



IDENTIFICATION

Department	Position Title	
Industry Tourism and Investment	Manager, Financial and Economic Analysis	
Position Number	Community	Division/Region
63-3708	Yellowknife	Diamonds, Royalties and Financial Analysis/HQ

PURPOSE OF THE POSITION

The Manager, Financial and Economic Analysis (Manager) is accountable for developing, implementing, and maintaining financial and economic models of mining and oil and gas deposits in the Northwest Territories (NWT).

SCOPE

The Manager, Financial and Economic Analysis is located in Yellowknife and reports to the Director, Diamonds, Royalties and Financial Analysis (DRFA). The Manager provides subject-matter expert advisory, analysis, and scenario modelling services to inform decision making related to resource project development policy, strategic investments, and predicting project specific outcomes (e.g., corporate income tax and resource royalty) and likelihood. The Manager is considered the Government of the Northwest Territories (GNWT) authority for conducting and interpreting financial and economic modeling of producing and potential resource projects in the NWT to inform decision making on mineral leases, infrastructure projects, and future revenues for the territory.

The mandate of the Department of Industry, Tourism and Investment (ITI) is to promote economic self-sufficiency through the responsible development of NWT mineral and petroleum resources, the development of natural resource industries, the promotion and support of tourism, trade and investment, business, and manufacturing and secondary industries, to create a prosperous, diverse and sustainable economy for the benefit of all NWT residents.

DRFA is responsible for the management, administration, and collection of royalties from mineral and petroleum resource development in the NWT. DRFA is also responsible for

facilitating the development of the diamond secondary industry in the NWT through implementation of the Diamond Policy Framework (DPF).

The Manager works within a legislative and regulatory framework that includes the: DPF, *NWT Mining Regulations*, the *NWT Mineral Resources Act* and its regulations and the *Financial Administration Act* as well as GNWT and ITI policies and procedures.

The mineral and petroleum revenues collected by ITI between 2014 and 2018 totaled \$240 million. The DRFA is responsible for the resource royalty forecast, which is published by ITI and the Department of Finance in the GNWT Business Plans and Main Estimates and is tabled in the legislature.

The DRFA is sometimes called upon by other departments in the GNWT to provide analysis and advice based on the econometric models of the Manager. This econometric advisory service can inform and support the decision-making that facilitates and enables resource development projects. The value of these projects range from millions to in excess of \$1 billion in capital expenditures.

The Manager undertakes this work within the context of the NWT and Canadian economic circumstances, and often includes international influences focusing on: mining, oil and gas and resource development, resource royalties, project financing, and strategic investments.

The Manager is an advanced economic and financial market subject-matter expert and represents ITI while advising decision-makers throughout government. The Manager is required to understand and interpret legislation, regulations, and diverse policies affecting the resource industry, as well as industry accounting statements, mining, oil and gas, beneficiation, refining, and GDP effects. The Manager will model scenarios and quantify associated project risk.

The Manager works within the constraints of data accessibility and accuracy necessary to inform predictive models. Key data may only be available from corporate resource developers. This constraint requires establishing confidentiality agreements with corporations and other stakeholders to ensure timely and accurate provision of services to government.

Within this environment, the Manager has independent analysis and advisory responsibility to Cabinet, Minister, Deputy Minister, and across government, in support of the ITI's resource development objectives. The Manager has independent authority for determining the breadth, quantity, and method of all advisory services, and the work is often deadline driven. The analysis and information output of this role is critical to Cabinet, ITI's Deputy Minister and Minister with regards to deliberations on policy development and decision-making. The information is used at a senior level of government, involving multiple departments, and reflects a whole of government approach.

The Manager collaborates closely with the Division's Manager, Resource Royalty Administration and the Manager, Geology and Resource Royalty Policy. The Manager works collaboratively with colleagues within ITI, particularly Policy, Planning, Analysis and Communications, and Mineral and Petroleum Resources Division. The Manager regularly collaborates with GNWT colleagues in the Departments of Finance, Justice, Executive and Indigenous Affairs, and Education Culture and Employment. The Manager also works with federal and provincial colleagues.

Work is performed under the general direction of the Director, DRFA. The Manager has a significant amount of latitude provided that the policies, guidelines and interests of the GNWT are complied with. Judgment is required in interactions with operators and the application of valuation and audit processes. A high degree of diplomacy and tact are required.

