LABOUR MARKET OUTLOOK



Advanced Education and Skills



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MESSAGE FROM THE MINISTER

As Minister of Advanced Education and Skills, I am pleased to present Labour Market Outlook 2025. As part of its mandate, the Department of Advanced Education and Skills works to ensure Newfoundland and Labrador has a highly skilled workforce to support the provincial economy, meet labour demands and increase labour force participation in the province. The availability of timely labour market information is pivotal to help individuals make informed decisions regarding their education and careers, to help post-secondary institutions tailor their programs to meet employer needs, and to assist industry in preparing for future labour market conditions.

Labour Market Outlook 2025 projects the province's labour demands for the next decade and outlines the prospects for various occupations. This report provides detailed outlooks on the provincial labour market landscape, including economic, employment, labour supply and occupational trends over the next 10 years. It is an important tool for job seekers, employers, educators, researchers and policy makers, as well as others with an interest in the provincial labour market.

Workforce development is an integral part of *Live Here, Work Here, Belong Here: A Population Growth Strategy for Newfoundland and Labrador, 2015-2025*. Labour Market Outlook 2025 will help inform individuals and other stakeholders about the existing and forthcoming employment opportunities in Newfoundland and Labrador. The Provincial Government will invest in the workforce and the people of Newfoundland and Labrador, support family-friendly communities, support economic and community development, and grow the population through immigration.

I would like to recognize the significant contribution of the Economics and Statistics Branch of the Department of Finance in the development of Labour Market Outlook 2025. This document builds on previous work undertaken by the Department of Advanced Education and Skills. Increased public access to relevant, timely and accurate labour market information is key to supporting Newfoundlanders and Labradorians as they work, study and raise a family right here in our province.

For more information on Labour Market Outlook 2025, please visit the Department of Advanced Education and Skills website at www.aes.gov.nl.ca.

The Honourable Clyde Jackman
Minister of Advanced Education and Skills

MHA, Burin-Placentia West



Disclaimer

The information presented in this report is intended to help individuals gain a better understanding of the provincial job market. However, the information about future trends and job prospects is based on a specific set of economic and demographic assumptions. This forecast presents one possible scenario and may become dated, especially in the context of changing economic circumstances.

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Purpose

To provide relevant, timely, and accurate labour market information to stakeholders, including job seekers, employers, industry, post-secondary institutions, and government agencies. Such information is designed to inform people of employment opportunities in Newfoundland and Labrador, assist in career planning for residents and immigrants, help attract newcomers to existing and emerging opportunities, and respond to current and future labour market realities within the province.

HIGHLIGHTS

Job Openings

Significant job openings are anticipated over the next decade due to an increasing number of retiring workers. Almost 64,000 job openings are anticipated between 2015 and 2025 in Newfoundland and Labrador.¹

Almost 80 per cent of all job openings in this period will be among the following occupational categories:

- Sales and service;
- · Business, finance and administration;
- Management;
- · Health; and
- Occupations unique to primary industry.²

Highlight: Almost 64,000 job openings are anticipated between 2015 and 2025.

Job Openings by Skill Level

Between 2015 and 2025, approximately 57 per cent of job openings will be in occupations that are in management or require some form of post-secondary education. There will also be considerable openings in jobs requiring secondary school and on-the-job training.

Employment

Over the next ten years, employment in the province is anticipated to fluctuate based on major project employment cycles. Between 2015 and 2018, employment will reflect the winding down of the development phases of large projects like Hebron and Muskrat Falls. However, it should also be noted that employment levels in 2015 are still anticipated to be high compared to the province's historic employment levels.

Over the 2019 to 2025 period, the number of workers is expected to increase by about 12,000 (or 4.5 per cent). This reflects higher activity levels around production from other major projects including Vale's Voisey's Bay underground mining development and Statoil's Bay du Nord discovery, as well as expanding employment in the service sector to meet demands generated by an aging population.

During the last seven years in the forecast period (2015 to 2025), a general upward trend is anticipated. Industries that are expected to experience the largest increase in employment over the 2015 to 2025 period are:

- · Health care and social assistance;
- Mining and oil and gas extraction;
- Arts, entertainment and recreation/accommodations and food services;
- Finance, insurance, real estate and leasing; and
- Wholesale and retail trade.

Industries that are expected to experience the largest employment declines are:

- Construction:
- Professional, scientific and technical services;
- Other manufacturing (i.e., excluding seafood processing);³
- Public administration; and
- · Educational services.

Supply Considerations

The population that supplies most of the labour (15 to 64 years old) is projected to decline significantly over the forecast period, implying tightening of labour market conditions.

Of particular importance to future labour market policy is the fact that new entrants, specifically young people at the beginning of their careers, will be the biggest single source of new labour supply. It is anticipated, however, that their numbers will be exceeded by labour market exits due to attrition (i.e., retirements and deaths). Accordingly, immigration and attraction of people from elsewhere in Canada will be integral to maintaining and fostering a sufficient labour supply. The recently launched *Live Here, Work Here, Belong Here: A Population Growth Strategy for Newfoundland and Labrador* makes the attraction of individuals from the rest of Canada and around the world a priority.

Highlight: Over the 2019 to 2025 period, the number of workers is expected to increase by about 12,000 (or 4.5 per cent).

OVERVIEW AND BACKGROUND

Labour Market Outlook 2025 provides an outlook for job prospects in 120 occupational groups in the province from 2015 to 2025. This work was produced by the Department of Advanced Education and Skills, in partnership with the Department of Finance.

This report provides information on the number of job openings by occupational grouping as well as future job prospects for each grouping. The report is a valuable resource that can be used by:

- · iob seekers:
- · employers and educators;
- · researchers and policy makers; and
- others with an interest in the provincial labour market.

The report also serves as a key resource to help achieve the objectives of the recently released *Population Growth Strategy*, particularly those key actions under the Workforce Development Action Plan of that Strategy. As part of the labour market information toolkit, Labour Market Outlook 2025 provides stakeholders (such as students, job seekers, employers, and educational institutions) with the information they need to plan for forecasted workforce opportunities.

The occupational demand projections in this report and the associated job prospect ratings were prepared by the Economic Research and Analysis Division, Economics and Statistics Branch, Department of Finance. The projections are based on economic and demographic forecasts also prepared by the Department of Finance.

The occupational demand projections are based on a macroeconomic forecast which includes key indicators such as Gross Domestic Product, household income, and employment. The macroeconomic forecast is used to project employment demand for over 40 industry groups. This employment by industry forecast is the basis for the occupational demand projections.

A more detailed presentation of the methodology utilized for Labour Market Outlook 2025 and the development of the Newfoundland and Labrador occupational forecast is contained in Appendix A of this report.

KEY CONSIDERATIONS

This forecast notes continued tightening in the labour market in Newfoundland and Labrador as a result of a declining working age population. Replacement of retiring workers will be a priority over the forecast period and a main source of opportunities for job seekers in the Newfoundland and Labrador job market.

Changes in the economy, technology and demographics will be the main driving forces shaping labour market conditions into the future. In order to ensure that the skills required to meet upcoming demands are met, the Government of Newfoundland and Labrador continues to implement measures which help position the province and its workforce to capitalize on emerging opportunities.

The Provincial Government has taken a number of proactive steps to prepare individuals choosing Newfoundland and Labrador as their workplace of choice for the opportunities that exist throughout the province.

- To align labour supply and demand, and connect individuals with employment opportunities, the Provincial Government has established the Workforce Development Secretariat. Located within the Department of Advanced Education and Skills, the secretariat has a mandate to ensure labour market policies and investments reflect employer demands, to increase labour force participation rates, to collaborate with employers to recruit and train skilled workers, and to highlight skill needs and identify solutions to ensure skill gaps are filled.
- In Budget 2015, the Government of Newfoundland and Labrador announced it will work with College of the North Atlantic to renew the province's approach to trades education by developing a new strategic vision and direction that is opportunity- and industry-driven. The objective of this strategic vision will be to train people for jobs that are about to open up and to match people and programs to labour force needs. This vision is outlined in *Train Here: A Roadmap for Apprenticeship Renewal*, part of the Workforce Development Action Plan of the *Population Growth Strategy*.
- The Government of Newfoundland and Labrador obtained a 250 per cent increase from the Federal Government in the number of immigrants that the province can nominate annually. This includes an increase of 200 additional nominations for the Provincial Nominee Program, bringing the total to 500 nominations in this program, and an additional 550 nominations under the new Express Entry model of immigration. These increases will assist the province in meeting the forecasted need for skilled labour over the next 10 years.
- Recognizing the importance of employer-driven training, the Government of Newfoundland and Labrador, in partnership with the Government of Canada, offers Canada-Newfoundland and Labrador Job Grants for employers to train new or existing employees. These grants provide support to employers to invest in high quality training for their current staff and to help address the upskilling needs of a potential new employee.

