Inside the Hard Drive



Status, Challenges and Current Initiatives of the Department of Transportation

Government of the Northwest Territories







November 2007



The meaning and definitions behind the document's title, *Inside the Hard Drive,* is representative of the document's purpose: to provide *data* and *information* about the Department of Transportation, including the Department's

- internal operations and direction;
- programs, technology and efforts to surmount challenges; and
- **progress, momentum** and **drive** to meet its mandate.

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INTRODUCTION

The Northwest Territories is a land rich in people and resources covering almost 1.2 million square kilometres—over 10 percent of Canada's land mass. Within this vast area is a population of 41,800 living in 34 communities.

Only one-third of the land area of the Northwest Territories is within 100 kilometres of an all-weather road. Air and marine transportation thus play a very important role in the mobility of Northerners.

Transportation infrastructure allows an economy to begin, grow and prosper through increased access to essential goods and services and to natural resources. Linking communities within a region provides jobs, fosters social development and trade, and allows for the flow of labour.

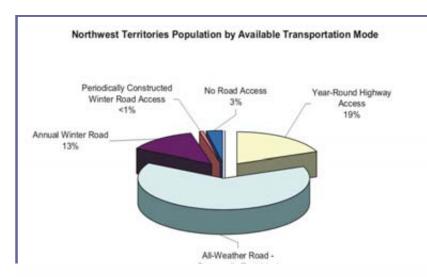
Created in 1989, the Department of Transportation aims to provide an integrated transportation system in the Northwest Territories that meets the social, economic and political needs and aspirations of Northern residents by providing:

- Safe, secure, affordable, reliable and accessible personal mobility;
- A higher standard of living for the territory and its communities through the more efficient and lower cost movement of freight; and
- Sustained economic growth and prosperity through better access to the territory's renewable and non-renewable natural resources.

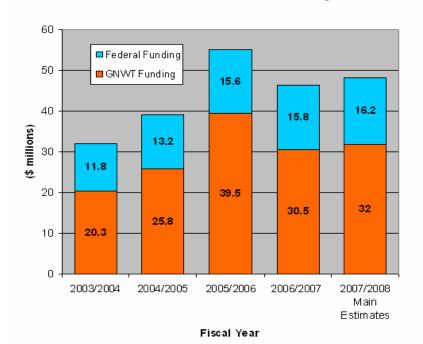
The Northwest Territories faces many unique challenges to the operation of an effective transportation system. Over the past decades the harsh climate, geographic distances between communities and markets, limited construction season, sensitivity of the environment and developing economy have been the important considerations in the construction, operation and maintenance of transportation infrastructure. Now, climate change and aging infrastructure are the preeminent challenges.

To succeed in the delivery of services and infrastructure to users, the Department of Transportation promotes partnerships between various levels of government and the private sector. These partners include:

- Marine, air, rail, and highway service providers (carriers) transporting both people and cargo;
- The federal government providing infrastructure funding, services such as marine navigation aids, and regulation of marine and air safety;



Infrastructure Funding



- Business and contractors providing construction and maintenance of infrastructure;
- NAV CANADA providing air navigation aids and services;
- Canadian Air Transport Security Authority providing security and screening services;
- Communities providing contract services for maintenance activities;
- Industry partnerships to expand operations and services; and
- Provincial and Territorial counterparts.

The Department's mission is to provide for the safe, secure, accessible and reliable movement of people and goods to serve the social, economic and political needs and aspirations of the people of the NWT.

The Department of Transportation's mission is guided by overarching strategic documents such as the GNWT Strategic Plan, A Northern Vision, and business plans prepared annually for review by the Legislative Assembly.

The Department, in support of its mission, has produced strategic planning documents including:

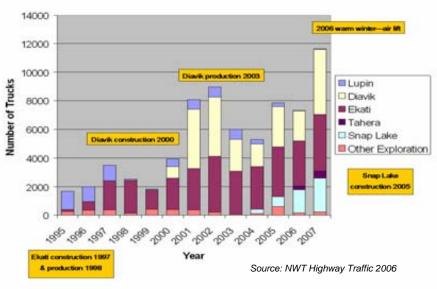
- Investing in Roads for People and the Economy, A Highway Strategy for the Northwest Territories;
- Corridors for Canada: An Investment in Canada's Economic Future and Corridors for Canada II: Building on Our Success, proposals submitted to the Canada Strategic Infrastructure Fund and industry;
- Connecting Canada: Coast to Coast to Coast, a funding proposal submitted to the federal government in 2006 to construct an all-weather Mackenzie Valley Highway to the Arctic Coast through a GNWT/federal partnership.

