

Vol. 2 Consultation Report

Infrastructure for a Sustainable Chesterfield Inlet



Prepared for the Government of
Nunavut By Aarluk Consulting Inc.
Approved by the Hamlet Council of
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Table 1. Acronyms

AHI	Affordable Housing Initiative
CEDP	Community Economic Development Plan
CGS	Department of Community and Government Services, GN
CIDC	Chesterfield Inlet Development Corporation
EDT	Department of Economic Development and Transportation, GN
GN	Government of Nunavut
GTF	Gas Tax Fund
HSS	Department of Health and Social Services
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

Table 2. 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.

1 Introduction

1.1 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 Chesterfield Inlet from fall 2009 to spring 2010.

Volume One of the report is set up as follows:

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 Chesterfield Inlet, 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.

1.2 Project Background

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 includes representatives from the

Department of Community and Government Services (CGS); Nunavut Association of Municipalities (NAM); Department of Finance; and other GN departments, when needed.

This Committee was 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.

To achieve this, the Committee began a planning process, working with 24 communities in Nunavut¹ to develop community-specific plans identifying infrastructure investments that would meet the basic, current needs of individuals, families and the community as a whole, without imposing a burden on future generations.

The planning process focused specifically on infrastructure - primarily network infrastructure like roads, bridges, water and wastewater systems), buildings, and equipment. While many infrastructure projects in the past have focused on immediate needs, this planning process encouraged communities to take a longer term view, looking ahead for five or more years into the future.

In the summer of 2009, GN and the NCIAC developed a detailed consultation plan, data collection tools, and research schedule. They also prepared a set of draft sustainability goals to begin discussions at the community level.

Preparation for the Chesterfield Inlet ICISP began in the fall of 2009. Background information was collected, analyzed, and organized into a detailed community profile (see Volume 2, Section 5).

A community consultation meeting was held in Chesterfield Inlet on November 18, 2009. Initial findings from the research were presented to a group of community representatives, who used that background information to help determine what sustainability means to the community, what the sustainability goals of Chesterfield Inlet are, and what infrastructure investments could help achieve those goals in the next five to twenty years. The results of this meeting were then presented at an open community meeting for further input.

Input from the research and community meetings was analyzed into a draft ICISP, which was then submitted to CGS for review.

The draft ICISP was finalized, translated, and provided to the Hamlet Council. The ICISP was then revised to reflect their input, and was submitted to CGS as a final report on this community's planning process.

¹ Iqaluit was not included in this process.

2 Conditions Influencing Sustainable Infrastructure Needs and Priorities

The geography and climate of Nunavut contribute to the high cost of acquiring materials and services, and building and maintaining community infrastructure in Chesterfield Inlet. Buildings, facilities, equipment and vehicles depreciate very quickly as a result of the harsh climate, conditions of use (e.g. local road conditions), poor storage conditions and inferior maintenance (e.g. lack of proper staff training and certification).

Nunavut's population is young and growing. Although there have been some overall declines in Chesterfield Inlet's population, its demographic composition mirrors that of Nunavut in general. In the medium term, growth in the youth population will put pressure on already overburdened infrastructure, including in areas such as housing, water, sewage and solid waste, and infrastructure systems in the public safety, education, health care and recreational sectors.

According to the 2008 Nunavut Economic Outlook, key areas of employment in Nunavut communities such as Chesterfield Inlet are in the public sector, mining, fisheries, oil and gas exploration, transportation and tourism. Sustainable community infrastructure must support existing economic activity and emerging opportunities in these sectors, stimulate economic diversification, and enable greater participation in mainstream and traditional economic activities.

The traditional economy is also an important component of life, well-being and sustainability. It contributes in-kind income, provides country food and traditional medicines, and incorporates commercial activity like soapstone carving, arts and crafts.

Social conditions in Chesterfield Inlet are similar to those in other Nunavut communities. The number and condition of housing units is inadequate, a problem exacerbated by the lack of serviceable lots, the poor condition of heavy equipment in the community, and lack of capacity to build access roads to new lots. Overcrowding and poor housing conditions contribute to higher rates of infant mortality, respiratory illness and violence.

Social conditions and trends suggest both a short-term and ongoing need for investment in community education, housing, health and recreation and related infrastructure systems.

While Inuit culture and language remain strong, these are increasingly under threat from southern cultural influences via modern communications technologies, reduced reliance on traditional foods and economic pursuits, the continued loss of Elders and traditional language speakers, and a growing disconnection between Elders and youth.

The protection and promotion of Inuit culture, language and heritage can be achieved through investment in infrastructure systems that support the traditional economy, recreational infrastructure and facilities that bring community members together to share and transmit culture, language and heritage.

2.1 Existing vision statements and major community goals that relate to the ICISP

Chesterfield Inlet has articulated a community vision and several community goals that have implications for infrastructure development in the community in the short, medium and longer term.

In its Community Economic Development Plan (2008), Chesterfield Inlet has articulated the following elements of a community vision:

Chesterfield Inlet will empower the community to initiate projects in the areas of economic, social, cultural, and political development that will create jobs and allow for growth benefitting present and future generations.

Through its Community Economic Development Plan (2008), Chesterfield Inlet has also articulated community goals and objectives, some of which have implications for or are relevant to infrastructure development². The Plan includes recommendations for infrastructure development in the following sectors:

- Power and Energy
- Transportation
- Traditional Economy
- Commercial Facilities
- Health and Social Services
- Education
- Water and Waste

Specific infrastructure priorities in each of the above sector have been incorporated into this Integrated Community Infrastructure Sustainability Plan.

² These goals are set out in the Hamlet of Chesterfield Inlet *Community Development Plan*, 2008.