ECONOMIC OVERVIEW

Economic Expansion and First Oil

Newfoundland and Labrador's economy experienced substantial expansion following the start of oil production in 1997 from the Hibernia project. Between 1997 and 2013, real Gross Domestic Product (GDP) in the province expanded by an average of 3.4 per cent per year. The exports sector was the main driver of growth, but all other sectors also grew, including government, investment and consumption. Exports almost doubled in size, reflecting production from Hibernia and, later, the Terra Nova and White Rose projects. Mineral output also grew significantly with the production of nickel from the Voisey's Bay project and expansion in the iron ore industry.

In recent years, capital investment has played an increasing role in the economy, mainly due to sizeable major projects in oil and gas, mining, hydroelectric development and manufacturing. Capital investment in the province rose from approximately \$5 billion in 2009 to \$12.3 billion in 2013.

Developments in the natural resource sector also generated gains in the service sector. Professional services were positively impacted by major project development, while income growth supported gains in trade and other consumer services. The public sector (education, health and general public service) also experienced growth as increased government revenue led to enhanced delivery of public services.

Labour market indicators reflected this prosperity. Employment grew by an average of 1.6 per cent per year from 1997 to 2013 with most of the gains in full-time jobs. Annual average employment reached 242,700 in 2013, the highest level ever recorded.⁴ During 2013, the annual average unemployment rate was 11.6 per cent, the lowest unemployment rate in 40 years. Strong employment demand was evident in wage gains over the period. Weekly earnings in the province in 2013 averaged \$952, second highest only to Alberta among provinces, and 4.5 per cent higher than the national figure.⁵

Employment growth occurred in both the private and public sectors. Top private sector increases included construction; mining and oil and gas; professional and scientific (e.g., architectural, engineering and design, computer systems); trade; and business services (contact centres and many other support services). In the public sector, health care and social assistance recorded the greatest increase, followed by education and public administration.

Highlight: In recent years, capital investment played an increasing role in the economy, due mainly to sizeable major projects in oil and gas, mining, hydroelectric development and manufacturing.

This solid economic performance also had a significant impact on the population of the province. Beginning In 2008, after experiencing 15 years of annual decline following the ground fishery closure, the province's population increased by 0.6 per cent per year, from 509,039 in 2007 to 528,194 in 2013.

Economic Performance in 2014

Global oil and iron ore price declines have impacted commodity producing economies around the world. Newfoundland and Labrador's economic conditions also softened in 2014, following a period of substantial growth. Prices for Brent crude, a benchmark for Newfoundland and Labrador oil, and iron ore declined throughout 2014. For the year as a whole, oil prices fell nine per cent compared to 2013 and iron ore spot prices fell by about 30 per cent.

Capital investment is estimated to have exceeded \$12 billion in 2014. Lower spending on Vale's nickel processing facility in Long Harbour was offset by higher spending on the Hebron and Muskrat Falls developments.

Employment levels in Newfoundland and Labrador in 2014 declined compared to 2013, from 242,700 in 2013 to 238,600 in 2014. However, 2014 had the third highest annual employment level in the province since 1976 (the year this data commenced being compiled in this manner by Statistics Canada). Lower development activity at Vale's nickel processing site in Long Harbour and the closure of Wabush Mines were contributing factors to the drop in employment.

In 2014, Newfoundland and Labrador's overall average weekly wages ranked second among the Provinces (Alberta being first) at \$991. This represents the second highest growth since 2001 (Alberta having the highest growth), and the highest percentage growth among the provinces since 2009. In 2001, Newfoundland and Labrador's overall average weekly wages were 90 per cent of the Canadian average. By 2014, this percentage had grown to 106 per cent in other words, six per cent higher than the national average.

Statistics Canada data indicates that the population of the province was 526,977 (July 1, 2014), a decrease of 0.2 per cent compared to one year earlier. The population decline was due to natural population decrease (more deaths than births) and net out-migration.

INTERNATIONAL AND CANADIAN ECONOMIES

The export of resource-based products, particularly fish products, oil and minerals remains important to the Newfoundland and Labrador economy. Changes in the global markets for these commodities can significantly impact the economy of this province.

Global

Global economic growth has been modest in recent years. However, despite modest global growth, demand for some commodities (particularly oil and iron ore) was strong following the 2008-09 recession. This was due mainly to rapid growth in China. This demand resulted in high commodity prices over the past five years and created a boom in these industries worldwide. Slowing growth in China in 2014, together with supply increases, resulted in price declines. Commodity-producing regions around the world have been impacted by lower prices, including Canada.

In late 2014 and through 2015, commodity prices have been volatile. Prices are currently at lower levels than in recent years. In the longer term, supply side adjustments due to the recent drop in prices, combined with improving global growth, are expected to result in a rebound in oil and iron ore prices. The International Monetary Fund is forecasting that global Gross Domestic Product (GDP) growth will gradually increase over the medium term.⁶

A weak global economic recovery since the 2008-09 recession has been reflected in the labour market, through smaller wage gains, higher unemployment and lower employment rates for many G7 countries.

Employment rates for the G7 countries are provided in the following table. This table shows that population growth outpaced job growth in a number of the countries, suggesting excess labour supply in some G7 countries in the medium term. However, this trend has not been evidenced in Newfoundland and Labrador. In the longer-term, labour force aging and renewed economic growth are expected to result in tightening labour market conditions in most of the G7 countries and in Newfoundland and Labrador.

Table 1. G7 Employment Rates

G7 Employment Rates	Historical Peak	2014	Difference
United States	74.1 (2000)	68.1	-6.0
Italy	58.8 (2008)	55.7	-3.1
Canada	73.5 (2008)	72.3	-1.2
France	64.8 (2008)	63.8	-1.0
Germany	73.5 (2013)	73.8	0.3
United Kingdom	71.8 (2005)	71.9	0.1
Japan	71.7 (2013)	72.7	1.0

Source: Organization for Economic Co-operation and Development (OECD)

Notes: The employment rate used above is the employed 15 to 64 years of age as a percentage of the population in this age group.

Canada

In recent years (2012-2014), real GDP growth in Canada averaged just 2.2 per cent compared to 2.6 per cent from 2002 to 2007. The recovery has not been evenly shared amongst regions. Alberta and Saskatchewan posted above average GDP growth rates since the 2008-09 recession (4.6 per cent and 3.9 per cent, respectively), while remaining provinces posted growth rates at or below the national average.⁷

For 2014, Canada's real GDP expanded 2.4 per cent, driven mainly by increases in exports and household consumption expenditures. Among provinces, Alberta posted the strongest economic growth at 4.4 per cent.

The Canadian dollar has been steadily losing ground against the strengthening U.S. dollar for well over a year, partially due to falling oil and other commodity prices. The Canadian dollar recently (August 2015) reached its lowest level since March 2009, at just US\$0.76. While there are negative impacts on some sectors of the economy from a lower exchange rate vis-à-vis the U.S. dollar, Canada remains a major commodity-exporting country, and the slide in the Canadian dollar is generally positive for future economic growth (especially since it coincides with a strengthening U.S. recovery). It is expected that the Canadian dollar will remain near US\$0.76 for the remainder of calendar year 2015.8

Looking forward, low oil prices coupled with Canada's low exchange rate should help economic performance in manufacturing-intensive provinces and lead to a rebalancing of regional economic growth in 2015. The latest consensus of bank forecasts expects real GDP growth in Canada to average 1.5 per cent in 2015. British Columbia is expected to lead the provinces in real GDP growth at 2.5 per cent, followed by Ontario (2.3 per cent) and Manitoba (2.2 per cent). The same three provinces are expected to be among the frontrunners in employment growth as well, with Manitoba leading the way at 1.6 per cent, Quebec at 1.0 per cent and Ontario and British Columbia at 0.9 per cent each.

