When Prime Minister Stephen Harper visits Pangnirtung, Nunavut, later this week, he's sure to get a warm greeting. After all, his government is contributing $25-million to the 1,300-person community to build a new small-craft harbour aimed at bolstering the local fishing industry.

The harbour, whose designation as a “priority project” in the federal budget in January came as a welcome surprise for Pangnirtung, is an important plank in the Harper government’s commitment to building much-needed infrastructure in Nunavut.

But Monday, the Prime Minister arrives in Iqaluit, where the welcome may be a little cooler. There has so far been no infrastructure money to replace a gravel wharf in the 7,000-person territorial capital, where it takes up to a week for the most basic goods to be offloaded from boats bringing them in – “stone-age” infrastructure, as the territory’s transportation planning director calls it.

Iqaluit has spent the past decade campaigning for a deep-sea port. Mr. Harper’s Conservatives promised a big marine project in the North as part of the 2006 election campaign, but ended up choosing to refurbish a port near an abandoned mine in uninhabited Nanisivik.

Since coming to power in 2006, Mr. Harper’s government has pledged billions of dollars for Arctic development – money that has gone toward everything from military bases to houses to seabed mapping. But many of the territory's most basic infrastructural needs remain unaddressed.

Attempting to categorize and prioritize the North’s infrastructure needs can be overwhelming, says Rob Huebert, associate director for the Centre for Military and Strategic Studies at the University of Calgary.

“What infrastructure do they need? Everything. We talk about the Canadian dream, we talk about the manner in which Canada was supposed to be joined by infrastructure. Well, it just doesn’t exist.”

The following are four projects that come up most often in conversations with Northern residents, politicians, advocates and academics when discussing what infrastructure is needed most urgently.
Iqaluit deep-sea port

Iqaluit's bay has one of the most dramatic tides in the world: The ebb and flow spans eight metres over kilometre-long tidal flats.

They're impressive, but they can also be a headache when it comes to offloading cargo brought in by boat, or to travelling by sea to and from the territorial capital. It can take days to do jobs that would otherwise be finished in a matter of hours as boats wait for high tide.

A proper port would lower the cost of living, boost the fishing industry and make it far easier to do business in the capital city, says Iqaluit community economic development officer Erin Gordey.

Over the past 10 years, Ms. Gordey says, multiple feasibility studies have shown the need for a port, which wouldn't come cheaply – $50-million would be “a start.”

John Hawkins, Nunavut's director of transportation policy and planning, says even the basic costs of a port would be double the department's annual budget.

Nunavut is embarking on another ambitious design and feasibility study, but it likely won't be finished for another 18 months – too late to profit from the federal government's stimulus funds for “shovel-ready” projects.

“We would be able to ease the congestion, to ease the cost of doing business here,” Mr. Hawkins says. “We are a coastal community, the capital of a territory, and it just doesn’t seem right to be back in the stone age as far as moving cargo goes.”

Housing

When the Nunavut government put together a 10-year housing plan in 2004, half of the territory's Inuit lived in overcrowded conditions – almost 40 per cent of them classified as “core need,” meaning they're simply not able to access acceptable housing. At the time, the Nunavut Housing
Corporation estimated it would need twice its annual budget to build the 3,000 affordable-housing units required to bring overcrowding to a level on par with the rest of Canada.

“The Inuit of Nunavut are locked in a housing crisis that is worsening daily as the population booms and existing housing stock ages,” the report stated, estimating that the territory would need $1.9-billion to make up the shortfall between 2006 and 2016, by which time seven in 10 Inuit in Nunavut are projected to be living in overcrowded conditions.

In the five years since the report’s publication, the affordable-housing deficit has grown at an estimated 250 to 300 units a year. The federal government has contributed $300-million over the past several years, enabling the territory to build about 1,000 units.

“It still doesn’t give us enough houses,” says Nunavut MLA Ron Elliott. He says overcrowding – exacerbated by a harsh climate, remote geography, a small population base and the high costs of labour and materials – also makes it more difficult for Nunavut residents to claw their way out of poverty.

As flu season begins, he adds, many fear severe overcrowding will speed the spread of the H1N1 virus that has already infected close to 500 people in the territory.

“You have houses that are overcrowded, one person gets sick, how do you isolate that person?”

Broadband wireless

In a territory of almost 32,000 people – most under 25 – scattered across 1.9 million square kilometres with little in the way of transportation infrastructure, Internet access is an issue.

Web connectivity is in huge demand in Nunavut – for educational purposes, to aid industry and to keep people connected in an area defined by isolation, says Lorraine Thomas, the interim executive director of the Nunavut Broadband Development Corporation. Founded in 2003, the group set up its network, called Qiniq, with the help of a grant from the federal government to subsidize half the cost of the first 2,000 users. There are now 5,000 Qiniq subscribers and thousands more users in the territory’s 25 communities.

Ms. Thomas says the necessary satellite broadband is expensive, and Nunavut is the only jurisdiction in Canada to rely solely on satellite for its Internet usage.

Qiniq is billed as high-speed broadband, but that’s a bit of a misnomer, Ms. Thomas says: When not bogged down by thousands of users logging on at once, it runs at 256 kilobytes a second – five times the speed of wireless, but half the traditionally accepted definition of high-speed. This makes it possible to use Skype and take long-distance courses. But the territory’s geoscientists and its
nascent film industry, both of which need to send large, complex files, are largely out of luck.

The corporation received a grant last year from Infrastructure Canada covering four years of expanded basic services and half the costs of new subscribers beyond the initial 2,000. But she would like to see it made available (and affordable) to more people, with an expanded bandwidth.

Ms. Thomas argues the smallest, most remote communities present the most money-losing proposition to Internet providers, but they are also the ones who need Internet access the most, for everything from banking to education to marketing a service – none of which can be done in person.

“If we can't make it work in Grise Fiord, we can't make it work in Nunavut,” she says. “What options do you have for economic opportunities without the Internet? What options do you have for post-secondary education?”

Roads

There aren’t many. Not outside Iqaluit, anyway.

Proposals have been put forward to build a network connecting Nunavut’s communities, which would provide an alternative to the astronomical cost of air travel. But it’s a trade-off, says Rob Huebert, associate director for the Centre for Military and Strategic Studies at the University of Calgary.

“There is always the concern that if you do build a complete road system you will be impacting on the ecological system,” he says. “You have to balance: Do you keep it preserved as it is? ... [But] most of the people I talk to talk about having some form of connection to Southern Canada.”

Proposals have been put forward for road connections through Manitoba, Ontario or Quebec. But the most high-profile has been the Bathurst Inlet Road and Port project, a multimillion-dollar proposal to build a port and road in the far northwest corner of Nunavut. Its proponents insist the 211-kilometre road and port are vital to mining development in the territory.

The plan has encountered strident opposition from environmentalists opposed to development that would harm wildlife habitat in the Kitikmeot and Bathurst Inlet area. They are specifically worried for the Porcupine caribou, which migrate through the region.

But Charlie Lyall, president of the Inuit-owned Kitikmeot Corporation backing the proposal, argues that by making it cheaper to supply mine sites and to ship minerals out by boat, the project will bring jobs and economic growth to the region.

“A lot of the people that are living on social assistance right now would be able to work. ... The young people that are graduating now, right now there's really nothing for them at the end of the
tunnel. And this would be an opportunity for them."