CURRENT CHALLENGES

Responding to the Pressures of Resource Development: Non-renewable resource development including oil and gas exploration and development, the anticipated construction of the Mackenzie Gas Project, and diamond mining and other mineral exploration activities will continue to have a significant impact on the NWT transportation system. Increased resource development traffic in all modes will occur on a transportation system that is incomplete and not up to the required standards to support the commercial vehicle traffic. DOT has identified a number of major transportation issues associated with resource development:

- Safety of the travelling public;
- Limited capacity, system reliability and the need for upgrades; and
- Potential for increased operation and maintenance costs due to increased traffic volume.

Tibbett to Contwoyto Winter Road Traffic



Existing highway infrastructure is under extreme pressure from recent industrial expansion, particularly as the majority of the highways in the NWT were constructed in the 1960s and 70s. The average annual increase in highway traffic from 1998 to 2006 is 3.0%, with 4.2% on arterial highways and 1.1% on our collectors. Dramatically, commercial traffic on the privately-constructed Tibbett to Contwoyto Winter Road that supports the mining industry has increased eight-fold since the early 1980s, from 1,600 to 12,000 trucks per season.

Geometric and surface deficiencies on the highway network are exacerbated by the increased traffic. Other issues include expanding the limited window of operation for winter roads and reducing the seasonal restrictions on ferry/ice bridge crossings. The Department must continually deal with these pressures while maintaining service and proactively planning to accommodate further economic developments.

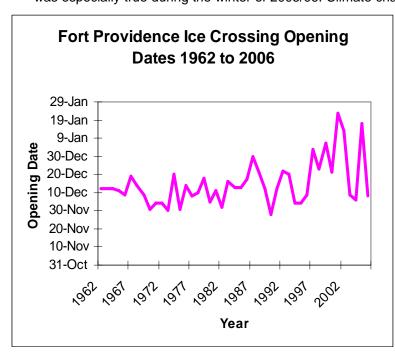
Cost Escalation: The Department continues to face a number of challenges that increase the costs of program delivery. The rising cost of fuel affects operation and maintenance activities, particularly for ferries and highways. The rising cost of other materials, such as steel and calcium chloride, along with a labour shortage, impact both maintenance and capital projects. The Department will continue to feel the effects of the booming construction sector in Alberta; attracting contractors to bid on northern projects will remain challenging.

Human Resource Pressures: A booming economy means greater demand and competition for qualified personnel. The Department will continue to experience more difficulties attracting and retaining staff with the skills required to keep pace with the rapid technological development of the transportation industry, in particular due to the aging workforce as the baby boomers approach retirement.

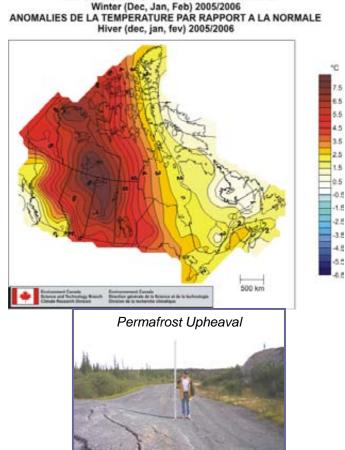
Regulatory Environment: The Department's operations and construction activities are subject to an array of federal transportation safety, security and environmental regulations. Modified or new regulations are being brought forward on an ever-increasing basis. Examples are the

requirement for salt management plans and related infrastructure for highway operations, increasing reporting requirements, in-field monitoring, infrastructure change and operation activity. In response to the incidents of September 11, 2001 measures have been implemented to ensure compliance with enhanced national security requirements for driver's licences and air travel.

Climate Change: Evidence from around the word, including extreme weather events, record temperatures and precipitation levels, thawing permafrost and rising sea levels, indicate that climate change is happening now and at a much faster rate than expected. Climate change will seriously effect northern regions, including transportation systems. The trend to warmer than normal temperatures has delayed the opening dates of ice bridges on the all-weather highways and reduced the operating window of the winter road system, as shown in the chart below. This was especially true during the winter of 2005/06. Climate change has also acceler-



permafrost ated degradation, which deteriorates road and runway surfaces. Increased precipitation results in increased consumption of sand and salt, along with mainteincreased activities. nance There will be increased pressure to mitigate the effects by improving poor surface conditions, realigning winter roads and building permanent bridges to extend and stabilize winter road seasons.



TEMPERATURE DEPARTURES FROM NORMAL

Mackenzie Gas Project: The potential construction of this pipeline will have a very large but relatively short duration impact on transportation infrastructure and services across all modes. Impacts will be felt on airport operations, highway infrastructure, and marine transportation. The Department has worked with the proponents and Transport Canada to determine the transportation requirements associated with the pipeline to identify ways and means to mitigate the negative impacts and capitalize on opportunities to expand. The Department is currently negotiating a Transportation Sub-Agreement under the Socio Economic Agreement to mitigate transportation system impacts.

