# **Northern Highways Strategy**

# **Building For Tomorrow Today**

... Advancing The Alberta Economy



Prepared by:

Northern Alberta Development Council October 2008

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### **Northern Highways Strategy**

# Building For Tomorrow Today ... Advancing The Alberta Economy

Northern Alberta will continue to make a significant contribution to the Alberta economy as the Province of Alberta moves into the future. The building of northern highways will be a key factor in realizing the many northern economic development opportunities and the provincial benefits associated with them.

The proposed northern highways included in this proposed "Northern Highways Strategy" are all priorities. They will provide enhanced access to resources, tourism routes for the Province's growing tourism industry and connections to communities. These highways will also play a critical role in the integration of the Province of Alberta's highway system with neighbouring provincial and territorial jurisdictions.

When looking to the future of the Province of Alberta, the North will be an important cornerstone to the advancement of the Alberta economy. In order to advance, northern highways must be developed as a priority program for the Provincial Government.

The Western Premiers approved the Northwestern Canada Integrated Road Network Plan in 1998. It identified a number of highways as critically important. The NADC has indentified Highway 40 and its importance as a strategic link between Grande Prairie, Grande Cache, Hinton, southern Alberta and British Columbia. Given the importance of the north to the Alberta economy, the NADC is asking the provincial government to identify how these roads fit in the strategic implementation plan.

## The Alberta Economy - A Northern Perspective

#### Introduction

The Northern Alberta Development Council understands the importance of a highway transportation network, as it is vital to develop the social and economic fabric of northern Alberta. Communities and businesses require a road network that links the regions of northern Alberta with each other and with Western Canada.

The <u>Northwestern Canadian Integrated Road Network Plan</u> has seen considerable progress over the last 10 years. More work, however, is required. Some highways have not been completed, and changing circumstances have lead to the identification of further highways as being critically important to Alberta's economic development.

#### **Overview of Economic Activity**

Northern Alberta (defined as the area covered by the Northern Alberta Development Council) is a *significant contributor to the economy of Alberta*. This is clearly shown by the following table.

Table 7.1 Economic Contribution of the NADC Region

		Total Contribution (\$ Billions)			Value Per Capita (\$ Thousands)		
Economic Contributions	Year	NADC Region	Rest of Alberta	NADC as % of Alberta	NADC Region	Rest of Alberta	Alberta Average
Exports							
	2005 2010	37.1 40.3	92.6 96.3	28.6 29.5	125.7 124.5	31.4 29.5	40.0 38.1
Investment							
	2005	13.2	36.6	26.4	44.5	12.4	15.4
	2010	12.0	40.5	22.8	37.0	12.4	14.6
Materials for manufacturing	2003	1.4	30.6	4.3	5.3	11.0	10.5
Materials and labour for oil sands investment							
	2006-10*	1.2	23.9	4.9	4.0	7.7	7.4
Employment earnings							
	2005	7.3	76.2	8.8	24.8	25.9	25.8
	2010	9.3	96.5	8.8	28.7	29.6	29.5
Government revenues - Alberta							
	2004-05**	5.9	23.5	20.0	21.7	8.4	9.6
	2008-09**	6.0	24.5	19.7	19.2	7.8	8.9
Government revenues - Federal							
	2005	2.6	24.2	9.8	8.9	8.2	8.3
	2010	3.3	29.7	9.9	10.1	9.1	9.2

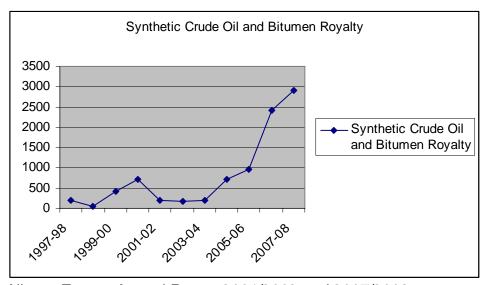
Source: GTS Group International. "Analysis of the Economic Contribution of the Northern Alberta Development Council Region to Alberta and Canada: July 31, 2008." Website: <a href="www.nadc.gov.ab.ca">www.nadc.gov.ab.ca</a>, accessed October, 2008.

The north is rich in a variety of resources. Northern Alberta is a major producer of agriculture, forestry and energy products. Northern highway projects are an investment in Alberta's future. Highway infrastructure projects help communities and industry to grow and prosper. In turn, this allows the Province to collect more revenues through royalties, timber fees, corporate taxes, and personal taxes. Resource developments in northern Alberta are closely tied to Government's ability to fund other priorities such as health and education.