RESPONSIBILITIES

- 1. Develops, implements, and maintains the forecasting and scenario-modeling of existing, planned, and potential resource projects.**
 - Functions as central agency for resource development modeling including roads, infrastructure.
 - Uses professional judgment to select data or and make critical assumptions for use in analysis.
 - Researches and provides advice on risks associated with determining regulatory security deposits.
 - Communicates complex ideas in a straightforward, understandable manner.
 - Develops input-output analysis of project impacts on NWT GDP and employment.
 - Creates Monte Carlo Simulations of economic and financial models and analyzes and concludes on results.
 - Develops base case models of resource project including the forecasting of marketable goods, project profitability, and benefit to government (resource royalties, personal and corporate income taxation).
 - Drafts briefing material and provides expert opinions as requested by the Deputy Minister, Minister, and Cabinet as required, including meetings, periodic forecasts, marketing missions or other government initiatives.
 - Advises on ITI's technical standards for econometric, input-output, cost-benefit, and financial market analysis for non-renewable resources.
 - Creates forward-looking prices simulations using differential calculus, informed by Econometric models of commodity, price volatility, and the presence of trend.

- 2. Develops, implements, and maintains forecasting models of resource royalties.**
 - Interprets complex information from industry to inform the forecast.
 - Forecasts royalties and adapts and maintains forecast models.
 - Presents results to senior management for approval.
 - Assesses model accuracy using Econometric techniques.

- Anticipates the need for inter-provincial royalty sharing agreements and model scenarios, used to inform future negotiations.
3. **Contributes to the Department's engagement in government initiatives that are in response to insolvency and bankruptcy proceedings of resource development companies.**
 - Oversees monitoring and reporting related to financial status for companies or projects, related to developing or operating projects in the NWT, using data from public sources and royalty returns.
 - Provides senior management with accurate and timely research, analysis and recommendations related to potential for insolvency events.
 - Participates on inter-departmental working groups associated with managing insolvency and bankruptcy events.
 - Ensures the integrity, confidentiality, and security of highly sensitive information.
 4. **Provides information, analysis, and advice to the Deputy Ministers, the Ministers, and Cabinet on the regulatory and infrastructure development impact on project viability.**
 - Ensures the timely collection of accurate information/data on financial markets, capital and operating cost inflation, relevant legislation constraints, and regional investment policy.
 - Calculates and advises on the likelihood of project financing.
 - Monitors important market developments and draft briefing materials focused on policy implications of initiatives (program and fiscal), including providing recommendations for courses of action to mitigate loss or risk.
 5. **Supports economic strategy development based on economic and financial analysis inputs.**
 - Collaborates with industries and governments to conduct research and analysis of jurisdictional competitiveness related to resource development.
 - Provides strategic analysis and advice on economic policy, conducts research and analysis of economic changes as they affect regional or industry activity in the NWT economy.
 - Maintains a network of contacts with economic bureaucrats in federal, provincial and territorial governments.
 - Collaborates with Statistics Canada in the identification of resource industry data gaps;
 - Manages contractors/consultants on the delivery of specialty services;
 - Collaborates with other governments, liaising on model data and other key information/research sources;
 - Provides input on the Conference Board of Canada's quarterly reports

6. Assists the Resource Royalty Administration Unit in conducting valuation and year-end reconciliations at operator's sorting and valuation facilities (in Yellowknife) or other worksites in Canada or abroad.

- Represents departmental interests in the process of valuation and year-end reconciliations as carried out by industry.
- Establishes mutually respectful and productive relationships with key industry representatives/employees.

WORKING CONDITIONS

Physical Demands

Periodic requirement to submit to participate in search protocols imposed by external operators during visits to diamond sorting facilities in Yellowknife. Search protocols may require the incumbent to consent to be touched by another person.

Travel overseas will require immunizations against disease, mandatory in some countries.

The incumbent will be required to travel to Southern Canada approximately three times per annum, for one week per occurrence and overseas once per annum for one week.

Environmental Conditions

No unusual conditions.

Sensory Demands

No unusual demands.