GNWT TRANSPORTATION INFRASTRUCTURE: HIGHWAYS

The Northwest Territories' highway system consists of approximately 2,200-kilometres of all-weather road and 1,425-kilometres of publicly constructed winter road. It includes over 75 major bridges, 300 large diameter culverts and well over 3,000 small culverts. In addition, feeding into the public system are numerous privately constructed winter roads for oil and gas development and mine resupply including the 570-kilometre Tibbett to Contwoyto winter road into the Slave Geologic Province.



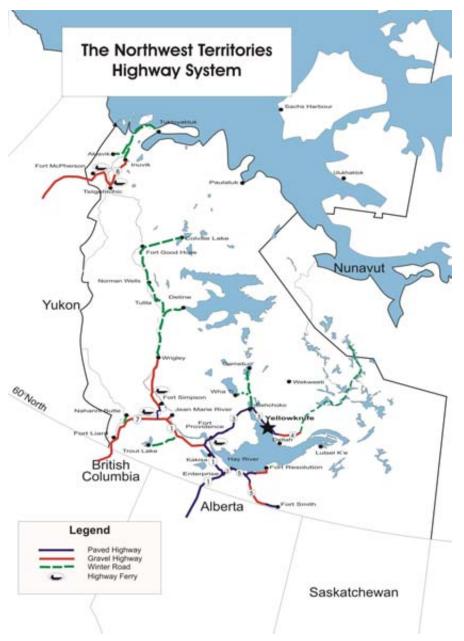
Significant improvements have been made to the highway system, most notably on the National Highway System that extends from the Alberta border to Hay River and Yellowknife, which was reconstructed and

paved in 2006. Also in 2006, 847 kilometres of NWT highways (1, 4 and 8) were added to the National Highway System under the Northern and Remote Routes category.

Major progress has been made to improve the bridge infrastructure supporting the Mackenzie Valley Winter Road. In an effort to achieve a longer operating season, 32 of 40 bridges have been constructed with 5 more underway .

Within the territory 16 communities are served by all weather roads and another 10 are served by winter roads. The Department strives to maximize winter road operations to facilitate inter-community travel, re-supply, and resource development.

Improvements to highway surface conditions are also a priority. At present 40 percent of the highway system is paved, with another 42 percent having a dust-free surface. There is much work remaining. The Liard and Mackenzie Highways require upgrading to support oil and gas activity in their regions. The Dempster Highway needs widening and surface upgrades. The Ingraham Trail requires reconstruction to improve safety and surface conditions. Surface improvements are also required on the rest of the highways.











Meeting the Challenge: Current Highways Initiatives

Maximizing our Productivity and Resources: Maintaining and upgrading the highway network is the highest priority for the Department's existing highway resources. The Department is continually challenged to maintain and improve levels of service and safety, given higher operating costs for own-force operations and contractors, internal pressures for budget reductions, and our aging infrastructure.

Deh Cho Bridge: The Government is proceeding with the construction of the bridge across the Mackenzie River near Fort Providence under a public-private-partnership (P3) arrangement with the Deh Cho Bridge Corporation (DCBC). The DCBC will design, construct, finance and operate the bridge. In return the Department will provide revenues to the DCBC from ferry/ice bridge savings and a toll on commercial vehicles. The Concession Agreement was signed on September 28, 2007. All outstanding issues are expected to be resolved by December 31, 2007. Both parties are hoping to begin construction of the bridge in early 2008, with opening in the fall of 2010.

Canada Strategic Infrastructure Funding: The \$2 billion CSIF Program was announced in the 2001 Federal Budget, as a response to the need to fund large-scale infrastructure projects beyond the scope and capacity of existing programs. The federal government's total commitment to the GNWT is \$65 million (matched by the GNWT). The \$130 million is being invested into Highways 1, 3, 4, 7 and 8 and Mackenzie Valley bridges. This funding ends in Fiscal Year 2008/09.

Federal Investment in Highways: The Department anticipates that new federal infrastructure funding programs, such as the Building Canada Fund, announced in Budget 2007 will be able to address in part a number of NWT infrastructure priorities and Corridors for Canada II proposals.