Oil sands developments are just one example of the significant contribution the overall northern energy sector makes to the provincial economy. All of Alberta's oil sands deposits are located in northern Alberta. In 1999, oil sands production amounted to 585 thousand barrels per day. Today's forecast is to see that number grow to five million barrels per day by 2020. More than 204 billion dollars of oil sands investment is expected for the 2008 – 2012 period. Excluding construction jobs there are 6,000 permanent jobs locally in the oil sands and 18,000 nationally. By 2010 this is forecasted to exceed 13,000 locally and 39,000 nationally.

Based on the following charts, northern Alberta will continue to contribute substantially to the Alberta economy. Efficient and interconnected transportation routes will create new opportunities to expand on northern Alberta's economic contribution.

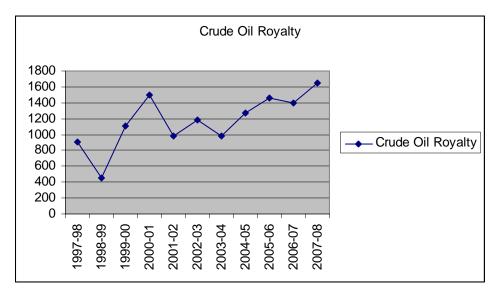
The following chart shows Alberta oil sands. In the period 1997-2008 Alberta royalties amounted to \$8.9 Billion.



Alberta Energy Annual Report 2001/2002 and 2007/2008

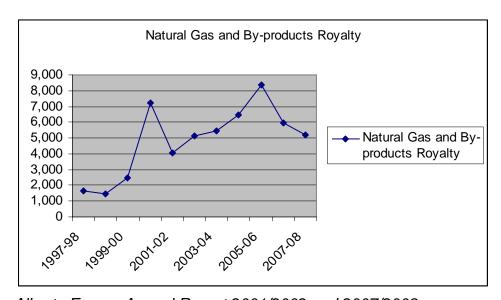
<sup>1</sup>The Oil Sands Developers Group: Energy from Athabasca. "Oil Sands Developers Group 2008 Survey and Forecast Results – August 2008" Webpage.www.oilsandsdevelopers.ca accessed October 2008.

This chart shows Alberta crude oil royalties. In the period 1997 - 2008 Alberta royalties amounted to \$12.8 Billion. Northern Alberta accounts for 42 % of Alberta's conventional oil production.



Alberta Energy Annual Report 2001/2002 and 2007/2008

The following chart shows Alberta natural gas and by-products royalties. In the period 1997 - 2001 Alberta royalties amounted to \$53.3 Billion. Northern Alberta accounts for 37 % of Alberta's natural gas production.



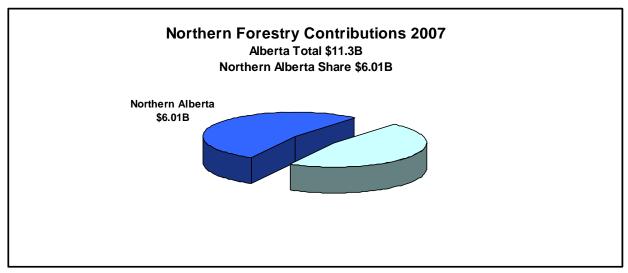
Alberta Energy Annual Report 2001/2002 and 2007/2008

The following chart shows Alberta royalties collected through bonuses and sales of crown land leases. In the period 1997- 2008 Alberta royalties amounted to \$14.2 Billion.



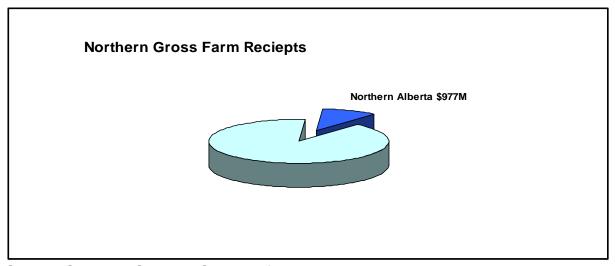
Alberta Energy Annual Report 2001/2002 and 2007/2008.

This chart shows the overall forestry sector contribution to Alberta for 2007. The total revenues of all product sales including direct and indirect benefits, corporate and personal income tax, property tax and stumpage and protection charges amount to \$11.3 billion. Of this amount, \$6.0 billion can be attributed to northern Alberta.



