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 			
Recommendations	<ul style="list-style-type: none"> Renovate Airport Runway (short to long term) Repair Airport Terminal (short term) 			

6.2.4 Transportation – Marine

Table 12. Marine Transportation

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Marine Dock				
Public Dock	1991			
Floating Dock	2009			
Community crane				

Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2006, 2008 and 2010.
Recommendations	<ul style="list-style-type: none"> New Breakwater (short term)

6.2.5 Communications

Table 13. Communications

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 			
Recommendations	<ul style="list-style-type: none"> New Radio System (short term) Upgrade Telephone Service (medium term) Upgrade Internet Service (medium term) Cell Phone Service (long term) 			

6.2.6 Commercial Facilities

Table 14. Commercial Facilities

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Coop Store				
Northern Store				
Hotel				
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 			
Recommendations	<ul style="list-style-type: none"> New Warehousing / Housing / Offices / Fuel for Oil / Mining Exploration (medium term) New hotel (medium term) 			

6.3 Cultural Infrastructure

6.3.1 Culture, Heritage, Language and Arts

Table 15. Culture, Heritage, Language and Arts

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
NWP Historic Site				
Elders Heritage Centre				

Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2010. For more details see Volume 2, Section 5.14.4
Recommendations	<ul style="list-style-type: none"> Visitor Centre (short term)

6.3.2 Recreation Facilities

Table 16. Recreation Facilities

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Arena Complex	1993	2033	23	<ul style="list-style-type: none"> Building has sunk and is in poor condition- requires complete renovations
Playground	2005	2023	13	
Zamboni Shed	1998	2038	28	
Zamboni Ice Resurfacer 440	1998	2016	6	
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> Planned investments identified in GN Capital Plan Estimates are examined in Volume 2, Section 5.15.3 Hamlet Council identified investment in a new swimming pool as priority 2 out of 9 and renovations to the arena as priority 9 out of 9 in the 2010 NCIAC biennial planning process. For more details refer to Section 5.15.4 in Volume 2 			
Recommendations	<ul style="list-style-type: none"> Swimming Pool (short term) Renovate Arena (short term) 			

6.3.3 Elders and Youth Facilities

Table 17. Elders and Youth Facilities

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 			
Recommendations	<ul style="list-style-type: none"> Renovate Youth Centre (short term) New Elders / Youth Camp (medium term) 			

6.4 Health and Wellness Infrastructure

Table 18. Health and Wellness Facilities

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Health Centre (W/O Residences)	1998			
Health Centre with 2-apartment residence for nurses and Hamlet Offices	1970's			<ul style="list-style-type: none"> Old

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Continuing Care Centre	2008			<ul style="list-style-type: none"> Not being used due to maintenance issues. The new mechanical system is automated and the maintenance staff are getting training on how to fix it.
Infrastructure Priorities and Planned Investments		<ul style="list-style-type: none"> Planned investments identified in GN Capital Plan Estimates are examined in Volume 2, Section 5.17.3 No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 		
Recommendations		<ul style="list-style-type: none"> Repair Continuing Care Centre (short term) New 5-plex Staff Housing with Garages (medium term) Convert old Health Centre into Wellness Centre (medium term) 		

6.5 Education Infrastructure

6.5.1 Elementary / High School

Table 19. Schools

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Quqshuun Ilihakvik Jr High	1987, ren. 1997, 2008			<ul style="list-style-type: none"> Road access to the elementary school is limited, which is a concern regarding fire safety Both schools are overcrowded, which is a safety concern

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
One Classroom School				
Qiqrtaq High School	1976, ren. 1997			<ul style="list-style-type: none"> Needs renovations Both schools are overcrowded, which is a safety concern
Infrastructure Priorities and Planned Investments		<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 		
Recommendations		<ul style="list-style-type: none"> Expand / Renovate Junior High School (short term) Repair Access Road to School (short term) Renovate High School (medium term) 		

6.5.2 Day Care

Table 20. Day Care

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Nutarqanut Pairivik Day Care				
Infrastructure Priorities and Planned Investments		<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 		

