

Thank you for very much for the invitation to speak to you today.

I have a few slides to share that I am hopeful will help set the stage for our infrastructure panel discussion.

In hearing Minister Schumann's comments, they will complement them, and they will set the stage for Charlie Lyall and Tom Garrett's presentations (on Gray's Bay Road and Port and Manitoba – Kivalliq hydro link).

The Mining Industry – Government Partnership

- **Our Industry has accepted governments' challenge to do what governments cannot do**
 - To turn rock into benefits – jobs, business spending, taxes
 - Assume the risks of exploration, mining and the markets
 - Bring money to do the job
 - Bring expertise to share and build capacity & wealth
- **But Industry can't do it alone**
 - We need governments' help too



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Let me open by speaking to partnership between industry and government.

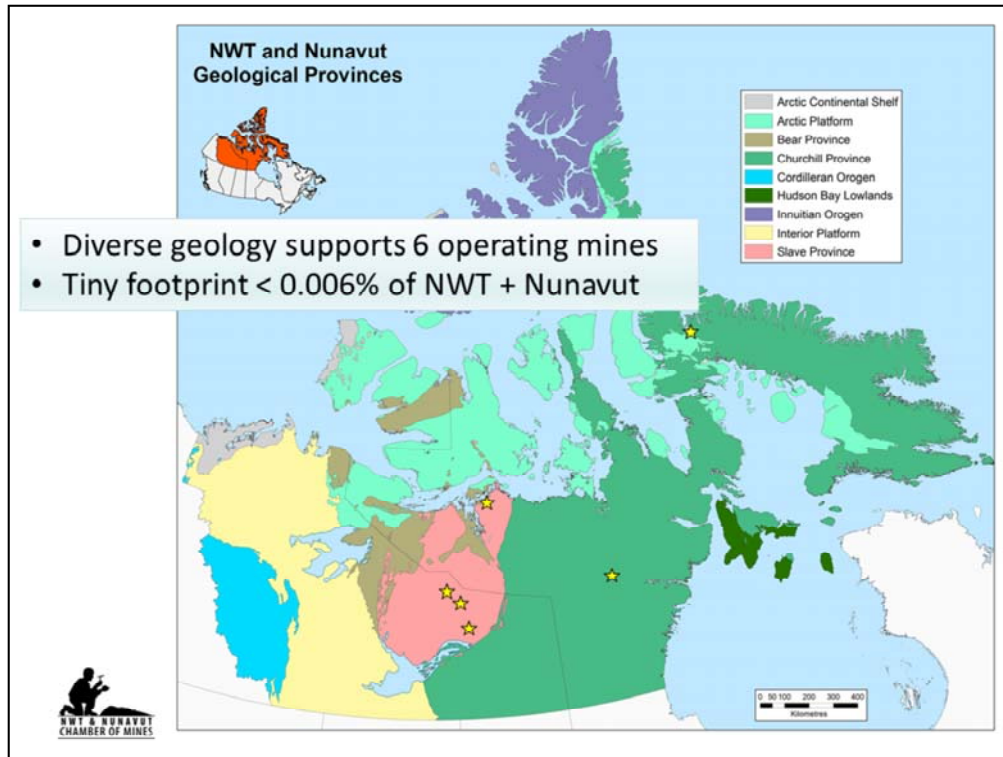
Government has invited industry in to develop its resources, and our industry has accepted government's challenge, and that is to do what government cannot do:

- To turn rock into jobs, businesses, training, community benefits, and revenues.
- To take on the risks associated with exploration, mining and the global markets.
- To bring millions and even billions of investment dollars.
- And to bring expertise that is free for the sharing.

That's a tall order, but our industry is doing a good job at it.

However, industry can't do it alone.