3 Community Sustainability Goals and Priorities

As part of the Chesterfield Inlet planning workshop, community participants reviewed eight general sustainability goals developed to help guide the preparation of ICISPs. These propose that sustainable community infrastructure should:

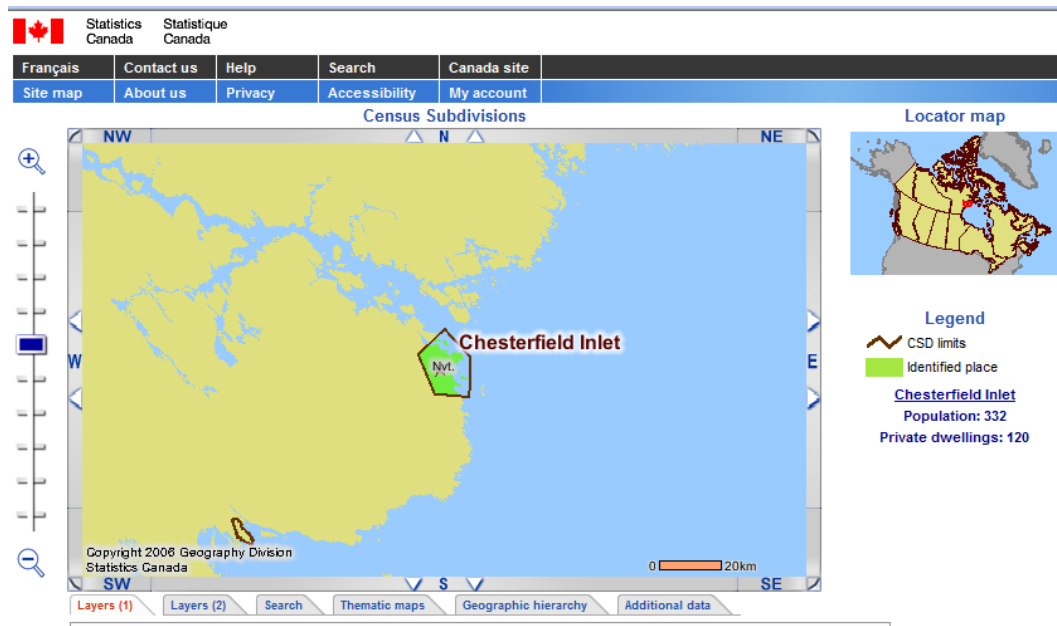
1. Meet basic human needs.
2. Achieve a sustainable economy and self-reliance.
3. Ensure equitable access for all residents and financial sustainability.
4. Promote individual and community health and well-being.
5. Use resources efficiently.
6. Reduce waste and hazardous waste.
7. Protect and promote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

In discussing these goals, Chesterfield Inlet participants noted that sustainability is a highly relevant concept for today and for the future and should be considered in all future community structures, programs and services.

4 Community Profile

4.1 Location and History

Chesterfield Inlet, or *Igluligaarjuk* in Inuktitut (meaning places with a few houses), is a small community located on the west coast of Hudson Bay in Nunavut’s Kivalliq region, approximately 101 km north of Rankin Inlet and 1600 km north of Winnipeg (N63° 19' W90° 14').



Map 1 – Community of Chesterfield Inlet

4.2 Demographics

The 2006 Census reported the total population of Chesterfield Inlet to be 332, of which approximately 50% were female and 50% male.

Chesterfield Inlet’s population grew 2.4% between 1996 and 2001, and dropped 3.8% between 2001 and 2006. This rate of growth was lower than the territorial average of 10.2% in the same time period. The estimated population of Chesterfield Inlet in 2020 is 583.

Table 3. Total Census Population

Year	1996	2001	2006
Total Population	337	345	332
Females	170	165	165
Males	165	180	165

Source: Statistics Canada, 2006 Census, Community Profiles – Chesterfield Inlet

Tables 3 and 4 below provide a picture of the age composition of Chesterfield Inlet’s population, based on Census data. The average age of residents is 24 years, slightly higher 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.

Chesterfield Inlet’s population is relatively young, with nearly 36.4% 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.

Table 4. Age Characteristics

Age Group	Total Population		
	1996	2001	2006
Total	340	345	330
Age 0 – 4 yrs	50	40	40
Age 5 – 14 yrs	90	90	80
Age 15 – 19 yrs	25	35	30
Age 20 – 24 yrs	20	25	30
Age 25 – 54 yrs	120	130	120
Age 55 – 64 yrs	15	15	20
Age 65 – 74 yrs	5	5	5
Age 75 yrs and over	0	0	0
Average age	22.9	21.2	24

Source: Statistics Canada, 2006 Census, Community Profiles – Chesterfield Inlet

Table 5. Total Census Families

	Census	
	2001	2006
Total number of census families	80	85

Source: Statistics Canada, 2006 Census, Community Profiles – Chesterfield Inlet

4.3 Economy

Chesterfield Inlet experiences higher participation rates than for the territory as a whole, and identical unemployment rates. In the 2006 Census it was reported Chesterfield Inlet had a participation rate of 74.4% and an unemployment rate of 15.6%, while the territory had participation rate of 65.3% and an unemployment rate of 15.6%.

Table 6. Participation and Unemployment Rates

	Census		
	1996	2001	2006
Participation rate	60.5	70.7	74.4
Unemployment rate	26.1	17.2	15.6

Source: Statistics Canada, 2006 Census, Community Profiles – Chesterfield Inlet

Table 7 below shows that residents participate in a variety of occupations, but are predominantly employed in sales and service occupations; social science, education, government service and religion occupations; and Trades, transport and equipment operators and related occupations.