Recommendations	<ul style="list-style-type: none"> • None identified
------------------------	---

6.5.3 Adult Education

Table 21. Adult Education

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Nunavut Arctic College office				
Infrastructure Priorities and Planned Investments		<ul style="list-style-type: none"> • No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. • No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 		
Recommendations		<ul style="list-style-type: none"> • None identified 		

6.6 Housing Infrastructure

6.6.1 Public Housing

Table 22. Public Housing

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
97 Single Family Units	91 Pre-1990 2 Post-1990			

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
	4 No Date			
33 Duplex Units	3 Pre-1990 26 Post-1990 4 No Date			
34 Multi-Family Units	7 Pre-1990 23 Post-1990 4 No Date			
7 NHC Leased Units				
1 Office / Garage				
1 Warehouse				
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> Planned investments identified in GN Capital Plan Estimates and are examined in Volume 2, Section 5.21.3 No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 			
Recommendations	<ul style="list-style-type: none"> Renovation of existing housing (short term) Service building lots zoned for residential development of various density (medium term) Construction of new units for single persons, and large families (medium term) Construction of new units of all sizes (long term) 			

6.6.2 Staff Housing

Table 23. Staff Housing

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Staff House #1 (007)	1982	2022	12	
Staff House #2 (008)	1975	2015	5	
Staff House #3 (014)	1996	2036	26	
Staff House #4 (009)	1960	2000	(-10)	
3-bedroom House				
3-bedroom Detached House				
Infrastructure Priorities and Planned Investments		<ul style="list-style-type: none"> Planned investments identified in GN Capital Plan Estimates and are examined in Volume 2, Section 5.22.3 No priorities were identified by Council for NCIAC in 2006, 2008 and 2010. 		
Recommendations		<ul style="list-style-type: none"> New 5-plex GN Staff Housing for Health with Garages, located near the health centre (medium term) 		

6.7 Environmental Infrastructure

6.7.1 Water

Table 24. Water System

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Remote Pumphouse				
Sterling Acterra M85 Water Truck	2005	2012	2	<ul style="list-style-type: none"> Water Road issues cause them to break-down.
Water Treatment Plant	2007	2037	27	
Water Intake, Pumping and Heating Station	2007	2037	27	<ul style="list-style-type: none"> Waterhouse pump station isn't working right now because equipment breaks down at -30; Pipe from water lake to reservoir is buried underground and keeps freezing, it needs to be redesigned
Infrastructure Priorities and Planned Investments				<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. 70k was allotted in 2010 for water road, but despite having a crusher the lack of a gravel supply is hindering progress No priorities were identified by Council for NCIAC in 2010. For more details see Volume 2, Section 5.23.4

Recommendations	<ul style="list-style-type: none"> • Repair Water Access Roads (short term) • Repair Waterhouse Pump Station (short term) • Repair Water Reservoir Tank (short term) • Replace Pipe from Water Lake to Reservoir (short term)
------------------------	---

6.7.2 Waste Water and Sewage Disposal

Table 25. Waste Water and Sewage Disposal

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Freightliner - FL80 Sewage Truck				
Freightliner - FL80 Sewage Truck				
Ford				
Sewage Lagoon				
Vacutrix Vacuum Tank 2500 Gallon	2008	2015	5	
Sterling Acterra Vacuum Truck	2009	2016	6	
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> • No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. • Hamlet Council identified investment in the sewage lagoon and solid waste sites as priority 4 out of 9 in the 2010 NCIAC biennial planning process. For more details refer to Section 5.24.4 in Volume 2 			

Recommendations	<ul style="list-style-type: none"> Expand or Replace Sewage Lagoon (short term)
------------------------	--

