

DEPARTMENT OF INFRASTRUCTURE

Transportation Strategy Report Card



2016-2019



Government of
Northwest Territories





Introduction

In June 2015, the Department of Transportation (now Department of Infrastructure) released *Connecting Us: NWT Transportation Strategy 2015-2040* (the Transportation Strategy), a vision for the transportation system and strategic long-term priorities to guide future actions.

The Transportation Strategy has a vision of “Northerners Connected to Opportunities” and a mission to provide and promote a safe, reliable, and sustainable multi-modal transportation system by strengthening connections, capturing opportunities and embracing innovation.

The June 2016 *Connecting Us: Four Year Action Plan* (the Action Plan) identified key activities that would contribute to fulfilling the mission of the Transportation Strategy. These activities were undertaken in five areas – Airports, Corporate Management, Highways, Marine Infrastructure, and Road Licensing – while furthering investment in and work related to the three priority transportation corridors: the Mackenzie Valley Highway, the Tłıchǫ All-Season Road, and the Slave Geological Province Corridor. The development of these

corridors is intended to support a lower cost of living, improved quality of life, sustainable resource development, increased tourism, and boosting regional economies.

Between 2016 and 2019, the Department of Infrastructure made significant achievements under the Action Plan, moving us closer towards fulfilling the promise of our Transportation Strategy. In this *2016-2019 Transportation Strategy Report Card*, the Department of Infrastructure reviewed key activities undertaken and achievements made to advance the priority areas and transportation corridors identified in the 2016-2019 Action Plan. The findings outlined here, along with the guiding principles of the Transportation Strategy, and the Priorities of the 19th Legislative Assembly, will be used to inform the next Action Plan.



Key Activities

AIRPORTS

1. Establish a revolving fund for the Yellowknife Airport to increase revenue, make the airport self-sustaining, and use the resources generated to make improvements and fund projects to attract new business opportunities at the airport. (COMPLETE/ONGOING)
 - Yellowknife Airport Revolving Fund was established in July 2017 to create a secure and self-sufficient funding model for the Yellowknife Airport, by ensuring revenues generated are retained to pay for all operating and capital expenditures.
 - The Yellowknife Airport has undergone numerous improvements to support economic growth and improve passenger experience, including Canadian Air Transport Security Agency (CATSA) upgrades to pre-boarding screening, launch of the Cabin gift shop, food and beverage services in the pre-board departure lounge, a business center for staff waiting for flights, and renovation and relocation of the oversize baggage facility to create more passenger queue space at the check-in area.
 - The Yellowknife Airport Cold Weather Testing Group was established to promote Yellowknife as the number one cold weather testing destination by global aerospace leaders. In 2018, the Group hosted cold-weather testing by Bell Helicopters and has been in discussions with Mitsubishi to testing needs, and with Korean Aerospace Industries regarding the potential future testing of helicopters.

2. Replacing or expanding air terminal buildings, including at the Inuvik Airport (IN PROGRESS/ONGOING)

- The replacement of the Inuvik Airport is underway. The demolition of the RCMP Hangar (site of the future air terminal building) was undertaken by Delta North Alliance, a joint Inuvialuit and Gwich'in business entity, and was substantially completed in summer 2020. A public RFP for the design of the new air terminal building was awarded to Stantec. Construction of the new ATB and siteworks is expected to commence in summer 2021 and be completed by 2024, at which time the existing air terminal building will be demolished.
- The Department of Infrastructure has been replacing aging airfield lighting with new innovative LED technology. The department upgraded the airfield lighting, runway edge lighting, apron edge lighting, and runway end identifier lights to LED technology in Tuktoyaktuk and Norman Wells. Precision Approach Path Indicators were also introduced in Tuktoyaktuk as an improvement and replaced in Norman Wells. This work was substantially funded under the federal Airports Capital Assistance Program (ACAP).

