



Building for Prosperity:

Public Infrastructure in Nunavut

May 2012



Minister's Message

Safe, modern and efficient public infrastructure is key to Canada's economic growth and long-term prosperity. Knowing how important infrastructure is to our country as a whole, and to the quality of life of every Canadian, I am proud to be leading the development of a long-term plan for public infrastructure that extends beyond the expiry of the Building Canada Plan. A new long-term infrastructure plan will position our nation to meet the challenges and opportunities of the coming decades.

Through Canada's Economic Action Plan and our infrastructure programs, our government has maintained an open dialogue with partners and stakeholders about the best way to support national and local priorities through infrastructure investments. Moving forward we will continue to work closely on infrastructure projects that make a difference for communities large and small. From a cultural centre in Clyde River to a water treatment facility in Taloyoak, by working together, we have made important contributions to communities across the territory.

As the Minister of Transport, Infrastructure and Communities, I am very proud of the achievements that have been made possible through partnerships with Nunavut and its communities. Looking ahead, these strong ties will form the foundation of our next long-term infrastructure plan and ensure Canadian communities continue to grow and prosper.

Working together, we will accomplish more and ensure Canada remains well-positioned for the future.



The Honourable Denis Lebel, P.C., M.P.
Minister of Transport, Infrastructure and Communities and
Minister of the Economic
Development Agency of Canada for the Regions of Quebec



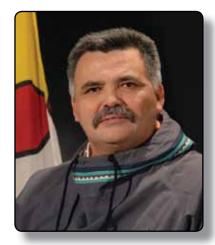
Minister's Message

Public infrastructure provides the essential building blocks of every community, and includes amenities that improve the quality of life for all members of society. As the Minister of Community and Government Services, I understand that a collaborative approach between all three levels of government – municipal, territorial, and federal, is essential to produce strong and sustainable communities.

Every community has a unique vision of how to grow and prosper. Through strong partnerships between the Government of Canada and the Government of Nunavut, we can enable community infrastructure development to flourish in Nunavut – helping make community visions a reality.

Together, we have already established a track record of success for delivering essential infrastructure which meets the core needs of all Nunavummiut. We look forward to continuing this success through the delivery of future federal infrastructure programs. Planning is an instrumental component to building strong and healthy communities.

By planning in the present to build for the future, our achievements will guide our path as we strive to meet the evolving goals of our communities.



The Honourable Lorne Kusugak Government House Leader Minister of Community and Government Services Minister responsible for Qulliq Energy Corporation



Success Through Partnership: Working Together to Accomplish More

Building Canada Infrastructure Investments in Nunavut

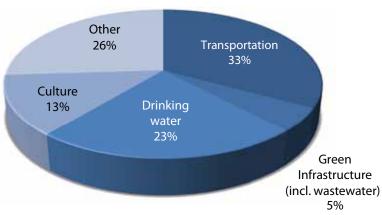
Since 2007, federal, territorial and municipal governments have made significant investments in public infrastructure in Nunavut. Most recently, Canada's Economic Action Plan accelerated existing programs and delivered new funding to create jobs and support economic growth. These investments have resulted in over \$242 million* and more than 35 initiatives across the territory, helping create the right conditions for economic growth and long-term prosperity.

With a focus on Nunavut's priorities, funding has included transportation infrastructure such as improved local and regional airports, upgraded roads in Iqaluit, and water and wastewater infrastructure in numerous communities. Projects included:

transportation: 14 initiatives worth over \$80 million

- green infrastructure:
 2 initiatives worth over \$12 million
- sports and recreation:
 3 initiatives worth over \$10 million
- drinking water:
 6 initiatives worth over \$54 million
- culture:
 1 initiative worth over \$32 million

Infrastructure Funding by Category



^{*} based on total eligible costs

Partnership in Action

Working together to build infrastructure achieves local and regional priorities while supporting national objectives. The Infrastructure Stimulus Fund, the cornerstone of Canada's Economic Action Plan, has demonstrated what strong partnerships can accomplish. During the global economic downturn, all orders of government responded quickly and effectively to identify shovel-ready projects, drive employment and boost the economy, through infrastructure projects in Nunavut worth more than \$7 million. These projects provided lasting benefits to communities across Nunavut.

For example, in recognition of the Territory's unique infrastructure needs, this funding supported repairs to the Arctic Winter Games Arena in Iqaluit which can now accommodate multiple uses including a gathering place for large cultural events. Another example is the new hamlet office in Taloyoak. The new facility helped the local government become more self-sufficient and offer better services to residents.

Canada's Gas Tax Fund at Work in Nunavut: Local Projects, Long-term Results

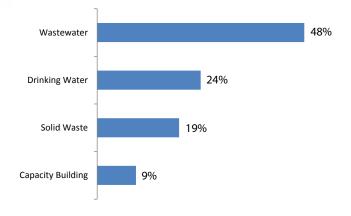
Inuit society places great significance on protecting the environment.