Mental Demands

The incumbent will be required to travel to Southern Canada approximately three times per annum, for one week per occurrence and overseas once per annum for one week.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of financial markets (specifically physical commodities and futures) and theory used to generate econometric price models, which inform advisory services to government;
- Knowledge of traded financial instruments and industry practices, such as, corporate and government bonds, equities, and debt financing terms, used to inform specialized financial modeling;
- Knowledge of theoretical economic policy, and econometrics, specifically structural equation models and time-series analysis to enable advanced statistical diagnostic capabilities;

- Knowledge of applied mathematics including: matrix algebra, differential equations, and probability, used as key tools in constructing economic and financial models to inform decision making by government;
- Knowledge of federal and provincial/territorial taxation, personal and corporate tax to calculate/forecast tax implications of projects;
- Knowledge at an advanced level of accounting principles and financial statements to inform economic and financial models;
- Knowledge of territorial/Canadian issues and trends (political, social, economic) to inform advisory services;
- Knowledge of computer applications and software at an advanced level, as they pertain to economic analysis for oil and gas, and mineral development and economic evaluation purposes;
- Knowledge of the oil and gas and mineral resource industries, including exploration, development and production related activities;
- Knowledge of resource development engineering and geology specific to mining and oil and gas, to allow for effective analysis of regional opportunities and predicted values;
- Knowledge of aboriginal groups, land claim issues, and resource development activities and negotiations ongoing throughout the NWT;
- Knowledge of the Canadian System of National Accounting, to enable use of Statistics Canada's Supply-Use Tables, and conduct input-output analysis;
- Knowledge of rough diamond rifling, sorting, valuation, and inventory control.
- Analytical skills to ensure accurate, thorough and timely analysis of data and information to inform effective advisory services;
- Computer skills especially in the use of spreadsheets, econometric, and Monte Carlo software;
- Computer programming skills in order to overcome the limitations of Excel and Monte Carlo simulation software when used for dynamic modelling;
- Priority setting skills to effectively manage a large volume of work and competing demands;
- Written and verbal communication skills and the ability to articulate complex information to a non-finance/economics audience;
- Influence and persuasion skills to gain access to and impact issues with other organizations relating to the GNWT's mining, oil and gas, and economic policies, strategic directions and investments;
- Management skills to ensure activities and responsibilities are completed on time and in line with Department objectives and priorities;
- Interpersonal skills to ensure the incumbent works effectively as part of the Division team, and establishes effective working relationships within the department, government and with external partners or stakeholders;
- Presentation skills to ensure that complex information is organized and presented in an effective, timely and focused way, aimed at meeting the objectives of the Department;
- Ability to work in a highly unpredictable and complex environment involving demanding clients, and multiple and potentially conflicting demands;
- Ability to deal with ambiguity and use good judgement where project or data parameters are unclear or undefined;

- Ability to understand customer needs and deliver results at a high standard;
- Ability to learn quickly is essential to understanding and meeting changing client demands;
- Ability to develop innovative approaches to modelling changes/scenarios in taxation, GDP, labour income, population dynamics, resource revenues and strategic investments;
- Ability to work to and meet tight deadlines;
- Ability to synthesize large volumes of information;
- Ability to research and understand unfamiliar physical or engineering processes to inform the accuracy of economic modelling;
- Ability to be highly confidential and safeguard sensitive information that may cause reputational or financial loss if disclosed inappropriately;
- Ability to effectively and concisely communicate complex subject matter to a lay audience including elected officials and senior government bureaucrats

Typically, the above qualifications would be attained by:

Completion of an undergraduate degree in economics, finance, or advanced mathematics, combined with 10 years of progressively more responsible work experience. Experience should include working in an analytical or finance role in government or resource industry for a minimum of three years and should include five years or more experience in computer based analysis requiring advanced knowledge of quantitative methods including spreadsheets, Monte Carlo, and econometric software.

Must have one of the following professional designations: Certified Public Accountant (CPA), Chartered Financial Analyst (CFA), or Certified Business Economist (CBE).

Assets include:

A graduate level degree in Econometrics or Finance is preferred.

Full membership in the Canadian Association for Business Economics (CABE) or the National Association for Business Economics (NABE).

ADDITIONAL REQUIREMENTS

Position Security (check one)

- 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 applicable)

- 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

Indigenous language: Select language

Required

Preferred