3. Encourage commercial development at NWT airports through capital investments. (ONGOING)

- The GNWT continues to encourage commercial development at all NWT airports.
- The Yellowknife Airport worked toward a 20-Year Master Plan that identifies capital improvement for the future development of the airport, including continued collaboration with the aviation industry and the City of Yellowknife.
- The Bell Mobility Cell Tower was installed at the Inuvik Airport in Fall 2019 and is greatly enhancing connectivity for airport users.

4. Work with the federal government to streamline regulatory processes and adopt flexible “one size doesn’t fit all” approach. (ONGOING)

- Representatives from the department continue to advocate for the North on the Aviation Standing Committee and the Operations, Safety and Technical Affairs Committee of the Canadian Airports Council.
- Participation on these committees provides an opportunity for airport owners/operators across Canada to voice concerns regarding proposed regulatory changes being considered by Transport Canada.
- Some of the challenges the GNWT is engaging with the federal government on include funding for the ACAP, Canada Border Services Agency requirements for participation at an airport, Runway End Safety Areas, CATSA wait times and the regulatory burden of Safety Management Systems.
- The GNWT also advocates for stakeholder concerns regarding drones, solid waste sites, flight and duty times and pilot shortages, and numerous other issues.

CORPORATE MANAGEMENT

1. Secure federal funding to upgrade existing infrastructure in all modes and advance new strategic transportation corridors. (COMPLETED/ONGOING)

- GNWT Departments are working to maximize opportunities available under federal infrastructure funding programs. Funding highlights from 2016-2019 include:
 - o \$334 million in Phase 2 of the Investing in Canada Infrastructure Plan for numerous infrastructure projects across the NWT;
 - o \$130.5 million in funding through the National Trade Corridors Fund for a variety of projects relating to the Mackenzie Valley Highway;
 - o \$72.5 million in funding under the New Building Canada Fund (Provincial-Territorial Infrastructure Component (PTIC) Bundle 3) for a variety of rehabilitative highway work throughout the NWT;
 - o \$2.3 million for airport rehabilitation under the ACAP;
 - o \$50.4 million in funding under the Disaster Mitigation and Adaptation Fund (DMAF);
 - o \$19.5 million for four double hulled barges under the Oceans Protection Plan; and
 - o \$4 million under the Low Carbon Economy Leadership Fund to support energy efficiency and heating fuel substitution.

2. Encourage federal government to implement key recommendations for investing in NWT transportation infrastructure in the Canada Transportation Act Review Report. (COMPLETED)

- On May 16, 2017, the Minister of Transport Canada introduced the Transportation Modernization Act (Bill C-49), which would allow the federal government to move forward with initial measures in support of the Transportation 2030 Plan. Bill C-49 received Royal Assent in the House of Commons on May 23, 2018 with its provisions in force in the spring of 2019.
- Continued work to seek federal investment in airport infrastructure through the Airport Capital Assistance Program, Disaster Mitigation Adaptation Funding, DND Capital Assistance Program (Inuvik Runway Extension) and other funding programs as they become available.

3. Invest in community-based infrastructure projects under the Community Access Program. (COMPLETED/ONGOING)

- The Community Access Program (CAP) is a long-running program that provides funding to NWT communities for local construction projects to improve community transportation infrastructure, including access roads, trails, and marine facilities.
- Annual Funding for the CAP was increased from \$1 million to \$1.5 million in 2017/18.