Source: Alberta Forest Products Association, Economic Impacts of the Alberta Forest Industry, June 2008

The following chart shows northern Alberta's portion of 2006 provincial gross farm receipts. This amounts to more than \$977 million or about 10 % of Alberta's total gross farm receipts.



Source: Statistics Canada, Census of Agriculture, 2006.

#### **Future Northern Prospects**

Northern Alberta has immense resource exploration and development potential such as mining, tourism, new commercial ventures and value added activities. Mining includes exploration, development and commercialization stages and each stage provides many spin-off benefits. In 2006 \$6.5 million was spent on exploration in Alberta as reported by the Alberta Geological Survey. There have been encouraging discoveries throughout northern Alberta, including iron, uranium, diamond, and titanium deposits. At present no commercial mines (non-energy type mine) operate in northern Alberta.

#### Restrictions

Without adequate transportation networks future opportunities for wealth creation for the province will be restricted. This is particularly important with the uncertainty of world energy markets. Effective transportation leads to value added opportunities, and additional commodities.

#### **Tourism**

Highway infrastructure is necessary to support the development of a strong and vibrant tourism industry. Improvements in transportation will increase the North's ability to participate in expanding tourism markets. The abundance of lakes, forests and wildlife provide excellent resources for this industry. Each year, more visitors are attracted to the northern experiences which include outdoor recreation, historic, cultural and urban attractions.

#### Value -Added Industries

Northern Alberta is reliant on primary resource activities. As demand and markets change there is huge potential for northern Alberta to add value to products in the oil/gas, agriculture and forestry sectors. Secondary processing can be further advanced in northern Alberta if transportation challenges are addressed. Transportation of finished product out of the region is becoming an issue.

#### **New Commercial Ventures**

Road infrastructure projects strengthen businesses and industries that are already part of the region. Road development helps to diversify existing industries and spur new ventures that bring new employment and income to the north and Alberta.

#### One Priority - The Role of Northern Highways

Highways are critical in the economic growth and development of northern Alberta. Due to the current and potential economic activity in northern Alberta there is a need to make the highways identified in the <u>Northwestern Canada Integrated Road Network Plan</u> (NCIRNP) the priority for highway development. All of the identified highways provide vital connections to resources, communities and neighbouring jurisdictions. The integration of this system will result in opportunities to further advance the economic development and diversity of northern Alberta.

Much of northern Alberta's economy is tied to the development of natural resources, movement of commodities, and the inter-relationship between regions. Based on these considerations, the Province of Alberta must strive to build and maintain an effective highway system in northern Alberta. Highways are also vital in reducing the isolation of northern communities and expanding lifestyle options for northerners.

The rationale for this "one priority approach" is based on the significant need for northern highways and the significant revenues generated as a result of resource development in northern Alberta. It makes economic sense to undertake these projects now as a way to capture the future potential of the north while provincial revenues are available. It also insures that infrastructure is in place for future value added and non-energy development.

## Northwestern Canadian Integrated Road Network Plan

In June 1998, the Western Premiers adopted a concept plan, the <u>Northwestern Canadian Integrated Road Network Plan (NCIRNP)</u>, for the future development of highways in northwestern Canada. The NCIRNP provides a vision for the integration of road development in northwestern Canada, while recognizing the importance of highways to the advancement of northern development.

Many northern highways have been extensively studied and discussed amongst community, industry and provincial officials. Based on these consultations, key northern Alberta highway development projects were identified in the Network Plan. These highways support the current northern road network, while providing new regional and inter-provincial linkages.

#### **Purpose**

The overall goal of the Network Plan is to provide a framework for the future development of an integrated road network in northwestern Canada, including northern Alberta.