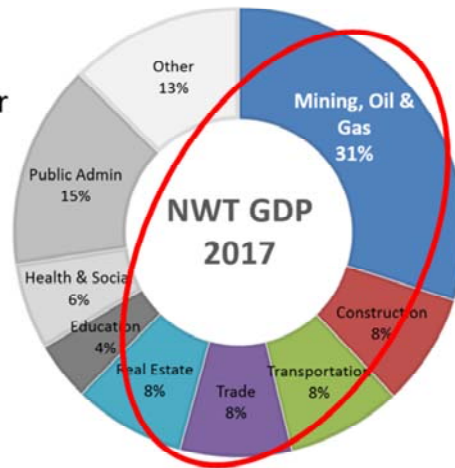
We need governments' help too, particularly with infrastructure if we are to fully realize the north's mineral potential.



Let me provide you with a quick glimpse of the mineral potential in the NWT and Nunavut. Just a reminder that this is a vast area covering one third of Canada. This is a geological map, and the various colours mark 9 geological provinces found here. This variety of geology means great mineral potential. In this vast area, we have only 6 mines, 3 in each territory, as shown by the stars. Note the stars are much bigger than the actual footprint of our mines, which have a small footprint, less than 0.006% of the area of the two territories. So our mines just barely scratch the surface, so to speak.

Mining is the largest private sector contributor

- Mining is the north's economic advantage
- The largest direct private sector contributor to the NWT economy
- And, it contributes more through other sectors of the economy, eg, construction, transportation, trade, real estate
- Nunavut is similar



- *"Over the past 3 years, diamond mines contributed 41% of the GNWT's corporate income, fuel, property and payroll tax revenue" ... GNWT Spokesperson*

Our small number of mines are making a big difference.

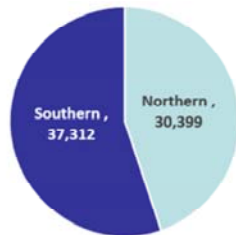
This is the contribution of three mines in the NWT. Directly, the three diamond mines contribute about 30% of the GDP, and indirectly through transportation, construction, and other sectors, increase their contribution to about 40%.

Contributions are similar in Nunavut.

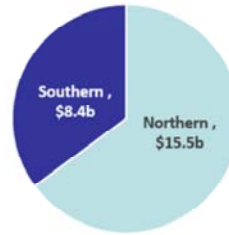
Mining is the north's economic advantage, since we have fewer other economic opportunities as in the south, eg, forestry, farming, manufacturing, etc.,

Significant mining benefits (1996-2017)

Mining Jobs - NWT + Nunavut
(person-years)



Mine Spending - NWT + Nunavut
(billions)



- Significant job and spending benefits to the provinces
- Indigenous benefits – 14,000 person years, \$6 billion business spend
- Significant taxes & royalties to all public & Indigenous governments



Zooming in on jobs and business benefits, over the past 20 years, mining in the NWT and Nunavut combined has created about 68,000 person years of employment, and about \$24 billion in spending.

What's really important to us in the north is the progress we have made in Indigenous employment and Indigenous business benefits. These are significant, and unprecedented in our history.

There's another side to these statistics, and that is the southern benefit.

You can see that over half of the jobs are southern. There are also billions in spending that go south, and many more even than the \$8 billion shown here since we purchase so many goods manufactured in the south.

A key takeaway is that Northern mining is not only good for the north, but also for the provinces.

However, infrastructure deficit hinders growth

- The North has Canada's largest infrastructure deficit
- Industry study shows higher mining capital costs
 - Up to 2.5 times higher for base metal mines
- And higher exploration costs
 - Up to 6 times that of the least remote project
- Higher operating costs challenge competitiveness
- We need help to “Level the playing field”



Industry Study: Levelling the Playing Field, May 2015

While the benefits are impressive, that's just the tip of the north's mining potential.

We are being held back by the lack of infrastructure.

That means our costs are much higher.

An industry study we partnered in reveals how lack of infrastructure raises costs for our industry:

- Capital costs up to 2.5 times more expensive
- Exploration costs up to 6 times higher.

And higher operating costs means we have a harder time being competitive.

We need help to level that competitive playing field.

Today, mines supply their own infrastructure



Let's have a quick look at the infrastructure challenges our remote mines face.

With no power grids to our remote mines, they must provide their own diesel generated power, or wind in the case of Diavik.

Being off the highway system, they must build their own roads – whether seasonal ice roads, or all weather roads. (Note the ice road melts every year and must be rebuilt annually for \$25 million. Note NU has no highway system, and this mine road at 110 km is Nunavut's longest road.)