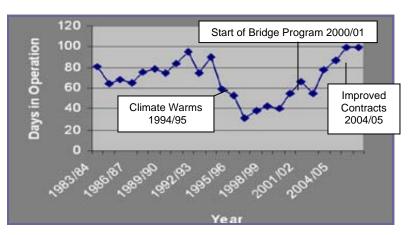
New Infrastructure: In response to resource development demands and to better connect communities, the Department will continue to pursue opportunities to expand the existing highway network. Opportunities exist for development of a Mackenzie Valley all-weather road as outlined in the proposal Connecting Canada. Opportunities also exist for improved road access into the Slave Geologic Province for existing diamond mines and for further mineral exploration activities. The Department is continually looking to expand the existing highway system to improve land access.

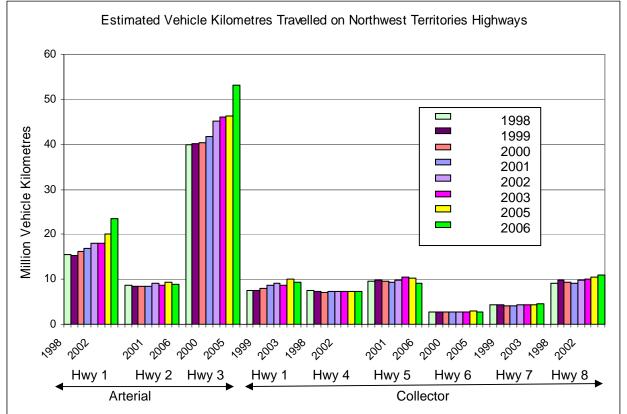
Encouraging Partnerships: In an effort to maximize the use of existing resources, and to help attract additional resources, the Department works in partnership with other governments, agencies and businesses. This includes initiatives such as lobbying efforts with the NWT Business Coalition, public-private partnerships with the Deh Cho Bridge Corporation and for winter road improvements, and partnering with the federal government on infrastructure funding. The Department will continue to develop these and other partnerships to maximize use of existing resources and/or provide improved transportation services.

Extending Winter Road Operations: Winter roads provide a cost-effective means of resupply and access for resource developments and communities when all-weather roads are unavailable. Through partnerships with the federal government the Department soon will have constructed 37 permanent bridges on the Mackenzie Valley winter road. With funding under the Canada Strategic Infrastructure Fund, the Department has improved grades on this winter road. Opportunities for partnership with industry to expand services on the winter road system are undertaken when mutually beneficial to industry and the Department.

Tlicho Corridor Improvements: The communities of Wha Ti and Gameti have road access for only two winter months of each year. Additionally, the winter road to Wekweeti has been extended from a road built by Indian and Northern Affairs Canada as part of its reclamation work at the Colomac Mine, projected to end in 2009. In 2001 Wha Ti requested that DOT realign the winter road between Behchoko and Wha Ti to an overland alignment that could be used for an all-weather road. The Department completed an initial preliminary study on different options for realignment and is undertaking engineering and environmental scoping studies. A Steering Committee and Working Group consisting of Tlicho Government, GNWT, and industry continue to study options and discuss opportunities for partnership.

Mackenzie Valley Winter Road 1983-2005 Days in Operation





ROAD LICENSING & SAFETY

The Road Licensing and Safety Program works to protect public safety, highway infrastructure, and the environment by supporting the safe operation of motor vehicles in the Northwest Territories. The Department is responsible for the testing, registration and inspection of all drivers and vehicles that use the Territorial transportation network. We establish and enforce the Acts, Regulations and Safety Codes that apply to drivers and motor vehicles—including commercial motor carriers—throughout the Territory. The Department also administers the All-Terrain Vehicles Act which delegates authority to municipalities to enact bylaws related to all-terrain vehicles.

Regional offices throughout the Territory licence vehicles and drivers. Commercial vehicle enforcement is undertaken through three permanent weigh scales located at Enterprise on the Mackenzie Highway, near Fort Liard on the Liard Highway, and near Inuvik on the Dempster Highway. The Department operates a mobile weigh scale and inspection unit, and enforcement officers patrol throughout the territory.

Over the past few years, RL&S has rolled out a number of road safety initiatives, including the Graduated Drivers Licence Program and STRID, the Strategy to Reduce Impaired Driving. Under STRID, amendments were made to the *Motor Vehicles Act* to allow the Registrar to take administrative actions against impaired drivers, as well as establishing the legislative authority to implement an ignition interlock system in the NWT.

Meeting the Challenge: Current RL&S Initiatives

Enhanced Drivers Licence Security: A new secure NWT Drivers Licence and General Identification Card program was introduced in July 2006. Department of Transportation staff are working to expand service to communities without issuing offices. Changes will be considered in the future to stay current with national and international identification security frameworks and protocols, such as the Western Hemisphere Travel Initiative.