Fiscal Year	Number of Projects	Total Funding Allocated
2016/17	19	\$ 1,014,028
2017/18	18	\$ 1,438,358
2018/19	19	\$ 1,352,473
2019/20	22	\$1,082,857

4. Partner with other governments and the academic community to advance climate change research and development and share information and best practices. (COMPLETED/ONGOING)

- The Department of Infrastructure is implementing operational practices to manage the impacts of climate change on public buildings and roads, including updating and enhancing review and inspection practices.
- The Department of Infrastructure is involved in Northern Transportation Adaptation Initiative (NTAI) projects aimed at better understanding climate change impacts and to help facilitate better and more integrated transportation planning and adaptation measures.
- Transport Canada contributed \$308,175 in funding to the GNWT in 2016/17 and \$252,525 in 2017/18 under the NTAI Transportation Monitoring Program, including the following initiatives:
 - Highway #3 Monitoring of Test Sections
 - Inuvik to Tuktoyaktuk Highway (ITH) Research and Development Project
 - ITH General and On-Going Monitoring
 - Alternate Watercourse Crossing Structures for the ITH and Mackenzie Valley Highway Winter Road
- The Department had an agreement with Wilfrid Laurier University to study the effects of loads on permafrost beneath Highway No. 4.
- The Department chaired the Northern Infrastructure Standardization Initiative until May 2017, working with the Standards Council of Canada and the federal government, to develop northern-specific codes, standards, and related instruments for infrastructure design, planning, and management.

5. Implement Environmental Management System (ONGOING WITH CHALLENGES)

- The Environmental Management System is intended to track permits, licenses, and regulatory commitments related to transportation work and initiatives. During the timespan of the Action Plan, no suitable system was found to exist which could be adapted to the needs of the Department at a reasonable price point. The Department remains committed to establishing such a system and will continue to work towards doing so.

6. Develop Green House Gas Reduction Strategy (COMPLETED/ONGOING)

- In follow up to the GNWT's Greenhouse Gas Strategy 2011-2015, the GNWT released the 2030 Climate Change Strategic Framework (CCSF) in May 2018, aimed at transitioning the NWT to a lower carbon economy, improving knowledge of climate change impacts, and building resilience and adapt to a changing climate. The GNWT also released the 2030 Energy Strategy to complement the objectives of the CCSF, including an Energy Action Plan.
- The first year of implementing the Energy Action Plan (2018/19) saw \$20 million dollars invested in energy actions and initiatives. The GNWT has been able to secure federal funding through various programs for projects to reduce greenhouse gas emissions.
- The GNWT is committing to reducing greenhouse gas emissions from transportation by 10% by 2030 over 2016 levels on a per person basis.

7. Develop Communications Strategy and increase presence on social media. (COMPLETED/ONGOING)

- Communications planning is an integral component of the Department of Infrastructure's major transportation initiatives. Information is provided to the public through the Department's website, the GNWT Facebook account, and Department of Infrastructure Twitter account.

HIGHWAYS

1. Complete construction of the Inuvik-to-Tuktoyaktuk Highway

- The 138-km Inuvik-to-Tuktoyaktuk Highway (ITH) opened on November 15, 2017. The ITH is the first highway in Canada to reach the Arctic Ocean, connecting Canada from sea to sea to sea. The project generated approximately \$90 million for the local economy and employed up to 600 people at the peak construction season, approximately 74% of whom were NWT residents. The project cost was \$299 million and four years of construction.

2. Undertake major reconstruction work on NWT highways 1, 2, 3, 4, 6, 7, and 8. (COMPLETED/ONGOING)

Highway Number	Amount spent since 2015/16	Description of work
Highway 1 (Mackenzie Highway)	\$17.5 million	Highway widening, installing guardrails, applying dust palliatives, and improving the road's grade, and drainage and chip sealing
Highway 2	\$1.65 million	Slope protection and drainage improvements, spot repairs as required
Highway 3 (Yellowknife Highway)	\$22.5 million	Repairs and rehabilitation work, as well as research on methods to reduce the impacts of thawing permafrost on ground conditions
Highway 4 (Ingraham Trail)	\$10 million	Roadway widening, structural strengthening, drainage improvements, resurfacing, application of chip seal, and guardrail installation where appropriate
Highway 6 (Fort Resolution)	\$17 million	Roadway widening, chip sealing and culvert installation
Highway 7 (Liard Highway)	\$12 million	Reconstruction and resurfacing work
Highway 8 (Dempster Highway)	\$23.4 million	Seasonal reconstruction and rehabilitation

3. Work with Parks Canada to complete reconstruction of the section of Highway 5 within Wood Buffalo National Park (COMPLETED)

- Chip seal overlay of the section of Highway 5 within Wood Buffalo National Park was successfully completed in 2017.