Table 7. Experienced Labour Force by Occupation

	Census	
	2001	2006
Total experienced labour force 15 years and over	145	155
Management occupations	10	15
Business, finance and administration occupations	20	20
Natural and applied sciences and related occupations	10	0
Health occupations	15	15

	Census	
	2001	2006
Social science; education; government service and religion	20	30
Art; culture; recreation and sport	0	10
Sales and service occupations	40	45
Trades; transport and equipment operators and related occupations	35	25
Occupations unique to primary industry	0	0
Occupations unique to processing; manufacturing and utilities	0	0

Source: Statistics Canada, 2006 Census, Community Profiles – Chesterfield Inlet

4.4 Education

With respect to educational achievement, the 2006 Census reported that among the population age 15 and over, 59.5% had no certificate, diploma or degree (including high school), while 9.5% reported the highest level of educational achievement to be high school certificate or equivalent.

4.8% 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, 19% of residents reported a non-university diploma or certificate and 4.8% reported a university certificate, diploma or degree.

Table 8. Educational Attainment (Census 2006)

	Total	Male	Female
Total population 15 years and over	210	105	110
No certificate; diploma or degree	125	60	65
High school certificate or equivalent	20	10	10
Apprenticeship or trades certificate or diploma	10	10	0
College; CEGEP or other non-university certificate or diploma	40	15	25
University certificate or diploma below the bachelor level	0	0	0
University certificate; diploma or degree	10	0	10

Source: Statistics Canada, 2006 Census, Community Profiles – Chesterfield Inlet

4.5 Housing

Table 9. Number of Private Dwellings

	Census	
	2001	2006
Total - Number of private occupied dwellings	90	100
Number of owned dwellings	25	20
Number of rented dwellings	65	80

Source: Statistics Canada, 2006 Census, Community Profiles – Chesterfield Inlet

Table 10. Dwellings Requiring Major Repair

	Census	
	1996	2006
Dwellings requiring major repair - as a % of total occupied private dwellings	25=31.25%	45%

Source: Statistics Canada, 2006 Census, Community Profiles – Chesterfield Inlet

Table 11. Dwellings With More Than One Person Per Room

	Census	
	1996	2006
% of occupied dwellings with more than one person per room	31.2	10

Source: Statistics Canada, 2006 Census, Community Profiles – Chesterfield Inlet

4.6 Summary

In view of demographic and socio-economic conditions in Chesterfield Inlet reported above, it can be anticipated that changes in the population including as a consequence of the aging of a large youth cohort, will continue to influence the demand for community infrastructure in key sectors.

In the short and medium term education and recreation infrastructure, and essential infrastructure systems such as housing, water and waste will have increased demands placed upon them. In the medium term the need for robust infrastructure systems that

support the economy and provide opportunities for economic diversification and stability will gain prominence. During the next twenty years other infrastructure systems, including health services and facilities, public safety and security systems, and infrastructure that supports heritage, culture and arts will remain critically important to Chesterfield Inlet as a sustainable community.

5 Infrastructure Worksheets

5.1 Hamlet Office

5.1.1 System ID

Infrastructure Category	Public Services / Community Governance
Infrastructure System	Hamlet Office

5.1.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Community Hall, Office and Gymnasium	1986	2026	16		Hamlet office is located in the community complex, is in fair condition but needs major renovations including to the design/organization of existing office space (not designed for computer use).
St. Theresa Home	1940s			Ste. Theresa Home presently houses 4 offices (used by GN, HTO and the MLA).	Building is structurally sound but there are concerns about health and safety because of the presence of asbestos.

- Hamlet Council Chambers are co-located with the community gym and noise from the gym disrupts meetings in the Chamber.
- Community complex boiler room floor soaked with fuel oil and may have contaminated joist work. Boilers were installed in 1985 and are considered to be very old.
- Fire safety and air ventilation systems are not functional

- Very little storage space in Hamlet office – again, redesign and reconfiguration could potentially address this issue

5.1.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.1.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.

5.1.5 Infrastructure Priorities Identified in Community Consultations

- Renovation of existing hamlet office (and community complex) to use space more efficiently and create larger offices and storage, or new hamlet office including Council Chambers. (medium term)
- Separation of Council Chambers from the gym area. (medium term)

5.2 Municipal Garages

5.2.1 System ID

Infrastructure Category	Public Services / Municipal Services
Infrastructure System	Municipal Parking Garages, Warehouses and Related Buildings

5.2.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
3 Bay Garage	1965	2005	(-5)	Old maintenance garage used now for storage only	
Maintenance Garage	1989	2029	19		In fair to good condition but experiences problems with water runoff in the spring time (i.e. water runs through the building)
Warehouse	1965	2005	(-5)		Warehouse is attached to maintenance garage but has no heating system. Should be rewired with new lighting and a heating system. Potentially could be adapted to other uses
Trades Warehouse (DPW)	1980	2020	10		In good condition but needs minor repairs (garage doors)

- CIDC is planning to construct a 60 x 80 building which may be used for storage of heavy equipment and vehicles and could serve as an alternative to Hamlet garages and storage in the future, if there is consensus that this is an appropriate role for CIDC to

play (i.e. 'private' ownership as an alternate to Hamlet owned infrastructure including garages and actual equipment and vehicles which are then leased to the Hamlet).

5.2.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.
- Potential construction by CIDC of 60X80 foot building to store heavy equipment and vehicles.

5.2.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.