TRAFFIC ACCIDENT SUMMARY (2006 compared to 2005)				
,	2005	2006	% Change	
Property Damage Only Collisions	656	564	-14.0	
Personal Injury Collisions	128	88	-31.3	
Fatal Collisions	2	2	0.0	
Total Reported Collisions	786	654	-16.8	
Number of Persons Killed	2	2	0.0	
Number of Persons Injured	188	112	-40.4	
NWT Highway System Collisions	183	142	-22.4	
Rural Collisions	7	5	-28.6	
Collisions in Communities	596	507	-14.9	
Registered Vehicles	34,669	35,938	3.7	
Licenced Drivers	29,166	28,974	-0.7	
Collisions per 100 Licenced Drivers	2.69	2.26	-16.2	
Collisions per 100 Registered Vehicles	2.27	1.82	-19.7	
Collisions per 100 Population	1.83	1.56	-14.6	
Collisions Involving Alcohol	51	43	-15.7	

Amendment of the *Motor Vehicles Act (MVA)*: RL&S has submitted a Legislative Proposal to the Department of the Executive for review. The proposal identifies 23 key issues in the MVA that need to be addressed. RL&S also intends to review the All Terrain Vehicles Act, which may lead to major changes to incorporate better safety provisions and to account for a variety of new products available on the market that are not easily classified under the current Act. The review will involve meeting with the various stakeholders to ensure that the regulatory framework is in place for public safety and that there are no gaps in the legislation as a result of the lack of community bylaws.

Commercial Vehicle Permitting and Enforcement: The Department is investigating changes to its issuing processes, with a view towards adapting a streamlined phone and/or internet based system. As well, enforcement activities are being reworked and virtual weigh scales are considered to maximize resources and respond to changing trucking patterns.

Road Safety Initiative: The Road Safety Initiative is being developed in support of Canada's national road safety plan, *Road Safety Vision 2010.* It is being created to educate and inform the public, engineer our highways to the highest safety standards; and assist law enforcement and our own enforcement agencies to ensure all drivers and vehicles are as safe as possible. An important component in developing a road safety program is a thorough review of the existing Acts and Regulations to ensure that there is a solid framework in place to address road safety issues.

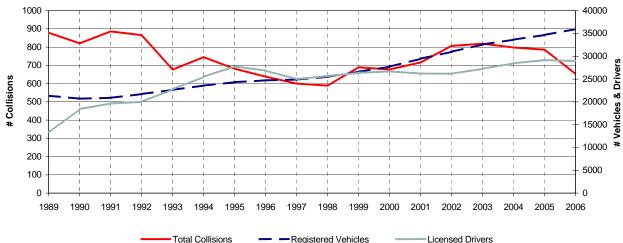
Other safety initiatives undertaken to by the Department date include variable-messaging signs warning drivers of conditions and events, a Bison awareness campaign, introduction of the *Strategy to Reduce Impaired Driving* (STRID) initiatives, additional safety features on the highways such as guardrails, improved lighting, corner markers, and rest areas, a new web site for road reports (www.dot.gov.nt.ca/) and more responsive winter operations.





Trends in Licensed Drivers, Registered Vehicles and Collisions





AIRPORTS

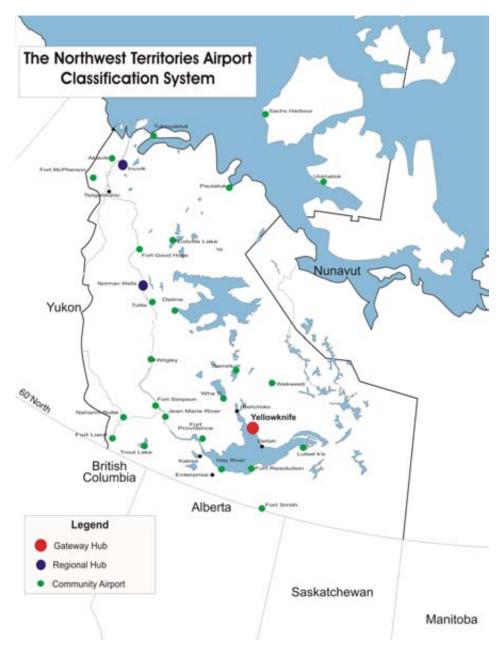
The Department provides airport facilities and services in support of safe, cost-effective and reliable air services. The Department is responsible for the maintenance, operation, rehabilitation and upgrading of 27 community based airports located throughout the Northwest Territories.

The air infrastructure in the Northwest Territories is well-developed. Department resources are focused on operating, maintaining and rehabilitating existing infrastructure. In some cases, new or expanded air terminal buildings have been constructed.