ECONOMIC AND DEMOGRAPHIC OUTLOOK

Economic Outlook

Economic activity between 2015 and 2025 will vary from year-to-year depending on major project timelines, and the level of oil and mineral production.

The current forecast indicates less activity for the first few years of the period as major projects begin to mature past peak development. Development of major projects has been a significant source of economic and employment growth over the past several years. As development winds down and large projects move toward the production phase, there is often a lull in activity.

In the longer term, economic expansion is expected to resume due to production from Hebron, Muskrat Falls and the Voisey's Bay underground mine, as well as development of other offshore resources, such as Statoil's Bay du Nord discovery. Employment levels, in terms of the number of people working at some point during the year, are illustrated in Figure 2 on page 6.

Demographic Outlook

The provincial population may experience a decline during the first several years of the forecast period, in tandem with the winding down of several major projects. However, steps to mitigate population decline and support labour force attachment have recently been announced under the province's *Population Growth Strategy*. Population levels are projected to increase marginally after 2018 from net in-migration required for major project labour demand and to replace retirements. On a net basis, by 2025, the total population level is expected to be 0.6 per cent higher than in 2014 as seen in Table 2. On a gender basis, the female population is expected to increase over the forecast period.

Table 2. Demographic Indicators

Indicator	2014 (Actual)	2025 (Forecast)	Actual Change	Per Cent Change
Population	526,977	530,002	3,025	0.6%
Males	259,781	257,669	-2,112	-0.8%
Females	267,196	272,333	5,137	1.9%
Median Age	44.6	47.9	3.3	7.4%
Population 0-14	75,941	72,634	-3,307	-4.4%
Population 15-64	357,580	324,196	-33,384	-9.3%
Population 65+	93,456	133,172	39,716	42.5%

Source: Statistics Canada; Department of Finance

An aging population is one of the challenges facing the labour market over the forecast period as more people reach retirement age. The population aged 15 to 64 years, from which most of the labour force is drawn, is projected to decrease by 9.3 per cent (or 33,400), potentially impacting future labour supply. The population aged 65 years and over is expected to increase by 42.5 per cent. It is the assumed movement of this age group out of the labour market (attrition) which will provide most of the job openings going forward. The median age of the population is expected to continue to increase, rising from 44.6 years in 2014 to 47.9 years in 2025.

Highlight: Attrition will result in a large number of job opportunities for new labour market entrants and other job seekers.

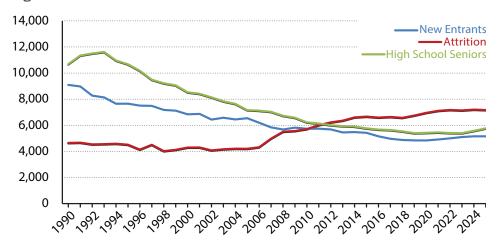
LABOUR SUPPLY CONSIDERATIONS

Changes in the province's labour supply are based on several variables, including new entrants, attrition and migration.

For the purposes of this analysis, new entrants are defined as young people at the beginning of their careers. The number of new entrants to the labour market has declined over the years, and this, together with attrition, is increasing pressure on labour supply as observed in Figure 1. About 25 years ago, there were 100 new entrants for every 50 people exiting the workforce. Today, it is estimated that for every 100 new entrants there are about 125 people exiting. This gap will continue to widen over the forecast period.

New entrants are projected to average about 5,000 per year, and total over 55,000 between 2015 and 2025. At the same time, the labour market is expected to lose almost 7,000 people per year, or about 76,000 people, through attrition over the 2015 to 2025 period. As a result, migration and other labour supply responses such as higher participation rates will be required to balance demand and supply. For some occupations, employers may be challenged to find required labour locally. However, steps have been outlined in the *Population Growth Strategy*'s recently released Workforce Development Action Plan, as well as the Immigration Action Plan, which will help align education and training in the province with labour market demands. This alignment will help further ensure a sufficient labour supply to meet employers' needs.

Figure 1. Labour Market - New Entrants and Attrition



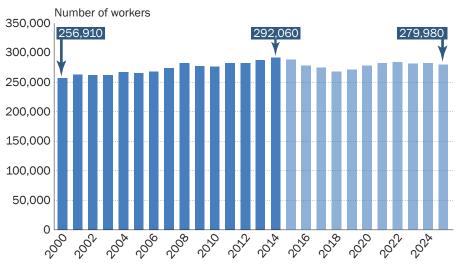
Source: Department of Finance

Notes: New Entrants refers to individuals entering the labour force for the first time. High School Students refers to students in Grade 12 or in their fourth year of high school.

EMPLOYMENT OUTLOOK

As seen in Figure 2, employment will remain at a relatively high level while labour market conditions are forecast to remain tight.

Figure 2. Employment History and Forecast



Source: Statistics Canada; Department of Finance

Highlight: Employment will remain relatively high for Newfoundland and Labrador over the next decade.

The industries that are expected to experience the largest employment increases over the forecast period include:

- · Health care and social assistance;
- · Mining and oil and gas extraction;
- Arts, entertainment and recreation/accommodations and food services;
- · Finance, insurance, real estate and leasing; and
- Wholesale and retail trade.

Increased employment in health care and social assistance is consistent with the aging population trend. Growth in mining and oil and gas extraction employment reflects major project production phases such as Hebron, Voisey's Bay underground mine and Statoil's Bay du Nord. Growth in the arts, entertainment and recreation/accommodations and food services industries reflects income growth over the period.

The forecast period from 2015 to 2025 can be divided into two distinct periods: from 2015 to 2018, and from 2019 to 2025. Over the next 10 years, employment in the province is anticipated to fluctuate based on major project employment cycles.

Between 2015 and 2018, employment will reflect the winding down of the development phases of large projects such as Hebron and Muskrat Falls. This forecast estimates a decline in employment of 8.2 per cent (or 24,100 people) over this period. While this will result in fewer people being employed in Newfoundland and Labrador in 2015 than in 2014, it is important to note that employment levels in 2015 are still anticipated to be high compared to the province's historic employment levels.

Over the 2019 to 2025 period, the number of workers is expected to increase by approximately 12,000 (or 4.5 per cent). This increase primarily reflects production from other major projects, including Statoil's Bay du Nord.

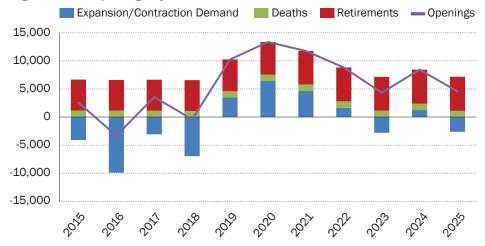
Job Openings

Significant job openings are anticipated over the next decade due to attrition. In total, almost 64,000 job openings are anticipated between 2015 and 2025.

The majority of job openings are anticipated in the last seven years of the forecast. Between 2015 and 2018, 2,400 job openings are forecasted to occur.

About 96.2 per cent of (or around 61,500) job openings are expected to occur during the last seven years of the forecast period (2019 to 2025). An expansion in employment and higher numbers of retirements significantly boost such job openings.

Figure 3. Job Openings by Source



Skill Levels

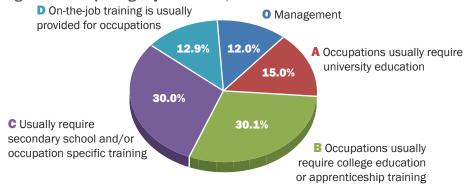
The Government of Canada provides a National Occupational Classification for Statistics (NOC-S) matrix to allow occupational classification based on skill level. There are five skill level categories:

- 0 Management occupations;
- A Occupations usually require university education;
- B Occupations usually require college education or apprenticeship training;
- C Occupations usually require secondary school and/or occupation specific training; and
- D On-the-job training is usually provided for occupations.

Each occupation or NOC code is assigned to a category based on its skill level. As indicated in Figure 4, about 57 per cent of the job openings over the entire 2015 to 2025 period will be in occupations that are in management or require some form of post-secondary education (groups O, A and B), similar to the current share of employment for these categories. There will also be considerable openings in jobs requiring secondary school and on-the-job training (groups C and D). This mix reflects aging workers exiting the labour market from all skill levels.