Some of our mines must build their own sea ports and all provide their own airports.

Mines must provide camps for their workers, with recreation and medical facilities too.

And they must buy their entire year's consumables inventory ahead of time which brings carrying costs. Of course they must also store all that inventory on site, which costs them more for storage facilities.

It all adds up to significant extra costs to mine in the north.

And it challenges our mines' competitiveness in the global marketplace.

Government was once an infrastructure partner

Federal Investments in Northern Mining Infrastructure

- 1948 – Snare Hydropower for Yellowknife gold mines
- 1959 – Roads to Resources, highways to mining towns
- 1961 – Great Slave Lake Railway for Pine Point zinc-lead mine
- 1966 – Taltson Hydropower for Pine Point mine
- 1974 – Townsite, dock, airport for Nanisivik zinc-lead mine
- 1975 – Ice-breaking cargo ship to service Nanisivik & Polaris mines
- **40 YEAR FEDERAL INVESTMENT GAP FOR NORTHERN MINING**
- 2017 – Tlicho road with indirect benefit for NICO mine project



It wasn't always this way.

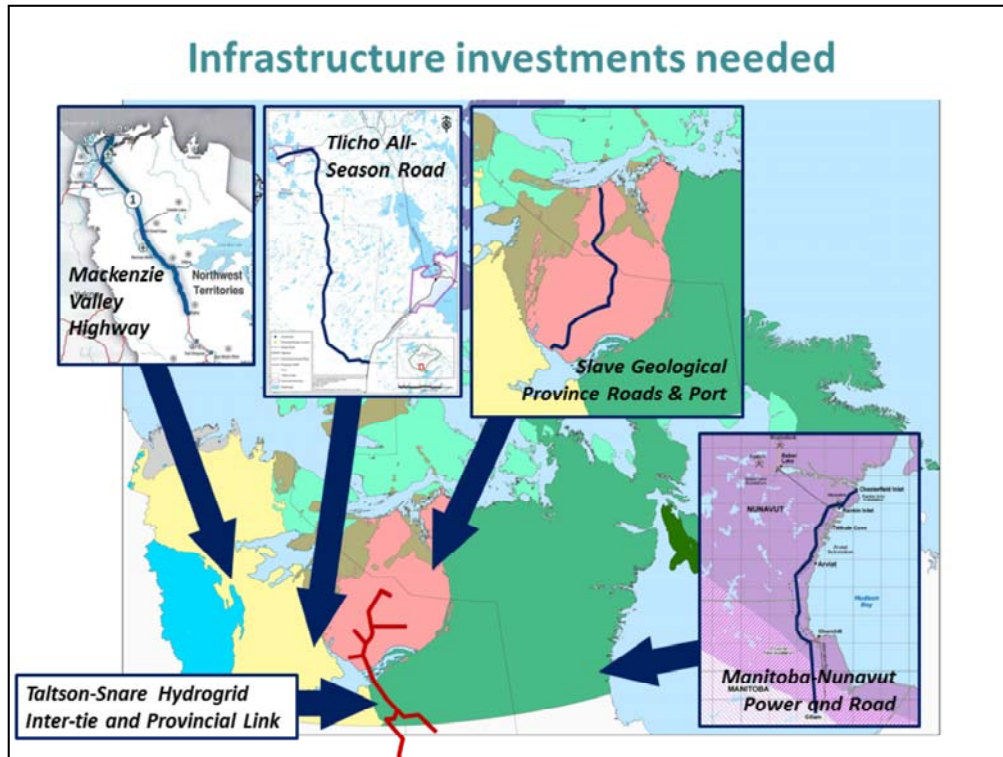
Years ago, the Federal government was a major partner in providing infrastructure for the mining industry.

Here are some examples.