4. Systematically replace aging culverts and bridges (COMPLETED/ONGOING)

- All NWT bridges and bridge culverts receive regular inspections, maintenance, rehabilitation, and replacement as required to maintain the GNWT's high safety standards on territorial highways.
- Examples of culvert and bridge replacements that have been undertaken since 2015/16 include;
 - 19 new culverts and 8 new bridges along the ITH (Highway 10)
 - 4 culverts replaced in the Beaufort Delta region (Highway 8)
 - one portable bridge installed and remediation work completed on various bridges on the Mackenzie Valley Winter Road
 - two major truss bridges upgraded on Highway 5
 - embankment rehabilitation on Deh Cho Bridge
 - deck and foundation maintenance on various bridges (Highways 1, 3, 5, and 6)
 - evaluation and approval of oversize and overweight vehicle permit requests
 - 2 bridges installed on Highway 7
 - 1 culvert installed on Highway 8

- deck maintenance on the Frank Channel Bridge.
- re-engineering work for approximately 30 bridge-culvert sites requiring replacement
- community engagement, pre-engineering and environmental studies, and initiation of design for the Great Bear River Bridge.

5. Expand use of the Highways Asset Management Systems (ONGOING)

- The Highway Asset Management System is comprised of the Bridge Management System and the Highway Surface Management System. Both systems have been in continued use since 2012 and 2016 respectively to monitor the condition of highways and bridges to ensure timely and efficient maintenance and rehabilitation efforts take place.

6. Update the Public Highways Act (IN PROGRESS/ONGOING)

- A Legislative Proposal to amend the Public Highways Act to clarify that the GNWT cannot be held liable for incidents that occur on privately constructed/maintained roads was approved. Amendments were introduced in the 19th Legislative Assembly.



MARINE

1. Support the Hay River Harbour Restoration Working Group in developing a long-term plan and securing federal funding for dredging the harbour. (IN PROGRESS/ONGOING)

- The Hay River Harbour Restoration Working Group was a community-led initiative formed by local fishermen.
- Between 2016 and 2019, the Department worked with the Hay River Harbour Restoration Working Group to find opportunities to improve marine infrastructure in order to ensure safe passage within the Harbour.
- The Department continues to urge the federal government to work with the GNWT to find a cost-effective solution for dredging the Hay River Harbour.
- The Working Group is no longer active.

ROAD LICENSING

1. Improve accessibility and continue to increase the number of driver and motor vehicle services that are available online, especially for commercial vehicles. (COMPLETED/ONGOING)

- In March 2018, the NWT became the first jurisdiction in North America to offer a full suite of online DMV services, and is recognized as an industry leader. Online DMV services implemented include:
 - o Email and text notification reminders for driver examination appointments, expiring registrations, driver's license renewals, general identification card renewals, driver medicals, and commercial inspections;
 - o Renew or replacement of a driver's license and NWT identification card;
 - o Renew, change of address, reprint, cancel a vehicle registration, or upgrade gross vehicle weight rating;
 - o Book, reschedule, or cancel a driver examination;
 - o Driver's abstracts;
 - o Purchase and modify commercial carrier vehicle registration permits, single trip permits (e.g. tolling and fuel tax permits), as well as annual and special permits;
 - o Commercial fleet management for self-managing tolling transponders for the Deh Cho Bridge, and reporting toll crossings online.
 - o Print replacement documents including receipts, vehicle registration certificates, examination bookings, and commercial permits; and
 - o User account self-management to authorize other users to use a person's account to process online requests on their behalf.
- The Department of Infrastructure continues to work with key stakeholders to implement additional online services, including requesting an online accident report and making a personalized plate request.