Air services are provided by three major carriers (Canadian North, First Air and Air Canada); by several smaller regional carriers including Air Tindi, Northwestern Air Lease, North Wright Air, Aklak Air and Buffalo Air; and by charter operators such as Arctic Sunwest. Helicopter operators such as Great Slave Helicopters and Canadian Helicopters are based throughout the territory.

Air carrier services follow a typical "hub and spoke" operation. The main access point to other provinces/territories is through Yellowknife, which is classified as a gateway hub. The airports in Inuvik and Norman Wells are classified as regional hubs since air services are provided from these airports to the surrounding communities. The remaining 24 airports are community-based.

Transport Canada is responsible for the regulation of airport facility and air carrier operations. NAV CANADA provides air navigation systems and flight and weather information in the Northwest Territories. The Canadian Air Transport Security Authority (CATSA) manages security at the Yellowknife airport. Community airport radio stations or CARS stations are managed through a private contractor at 17 territorial airports.









Meeting the Challenge: Current Airports Initiatives

Maximizing our Productivity and Resources: The Department is continually challenged to provide safe and efficient airport facilities and operations with the limited resources available, particularly in light of our aging infrastructure. While there has been success related to safety, the Department must be diligent to ensure that this continues, especially given budget restraints and increasing operating costs for both own-force operations and contractors. The Department will continue to pursue initiatives such as runway stabilization and mobile equipment rationalization to cost-effectively manage existing resources.

Enhanced Security Measures: In response to the incidents of September 11, 2001 measures have been implemented to ensure compliance with enhanced national security requirements. The Department has modified the Yellowknife Air Terminal Building to accommodate enhanced security screening facilities, funded by the Canadian Air Transport Security Authority (CATSA). The security hold room has been expanded and washrooms added to encourage earlier passenger arrivals and screening by security.

Runway Lengths and Issues Project: The Department will soon release its Airport Runways Optimal Lengths and Issues Project report, a comprehensive examination of our current airport infrastructure and an update of the 1998 Runway Issues Study identifying infrastructure priorities.

Obtaining Federal Funding for Airport Improvements: The Department continues to rely on the federal Airport Capital Assistance Program (ACAP) to fund major capital infrastructure rehabilitation. Most recently these funds have been used to repair the Hay River runway and Norman Wells apron, runway and taxiways. Since 1999, \$16.7 million has been invested in NWT airports through ACAP.

Exploring Opportunities for the Yellowknife Airport: The Department of Transportation and Department of Industry, Tourism and Investment are currently undertaking an International Air Travel/Air Cargo and Tourism Opportunities Study to identify new commercial development opportunities for the Yellowknife airport. The Yellowknife Airport is strategically located and could be marketed as an important intermediate and emergency stop, or as a destination in itself for international traffic. In consultation with stakeholders, the Department has also studied alternatives to the ownership and management of the Yellowknife Airport, with consideration being given to establishing an airport authority for the operation, management and maintenance of the airport. The benefits of this approach are more flexibility in managing, marketing and accessing revenue for future development.

Aviation Career Development Program: Established in 2001 to assist NWT students who are pursuing a career in aviation, the program awards a \$5,000 bursary to up to 12 successful applicants each year. The fund is sponsored by the Department, Canadian North, Adlair Aviation and Discovery Air.



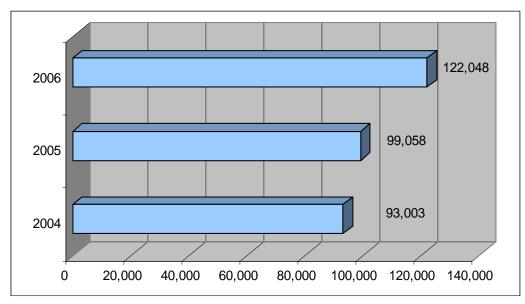
Commercial Development: The GNWT's three busiest airports (Yellowknife, Norman Wells and Inuvik) are unable to meet demands for commercial development lots. The Department is developing an investment proposal to make approximately 120 acres of airport land available for commercial development over the next five years.

Regulatory Changes: The Department will continue to work with the federal regulatory agencies and northern air carriers to ensure the impact of regulations are known and mitigated as appropriate.





Total Flights*



^{*} Includes available statistics for NWT's six largest airports

FERRIES AND MARINE

The Department of Transportation provides safe and reliable seasonal ferry services at five river crossings where territorial all-weather highways traverse waterways. The Department is responsible for the maintenance, operation and upgrading of vessels and support facilities.

As each ferry operation is subject to the annual freeze-up and break-up of the river, the Department seeks to maximize the window of operation for each ferry, considering available budget, public safety and protection of the investment.

