



IDENTIFICATION

Department	Position Title	
Infrastructure	Director, Transportation	
Position Number	Community	Division/Region
33-0096	Yellowknife	Transportation

PURPOSE OF THE POSITION

The Director, Transportation (Director) is accountable for the safe, effective, and efficient design, maintenance, and construction management of all the Northwest Territories (NWT) capital and major O&M (Operation and Maintenance) projects for Highways and Marine facilities.

SCOPE

The Director, Transportation (Director) is located in Yellowknife, and reports to the Assistant Deputy Minister, Asset Management (ADM, Asset Management).

The Department of Infrastructure is highly decentralized in the delivery of its programs and services and is responsible for territory-wide government programs such as the operation and maintenance of public buildings and transportation infrastructure and systems, project management, facilities planning, design and technical support services, environmental assessment and remediation, property management, procurement shared services, information technology, information management, disposal of surplus property and goods motor vehicle and mechanical/electrical regulatory services and fleet management.

The department is also responsible for programming aimed at increasing the use of domestic energy resources and reducing energy costs in the NWT, delivering renewable energy solutions, providing energy supply services to non-market communities, and leading efforts in energy conservation and efficiency.

On behalf of the GNWT, the department of Infrastructure also carries the responsibility for strategic planning for the GNWT's long term investment in the development of public

transportation and energy production and distribution systems for the Northwest Territories, as well as the continuity of marine transportation services for the provision of fuel and dry goods to northern destinations.

This position must function within all the related engineering Acts, Federal and Territorial regulations for: engineering, construction, safety, human resource management, financial administration, and project management, thereby ensuring the people of the NWT have a safe and effective surface and marine transportation network to support government, commercial and personal activities.

This position is the chief Civil Engineer for the Government of the Northwest Territories (GNWT) with respect to the delivery of projects, programs, maintenance and repair of all surface and marine transportation infrastructure. The Director is fully responsible for the development and delivery of programs and projects throughout the NWT to ensure the surface and marine transportation networks are safe and effective. Commercial, tourism and personnel travel are all dependent on these transportation links and the impact of an effective and safe system is significant for all residents and businesses in the Northwest Territories.

Highway operations are highly visible and politically sensitive. The Director routinely deals with communities, the media, the public, and commercial industry on issues related to provision of highways and marine services. Judgement needs to be exercised to avoid loss of life, damage or economic hardship to communities served by the highway systems. The Director carries legal responsibility in the event of a highway accident or infrastructure failure.

The Director is responsible for the delivery of a design, construction and maintenance program for a surface system of over 2200 kilometers of all-weather highways, 1425 kilometers of winter road, 70 bridges, over 2000 culverts, and 5 inland ferries and associated facilities. The Director develops and implements design standards and construction methods appropriate to severe seasonal frost, discontinuous and continuous permafrost, climatic extremes, poor soil conditions and aggregate, severe river, lake and sea ice, hydrological problems and the logistics of remote construction.

The position is also accountable for the oversight of engineering and operation of 5 ferries that form an integral part of the NWT highway system carrying over 120,000 vehicles and 220,000 passengers annually. The Director is also accountable for the strict compliance with standards; and regulations set by the Transport Canada Marine Safety Branch as well as conformation to federal and territorial legislation including the *Fisheries Act*, the *Environmental Protection Act*, *Inland Waters Act*, *Marine Liability Act* and the *Canada Shipping Act*.

The Director must provide the necessary leadership direction to ensure that programs are delivered and projects are completed. This must be done in an environment of government restructuring, fiscal restraint and rising public expectations.

DIMENSIONS

- Reporting Positions (direct or indirect/functional relationship) 6 direct, 20 indirect
- Compensation & Benefits (\$) 3,208,712
- Operations & Maintenance (\$) 1,171,288
- Grants & Contributions (\$) _____

Total O&M Budget (\$) 4,380,000

Tangible Capital Assets (\$) 76,400,000

RESPONSIBILITIES

1. Provides professional and technical advice to the ADM, Asset Management, the Regional Superintendents, and to various federal, territorial and non-governmental clients for the planning, design and construction management of civil engineering projects supporting the highways and marine transportation system within the Northwest Territories.
2. Accountable for the detailed evaluation of airport runway surfaces, highway pavements and bridge structures and for recommendations on seasonal load restrictions and overload permits to protect both public investment and safety.
3. Participates in all strategic planning for the transportation systems within the NWT. The incumbent chairs the program committee, including all Regional Superintendents, to plan for and manage the highway system.
4. Ensures the Transportation Division business plan and strategic priorities are effectively implemented and coordinated. The Director must accomplish all programs within with financial parameters. Resources must be allocated and work coordinated in such a manner as to mitigate any safety concerns. Ensure best practices are being employed for all capital and O&M projects with a view to maximizing resources for projects.
5. Develops, directs and evaluates direct reporting staff. The Director must create a positive work environment where staff is motivated to provide high quality programs and services. The Director must demonstrate management competency to ensure qualified staff are recruited and retained.
6. Accountable for ensuring safe and efficient service in remote locations where technical support and assistance is limited. Permafrost conditions create structural problems. The Director requires expertise in providing engineering solutions to diverse situations created by weather-based equipment failure and structural damage to road grades and surfaces.
7. Provides detailed and technical expertise for all projects and programs being delivered in the Territory; is part of the leadership on National or Regional level boards or

conferences. Maintains up to date information on new technology as it relates to construction and maintenance in the North.