The composition of job openings by skill level also differs depending on the period of the forecast. From 2015 to 2018, 43 per cent of job openings will be in occupations that are in management or require some form of post-secondary education. Over the 2019 to 2025 period, this percentage increases to 57.7 per cent, partially reflecting increased demand for skilled jobs because of the development of major projects in the province over this time period.

Figure 4. Job Openings by Skill Level, 2015 to 2025



Source: Department of Finance

Source: Department of Finance

OCCUPATIONAL JOB OUTLOOK

The Expansion/Contraction and Replacement Demand Forecast provides a summary of employment (in terms of the number of people working at some point during the year), expansion/contraction of employment, attrition and job openings for 120 three-digit occupational categories (please see Appendix B for a detailed description of occupational categories). These indicators are provided for the entire forecast period (2015 to 2025), but are also provided for the 2015 to 2018 and 2019 to 2025 periods due to the varying employment patterns forecast for the two periods.

The 2015 to 2018 period is characterized by the winding down of major projects across the province. The 2019 to 2025 time period is characterized by the ramping up of economic activity across the province as new major projects come online. As a result, there will be increased employment demand for many occupations over this period.

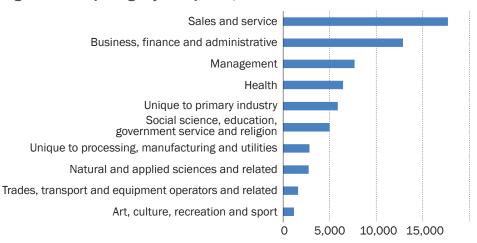
The job openings reported in the Expansion/Contraction and Replacement Demand Forecast section of this report are a net figure defined as the sum of the expansion/contraction of employment and attrition for each time period. This sum is illustrated for the 2015 to 2025 period and for the 10 major occupational groups in Table 3.

Table 3. Job Openings by Occupational Group (2015 to 2025)

Occupational Group	Job Openings
Management	7,675
Business, finance and administrative	12,879
Natural and applied sciences and related	2,747
Health	6,438
Social science, education, government service and religion	4,980
Art, culture, recreation and sport	1,161
Sales and service	17,701
Trades, transport and equipment operators and related	1,612
Unique to primary industry	5,870
Unique to processing, manufacturing and utilities	2,828
Total	63,891

A visual breakdown of total job openings (ranked most to least) by the 10 major occupational categories is provided below in Figure 5.

Figure 5. Job Openings by Occupation, 2015 to 2025



Source: Department of Finance

Tables 4, 5, 6 and 7 provide a summary of the largest increases and decreases in employment, attrition and job openings over the 2015 to 2025 period by occupational group.

Employment

The National Occupational Classification for Statistics (NOC-S) is a statistical classification designed by Statistics Canada to classify data on occupations from the Census of Population and other Statistics Canada surveys.

Table 4. Occupational Groups and Occupations with the Largest Increases in Employment (2015 to 2025)

Occupational Group	Occupation (by NOC-S*)
Sales and service	Childcare and home support workersRetail salespersons and sales clerksCashiers
Health	 Nurse supervisors and registered nurses¹⁰ Assisting occupations in support of health services (includes personal care assistants, dental assistants and other aides/assistants)¹¹ Other technical occupations in health care (except dental)¹²
Occupations unique to primary industry	 Underground miners, oil and gas drillers Supervisors, mining, oil and gas Mine service workers and operators in oil and gas drilling

^{*} See Appendix B for description

Table 5. Occupational Groups and Occupations with the Largest Decreases in Employment (2015 to 2025)

Occupational Group	Occupation (by NOC-S*)
Trades, transport and equipment operators and related	Trades helpers and labourersCarpenters and cabinetmakersMetal forming, shaping and erecting trades
Natural and applied sciences and related	 Civil, mechanical, electrical and chemical engineers Other technical inspectors and regulatory officers¹³ Technical occupations in architecture, drafting, surveying and mapping¹⁴
Business, finance and administration	 Clerical occupations and general office skills Administrative and regulatory occupations Auditors, accountants and investment professionals

^{*} See Appendix B for description

Attrition

Approximately 74 per cent of job openings due to attrition alone in this forecast period will be among (see Table 6):

- Sales and service;
- Business, finance and administration;
- Trades, transport and equipment operators and related;
- Management; and
- Social science, education, government services and religion.

Table 6. Occupational Groups and Occupations that are the Largest Source of Attrition (2015 to 2025)

Occupational Group	Occupation (by NOC-S*)
Management	 Managers in retail trade Legislators and senior management Managers in health, education, social and community services
Trades, transport and equipment operators and related	 Motor vehicle and transit drivers Carpenters and cabinetmakers Electrical trades and telecommunications occupations
Business, finance and administration	 Clerical occupations and general office skills Administrative and regulatory occupations¹⁵ Secretaries, recorders and transcriptionists
Sales and service	CleanersChildcare and home support workersRetail salespersons and sales clerks
Social science, education, government services and religion	 Secondary, elementary school teachers and educational counsellors University professors and assistants, college and vocational instructors Paralegals, social services workers and occupations in education and religion¹⁶

^{*} See Appendix B for description

Job Openings

Almost 80 per cent of all job openings in this forecast period will be among (see Table 7):

- Sales and service:
- Business, finance and administration;
- Management;
- Health; and
- Occupations unique to primary industry.

Table 7. Occupational Groups and Occupations with the Largest Number of Job Openings (2015 to 2025)

Occupation (by NOC-S*)
 Managers in retail trade Legislators and senior management Managers in health, education, social and community services
Clerical occupations, general office skillsAdministrative and regulatory occupationsSecretaries, recorders and transcriptionists
CleanersChildcare and home support workersRetail salespersons and sales clerks
 Nurse supervisors and registered nurses¹⁷ Assisting occupations in support of health services¹⁸ Other technical occupations in health care (except dental)¹⁹
 Fishing vessel masters and skippers and fishermen/women Primary production labourers²⁰ Underground miners, oil and gas drillers

^{*} See Appendix B for description

Occupational Ratings

Changing labour demands do not provide a complete picture of occupational job prospects for the future. Consideration must also be given to the size of the labour force relative to employment, as well as the overall level of employment in an occupation. For example, employment may grow by two per cent in a particular occupation, but at the same time, the labour force in that

occupation may grow by three per cent. These factors would potentially give rise to an excess supply of workers and increasing unemployment. Alternatively, an occupation may represent a small proportion of total employment and be growing at an above average rate. In this case, there may be relatively few new job openings, despite the fast rate of growth.

The Department of Finance carried out an analysis of 120 occupational categories taking both supply and demand considerations into account to identify occupations with the strongest job prospects over the 2015 to 2025 period, as well as the 2015 to 2018 and 2019 to 2025 periods. This occupational forecast included the following variables:

- Employment growth rates (historical and projected);
- Attrition:
- · New entrants:
- Participation rates;
- · Age of the workforce;
- · Unemployment; and
- Migration.

Considering both supply and demand, the occupations in this outlook have been assigned a job prospect rating between 1 and 4, according to a scale which takes into account various labour market indicators, including:

- Employment growth;
- · Ratio of attrition to labour force;
- · Net migration as a percentage of labour force; and,
- Increased labour supply responses as a percentage of labour force (inmigration, higher participation rates, inter-occupational shifts).

Occupations are rated between 1 and 4, with 1 providing the lowest job prospects where existing labour supply is anticipated to meet demands, and 4 providing the highest job prospects where existing labour supply is tight, and not meeting proposed demands. 21

The Occupational Job Prospects section of this report provides the complete table of the 120 occupations and their ratings. As seen in this section, job prospects for various occupations differ between 2015 to 2018 and 2019 to 2025, mainly due to the impacts of major project developments.

The following section provides a summary of the highest and lowest rated occupational groups and occupations (as per NOC-S) over each time period. Occupations forecast to experience labour pressures have a rating of 3 or 4, while those anticipated to have little or no pressure are rated 1 or 2.