Connected with the Ferries Program, the Department maintains a close watch over federal marine legislation, regulation and policy activities. There are three areas of program support: Management, Maintenance and Refits and Operations.

There has recently been a shift in ferry operations. Prior to 2005 all ferries were operated by private contractors through service contracts. In 2005, unionization of the ferry workers at Fort Providence and Liard River led to the termination of both service contracts. At the same time, employees at both crossings became GNWT employees. The ferry operations at N'Dulee, Peel River and Tsiigehtchic will continue to be contracted.

Meeting the Challenge: Current Ferries and Marine Initiatives

Infrastructure Strategy: The Department is initiating a fleet and infrastructure renewal strategy.

Training Program: The Department has experienced difficulties in recruiting various marine personnel (marine engineers, deckhands, mates and captains) as it is a specialized occupation in high demand across Canada. This work is often seasonal in nature and with the short ferry season, particularly at the Liard River crossing, many marine personnel prefer more stable, full time work. It is also an aging, southern-based workforce that tends to be hard to attract. The Department is therefore launching a training program to entice NWT residents to view ferry operations as an appealing career

MV Louis Cardinal Fuel Efficiency Initiative: The ferry's engines will be upgraded this fall to improve efficiency that will reduce fuel consumption by 15-25% as part of the GNWT's energy conservation efforts.

Federal Remote Resupply Program: The Coast Guard provides up to \$500,000 per year through its Remote Resupply Program, with which the Department maintains and upgrades resupply sites. A Memorandum of Understanding (MOU) has been signed with the federal government for this funding.











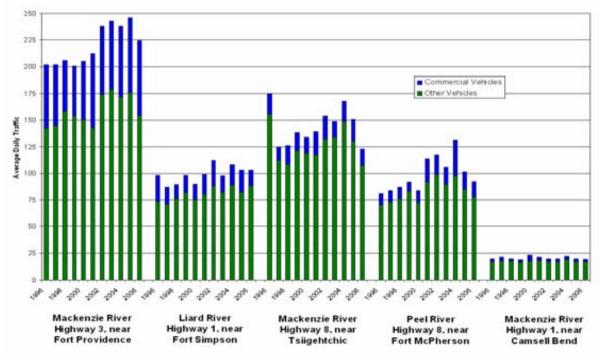
Proposed Over-the-Top Marine Route

Over-the-Top Marine Route: The oil sands and marine shipping industries are considering the shipment of heavy equipment and other commodities to the Alberta oil sands via the Northwest Passage, Mackenzie River, Great Slave Lake, Slave River, and Alberta rivers. There are potential economic benefits for NWT, and the Department is involved in ongoing feasibility discussions with industry.

Bathurst Inlet Port and Road: A Nunavut study is underway on the construction of a deep-water port on Bathurst Inlet and an all-weather road into the Slave Geologic Province to serve mineral development. This project, if it proceeds, could alter existing resupply patterns in both the marine and road modes. The Department will continue to monitor this development to ensure maximum benefits to the Northwest Territories.



Average Daily Traffic on Highway Ferries



PRIVATELY OWNED INFRASTRUCTURE: MARINE AND RAIL

The only rail line in the Northwest Territories, from Smith, Alberta up to Enterprise and Hay River, is an important link to the NWT transportation system, despite there being only 121 kilometers of track in the NWT. Over half of all bulk commodities (principally petroleum products) coming into the territory traverse this line, which was reacquired by Canadian National (CN) in January, 2006.

CN is investing into the line; it is expected that \$59 million of upgrading is required. The line's weight limit of 220,000 lbs is under the national standard of 256,000 lbs, but CN's current improvement efforts will only address critical areas. CN recently purchased 156 acres of land south of Hay River for expansion of its operational base (trans-load yard and staging area), but is not considering line expansion at the current time.

Marine infrastructure for resupply activities is either privately owned by barge operators or publicly owned by the federal government (Department of Fisheries and Oceans, Canadian Coast Guard). Barge operators include Northern Transportation Company Limited (NTCL), and several smaller operators including Coopers Barging, Bob's Welding, E. Gruben's Transport and, most recently, Horizons North.

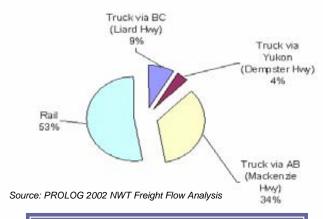
Rail and marine resupply are integral to the resupply of bulk commodities for both communities and resource development. There are four communities in the Northwest Territories that depend exclusively on marine resupply of bulk commodities (Lutsel'ke, Paulatuk, Sachs Harbour and Ulukhaktok). Eleven communities are served by both marine and all-weather/winter road access. Both bulk fuel and deck cargo services are provided.