5.2.5 Infrastructure Priorities Identified in Community Consultations

- Demolish 3-bay garage (short term)

5.3 Municipal Vehicles

5.3.1 System ID

Infrastructure Category	Public Services / Municipal Services
Infrastructure System	Municipal Vehicles

5.3.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
2004 Ford F-150 Pick-up	2008	2015	5		
1997 Ford - F150 SC XL	1997	2004	(-6)		
Ford F150 4X4	2001	2008	(-2)		
2004 Ford F-150	2004	2011	1		
2003 Ford F150 Supercab	2004	2011	1		

- Hamlet currently only operates two pickup trucks
- One Ford pickup belongs to CGS/DPW
- Hamlet requires two additional pickup trucks (i.e. one for Hamlet building maintenance and one for recreation).

5.3.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.3.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.

5.3.5 Infrastructure Priorities Identified in Community Consultations

- None identified.

5.4 Law Enforcement/RCMP Infrastructure

5.4.1 System ID

Infrastructure Category	Public Services / Public Safety
Infrastructure System	RCMP

5.4.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
RCMP Detachment					
RCMP Staff Housing (TBD)					

5.4.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.4.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.

5.4.5 Infrastructure Priorities Identified in Community Consultations

- Community needs more by-laws for public safety and security. Concerns about the RCMP and the way they deal with and treat youth.

- Greater Council and community involvement in public safety and security issues

5.5 Fire Services Infrastructure

5.5.1 System ID

Infrastructure Category	Public Services / Fire Services
Infrastructure System	Municipal Vehicles

5.5.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Fire Hall	1993	2033	23		In good condition. Floor has been replaced because formerly used to house sewage truck which caused water damage.
Sterling Acterra Fire Truck	2007	2027	17		Good condition
1984 IHC Fire Truck	1984	2004	(-6)		Decommissioned
4 Bay Garage & Firehall	1987	2027	17	Used for parking vehicles in the winter time.	Very old and had a fire in 1980s, at which time all the wiring was replaced. This building needs major renovation (e.g. heating systems) or replacement.

5.5.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.5.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.

5.5.5 Infrastructure Priorities Identified in Community Consultations

- None identified.

5.6 Search and Rescue Infrastructure

5.6.1 System ID

Infrastructure Category	Public Services / Search and rescue
Infrastructure System	Municipal Vehicles

5.6.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
None identified					

5.6.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.6.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.

5.6.5 Infrastructure Priorities Identified in Community Consultations

- None identified.

5.7 Power / Energy System Infrastructure

5.7.1 System ID

Infrastructure Category	Public Services
Infrastructure System	Power / Energy

5.7.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
QEC Power Plant	1975	2015	5		Poor; small, poorly constructed
300 kW Generator	1993	2011	1	300 kW	
200 kW Generator	2002	2059	49	200 kW	
360 kW Generator	1985	2017	7	360 kW	
Diesel Tanks (5)				1,749,520 L	
Gasoline Tanks (4)				371,051 L	

- By fiscal year 2010 – 2011 the community will not have the capacity to store the amount of diesel fuel required to meet expected needs.
- By fiscal year 2014 – 2015 the community will not have the capacity to store the amount of gasoline required to meet expected needs.

5.7.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.7.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.
- However, CED plan calls for review of options for power generation (i.e. alternatives to reliance on fossil fuels) and to identify benefits and costs of each

5.7.5 Infrastructure Priorities Identified in Community Consultations

- Establish a new power station or move existing power facilities to a new location.
- Move Tank Farm from current location, which is in the vicinity of an area of town that has potential for use in future housing development (i.e. behind the Health Center).
- Power line for transmission from Manitoba.
- There has been little consideration of alternative energy sources. However, it is recognized that tidal energy sources may be a possibility given the tides in the Inlet, and possibly wind power if technologies can be found that are appropriate to and can withstand northern conditions.

5.8 Infrastructure Supporting the Traditional Economy

5.8.1 System ID

Infrastructure Category	Economic Infrastructure
Infrastructure System	Traditional Economy

5.8.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Community Freezer	1980	2020	10		
Community Freezer	2008/09				New
HTO Boat				Has not been operational for many years.	

- During the summer months, arctic char is caught and sold to Iqalukpik, a local fish plant. Fish is processed in Rankin Inlet.
- Many hunters in the community have taken guiding courses and are very capable of providing on the land excursions.
- The Wildlife Officer has a boat but it is in poor condition and not safe. Office is located in a relatively new building but is need of a pickup truck as currently only able to work from an ATV. This is increasingly problematic especially with increased number of bears.

5.8.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.8.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010
- However the CED Plan calls for development of a new federally certified fish plant that can process, package, label, and market fish products using all existing fish quota as well as a caribou meat processing facility (following completion of feasibility studies).

5.8.5 Infrastructure Priorities Identified in Community Consultations

- None identified.

5.9 Transportation System – Road Maintenance Equipment and Vehicles

5.9.1 System ID

Infrastructure Category	Economic Infrastructure / Transportation
Infrastructure System	Transportation System - Equipment and Vehicles

5.9.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Caterpillar Front End Loader 950F	1992	2010	0		Fair- operational
Caterpillar Grader 140G	1994	2012	2	This piece of equipment is not old and is still in use.	Grader may have an engine problem that needs to be resolved.
Caterpillar D6H	1996	2014	4	Caterpillar D6 is used for roads less frequently, and in winter is used to break down snow banks.	
CAT Wheel Loader 950H	2007	2025	15		Good- operational
2003 International - Dump Truck SF625	2003	2010	0		

- Local gravel supply is problematic. Hamlet has a moderate amount of gravel that was crushed last a time crusher was in the community. This is earmarked for roads only. There is a limited supply of gravel available for pads for new housing units.
- A private company provides heavy equipment and services to the Hamlet for a fee.