2015 to 2018

Table 8. Occupational Groups and Occupations with the Highest Job Prospects Rating (1 being lowest job prospects and 4 being highest)

Occupational Group	Occupation (by NOC-S*)
Management (3)	 Legislators and senior management (3) Managers in health, education, social and community services (3) Managers in primary production (except agriculture) (3)
Occupations unique to primary industry (3)	 Contractors, operators and supervisors in agriculture, horticulture and aquaculture (3) Other occupations unique to primary industry²² (3) Fishing vessel masters and skippers and fishermen/women (3)
Health (3)	 Nurse supervisors and registered nurses²³ (3) Other technical occupations in health care (except dental)²⁴ (3) Assisting occupations in support of health services²⁵ (3)
Occupations unique to processing, manufacturing and utilities (3)	 Central control, process operators in manufacturing processing (3) Machine operators and related workers in chemical, plastic and rubber processing (3) Machine operators and related workers in metal and mineral products processing (3)
Business, finance and administrative (3)	 Mail and message distribution occupations (including couriers) (3) Human resources and business service professionals (3) Finance and insurance administrative occupations (3)

^{*} See Appendix B for description

In the occupations above, over this specific time period (2015 to 2018), the number of workers necessary to meet anticipated job openings will require new labour supply.

2015 to 2018

Table 9. Occupational Groups and Occupations with the Lowest Job Prospects Rating (1 being lowest job prospects and 4 being highest)

Occupational Group	Occupation (by NOC-S*)
Trades, transport and equipment operators and related (2)	 Trades helpers and labourers (1) Metal forming, shaping and erecting trades (1) Masonry and plastering trades (1)
Natural and applied science and related (2)	 Civil, mechanical, electrical and chemical engineers (1) Computer and information systems professionals (1) Other natural, applied sciences, related occupations²⁶ (2)
Sales and service (2)	 Cashiers (1) Other sales and related occupations²⁷ (2) Retail sales persons and sales clerks (2)
Social science, education, government services and religion (2)	 Judges, lawyers and Quebec notaries (2) Policy and program officers, researchers and consultants (2) University professors and assistants, college and vocational instructors (2)

^{*} See Appendix B for description

In the occupations above, over this specific time period (2015 to 2018), projected labour supply is expected to be able to meet projected job openings.

2019 to 2025

Table 10. Occupational Groups and Occupations with the Highest Job Prospects Rating (1 being lowest job prospects and 4 being highest)

Occupational Group	Occupation (by NOC-S*)
Management (3)	 Legislators and senior management (4) Managers in retail trade (3) Managers in financial and business services (3)
Occupations unique to processing, manufacturing and utilities (3)	 Machine operators in chemical, plastic and rubber processing (3) Other occupations unique to processing, manufacturing and utilities²⁸ (3) Central control, process operators in manufacturing processing (3)
Business, finance and administration (3)	 Mail and message distribution occupations (including couriers) (4) Finance and insurance administrative occupations (4) Administrative and regulatory occupations (3)
Health (3)	 Nurse supervisors and registered nurses²⁹ (3) Physicians, dentists and veterinarians (3) Other technical occupations in health care (except dental)³⁰ (3)

^{*} See Appendix B for description

In the occupations above, over this specific time period (2019 to 2025), the number of workers necessary to meet anticipated job openings will require new labour supply.

2019 to 2025

Table 11. Occupational Groups and Occupations with the Lowest Job Prospects Rating (1 being lowest job prospects and 4 being highest)

Occupational Group	Occupation (by NOC-S*)
Social science, education, government services and religion (2)	 Policy and program officers, researchers and consultants (2) Secondary, elementary school teachers, educational counsellors (2) University professors and assistants, college and vocational instructors (2)
Trades, transport and equipment operators and related (2)	 Metal forming, shaping and erecting trades (1) Plumbers, pipefitters and gas fitters (1) Masonry and plastering trades (1)
Sales and service (2)	 Other occupations in personal service (2) Technical occupations in personal service (2) Occupations in food and beverage (2)
Occupations in art, culture, recreation and sport (2)	 Athletes, coaches, referees and related occupations (1) Creative designers and crafts persons (1) Photographers, graphic arts technicians and technical and coordinating occupations in motion pictures, broadcasting and the performing arts (2)

^{*} See Appendix B for description

In the occupations above, over the forecast period (2019 to 2025), projected labour supply is expected to be able to meet projected job openings.

2015 to 2025

Table 12. Occupational Groups and Occupations with the Highest Job Prospects Rating (1 being lowest job prospects and 4 being highest)

Occupational Group	Occupation (by NOC-S*)
Management (3)	 Legislators and senior management (4) Managers in retail trade (3) Managers in health, education, social and community services (3)
Occupations unique to processing, manufacturing and utilities (3)	 Central control, process operators in manufacturing processing (3) Machine operators and related workers in chemical, plastic and rubber processing (3) Machine operators and related workers in metal and mineral products processing (3)
Business, finance and administration (3)	 Mail and message distribution occupations (including couriers) (3) Finance and insurance administrative occupations (3) Administrative and regulatory occupations (3)
Health (3)	 Nurse supervisors and registered nurses³¹ (3) Other technical occupations in health care (except dental)³² (3) Physicians, dentists and veterinarians (3)

^{*} See Appendix B for description

In the occupations above, over the forecast period (2015-2025), the number of workers necessary to meet anticipated job openings will require new labour supply.

2015 to 2025

Table 13. Occupational Groups and Occupations with the Lowest Job Prospects Rating (1 being lowest job prospects and 4 being highest)

Occupational Group	Occupation (by NOC-S*)
Trades, transport and equipment operators and related (2)	 Metal forming, shaping and erecting trades (1) Plumbers, pipefitters and gas fitters (1) Masonry and plastering trades (1)
Social science, education, government service and religion (2)	 Policy and program officers, researchers and consultants (2) Judges, lawyers and Quebec notaries (2) Secondary, elementary school teachers, educational counsellors (2)
Natural and applied science and related (2)	 Computer and information systems professionals (1) Other natural, applied sciences, related occupations³³ (2) Civil, mechanical, electrical and chemical engineers (2)
Sales and service (2)	 Other occupations in personal service³⁴ (2) Cashiers (2) Technical occupations in personal service³⁵ (2)

^{*} See Appendix B for description

In the occupations above, over the entire forecast period (2015-2025), projected labour supply is expected to be able to meet projected job openings.

At a more detailed level, the 20 occupations which are rated the highest (3 or higher) over the 2015 to 2025 forecast period are:

- Central control, process operators in manufacturing processing;
- Childcare and home support workers;
- Cleaners:
- Contractors, operators and supervisors in agriculture, horticulture and aquaculture;
- Finance and insurance administrative occupations;
- Fishing vessel masters and skippers and fishermen/women;
- · Legislators and senior management;
- Mail and message distribution occupations;
- Managers in financial and business services;
- Managers in health, education, social and community services;
- Managers in retail trade;

- Nurse supervisors and registered nurses;³⁶
- Other elemental service occupations (e.g., ushers, dry cleaning and laundry occupations, and other attendants);
- Other occupations in art, culture, recreation and sport;37
- Other occupations unique to primary industry;³⁸
- Other trades, transport and equipment operators and related occupations (e.g., motor transport supervisors, upholsterers and commercial drivers);
- Physical science professionals;39
- Stationary engineers and power station and system operators;
- · Technical occupations in libraries, archives, museums and art galleries; and
- · Transportation officers and controllers.

EXPANSION/CONTRACTION AND REPLACEMENT DEMAND FORECAST

This section contains detailed forecast tables for the 120 different occupations. The tables highlight forecasted employment levels for three different reference year periods (where employment reflects anyone employed at some point during the year). The remaining columns in the tables note the changes expected to occur for the 2015 to 2018 time period, the 2019 to 2025 time period, and the overall 2015 to 2025 time period. These changes are:

- The expansion/contraction of employment levels from the reference years;
- Overall attrition levels (i.e., retirements and attrition); and
- The combined effect of each of these two types of employment changes, resulting in net job openings.