Therefore, infrastructure investments must not only meet the local needs of the community, but also preserve the environment for future generations.

By targeting water, wastewater and solid waste infrastructure projects, the Gas Tax Fund has helped Nunavut achieve positive environmental results, including cleaner water, cleaner air, and reduced greenhouse gas emissions.

Between 2005 and 2014, Nunavut will receive a total of \$97.5 million from the Gas Tax Fund. This funding directly supports local communities – helping to build and revitalize core infrastructure and create jobs in Nunavut. Improvements and upgrades to pump houses, truck fill stations and water reservoirs have ensured that communities have access to safe drinking water, while improvements to wastewater infrastructure minimize impacts on the environment.

Gas Tax Fund Expenditures by Category 2005-06 to 2010-11



Each year, the Government of Canada delivers the Gas Tax Fund to municipalities across the country to provide greater certainty and support for long-term economic growth. The Gas Tax Fund was increased to \$2 billion per year nationally in 2009 and made permanent in 2011.



Taloyoak Water Treatment

Delivering safe, clean drinking water to remote communities in Nunavut is a challenging task. In Taloyoak, this challenge was met with creativity and innovation when a modern, efficient, pre-packaged wastewater treatment system was shipped to the community. In addition to grid power, the treatment plant uses sun-tracking solar panels and a wind turbine to power its operation. On an ideal day, alternative energy can supply the system with more than two-thirds of its energy requirements removing the equivalent of more than 130 tonnes of CO₃ each year.

The Gas Tax Fund is helping bridge infrastructure gaps by providing all Nunavummiut with access to essential services while minimizing impacts on the environment.

Building Communities in Nunavut

Since the creation of the Territory of Nunavut more than a decade ago, communities have grown at a remarkable rate. Ensuring that infrastructure is in place to meet the growing needs of the current population and those of future generations is essential to building strong, healthy and sustainable communities.

Investments made under the Building Canada Fund have built important infrastructure that is supporting the cultural life of the territory. Investments in community halls and cultural facilities help maintain strong family and community ties, and allow for interactions and learning opportunities that are helping to preserve traditional ways of life. In addition, investments in hamlet offices, civic garages, roads, airports, and water and sewage infrastructure have maintained reliable municipal services, ensuring that necessities are in place to support economic growth and long-term prosperity.

Arctic Bay Community Hall

The Akinnaq Pignnuarvik (translation: West Side) Community Hall in Arctic Bay provides an important gathering place for residents to host events such as community feasts, square dances, sporting events and concerts. The facility is a focal point of the community, and instrumental in the development of strong societal values that reflect the rich culture of Arctic Bay.



Sanikiluag Municipal Garage

Mobile equipment is a fundamental component of every Northern community. They provide essential municipal services such as snow-clearing, water delivery and sewage pick-up. Protection of these assets is crucial to ensuring the reliability of municipal services. Garages such as the one in Sanikiluaq are important components of municipal infrastructure, providing shelter and a facility to maintain and repair vehicles.

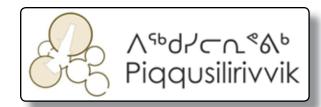


Pond Inlet Arena

The Pond Inlet Arena is a multi-purpose facility used to host major community events and promote physical activity. The arena incorporates a cement pad and state-of-the-art thermosyphon technology, permitting year-round use. The arena is used for youth and adult hockey as well as public skating in the winter, and can host activities such as indoor soccer and ball hockey in the summer.



Bringing Inuit Heritage to Future Generations



A society's cultural characteristics uniquely define it as a people. As such, the promotion and preservation of a culture ensures a people's longevity and the continuation of its history. Partnership between the governments of Canada and Nunavut, and infrastructure funding through the Provincial-Territorial Base Fund, has helped preserve Inuit heritage for future generations.



Piqqusilirivvik is Nunavut's new Inuit Cultural Learning Facility, which was established in Clyde River with satellite programming in Baker Lake and Igloolik. It is dedicated to preserving and teaching traditional Inuit culture, knowledge, lifestyle, skills and values in the Inuit language, and based on Inuit Qaujimajatuqangit guiding principles.

Inuit have always wanted their children to learn about their culture the way their Elders learned – through the acquisition and transfer of traditional skills, experience, language and values from generation to generation. Piggusilirivvik achieves these goals.

Students who complete the Piqqusilirivvik program will have acquired skills in creating traditional clothing, building shelters, preserving meat, hunting techniques and recognizing animal behaviour. They will also improve their language skills, practice way-finding and learn to respect the land and the animals that live there.