5.9.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.9.4 Infrastructure Priorities (No Resources Have Been Committed)

NCIAC Priorities	2006 NCIAC	2008 NCIAC	2008 CED Plan
Granular Program	4 out of 10	8 out of 10	
Back Hoe	9 out of 10	7 out of 10	
Loader	7 out of 10		
Rock crusher/screener			2 out of 7
Municipal roads			6 out of 7
Renovate Parking Garage	5 out of 10	6 out of 10	
Road to Josephine Lake			1 out of 7
Snow Fencing	3 out of 10	1 out of 10	3 out of 7

CED Plan identifies the following goals in relation to roads:

- Develop quarry zones and a gravel pit site in order to better maintain and manage municipal boundary roads, airport runway, community dock, housing pads, new building developments, dump site/sewage lagoon, and new potential road routes for expansion etc.
- Purchase a rock crusher.
- Develop a road from Chesterfield Inlet to Rankin Inlet.

- Build road to Josephine Lake to assist in the development of the mine.
- Maintain and enhance snow fence around Chesterfield Inlet.

5.9.5 Infrastructure Priorities Identified in Community Consultations

- Maintain and enhance snow fence around Chesterfield Inlet.

5.10 Transportation System- Airport Infrastructure

5.10.1 System ID

Infrastructure Category	Economic Infrastructure
Infrastructure System	Airport

5.10.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Airport Runway	1991, overlay in 2007	2017	7	Length: 3600; Width: 100	Good
Airport Terminal	1982				Poor- needs replacement
Grader	2009				New and in good condition
Truck - Runway (pickup/other)	2000				Has transmission problems
Snow-blower - Self-Propelled	1991				Old and not running well
Packer - Wobbly Wheel	1980				
Packer - Wobbly Wheel	2001				
Airside Electrical					Poor

- Airport requires a garage to store vehicles. This would in turn take pressure off the hamlet which currently stores airport vehicles (i.e. 2 pickups, snow blower and grader).

5.10.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.10.4 Infrastructure Priorities (No Resources Have Been Committed)

- Priorities identified in the Nunavut Transportation Strategy:
 - Terminal requires replacement / rehabilitation \$1.5 million (short term)
 - Apron requires resurfacing \$1.5 million (short-medium term)
- CED Plan calls for extension of airport runway by 500+ feet so that larger aircraft can land and Chesterfield Inlet can be used as a hub for transportation in the Kivalliq region.
- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010

5.10.5 Infrastructure Priorities Identified in Community Consultations

- None identified.

5.11 Transportation System- Marine Infrastructure

5.11.1 System ID

Infrastructure Category	Economic Infrastructure / Marine
Infrastructure System	Marine Infrastructure Systems

5.11.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Dock (public)	1994-95				
Marine Dock					
Community Crane					

- Marine infrastructure considered inadequate to meet community needs.
- Public dock is difficult to access during low tide.
- Extension to the breakwater, dredging and a series of loading docks are required (proposal was submitted to federal government several years ago) but has not been acted upon

5.11.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.11.4 Infrastructure Priorities (No Resources Have Been Committed)

- Priorities Identified in the Nunavut Transportation Strategy:
 - Timber replacement to the lower tidal section of the dock face
 - Two new shoreline bollards to secure the stern line of the resupply Tanker
 - Dock jib winch
 - Move landing beach 300' west
- CED Plan calls for development of a new harbour and dock to deal with larger boats, ships, barges and existing local fishing boats.

NCIAC Priorities	2006	2008
Small craft harbour	2 out of 10	

5.11.5 Infrastructure Priorities Identified in Community Consultations

- Feasibility and establishment of a deep sea port to make Chesterfield a transportation hub for the region

5.12 Communications

5.12.1 System ID

Infrastructure Category	Economic Infrastructure / Communications
Infrastructure System	Communications

5.12.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Telephone Service					
Radio Station					
Post Office					
Internet - Qiniq					
Satellite Television					

- A post office is located in the Co-op store.
- Telephone service is provided by Northwest Tel.
- The community has a local radio station and cable available through the Co-op store.
- CSP (Community Service Provider) is contracted by SSI Micro systems
- Internet service is provided by Qiniq through a local community service provider, and is reliable.
- There is no CAP site

5.12.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.12.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010

5.12.5 Infrastructure Priorities Identified in Community Consultations

- None identified.

5.13 Commercial Facilities

5.13.1 System ID

Infrastructure Category	Economic Infrastructure / Commercial
Infrastructure System	Commercial Facilities

5.13.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Co-op					
Northern Store					
CIDC Store					
Co-op Hotel					Too small to accommodate the number of visitors to the community

- CIDC owns a small hardware store supplying hardware, fishing gear, paddles, radios, and vehicle rentals.
- CIDC is also involved in housing construction through the NHC.
- Kiguvaq (next generation) acts as Calm Air agent, and provides local freighting and taxi services, and operates a confectionary store.
- This company also leases heavy equipment to the Hamlet for road and other maintenance work.
- The hotel is owned and run by the Co-op. This facility is too small to accommodate the number of visitors to the community. Some consideration is being given to establishing a second hotel through CIDC. A feasibility study is in progress.

- Light banking services are available at both the Northern and Coop stores

5.13.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.13.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.
- However, CED Plan calls for:
 - Extraction and processing of minerals in Chesterfield Inlet.
 - Work with Chesterfield Inlet Development Corporation on concept of manufacturing boats.

5.13.5 Infrastructure Priorities Identified in Community Consultations

- New/expanded hotel facility (short-medium term)
- Fish processing plant (short-medium term)

5.14 Heritage, Language and Arts

5.14.1 System ID

Infrastructure Category	Cultural Infrastructure
Infrastructure System	Heritage, Language and Arts

5.14.2 System Description: Technical

- There are no dedicated heritage, language and arts facilities presently in the community.