- 8.** Reviews and provides comments, suggestions and recommendations on existing or proposed departmental and government policies, to ensure consistency with highway legislation, regulation and policy.
- 9.** Establishes safe and effective standards for design and construction of runway surfaces, highways, bridges, buildings, marine facilities and related transportation facilities through research, experience and the application of sound engineering judgment. The Director is accountable for researching, developing and updating safe and effective engineering standards and construction specifications for runway surfaces, highways, roads, bridges, culverts, wharves and related transportation facilities.
- 10.** Ensures highway projects are implemented in a way that maximizes involvement of northern and local businesses and residents.
- 11.** Directs the gathering of sufficient preliminary engineering data, including environmental, geotechnical, hydrological and topographical survey data to ensure that various alternatives can be accurately assessed and the best option selected.
- 12.** Directs the NWT highway and marine engineering research activities and the GNWT input into National and International engineering associations and committees at the Chief Engineer level.
- 13.** Directs the scheduling of projects, recommend contract awards, direct the construction management and monitor the progress of projects to ensure projects are completed on schedule and within budget.
- 14.** Negotiates contracts, change orders and contract claims and approves them within limits of delegated signing authority ensuring projects are delivered with engineering standards and best use of public funds.
- 15.** Develops and maintains the long range capital plan for highway reconstruction, bridge upgrade, construction or upgrade of replacement maintenance facilities, replacement of equipment, and minor improvements to highways. The Director supports an operational plan to improve highways and to ensure highways are maintained in a condition that ensures public safety.
- 16.** Performs a liaison function with regulatory agencies to ensure that all systems, support facilities, and project implementation activities are operated, maintained or carried out in strict accordance with all applicable regulations and good environmental practice.
- 17.** Participates in various government and inter-government working groups in developing transportation standards and specifications. The Director represents the GNWT in various national and international associations (e.g.: the Roads and Transportation

Association of Canada, the American Association of State Highway and Transportation Officials).

18. Maintains effective public relations with the construction and maintenance industry, municipal governments, land claim organizations, and the general public.

WORKING CONDITIONS

Physical Demands

No unusual demands.

Environmental Conditions

No unusual conditions.

Sensory Demands

No unusual demands.

Mental Demands

The position is subject to conflicting priorities, deadlines, and travel up to four times per month.

KNOWLEDGE, SKILLS AND ABILITIES

- Thorough knowledge of civil engineering concepts, theories and practical applications;
- Thorough understanding of project management and the ability to skillfully implement complex projects under harsh engineering conditions;
- Thorough understanding of transportation infrastructure planning, design and construction management;
- Expert knowledge of northern construction techniques;
- Thorough knowledge of the contracting and financial aspects of construction;
- Excellent oral and written communication skills;
- Excellent negotiating skills;
- Effectively manage the delivery of contractors' work;
- Effectively plan and manage the use of financial resources;
- Think strategically and link the activities of the Division to the Department's and the GNWT's vision and goals;
- Foster a positive work environment where staff is motivated to deliver quality programs and services;
- Develop others in a mentoring and supervisory position.

Typically, the above qualifications would be attained by:

- A degree in civil engineering from a recognized university;
- License to practice engineering in the Northwest Territories;
- Eligibility for membership in a professional Engineering society, in particular the NWT and Nunavut's Association of Professional Engineers, Geologists and Geophysics (NAPEGG); and,
- Minimum of 15 years in progressively more responsible positions in the construction planning, design and management of transportation projects including highway and bridge projects,
- Leadership and management posts that ensure success in leading a diverse and technical group of over 40 people.

ADDITIONAL REQUIREMENTS

Position Security

- No criminal records check required
- Position of Trust – criminal records check required
- Highly sensitive position – requires verification of identity and a criminal records check

French language (check one if applies)

- French required (must identify required level below)
Level required for this Designated Position is:
ORAL EXPRESSION AND COMPREHENSION
Basic (B) Intermediate (I) Advanced (A)
READING COMPREHENSION:
Basic (B) Intermediate (I) Advanced (A)
WRITING SKILLS:
Basic (B) Intermediate (I) Advanced (A)
- French preferred

Aboriginal language: Choose a language

- Required
- Preferred