#### **Northern Alberta Highway Projects**

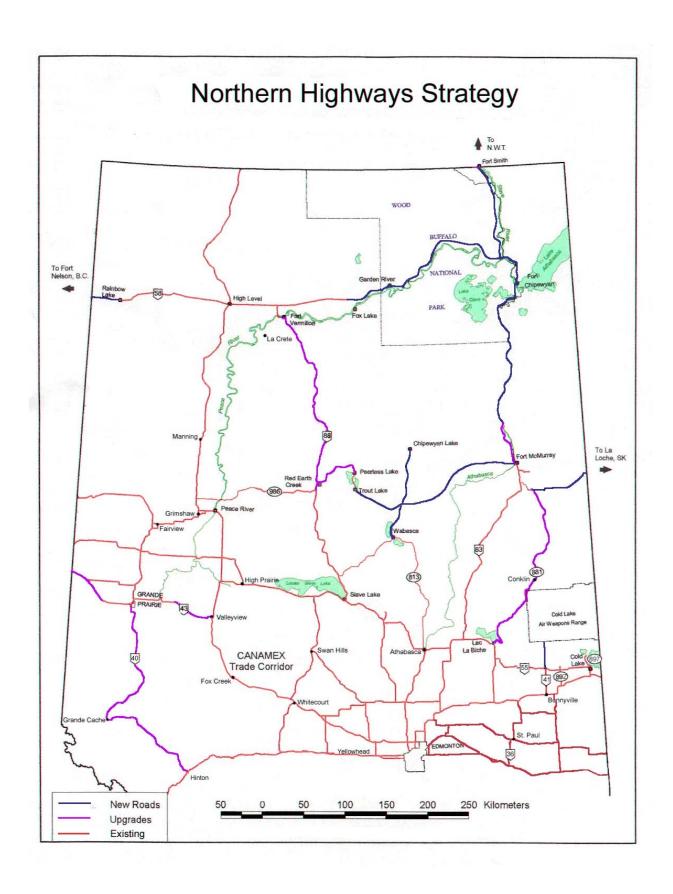
Northern regions have enormous development potential and will provide increased levels of wealth in all levels of government. Northern-based jurisdictions, including the Province of Alberta, share common opportunities and challenges in relation to future highway transportation needs.

The Northwestern Canadian Integrated Road Network Plan identified the following highway projects:

- Northern Alberta East-West Highway Corridor
- Highway #58
- Highway #88
- Secondary Highway # 881
- La Loche Road
- Highway #41 (added due to resource activity)
- Highway #63
- Secondary Highway #813
- CANAMEX Trade Corridor Highway # 43

The Northern Alberta Development Council has recommended the following highway project be added to this plan:

Highway # 40



### **Northern Highways Strategy**

#### A Priority For Alberta

The overall implementation of the NCIRNP should be a major priority for the Province of Alberta. This position is based on the following:

- · significant contribution to the Alberta economy made by the north;
- · provincial revenue generation resulting from resource development in northern Alberta;
- advancing new opportunities in agriculture, tourism, non-energy mineral, forestry and resource development;
- enhancing connections to northern, remote communities; and greater highway integration across northwestern Canada.

While the development of northern Alberta's highway system is a priority for northerners, the realization of the above-noted benefits should make this initiative a priority for all Albertans. Northern Alberta drives the Alberta economy.

#### **Strategic Directions**

Highway infrastructure proposed for northern Alberta supports a western Canada integrated road network system. Roads support economic development by providing access to resources and the transportation of commodities, products and services. Roads facilitate an industry expansion plan which in turn generates provincial resource revenues. The economic and social well being in northern communities is tied closely to efforts to strengthen the northern economy. Some communities experience unemployment rates above the provincial averages. More northern roads will promote economic activity and improve labour participation rates, especially for young Aboriginal people living in this region.

#### Implementation Strategies

#### **Alberta Transportation Business Plan**

Alberta Transportation incorporates all road transportation projects in its three year business plan. The ministry's planning horizon should not be limited to this time frame. Road projects are dependant upon availability of funds and overall priority importance to Alberta. Construction projects are often phased over several construction seasons. Where possible, the ministry is encouraged to adopt a "start to finish" strategy. In some instances it would be more practical to apply sufficient resources to a single project and complete it sooner. This would reduce the costs of moving construction equipment and personnel and allow roads to be commissioned sooner. The ministry of Transportation is doing an exceptional job given the resources they have and the requirements of Alberta's transportation network, but there are priorities that should be made.

#### **Special Funding Program**

Based on its consultation with northerners, the Northern Alberta Development Council believes that access to resources, services to industry/people, access to overseas markets and community deisolation are key drivers for northern development. The implementation of the Northwestern Canadian Integrated Road Network Plan will help leverage many benefits related to the economy such as increased mobility of local residents, better labour supply, new employment opportunities, small business growth, and revenues for all levels of government. Roads are important to industry because they reduce resource extraction and transportation costs, and provide an incentive to increase exploration activities which brings new projects to completion more quickly.

The Western Premiers approved the <u>Northwestern Canada Integrated Road Network Plan</u> in 1998. It identified a number of highways as critically important. The NADC has indentified Highway 40 and its importance as a strategic link between Grande Prairie, Grande Cache, Hinton, southern Alberta and British Columbia. Given the importance of the north to the Alberta economy, the NADC is asking the provincial government to identify how these roads fit in the strategic implementation plan.