5.14.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.14.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.
- However, CED Plan calls for Interpretive Centre, museum and other historic buildings following designation of Chesterfield Inlet as a National Historic Site.

5.14.5 Infrastructure Priorities Identified in Community Consultations

- Potential to reuse old St. Theresa's Hospital building for arts/heritage/cultural centre. This would involve a major renovation (\$3 million). St Theresa's Hospital, built in the 1940s is a three floor facility that is structurally sound, although there are concerns about the presence of asbestos. (medium term)

5.15 Recreation Facilities

5.15.1 System ID

Infrastructure Category	Cultural Infrastructure
Infrastructure System	Recreation Infrastructure

5.15.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Arena, (Noah Novak)	1992	2032	22	The arena is used extensively during winter months. Like the gym, the ice surface is 2/3 regulation size.	Condition of the arena is fair. The ice sheet is natural and is ready for use when the temperature outside remains cold enough for freezing.
Community Hall, Office and Gymnasium	1986	2026	16	At the present time capacity is not reported to be an issue, but within 10 years the community will not be able to gather in this location. The gym at the school was an addition made by the Hamlet, but is not regulation size (about 2/3 the size of a normal gym).	
Olympia ST-75 Ice Resurfacer	1987	2005	(-5)		
Sports Field	1999	2009	(-1)		
Playground	1996	2006	(-4)		

- The community hall is located in the hamlet building and is used by youth as a gym and for community gatherings.
- Upgrades to community complex would involve upgrades to community hall, gym and office. This building has the same problems as reported for the Hamlet Office.
- The community gathers to play games, enjoy square dances and feasts, which are organized by the recreation committee and to celebrate traditional Inuit culture. During the year events such as drag races on the sea ice, fishing derbies, and holiday games are held.
- Boating during the summer months is very popular and trips up the inlet happen daily.
- During the winter when the bay and inlet freeze, many people travel by snowmobile across the inlet for one day or more to hunt caribou.

5.15.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.15.4 Infrastructure Priorities (No Resources Have Been Committed)

NCIAC Priorities	2006	2008
Complex/Community Hall Renovation Upgrade	6 out of 10	4 out of 10
Noah Novak arena		5 out of 10

CED Plan calls for:

- Development of recreational facilities that meet the needs of the community.
- Youth Drop in Centre (with a coordinator and structured programming).
- Baseball diamonds, soccer pitch, snowmobile race course, curling rink and if viable and indoor swimming pool.

- Community centre where all community activities can be held and encompassing a daycare, playground, gymnasium, recreation office, drop-in centre, workout facility, etc.
- Repair of existing recreation facilities including baseball diamonds, and create new facilities like a field that could be used by the community for different sporting activities

5.15.5 Infrastructure Priorities Identified in Community Consultations

- Development of larger core recreation facilities, particularly the arena and gym(s), both of which are not regulation size.

5.16 Elders and Youth Facilities

5.16.1 System ID

Infrastructure Category	Cultural Infrastructure
Infrastructure System	Elders and Youth Infrastructure

5.16.2 System Description: Technical

- There are at present no dedicated facilities for Elders and youth.

5.16.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.16.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.

5.16.5 Infrastructure Priorities Identified in Community Consultations

- None identified.

5.17 Health and Wellness Infrastructure

5.17.1 System ID

Infrastructure Category	Health and Wellness Infrastructure
Infrastructure System	Health Infrastructure

5.17.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Kajuqjuk Health Centre	1991			Modern facility staffed by two nurses as well as community health workers. Doctors make visits on a regular basis, as do dentists and optometrists.	Good
Naja Isabelle Home	2004				

- Patients are flown to Churchill or Winnipeg for major medical emergencies or procedures.
- Naja Isabelle Home was completed by the Government of Nunavut in 2004 to replace the Ste. Theresa Home in Chesterfield which had operated since the 1940s. The facility was officially opened in June 2005. This care facility is home to persons under the age of 40 with disabilities and requiring medical intervention and care that their own families may be unable to provide. Residents come from all over Nunavut, and many are children. The facility is operated by the Pimaksirvik Corporation under contract with the Department of Health and Social Services. Pimaksirvik is 90% owned and operated by the Chesterfield Inlet Development Corporation. Naja Isabelle Home employs approximately 35 full time and part time workers, mostly Inuit support workers, cleaners and cooks, making this facility the largest employer in Chesterfield Inlet.

5.17.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.17.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.
- However, CED Plan calls for:
 - Dental facility to service the community and the region
 - Centre for doctors, specialists, and minor surgeries
 - Maintenance and enhancement of the Naja Isabelle home for the handicapped
 - Assisted living centre (4 – 6 bedrooms)

5.17.5 Infrastructure Priorities Identified in Community Consultations

- None identified.

5.18 Elementary and High School Infrastructure

5.18.1 System ID

Infrastructure Category	Education Infrastructure
Infrastructure System	Elementary/High School Infrastructure

5.18.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Vic Sammurtok School	1988			120 students K-12, approx. 16 staff	Poor- problems in the water system and bathroom facilities, sprinkler, and possibly the presence of mould and asbestos.

- Special needs instructors are required in the school as residents of the Naja Isabelle Home, which provides institutional care for up to handicapped individuals, also attend the school (6 in 2009).
- The school is not over capacity at the present time but will need to be expanded to accommodate anticipated growth in the population.
- A school gym was added in the early 1990s by the Hamlet and is used both by the school and in the evenings for youth activities and sports.
- The school includes a home economics and a shop room which are used for cultural lessons.
- There is inadequate space in which to store school records.
- Vandalism is a problem at the school. Incidents of vandalism are not often addressed with timely repair and maintenance, encouraging a cycle of further vandalism and ongoing damage to school property.

5.18.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.18.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.