Table	e 14 Detailed Forecast for NL	Re	ference Y	ear	Expans	sion/Cont	raction		Attrition		Jo	b Openin	gs
	Occupation (NOC-S)	2014	2018	2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025
	TOTAL ACROSS ALL OCCUPATIONS	292,060	267,987	279,980	-24,073	11,993	-12,080	26,477	49,493	75,970	2,404	61,486	63,890
A	MANAGEMENT	22,138	20,374	21,598	-1,764	1,224	-541	2,865	5,350	8,216	1,101	6,574	7,675
1	A01 Legislators and senior management	1,838	1,724	1,796	-114	72	-42	359	632	991	246	704	949
2	A11 Administrative services managers	2,174	2,028	2,122	-146	94	-52	254	505	759	107	599	706
3	A12 Managers in engineering, architecture, science and information systems	608	537	536	-72	-1	-73	56	103	159	-16	102	87
4	A13 Sales, marketing and advertising managers	993	887	913	-106	26	-80	125	227	352	19	253	272
5	A14 Facility operation and maintenance managers	786	726	756	-60	30	-30	90	179	269	30	210	240
6	A21 Managers in retail trade	5,528	5,160	5,771	-369	611	242	729	1,391	2,120	360	2,003	2,363
7	A22 Managers in food service and accommodation	1,920	1,923	2,065	3	141	144	208	412	620	211	553	764
8	A30 Managers in financial and business services	1,221	1,176	1,331	-45	155	109	149	296	445	104	451	555
9	A32 Managers in health, education, social and community services	1,756	1,695	1,756	-61	60	0	285	485	770	224	546	770
10	A37 Managers in construction and transportation	2,382	1,729	1,676	-654	-53	-707	243	408	651	-410	355	-55
11	A38 Managers in primary production (except agriculture)	327	336	362	10	26	36	33	75	108	43	101	144
12	A39 Managers in manufacturing and utilities	605	542	550	-63	8	-55	69	137	206	6	145	151
13	Axx Other Management occupations (A31, A33, A34, A35, A36)	1,998	1,909	1,964	-89	55	-34	265	499	764	176	554	730
В	BUSINESS, FINANCE AND ADMINISTRATIVE	44,278	41,080	43,235	-3,197	2,155	-1,042	4,845	9,076	13,921	1,647	11,231	12,879
14	B01 Auditors, accountants and investment professionals	3,420	3,111	3,282	-309	171	-138	351	632	983	42	803	845
15	B02 Human resources and business service professionals	1,696	1,588	1,654	-107	65	-42	200	321	521	93	387	479

Tabl	e 14 Detailed Forecast for NL (cont'd)	Re	ference Y	ear	Expans	ion/Cont	raction		Attrition		Jo	b Openin	gs
	Occupation (NOC-S)	2014	2018	2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025
	TOTAL ACROSS ALL OCCUPATIONS	292,060	267,987	279,980	-24,073	11,993	-12,080	26,477	49,493	75,970	2,404	61,486	63,890
16	B11 Finance and insurance administrative occupations	2,516	2,295	2,440	-221	145	-76	326	590	916	105	735	840
17	B21 Secretaries, recorders and transcriptionists	3,503	3,265	3,403	-238	138	-100	678	1,272	1,949	439	1,410	1,849
18	B31 Administrative and regulatory occupations	7,327	6,764	7,107	-564	343	-220	845	1,512	2,357	282	1,856	2,137
19	B41 Clerical supervisors	1,351	1,243	1,304	-109	61	-47	119	247	366	10	308	318
20	B51 Clerical occupations, general office skills	9,749	9,076	9,481	-673	405	-268	980	1,821	2,801	307	2,226	2,533
21	B52 Office equipment operators	639	595	613	-44	18	-27	66	135	201	21	153	174
22	B53 Finance and insurance clerks	4,229	3,916	4,128	-313	212	-101	406	805	1,211	93	1,017	1,110
23	B54 Administrative support clerks	571	540	561	-31	22	-10	55	106	161	24	127	151
24	B55 Library, correspondence and related information clerks	4,852	4,546	4,828	-306	283	-23	391	764	1,155	85	1,047	1,131
25	B56 Mail and message distribution occupations	1,455	1,367	1,454	-88	86	-2	194	352	547	107	438	545
26	B57 Recording, scheduling and distributing occupations	2,969	2,775	2,981	-195	206	12	235	520	754	40	726	766
С	NATURAL AND APPLIED SCIENCES AND RELATED	20,252	17,850	18,045	-2,402	195	-2,208	1,747	3,207	4,954	-655	3,402	2,747
27	CO1 Physical science professionals	435	425	455	-10	29	19	49	97	146	39	127	166
28	C03 Civil, mechanical, electrical and chemical engineers	2,585	2,069	1,978	-516	-91	-607	177	319	496	-339	229	-111
29	CO4 Other engineers	1,153	1,065	1,115	-88	50	-38	83	163	246	-4	212	208
30	C07 Computer and information systems professionals	2,266	2,086	2,153	-180	67	-113	118	249	367	-62	316	254
31	C11 Technical occupations in physical sciences	1,012	995	1,072	-17	77	60	90	173	263	73	250	323
32	C12 Technical occupations in life sciences	1,827	1,729	1,761	-98	33	-65	182	338	520	84	371	455
33	C13 Technical occupations in civil, mechanical, industrial engineering	1,094	868	838	-226	-29	-255	95	154	249	-131	125	-6

Tabl	e 14 Detailed Forecast for NL (cont'd)	Re	ference Y	ear	Expans	ion/Cont	raction		Attrition		Jo	b Openin	gs
	Occupation (NOC-S)	2014	2018	2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025
	TOTAL ACROSS ALL OCCUPATIONS	292,060	267,987	279,980	-24,073	11,993	-12,080	26,477	49,493	75,970	2,404	61,486	63,890
34	C14 Technical occupations in electronics and electrical engineering	2,103	1,904	1,972	-199	68	-131	215	430	645	16	498	514
35	C15 Technical occupations in architecture, drafting, surveying, mapping	1,050	758	675	-293	-82	-375	86	139	225	-207	56	-150
36	C16 Other technical inspectors and regulatory officers	1,798	1,452	1,409	-345	-43	-389	188	290	479	-157	247	90
37	C17 Transportation officers and controllers	2,262	2,149	2,257	-113	108	-5	260	483	743	147	591	738
38	C18 Technical occupations in computer and information systems	1,506	1,407	1,465	-99	58	-41	105	211	316	6	269	275
39	Cxx Other Natural, applied sciences, related occupations (CO2, CO5, CO6)	1,161	943	893	-218	-49	-267	98	161	259	-119	111	-8
D	HEALTH	19,650	19,391	20,852	-259	1,462	1,202	1,866	3,370	5,236	1,606	4,832	6,438
40	D01 Physicians, dentists and veterinarians	1,504	1,478	1,579	-26	101	76	121	217	338	95	318	414
41	D03 Pharmacists, dietitians and nutritionists	828	790	869	-38	79	41	64	119	183	27	198	224
42	D04 Therapy and assessment professionals	771	766	822	-6	56	50	49	89	137	43	145	188
43	D11 Nurse supervisors and registered nurses	6,364	6,300	6,735	-64	435	371	736	1,263	1,999	673	1,697	2,370
44	D21 Medical technologists and technicians (except dental health)	1,750	1,719	1,833	-31	114	83	143	267	410	112	381	493
45	D23 Other technical occupations in health care (except dental)	3,760	3,722	4,005	-39	283	244	339	623	962	300	906	1,206
46	D31 Assisting occupations in support of health services	4,235	4,178	4,534	-57	355	298	379	725	1,104	322	1,080	1,403
47	Dxx Other health occupations (D02, D22)	438	438	477	0	39	39	34	67	102	34	107	141