#### Rationale

The rationale for this special funding request is based on the significant royalty revenues which accrue as a result of energy projects in northern Alberta. There is also a need to integrate growth across Alberta's northern regions including British Columbia and Saskatchewan. It makes economic sense to invest in these projects now, to compliment resource development activities and the accrual of royalties.

#### **Existing Road Commitments and Maintenance**

This request for special project funding will be separate from existing commitments except where the existing commitment is connected to the implementation of the <u>Northwestern Canadian</u> Integrated Road Network Plan.

This initiative would also be separate from the regular operation, upgrading and maintenance of highways in northern Alberta.

### **Northern Highways Projects**

The Northern Alberta Development Council knows there will continue to be significant growth in northern Alberta in the years ahead. This growth is integral in the overall economic health of the province. Road infrastructure will be a catalyst for northern Alberta economic development. Therefore the implementation of this northern highways strategy must be an essential part of the Province of Alberta's economic strategy.

### **New Road Developments**

### NORTHERN ALBERTA EAST-WEST HIGHWAY CORRIDOR Fort McMurray - Peace River Description

The original plan includes the paving of Highway 986 between Peace River and Red Earth. The highway connection between Red Earth and Fort McMurray would be built passing through the Peerless Lake region. This northern connection would: provide greater access to natural resources; tourism development opportunities; increasing labour supply for high growth areas; mobility related to employment, and increased access to western ports and overseas markets.

#### **Current Status**

There is a high degree of industry and community support for this project due to the following: lever many economic development and tourism opportunities; provide access to existing and undeveloped resources including mineral exploration; de-isolation of northern communities (Chipewyan Lake); access to services and employment opportunities and greater connections to markets/ocean ports. There is a significant road network already in place, and further development by industry is on-going. This project will provide a coordinated approach to resource access development and provide a new much needed northern east-west public travel route.

This highway corridor will provide another means of access to the Fort McMurray area, a critical consideration in light of events that, from time-to-time, close other access routes into the area. Alberta Transportation has completed a corridor study, and is currently working on a planning study led by Stantec Consulting to be completed in the fall of 2009. Open houses will be held in Fort McMurray, Red Earth, and Wabasca.

# Highway 58 Description

As part of the original Northern Highway Strategy this project included four components: 1) the extension of Highway 58 west to the British Columbia border; 2) upgrades to the existing highway between High Level and Rainbow Lake; 3) the extension of Highway 58 to Garden River in Wood Buffalo National Park, and 4) the construction of a new winter road within Wood Buffalo Park from Garden River to Peace Point. Component one is new road construction: component two is widening of primary highway: component three is new road construction to Garden River: and component four is a new winter road. This project would provide access to resources, improve public safety and help to de-isolate Aboriginal communities, (Garden River and communities in the Lake Athabasca region) and provide another connection to Fort Smith NWT.

#### **Current Status**

1) The Province of British Columbia has not made any commitments regarding the construction of its portion of the Fort Nelson - Rainbow Lake connector. Alberta does not have any immediate plans to construct a road from Rainbow Lake to the B.C border. 2) The widening of Highway 58 between High Level and Rainbow Lake is currently under way. 3) Extension of the road to Garden River is ready to begin, however the shortage of diesel fuel has hindered the commencement of the project. Alberta and Indian and Northern Affairs Canada (INAC) are partnering on the construction this road. 4) In the past the Federal Liberal Government indicated an interest in the construction of a viable winter road with in the park. Currently there is yet to be a decision about road access through the Wood Buffalo National Park.

# Highway 88 Description

This project originally included the upgrading and paving of Highway 88, from Red Earth to Highway 58. This road is an integral part of the northern road system which will connect east-west regions of northern Alberta. The project is expected to enhance economic development, reduce safety concerns and improves access to services. It facilitates public travel and resource extraction activities across a vast region and also provides a more direct route for the shipment of goods and supplies to northern communities.

#### Current Status

Northern portions of this road from, Highway 58 to a point just south of Fort Vermillion have recently been paved. The remainder of Highway 88 south to Red Earth is being maintained as a graded gravel road. Highway 88 is paved from Red Earth south to Slave Lake.