5.18.5 Infrastructure Priorities Identified in Community Consultations

- None identified.

5.19 Daycare Infrastructure

5.19.1 System ID

Infrastructure Category	Education Infrastructure
Infrastructure System	Daycares

5.19.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Day Care Centre	Not known				

5.19.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.19.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.
- However, CED Plan calls for:
 - Enhanced daycare facility with a pre-school program and playground.

5.19.5 Infrastructure Priorities Identified in Community Consultations

- None identified.

5.20 Adult Education Infrastructure

5.20.1 System ID

Infrastructure Category	Education Infrastructure
Infrastructure System	Adult Education

5.20.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Adult Education Centre	1990s			Two classrooms, washrooms, storeroom and small office space.	Good

- The Nunavut Arctic College campus offers upgrading courses, new courses, as well as certificate programs.

5.20.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.20.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.
- However, CED Plan calls for:

- Skills training centre that can offer training in areas such as health care aide, handicap and disability worker training and certification, carpentry, welding, plumbing and heating, cook training, mining jobs, early childhood training, CPR and other skills training.
- Enhanced Nunavut Arctic College infrastructure and programming (need more than just seminars or courses on upgrading of skills).

5.20.5 Infrastructure Priorities Identified in Community Consultations

- None identified.

5.21 Public Housing

5.21.1 System ID

Infrastructure Category	Housing Infrastructure
Infrastructure System	Public Housing

5.21.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
48 Single Family Units					83-86
16 Duplex Units					82-86
11 Multi Family units					79
2 Leased Units					
Warehouse / Office	1986				

- NHC data reports total of 75 NHC owned units of which 52 (69%) were constructed pre-1990.
- Data collected from the Housing Association suggests the total number of units is 85, with most built in the 1950s and 1960s.
- Much of the older housing is considered to be inadequate, with very small bedrooms and living space.
- Housing is considered to be in short supply and demand exceeds available supply.
- Presently there are 13 families on the waiting list. Most request either one or two bedroom units.
- All the units are in need of repair

- 2010 – 2011 planned construction under AHI includes 4 new single family dwelling units (3-4 bedroom units). 2009/10 commitment from NHC not obtained from community.
- All houses are serviced by individual water and sewage tanks. There are concerns about the condition of some water tanks that are cast iron as they leach rust and metals into drinking water, causing discoloration.
- A new 4-plex Elders housing facility is currently being constructed. These units will be available to Elders only

5.21.3 Infrastructure Planned Investment (Resources Have Been Committed)

- Planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds:

GN Capital Estimates 2009-10	Dept.	Budget	Cap. Fund.	Years
Housing – M&I Retrofit – GN Portion	NHC	1,205K	GN Main 706K CMHC 499 K	2009-14
NHC Capital Projection (AHI)	SFD	Duplex	Multi-plex (5)	Years
4 units	4			2010-11

- NHC Housing Construction 2008-09 (NHT): 1 duplex.

5.21.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2010/ 2008/2006.
- However, CED Plan calls for:

- Completion of a housing needs assessment
- Development of a three-plex in partnership with Chesterfield Inlet Development Corp.
- Maintenance of existing public and private housing units, including government units (staff housing) through local contractors
- New housing
- Upgrades to existing housing units

5.21.5 Infrastructure Priorities Identified in Community Consultations

- Renovation of existing public housing stock (short-long term).
- Additional housing (multi-family and single family dwellings) (short term)

5.22 Staff Housing

5.22.1 System ID

Infrastructure Category	Housing Infrastructure
Infrastructure System	Staff Housing

5.22.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Staff Residence - Blue	1980	2020	10		
5 GN staff housing units				Used primarily by teachers	

- There is only 1 Hamlet staff unit for the SAO.
- Hamlet needs to increase and improve staff housing in order to be able to attract quality employees (e.g. need to hire a mechanic from outside)

5.22.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.22.4 Infrastructure Priorities (No Resources Have Been Committed)

- No priorities were identified by Council for NCIAC in 2006, 2008 or 2010.

5.22.5 Infrastructure Priorities Identified in Community Consultations

- None identified

5.23 Water

5.23.1 System ID

Infrastructure Category	Environmental Infrastructure
Infrastructure System	Water

5.23.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Pump-house - Fill Station	1989	2019	9		Needs to be replaced because of major electrical problems
Mobile Pump at First Lake	2006	2021	11		Good-new
Pump-house Generator Room					
Reservoir					
2001 Sterling Water Truck	2002	2009	(-1)		Good
2006 Freightliner - MM1060645 Tremcor Tanks	2006	2013	3		Good
1988 Ford Water Truck	1988	1995	(-15)	Not used for distribution but for parts	
1995 Ford F800 Water Truck	1996	2003	(-7)	Not used for distribution but for parts	

- There are some concerns within the community about the quality of water at the source lake and in the reservoir.

- Chlorination system is old and inadequate and is co-located with electrical systems.
- Individual homes that still have cast iron rather than stainless steel water tanks produce water that is discolored.

5.23.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.23.4 Infrastructure Priorities (No Resources Have Been Committed)

Priorities	2006 NCIAC	2008 NCIAC	2008 CED Plan
Water/Sewer Utilidor	10 out of 10	9 out of 10	
Secondary road to reservoir		3 out of 10	
Reservoir Pump House	1 out of 10		4 out of 7

- CED Plan identifies a water treatment plant needs assessment.