6.7.3 Solid Waste Disposal

Table 26. Solid Waste

Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Issues
Ford - F350 Garbage Truck	1994	2001	(-9)	
Ford F550 Garbage Truck	2006	2013	3	
Solid waste site				<ul style="list-style-type: none"> Currently there is open burning with the leftovers packed down, with no separation of materials- this leads to concerns about toxic fumes coming from the burning. Removing old parts and metal to ship out of the community is desired, the same way batteries and tires were sent out via sea cans. Old vehicles in dump could be sent out for recycling and other metals.
Infrastructure Priorities and Planned Investments	<ul style="list-style-type: none"> No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds. Hamlet Council identified investment in the sewage lagoon and solid waste sites as priority 4 out of 9 in the 2010 NCIAC biennial planning process. For more details refer to Section 5.25.4 in Volume 2 			
Recommendations	<ul style="list-style-type: none"> Expand or Replace Solid Waste Site (short term) 			

7 Appendices

7.1 List of Tables

U	Table 1.	Integrated Community Infrastructure Sustainability Plan	12
	Table 2.	Hamlet Office.....	22
	Table 3.	Municipal Garages and Buildings	23
	Table 4.	Municipal Vehicles.....	24
	Table 5.	Law Enforcement.....	25
	Table 6.	Fire Services	25
	Table 7.	Search and Rescue.....	26
	Table 8.	Energy Infrastructure.....	26
	Table 9.	Traditional Economy.....	28
	Table 10.	Road Maintenance Vehicles and Equipment.....	28
	Table 11.	Airport.....	30
	Table 12.	Marine Transportation.....	31
	Table 13.	Communications	32
	Table 14.	Commercial Facilities	33
	Table 15.	Culture, Heritage, Language and Arts.....	33
	Table 16.	Recreation Facilities	34
	Table 17.	Elders and Youth Facilities	35
	Table 18.	Health and Wellness Facilities	35
	Table 19.	Schools	36
	Table 20.	Day Care	37
	Table 21.	Adult Education.....	38
	Table 22.	Public Housing.....	38
	Table 23.	Staff Housing.....	40
	Table 24.	Water System.....	41
	Table 25.	Waste Water and Sewage Disposal	42
	Table 26.	Solid Waste	43
	Table 27.	Acronyms	45
	Table 28.	Key Definitions and Terms	45

7.2 Acronyms

Table 27. Acronyms

AHI	Affordable Housing Initiative
CEDP	Community Economic Development Plan
CGS	Department of Community and Government Services, GN
GN	Government of Nunavut
GTF	Gas Tax Fund
ICISP	Integrated Community Infrastructure Sustainability Plan
MFU	Multi-family unit
MTO	Municipal Training Organization
NAM	Nunavut Association of Municipalities
NCIAC	Nunavut Community Infrastructure Advisory Committee
NHT	Nunavut Housing Trust
NPC	Nunavut Power Corporation
SAO	Senior Administrative Officer
SFU	Single family unit

7.3 Key Definitions and Terms

Table 28. Key Definitions and Terms

Cultural Sustainability	A community's capacity to develop, retain and protect its culture and identity, and transmit that culture to future generations.
Economic Sustainability	The capacity of a community to maintain a stable and diversified economy that has minimal negative impacts on the environment and uses appropriate technologies and renewable resources where possible.
Environmental Sustainability	The capacity of a natural environment to meet human needs while remaining balanced and healthy, without damage to air, land, water or wildlife.
Social Sustainability	The ability of the community, individuals and families to ensure the basic needs of all residents with respect to food, shelter and safety are met, that there are opportunities for community and personal development, and that there is social equity in the community.
Goal	A broad statement that describes some aspect of the future the community hopes to achieve.

Sustainability goals	Goals that will preserve and enhance the culture, the society, the economy and the environment of a community, at a cost that the community can afford over time.
Infrastructure	The facilities, systems and equipment that provide public services and support private sector economic activity, including network infrastructure (e.g., roads, bridges, water and wastewater systems), buildings, machinery and equipment.
Infrastructure System	A set of linked infrastructure elements that collectively make up a "system". For example, a reservoir, pipes, a water truck, a purification plant, and a pumping station are all parts of a water infrastructure system.
Planning	The process of developing a long-term vision of what a community will be like in the future, and determining what specific steps and resources it will need to achieve that vision.