- In 1948, the Federal government built the Snare Hydropower system for Yellowknife and its gold mines
- In 1959 – Roads to Resources, highways to mining towns
- In 1961, Canada built the Great Slave Lake Railway for Pine Point zinc-lead mine
- And in 1966, the Taltson Hydropower plant for the Pine Point mine.
- In 1974, Canada took an 18% ownership in the Nanisivik mine and provided the townsite, dock, and airport for the zinc-lead mine
- And in 1975, the partnered in the Canarctic Shipping partnership with industry to build the world's first ice-breaking cargo ship to service the Nanisivik & Polaris mines.
- Unfortunately, we haven't seen any other investments until 2017 with the Tlicho road which has some benefits for one mining project.

This means we have suffered a gap of 40 years of federal investment in infrastructure for northern mining.

We need to catch up.



Where do we need infrastructure help today?

Here are the priority infrastructure projects that industry and governments like today.

- In the west is the Mackenzie Valley Highway project, a region with significant potential for oil & gas and also minerals.
- The Tlicho all season road, a road that will help one mining project, is the only fully funded project at this time.
- Of really high priority is the Slave Geological Province where our world class diamond mines are located, and where there are known deposits of precious and base metals, rare earths, and even more diamonds. This mineral rich region is similar to the famous Abitibi region of northern Ontario and Quebec that has created significant wealth for those provinces and for Canada. To really harness the economic power of the Slave Province, it needs road and port access, as well as cheap, green power. Of special concern too is that infrastructure could help sustain our world class diamond mines in that region.
- A geologically similar and high mineral potential region is found in the Kivalliq region of Nunavut where there is discussion about road, power and fibre optic access from Manitoba.

Can we reignite a similar Vision?

By: The Honourable Arthur Laing, Liberal Minister of Northern Affairs & National Resources
to the Canadian Institute of Mining – Edmonton, May 1966

- *It is inconceivable that all lands north of the 60th parallel, representing 35% of Canada's land area, which we believe contain a great resource potential, will remain as an undeveloped portion of Canada.*
- *Very often the discovery of one mine ... will lead to more, but as long as we continue to do nothing to replace that activity during the time allowed we will continue to experience the social upheavals and personal hardships that result when the resource comes to an end.*
- *We welcome those searching for the resource wealth of the North ... and my government is endeavouring in many ways to assist private industry on to the road to success.*



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So how can we catalyze northern infrastructure development?

I believe that we need a significant new vision for the north.

In contemplating a new vision, I want to take you back to 50 years to vision enunciated by a previous Federal resources Minister, and a Liberal one too, Arthur Laing.

Bear with me as I read 3 quotes from his speech to the mining industry in Edmonton in 1966:

- *It is inconceivable that all lands north of the 60th parallel, representing 35% of Canada's land area, which we believe contain a great resource potential, will remain as an undeveloped portion of Canada.* Hmmm ... how far have we developed the great north?
- *Very often the discovery of one mine ... will lead to more, but as long as we continue to do nothing to replace that activity during the time allowed we will continue to experience the social upheavals and personal hardships that result when the resource comes to an end.* This speaks to sustaining and growing the industry.
- *We welcome those searching for the resource wealth of the North ... and my government is endeavouring in many ways to assist private industry on to the road to success.*

I would observe that today, 50 years later, we are very much in need of renewed vision.

Timing is right for Infrastructure Vision & Action

- Industry is providing significant northern and Indigenous benefits
- Sustaining and growing them is required
- Indigenous governments and organizations are increasingly supportive
- Governments – public and Indigenous – are desiring more infrastructure & ownership too
- Provincial governments are supportive 😊
- The North is changing whether we like it or not



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For several reasons, I believe the timing is right for a new northern infrastructure vision and action.

- Industry is doing better than ever at providing significant northern and Indigenous benefits;
- Sustaining and growing them is required, and this will take more exploration and mining;
- Indigenous governments and organizations are increasingly supportive of mining and of infrastructure;
- Governments – public and Indigenous – say they want more infrastructure & even ownership of it too;
- Provincial governments are supportive 😊 . I hope I'm not being presumptuous but I hope provinces will be supportive as they realize that northern resource development benefits them too;
- The final reason is that the North is changing whether we like it or not. Climate change, Arctic shipping, and other nation's actions are making changes that we need to keep up with. Infrastructure and resource development can help.

Thank you very much.