#### Highway 881

#### Description

This project originally involved two components: 1) the completion of upgrades planned for Highway 881 between Lac La Biche and Fort McMurray; and 2) the alternate connection between Conklin and Highway 55 once the first part of the project is complete. Highway 881 serves as an alternate to Highway 63; it provides emergency route access for the Fort McMurray area in case Highway 63 is cut off, it is an alternate route for oil sands development, and it enhances interjurisdictional trade and community access to Janvier and Conklin.

#### **Current Status**

Paving of the highway has been completed and a new truck staging area has been built just east of Lac La Biche. There are no further plans for capital improvements.

#### La Loche Road

#### Description

The project originally promoted building the connector road from Fort McMurray to La Loche, Saskatchewan. The completion of the La Loche road will provide access to Saskatchewan labour for the Fort McMurray region and open up lifestyle opportunities for Fort McMurray residents to enjoy recreation and tourism opportunities in Saskatchewan. The project helps fulfil a two year old commitment between former Saskatchewan Premier, Lorne Calvert and former Alberta Premier, Ralph Klein.

#### Current Status

In Alberta, the design of road alignment and a new bridge is in progress for the connector road to La Loche. Saskatchewan has completed their portion of an all weather road to the Alberta border.

### Highway 63

#### Description

This project originally involved the extension of Highway 63, north of Fort McMurray to Fort Chipewyan. This project will provide an all weather road to residents of Fort Chipewyan. It will reduce costs to service the region, create new economic opportunities and compliment the Northwestern Integrated Road Network Plan.

#### Current Status

Highway 63 is now four lanes from Fort McMurray to Syncrude. Sections of the winter road, which is administered by the Regional Municipality of Wood Buffalo, are anticipated to be improved by industry to meet their needs. There are no plans, at this time, to transfer these roads to the Provincial Highway network.

#### Highway 813

#### Description

Originally, this project was the extension of Highway 813 from Wabasca north to Chipewyan Lake. The project includes the completion of Highway 813 paving and bridge replacement over the Athabasca River within the Town of Athabasca. This road will increase access to a large geographic area rich in resources. This road will also de-isolate the community of Chipewyan Lake. This project ties in to the proposed extension of Highway 686 connecting Peerless Lake to Fort McMurray.

#### **Current Status**

Resource roads are being built by industry. There are no plans, at this time, to transfer these roads to the Provincial Highway network.

# CANAMEX Trade Corridor - Highway 43 Description

Alberta is part of the CANAMEX Trade Corridor system. This corridor consists of the American States of Arizona, Nevada, Utah, Idaho and Montana and several Mexican States. The key purpose of this international initiative is to facilitate transportation distribution, commerce and tourism between three countries.

The twinning of Highway 43 from Edmonton northwest to Grande Prairie and then to the British Columbia border is part of Alberta's contribution to the CANAMEX project.

#### Current Status

This project is underway and will remain a high priority under the Northern Highways Strategy. The Milk River bypass replaces the last two lane section of Highway 4 and will be complete in 2009. Highway 43 west of Grande Prairie to the British Columbia border is still undergoing design and planning studies, with parts of it undergoing construction in Alberta Transportation's Three Year Plan. Still to be twinned is a portion of the highway at Sturgeon Lake.

## Highway 41

#### Description

This project originally is the extension of Highway 41 to the Department of National Defence Air Weapons Range near Cold Lake. The air weapons range is of significant importance to Canada, especially our commitment to meet North Atlantic Treaty Organization (NATO) air training exercises. 4 Wing Cold Lake conducts annual international training operations in this area; a better road access would be beneficial. The energy sector is optimistic about the area's development potential.

#### **Current Status**

There are no plans, at this time, for capital improvements.

# Highway 40 Description

This project is an addition to the original Northwestern Canadian Integrated Road Network, but needs to be included due to changing circumstances. Increased economic and tourism development has seen a large increase in traffic on this north south connector. The highway is seeing a much higher volume of traffic than it was designed for, and is becoming a major commercial route between the Yellowhead Highway and Grande Prairie. There is increasing activity around coal and natural gas interest and activity in the area. Improved road access would help industry and communities in the area and address major safety concerns on this highway.

#### **Current Status**

Alberta Transportation has initiated a functional planning study to determine future transportation requirements just south of Grande Prairie. There is no formal commitment to review the highway south of Grande Cache. Straightening and widening the highway south of Grande Cache to Hinton is critical to meet safety and development concerns.

Northern Alberta will continue to make a significant contribution to the Alberta economy as the Province of Alberta moves into the future. The building of northern highways will be a key factor in realizing the many northern economic development opportunities and the provincial benefits associated with them.