Tabl	e 14 Detailed Forecast for NL (cont'd)	Re	ference Y	ear	Expans	sion/Cont	raction		Attrition		Jo	b Openin	gs
	Occupation (NOC-S)	2014	2018	2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025
	TOTAL ACROSS ALL OCCUPATIONS	292,060	267,987	279,980	-24,073	11,993	-12,080	26,477	49,493	75,970	2,404	61,486	63,890
Е	SOCIAL SCIENCE, EDUCATION, GOVERNMENT SERVICE AND RELIGION	23,285	22,044	22,541	-1,241	497	-743	2,050	3,673	5,723	809	4,171	4,980
48	E01 Judges, lawyers and Quebec notaries	976	865	892	-111	28	-83	82	153	235	-29	181	152
49	E02 Psychologists, social workers, counsellors, clergy, probation officers	3,170	3,088	3,275	-82	187	105	343	594	937	261	781	1,041
50	E03 Policy and program officers, researchers and consultants	2,914	2,725	2,785	-189	60	-129	215	397	611	26	456	482
51	E11 and E12 University professors and assistants, College and Vocational Instructors	4,616	4,249	4,251	-367	1	-365	432	729	1,162	66	731	797
52	E13 Secondary, elementary school teachers, educational counsellors	7,030	6,695	6,648	-335	-47	-382	602	1,104	1,706	267	1,057	1,324
53	E21 Paralegals, social services workers, occupations in education, religion	4,578	4,422	4,690	-157	269	112	376	696	1,072	219	965	1,184
F	ART, CULTURE, RECREATION AND SPORT	5,861	5,606	5,860	-255	253	-2	409	755	1,163	154	1,008	1,161
54	F02 Writing, translating and public relations professionals	858	808	844	-49	36	-13	81	141	223	32	177	209
55	F03 Creative and performing artists	906	875	908	-31	33	1	98	173	271	67	206	273
56	F11 Technical occupations in libraries, archives, museums and art galleries	521	512	541	-9	29	20	63	110	173	54	139	193
57	F12 Photography, graphics, technical occupations movies, broadcasting and performing arts	525	482	506	-43	23	-19	27	60	87	-16	83	67
58	F14 Creative designers and craftspersons	707	639	662	-69	24	-45	41	79	120	-28	103	75
59	F15 Athletes, coaches, referees and related occupations	1,929	1,893	1,981	-36	88	52	51	102	154	15	191	205
60	Fxx Other Occupations in art, culture, recreation and sport (F01, F13)	414	397	417	-17	21	3	47	89	136	30	109	139

Tabl	e 14 Detailed Forecast for NL (cont'd)	Re	ference Y	ear	Expans	ion/Cont	raction		Attrition		Jo	b Opening	gs
	Occupation (NOC-S)	2014	2018	2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025
	TOTAL ACROSS ALL OCCUPATIONS	292,060	267,987	279,980	-24,073	11,993	-12,080	26,477	49,493	75,970	2,404	61,486	63,890
G	SALES AND SERVICE	69,551	66,763	72,132	-2,788	5,369	2,581	5,169	9,951	15,120	2,381	15,320	17,701
61	G01 Sales and service supervisors	2,370	2,274	2,484	-96	210	114	165	352	516	69	562	631
62	G11 Sales representatives, wholesale trade	1,108	981	1,023	-127	43	-85	91	180	272	-36	223	187
63	G12 Technical sales specialists, wholesale trade	511	458	479	-53	22	-32	45	88	134	-8	110	102
64	G13 Insurance and real estate sales occupations and buyers	1,381	1,328	1,534	-54	206	152	124	250	374	71	456	526
65	G21 Retail salespersons and sales clerks	9,586	8,960	10,010	-626	1,050	423	623	1,211	1,834	-4	2,261	2,257
66	G31 Cashiers	7,266	6,888	7,628	-378	740	362	313	625	938	-65	1,366	1,300
67	G41 Chefs and cooks	4,622	4,567	4,871	-55	304	249	314	608	922	259	911	1,171
68	G51 Occupations in food and beverage service	3,799	3,809	4,079	10	269	279	132	282	415	142	552	694
69	G61 Police officers and fire-fighters	1,400	1,329	1,334	-72	6	-66	137	260	397	66	265	331
70	G62 Other occupations in protective service	1,264	1,195	1,188	-69	-8	-76	90	174	264	21	167	188
71	G63 Security guards and related occupations	2,768	2,587	2,755	-181	167	-13	251	435	686	70	602	672
72	G71 Occupations in travel and accommodation	1,292	1,249	1,337	-43	88	45	92	195	287	49	283	332
73	G72 Tour and recreational guides and casino occupations	560	553	584	-7	31	23	39	79	118	31	110	141
74	G73 Other occupations in travel, accommodation, amusement and recreation	691	688	730	-3	42	39	45	81	126	42	124	166
75	G81 Childcare and home support workers	8,406	8,244	8,829	-162	585	423	932	1,673	2,605	770	2,258	3,028
76	G91 Technical occupations in personal service	1,462	1,382	1,441	-80	58	-21	98	179	276	18	237	255
77	G92 Other occupations in personal service	569	538	568	-31	30	-1	31	61	92	0	91	91

Tabl	e 14 Detailed Forecast for NL (cont'd)	Re	ference Y	ear	Expans	sion/Cont	raction		Attrition		Jo	b Openin	gs
	Occupation (NOC-S)	2014	2018	2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025
	TOTAL ACROSS ALL OCCUPATIONS	292,060	267,987	279,980	-24,073	11,993	-12,080	26,477	49,493	75,970	2,404	61,486	63,890
78	G93 Cleaners	9,762	9,362	9,990	-400	628	228	1,044	2,016	3,060	644	2,644	3,288
79	G94 Butchers and bakers, retail and wholesale	980	915	998	-65	83	18	68	137	204	3	219	222
80	G96 Food counter attendants, kitchen helpers and related occupations	5,041	5,036	5,394	-5	358	353	195	407	601	190	765	954
81	G97 Other sales and related occupations	3,845	3,584	3,987	-261	403	143	232	465	697	-29	869	839
82	G98 Other elemental service occupations	866	836	890	-30	55	24	109	193	302	79	248	326
Н	TRADES, TRANSPORT AND EQUIPMENT OPERATORS AND RELATED	60,175	48,687	48,899	-11,488	212	-11,276	4,537	8,351	12,888	-6,951	8,563	1,612
83	H01 Contractors and supervisors, trades and related workers	2,731	2,084	2,062	-647	-22	-669	264	472	736	-383	450	67
84	H11 Plumbers, pipefitters and gas fitters	1,587	1,133	1,065	-455	-68	-522	81	135	217	-373	68	-306
85	H12 Carpenters and cabinetmakers	5,446	4,018	3,963	-1,429	-54	-1,483	399	683	1,081	-1,030	628	-402
86	H13 Masonry and plastering trades	1,333	893	816	-441	-76	-517	75	126	201	-365	50	-316
87	H14 Other construction trades	2,557	1,725	1,576	-831	-149	-980	151	262	413	-680	113	-567
88	H21 Electrical trades and telecommunications occupations	4,753	3,603	3,452	-1,150	-151	-1,301	427	634	1,061	-723	483	-240
89	H22 Stationary engineers and power station and system operators	1,051	1,009	1,027	-41	18	-24	116	244	359	74	261	336
90	H31 Machinists and related occupations	137	118	121	-19	3	-16	11	23	34	-8	25	18
91	H32 Metal forming, shaping and erecting trades	5,629	4,298	4,177	-1,331	-121	-1,452	325	611	937	-1,006	490	-515
92	H41 Machinery, transportation equipment mechanics (except motor vehicle)	3,797	3,258	3,351	-539	93	-446	334	626	960	-205	719	514
93	H42 Automotive service technicians	3,013	2,860	3,096	-154	237	83	218	468	686	64	705	769

Table	e 14 Detailed Forecast for NL (cont'd)	Re	ference Y	ear	Expans	sion/Cont	raction		Attrition		Jo	b Openin	gs
	Occupation (NOC-S)	2014	2018	2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025
	TOTAL ACROSS ALL OCCUPATIONS	292,060	267,987	279,980	-24,073	11,993	-12,080	26,477	49,493	75,970	2,404	61,486	63,890
94	H43 Other mechanics	604	524	548	-80	24	-56	48	92	141	-32	117	85
95	H53 Other installers, repairers and servicers	1,774	1,471	1,501	-303	30	-273	109	205	313	-194	235	40
96	H61 Heavy equipment operators	4,236	3,359	3,286	-877	-72	-949	308	545	854	-569	473	-96
97	H62 Crane operators, drillers and blasters	634	487	470	-147	-17	-164	45	83	128	-103	66	-37
98	H71 Motor vehicle and transit drivers	6,930	6,212	6,502	-718	290	-428	692	1,331	2,023	-26	1,621	1,595
99	H73 Other transport equipment operators and related workers	1,495	1,427	1,511	-69	84	15	120	283	403	52	367	419
100	H81 Longshore workers and material handlers	3,432	3,140	3,293	-292	153	-139	265	509	774	-27	662	635
101	H82 Trades helpers and labourers	6,647	4,879	4,829	-1,767	-50	-1,818	296	518	815	-1,471	468	-1,003
102	H83 Public works and other labourers, not elsewhere classified	1,585	1,444	1,458	-141	14	-127	146	289	435	5	303	308
103	Hxx Other Trades, transport and equipment operators and related occupations (H02, H51, H52, H72)	803	747	794	-57	48	-9	104	211	316	48	259	306
-1	UNIQUE TO PRIMARY INDUSTRY	15,897	15,784	16,276	-113	492	379	1,887	3,603	5,491	1,774	4,096	5,870
104	IO1 Contractors, operators and supervisors in agriculture, horticulture and aquaculture	587	578	598	-9	20	11	77	149	226	68	168	237
105	IO2 Agriculture and horticulture workers	1,116	1,092	1,119	-23	27	4	68	143	211	45	170	214
106	I12 Supervisors, mining, oil and gas	702	729	816	26	87	114	58	131	189	85	219	303
107	I13 Underground miners, oil and gas drillers and related workers	1,069	1,121	1,256	52	134	187	81	164	245	134	298	432
108	I14 Mine service workers and operators in oil and gas drilling	436	454	506	18	52	70	21	43	63	39	95	133
109	I17 Fishing vessel masters and skippers and fishermen/women	7,610	7,603	7,606	-7	2	-4	1,260	2,356	3,617	1,254	2,359	3,612