5.23.5 Infrastructure Priorities Identified in Community Consultations

- Overall, there is need to develop a comprehensive strategy/solution to water supply and distribution in the community. While many water system issues are interrelated, community representatives have identified isolated solutions rather than an integrated solution.
- Through consultations community representatives identified the need to:
 - Relocate the reservoir, which is considered to be too close to the airport, potential new housing development, dusty roads, and pollution when prevailing northern winds are blowing. (medium term)

- Treat water at the lake site rather than at the reservoir (long term) as an alternative to moving the water storage location
- Establish a utilidor system for the community (long term)
- Shorter term needs and priorities included the following:
 - Replace existing water pump house at reservoir (short term)
 - Replace cast iron pumps that remain in individual housing units. (short term)
- Consultations also identified the need to establish a program/service to provide Elders with fresh water. However, the hamlet cannot provide untreated water to residents (e.g. establish an ice-house (winter) or water-house (summer) providing untreated drinking water supply especially to Elders).

5.24 Wastewater and Sewage Disposal

5.24.1 System ID

Infrastructure Category	Environmental Infrastructure
Infrastructure System	Wastewater and Sewage Disposal

5.24.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
2002 Sterling 8500 - Sewage Truck	2003	2010	0		Good
2007 Sterling Acterra Sewage Truck	2007	2014	4		Good
1995 Ford F800 Sewage Truck	1996	2003	(-7)	Not in use	
Snow Fence	2001	2021	11		
Sewage lagoon				The sewage lagoon is a natural wetlands with drainage into the sea running out of the inlet. It is adjacent to the land fill site and often run off from the dump, particularly the area where old metals are located flows directly into the wetlands	

- New water truck (2007) has had some problems with the tank and wiring.
- Water sampling by INAC is done within the wetlands rather than at the discharge/outflow point. As a result the Hamlet may not be in compliance with its NWB license.

- A tender has been issued for a new sewage lagoon. This calls for a certain type and size of gravel that is not available in the community.

5.24.3 Infrastructure Planned Investment (Resources Have Been Committed)

- Planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds:

GN Capital Estimates 2009-10	Dept.	Budget	Cap. Fund.	Years
Sewage Lagoon	CGS	850K	GTF	2009-10

5.24.4 Infrastructure Priorities (No Resources Have Been Committed)

Priorities	2006 NCIAC	2008 NCIAC	2008 CED Plan
Improve drainage around new sub division			7 out of 7
Sewage Lagoon	2 out of 10	10 out of 10	5 out of 7

- CED Plan identifies the need to maintain and expand sewage lagoon when and where required.

5.24.5 Infrastructure Priorities Identified in Community Consultations

- Work with INAC to ensure sampling of water quality at sewage lagoon at the discharge/outflow point to increase possibility of compliance with NWB license (short term).
- Sewage treatment plant / facility (engineered) should be established (medium to long term).
- Establish a utilidor system (long term).

5.25 Solid Waste

5.25.1 System ID

Infrastructure Category	Environmental Infrastructure
Infrastructure System	Solid Waste

5.25.2 System Description: Technical

Component Asset	Acquired (Year)	Projected Useful Life (Year)	Years of Remaining Life	Capacity / Utilization	Condition Rating
Landfill Site				No segregation of garbage at the land fill site, with the exception of old vehicles and heavy equipment, which are disposed of in a separate but adjacent area.	Fencing around dump site is inadequate
2002 Chevrolet - Garbage Truck	2002				
1995 Ford F350 - Garbage Truck	1995				

- There is significant burning of garbage at the land fill, which brings debris into the community when it is a wind (as there often is).

5.25.3 Infrastructure Planned Investment (Resources Have Been Committed)

- No planned investments identified in GN Capital Plan Estimates, Gas Tax Fund, Municipal Rural Infrastructure Fund, Building Canada Fund, or other funds.

5.25.4 Infrastructure Priorities (No Resources Have Been Committed)

NCIAC Priorities	2006	2008
Garbage Truck	8 out of 10	

- CED Plan identifies the need to:
 - Maintain and expand dump when and where required.

5.25.5 Infrastructure Priorities Identified in Community Consultations

- Improve segregation of garbage at land fill site (e.g. metals, hazardous waste, wood) (short-medium term)
- Introduce a system to better deal with garbage e.g. through compression or other means (short-medium term)
- Introduce recycling programs and waste management including for waste oil, metals, vehicles, hazardous waste etc. (medium term)

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7 Interviewees, consultation calendar, and list of local meeting participants

Consultations on the development of this Integrated Community Infrastructure Sustainability Plan included interviews with key officials responsible for or knowledgeable about existing infrastructure and infrastructure needs in Chesterfield Inlet. This included interviews or informal meetings with the following individuals either prior to, during or following community based consultation activities:

- Harry Tootoo, Mayor
- Roy Mullins, Hamlet Councillor
- David Kattegatsiak, Economic Development Officer
- Lillian Simik, Acting SAO

Consultations on the Integrated Community Infrastructure Sustainability Plan were held in Chesterfield Inlet November 19-20th, 2009. An initial planning workshop was held with representatives of governments and organizations in Chesterfield Inlet, and a community Open House was held on the evening of November 18th at which input to the infrastructure plan was provided by community members. Participants at these sessions are listed below.

Workshop – Stakeholders

- Harry Tootoo, Mayor
- Roy Mullins, Councillor and CIDC
- Louis Autut, Councillor
- Leonard Putulik, Councillor
- Leo Mimialik, Chair HTO
- David Kattegatsiak, Economic Development Officer
- Kevin Issaluk, Recreation Coordinator
- Greg Tanuyak, Hamlet Foreman
- Jayco Kimmaliardjuk, Fire Chief/By Law Officer
- Chris Cowz, Consultant to CIDC

Open House Participants

- Jeela Aqatsiaq
- Lui Autut
- Gary Ippiak
- Leonie Putulik
- Leonie Mimialik
- Leo Mimialik
- Jennifer Sammurtok (interpreter)