Students will also research traditional leadership styles, practice healthy community living and conflict resolution. Acquiring these traditional skills will empower individuals to be knowledge-carriers for future generations.









Nunavut: Planning in the Present to Build for the Future

Striking a balance between funding core services such as water and waste, with other important public-use infrastructure such as recreation facilities and community halls, is a delicate task.

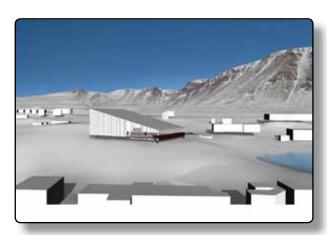
Over the last several years, funding partnerships between Nunavut and the Government of Canada have supplied the critical funding necessary to provide essential infrastructure for communities. Without investments from various federal programs, the construction of arenas, community halls and gymnasiums in many communities would not have been possible. The recent addition of these recreational facilities has been warmly welcomed by communities and has benefitted the health and well-being of many Nunavummiut.

There has been an increased focus on recreational and public-use facilities in recent years. However, the Government of Nunavut has continued to focus heavily on infrastructure that delivers basic municipal services. Many of the water and waste systems in Nunavut are aging, have exceeded their design life, or have experienced capacity issues due to the rapid growth in the communities. These core services have been the principal focus of the Government of Nunavut for the better part of a decade and will continue to be a central priority moving forward.

Nunavut's Most Northern Community

Unattached by road or rail, communities in Nunavut are isolated, making the sharing of services and infrastructure between small communities impossible. With a population of about 130, and at 75°25′N, Grise Fiord is Nunavut's smallest and most northerly community. While planning for the installation of a new Hamlet Office in Grise Fiord, it became clear that installing a multi-purpose facility would address multiple program and service needs within the community.

Multipurpose facilities offer significant advantages for very small communities; and, as a result of this project, the Nunavut Department of Community and Government Services made necessary adjustments to their capital standards and criteria so other communities can also benefit from similar projects.



Artist's rendering of Grise Fiord multi-purpose facility

Looking Ahead: Priorities in Nunavut

Every category of infrastructure in Nunavut requires significant investment, including municipal services, transportation, education, health services, culture and recreation. Despite the vast list of priorities, Nunavut's major investment challenge in the short-to-medium term will be solid waste, water and sewage infrastructure. These core services are essential to the health of each community and many are either at capacity or have exceeded their design life.



Safe drinking water, effective wastewater infrastructure and improved solid waste management have been identified as priorities in a number of Nunavut communities. Although Nunavut has allocated significant funds to these priorities through the Provincial-Territorial Base Fund and Gas Tax Fund, a considerable deficit in these services still remains.

Recognizing the unique challenges for the operation and maintenance of solid waste and wastewater systems in Nunavut communities, studies have been undertaken to develop systems that can be appropriately designed and managed for the North. Appropriate facilities will not only meet the immediate needs of the community but will ensure continued sustainability of the infrastructure well into the future.

While infrastructure priorities in Nunavut encompass a number of different categories, the Government of Nunavut and its constituent communities recognize that solid waste and wastewater are of principal concern, and significant investment in these areas will be the main focus moving forward.





JOBS · GROWTH · PROSPERITY

Moving Forward Together

Continuing Partnerships

Achieving our goals as a nation means that all orders of government and other partners must work together. We all know that public infrastructure plays a key role in our lives and in our economic well-being. Canada's long-term prosperity relies on the strength of our communities and the basic services that support them.

Through Canada's Economic Action Plan, and infrastructure initiatives such as the Building Canada Fund, the Gas Tax Fund, and the Infrastructure Stimulus Fund, great things have been built in Nunavut. People across the territory are benefiting from cleaner water, improved recreational and cultural facilities, and improved transportation infrastructure. The tangible benefits of our infrastructure investments increase every day as more and more projects are completed.

The Government of Canada is committed to continuing a partnership approach to national, regional and local infrastructure priorities. Strong partnerships mean that every dollar invested in public infrastructure will meet today's needs and sustain future economic growth and development.

A New Long-Term Plan

On November 30, 2011 the Government of Canada launched a process to engage partners from across the country on the development of a new long-term public infrastructure plan. This means working with provinces, territories, municipalities, key stakeholders, as well as with technical experts, to build knowledge around five broad themes:

- infrastructure and the economy;
- · infrastructure and the environment;
- infrastructure and stronger communities;
- · financing infrastructure; and
- asset planning and sustainability.

In the lead-up to our next infrastructure plan we will undertake a constructive dialogue that focuses on the broad principles, priorities and future directions for public infrastructure in Canada. Working together will ensure that Canada has a strong public infrastructure foundation for sustained growth and economic prosperity – now and for years to come.

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