2. Update and modernize regulations under the Motor Vehicles Act (MVA) and review corresponding fines to improve road safety and harmonize with other jurisdictions. (COMPLETED/ONGOING)

- Since 2015/16, the Department has made the following amendments to the MVA regulations to improve road safety and harmonize with other jurisdictions:
 - o establishing zero tolerance limits for alcohol and drugs (including cannabis) for young and novice drivers, and operators of specified commercial vehicles;
 - o establishing administrative driver's licence suspensions/disqualifications for all drivers who fail, or refuse without reasonable excuse, a Standardized Field Sobriety Test or an evaluation by an evaluating officer;
 - o introducing administrative license suspensions for second, third, and fourth distracted driving offences in a two year period;
 - o establishing specific offences (and higher fines) for driving while using a restricted electronic device in a school or construction zone; and
 - o establishing an offence framework for speeding offences that is proportional to the amount by which the driver exceeds the limit (every 1 kilometre over is an offence)



3. Implement a High Risk Driver Program aimed at achieving behavioural change among participants.
(NOT COMPLETE)

- Due to operational challenges this initiative was not completed. This will be considered as part of future planning.

4. Analyze the advantages of a combined NWT identification card in partnership with other GNWT Departments.
(IN PROGRESS/ONGOING)

- Several GNWT Departments are exploring the option of a combined identification card of GNWT services that would potentially include health care, income support services voter identification, hunting and fishing licenses, GNWT employee ID, and medical alert info.
- A pilot program was conducted in 2017 for general identification cards (GIC) to assist residents who find it difficult to obtain an identity card. The Department continues to review results to make it simpler and more efficient for elders and others to obtain a GIC.
- In 2018, the Department began developing an update to the Secure Image Management System, which will allow the GNWT to create a secure GIC that can be produced at issuing offices throughout the NWT. This update is complete.



Progress on Priority Transportation Corridors

1. Mackenzie Valley (Highway 1)

- In June 2018, the GNWT and the federal government announced \$140 million to advance the Mackenzie Valley Highway (MVH), including construction of the Great Bear River Bridge, an access road from Wrigley to Mount Gaudet, and environmental and regulatory reviews of the section of the MVH from Wrigley to Norman Wells. The GNWT is working toward completing the environmental assessment and ensuring that funding is secured to advance construction once permits and licenses are obtained.
- The Department of Infrastructure continues to advance various community road extension projects along the MVH alignment. These capacity building projects will ensure that residents can take full advantage of the future construction of the major sections of the MVH.



2. Tłıchǫ Highway (Highway 9)

- On February 13, 2019, an agreement was signed with North Star Infrastructure to design, build, finance, operate and maintain the Tłıchǫ Highway for 25 years.
- Environmental assessment and permitting processes for the Tłıchǫ Highway to Whatì have been completed. Construction began on September 3, 2019 and is anticipated to be substantially completed in November 2021, with final completion expected in November 2022.

3. Slave Geological Province Corridor

- In August 2019, the GNWT and the federal government announced \$40 million to support environmental and planning studies to advance the Slave Geological Province (SGP) Corridor. The SGP Corridor would provide road, communications, and energy transmission infrastructure, from the end of highway 4 into the Slave Geological Province, and up to the Nunavut border.
- The project would create new development opportunities, both in construction and by opening up access for exploration and development in the mineral-rich SGP, supporting employment and business opportunities for residents.
- Next steps include engaging with Indigenous governments and other stakeholders, environmental baseline studies, and further planning and engineering work.



Next Steps

The Department of Infrastructure has made significant progress in advancing the priority areas and key activities outlined in the 2016-2019 Action Plan. Based on the progress to date, together with the guiding principles of the Transportation Strategy, and the priorities identified by the 19th Legislative Assembly, the Department will continue to identify strategic initiatives to strengthen the transportation system of the NWT through the development of the next Action Plan.



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