Marine and rail resupply is characterized by relatively limited competition. There are significant barriers keeping new carriers from entering the market and existing carriers from investing in new equipment.

Federal marine activities in support of resupply activities in the Northwest Territories include the placement of navigation aids, dredging, ice escort, search and rescue, spill and emergency response, communications, vessel and crew certification, and marine policies and regulatory development.

The integrated rail and marine resupply systems are an important multi-modal resupply system for the Northwest Territories. The Department will promote multi-modal partnerships and facilities to improve levels of service and reduce costs for resupply activities.

Distribution of Inbound Surface Freight (2002)



On average, 454,000 tonnes of inbound surface freight is transported into the NWT each year:

- 53 percent arrives by rail (241,000 tonnes)
- 34 percent arrives by truck up the Mackenzie Highway from Alberta (156,000 tonnes)
- 9 percent arrives by truck up the Liard Highway from British Columbia (40,600 tonnes), and
- 4 percent arrives by truck up the Dempster Highway from Yukon and points south (16,500 tonnes).

DEPARTMENT-WIDE INITIATIVES:

Intelligent Transportation Systems (ITS): The Department has installed a Flight Information and Baggage Information Display System (FIDS/BIDS) at the Yellowknife Airport, developed a new website with a link to Yellowknife Airport flight arrivals and departures, and deployed four variable message signs on Highways 1,2, and 3. Two additional permanent variable message signs will be deployed soon on the highway system. A weigh in motion scale is also being installed on Highway 3.

Community Access Roads Program: The Department provides funding and technical assistance to non-tax based communities within the Northwest Territories for the construction and maintenance of local community access roads. Community access roads include public roads or trails offering all-weather or seasonal access, connecting communities to nearby public locations such as recreational sites, camps, archaeological sites, local resources and access to fishing, hunting and tourism opportunities. Programs are driven by requests from interested communities who determine the scope of work and construction approach. These programs are well received in communities because of the approach and direct benefit. However, funding is limited and must be apportioned in accordance with program priorities.

Energy Conservation Program: To reduce its energy consumption the Department has undertaken a num-

ber of initiatives. These include a pilot project to demonstrate the use of energy efficient vehicles, installation of auxiliary heaters in large Department vehicles, undertaking energy audits at facilities, the implementation of energy saving initiatives, undertaking a public awareness campaign on energy efficient driving for both GNWT employees and the public, and the implementation of an equipment management system to better track vehicle fuel consumption and implement preventive maintenance actions. The Department is seeking to identify additional energy conservation and alternate energy opportunities at select remote facilities and has retained the expertise of the Arctic Energy Alliance.

Climate Change: The Department is managing the Climate Change Action Project, a joint study of the effects of climate change on transportation infrastructure in the NWT with Natural Resources Canada, Transport Canada and Environment Canada. Dillion Consulting Limited was contracted to produce a report to document climate change impacts experienced to date, model future physical impacts, forecast the cost implications for future Department operations and recommend adaptive measures and determine best practices. The final report is pending. The Department is also participating in a number of interdepartmental and intergovernmental activities on climate change including the NWT GHG Strategy, the NWT Climate Change Adaptation Plan and other efforts such as a proposed Council of the Federation Climate Change Adaptation Conference to be held in British Columbia in early 2008.

Apprentice Program: The Department has received \$320,000 in funding for 7 new apprenticeship positions in 2007/08. DOT will maintain 3 apprentices for a total of 10, funded through periodic program vacancies and the existing budget. The positions are being filled.

Community Marine Program: The Department of Transportation provides funding and technical assistance to communities within the Northwest Territories for the construction and maintenance of breakwaters, docks and wharves in support of local boating. This funding is used to construct, rehabilitate, or replace local community marine facilities, either through contribution funding or through direct management of projects. The purpose of the program is to provide facilities in support of safe local harvesting, recreation, and tourism.

New DOT Website



THE FUTURE

The economic future of the Northwest Territories has never looked better, with ongoing oil and gas exploration and development, the proposed Mackenzie Valley gas pipeline, expansion of the diamond-mining sector, settlement of land claims, and many other seemingly limitless opportunities related to hydro development, tourism and development of resources. To fully realize a prosperous future there are many challenges, and among them is the provision of a safe and reliable transportation system. The Department of Transportation, through the activities and initiatives described in this report, will do its utmost to contribute to a bright future for the Northwest Territories.











BIBLIOGRAPHY

For more detailed information, please consult the following documents:

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Connecting Canada Coast to Coast: A Proposal to Complete the Mackenzie Valley Highway to the Arctic Coast, November 2005, prepared by DOT.

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