Table	e 14 Detailed Forecast for NL (cont'd)	Re	ference Y	ear	Expans	ion/Cont	raction		Attrition		Jo	b Openin	gs
	Occupation (NOC-S)	2014	2018	2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025	2015 to 2018	2019 to 2025	2015 to 2025
	TOTAL ACROSS ALL OCCUPATIONS	292,060	267,987	279,980	-24,073	11,993	-12,080	26,477	49,493	75,970	2,404	61,486	63,890
110	I18 Other fishing and trapping occupations	797	797	798	0	0	0	70	147	217	70	147	217
111	I21 Primary production labourers	2,986	2,846	3,008	-140	162	21	176	329	505	36	491	526
112	Ixx Other Occupations unique to primary industry (I11, I15, I16)	594	563	571	-31	8	-23	76	142	217	45	149	194
J	UNIQUE TO PROCESSING, MANUFACTURING AND UTILITIES	10,972	10,408	10,542	-564	134	-430	1,102	2,156	3,258	538	2,290	2,828
113	J01 Supervisors, processing occupations	600	551	551	-49	1	-49	92	159	252	43	160	203
114	J11 Central control, process operators in manufacturing and processing	419	423	452	3	30	33	48	91	139	51	121	172
115	J12 Machine operators and related workers in metal and mineral products processing	194	180	193	-14	13	-1	21	41	62	8	54	62
116	J13 Machine operators and related workers in chemical, plastic and rubber processing	198	182	186	-16	4	-12	23	44	67	7	48	55
117	J17 Machine operators in food, beverage and tobacco processing and related workers	4,091	4,030	4,037	-61	7	-54	408	788	1,196	347	795	1,142
118	J19 Machining, metalworking, woodworking and related machine operators	122	105	106	-18	2	-16	12	24	36	-6	25	19
119	J31 Labourers in processing, manufacturing and utilities	3,672	3,514	3,552	-158	38	-120	312	658	970	154	696	850
120	Jxx Other Occupations unique to processing, manufacturing and utilities (J02, J14, J15, J16, J18, J21, J22)	1,677	1,423	1,464	-253	40	-213	187	350	537	-66	390	324

Source: Economic Research and Analysis Division, Economics and Statistics Branch, Department of Finance Newfoundland and Labrador Occupational Projection Model

OCCUPATIONAL JOB PROSPECTS

The Department of Finance carried out an analysis of 120 occupational categories taking both supply and demand considerations into account to identify occupations with the strongest job prospects over the 2015 to 2025 period. This occupational forecast has included the following variables:

- Employment growth rates (historical and projected);
- Attrition;
- New entrants:
- Participation rates;
- · Age of the workforce;
- · Unemployment; and
- Migration.

The occupations in this report have been rated according to a scale that takes into account various labour market indicators, including:

- · Employment growth;
- Ratio of attrition to labour force;
- Net migration as a percentage of labour force; and
- Increased labour supply responses as a percentage of labour force (inmigration, higher participation rates, inter-occupational shifts).

The following key is provided to assist in the interpretation of job prospects for various occupations over the 2015 to 2025 period in Newfoundland and Labrador:

Occupation Rated as 1:

Projected labour supply is expected to be able to meet projected job openings, and an excess supply of workers may exist.

Occupation Rated as 2:

Projected labour supply is expected to be able to meet projected job openings.

Occupation Rated as 3:

Projected labour supply to meet job openings will require increased labour supply responses (i.e., in-migration, higher participation rates, inter-occupational shifts). Additional supplies of qualified workers to meet unanticipated short-term increases in demand in the province are limited.

Occupation Rated as 4:

Projected labour supply is expected to lag projected job openings. Significant labour supply responses (i.e., in-migration and inter-occupational shifts) will be required to meet demand. Competition for qualified labour will be strong.

Table	e 15. Labour Market Outlook 2025 Occupational Ratings	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2015- 2018	2019- 2025	2015- 2025
A	Management Occupations	3	3	3	3	3	3	3	3	3	3	3	3	3	3
1	A01 Legislators and senior management	3	3	4	4	4	4	4	4	4	4	4	3	4	4
2	A11 Administrative services managers	3	3	3	3	4	3	3	3	3	3	3	3	3	3
3	A12 Managers in engineering, architecture, science and information systems	2	2	2	2	3	3	3	2	2	3	3	2	3	2
4	A13 Sales, marketing and advertising managers	3	2	3	2	4	4	4	3	3	3	3	3	3	3
5	A14 Facility operation and maintenance managers	3	3	3	3	4	3	3	3	3	3	3	3	3	3
6	A21 Managers in retail trade	3	3	3	3	4	4	4	4	3	4	3	3	3	3
7	A22 Managers in food service and accommodation	3	3	3	3	3	3	3	3	3	3	3	3	3	3
8	A30 Managers in financial and business services	3	3	3	3	4	4	4	3	3	3	3	3	3	3
9	A32 Managers in health, education, social and community services	3	4	4	3	3	3	3	4	4	3	3	3	3	3
10	A37 Managers in construction and transportation	2	2	2	2	3	4	4	3	2	2	2	2	3	2
11	A38 Managers in primary production (except agriculture)	2	3	4	4	4	3	3	3	3	4	4	3	3	3
12	A39 Managers in manufacturing and utilities	3	2	3	2	4	4	4	3	3	3	3	3	3	3
13	Axx Other Management occupations (A31, A33, A34, A35, A36)	3	3	3	3	3	3	3	3	3	3	3	3	3	3
В	Business, Finance and Administrative Occupations	3	2	3	2	3	3	3	3	3	3	3	3	3	3
14	B01 Auditors, accountants and investment professionals	3	2	2	2	3	4	3	3	2	3	2	2	3	3
15	B02 Human resources and business service professionals	4	3	3	3	3	3	3	3	2	3	3	3	3	3
16	B11 Finance and insurance administrative occupations	4	3	3	3	4	4	4	4	3	4	3	3	4	3
17	B21 Secretaries, recorders and transcriptionists	2	2	2	2	2	2	2	2	2	2	2	2	2	2
18	B31 Administrative and regulatory occupations	3	3	3	3	4	4	4	3	3	3	3	3	3	3
19	B41 Clerical supervisors	2	2	2	2	3	3	3	3	3	3	3	2	3	2
20	B51 Clerical occupations, general office skills	3	3	3	3	3	3	3	3	3	3	3	3	3	3
21	B52 Office equipment operators	3	2	2	3	3	4	4	3	3	3	3	2	3	3
22	B53 Finance and insurance clerks	3	2	3	2	3	3	3	3	2	3	3	2	3	3
23	B54 Administrative support clerks	3	3	3	3	3	3	3	3	3	3	3	3	3	3
24	B55 Library, correspondence and related information clerks	3	2	2	2	3	3	3	2	2	2	2	2	2	2

Table	2 15. Labour Market Outlook 2025 Occupational Ratings (Cont'd)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2015- 2018	2019- 2025	2015- 2025
25	B56 Mail and message distribution occupations	3	3	3	3	4	4	4	4	4	4	3	3	4	3
26	B57 Recording, scheduling and distributing occupations	2	2	2	2	3	3	3	3	3	3	3	2	3	3
С	Natural and Applied Sciences and Related Occupations	2	2	2	2	3	3	2	2	2	2	2	2	2	2
27	CO1 Physical science professionals	2	3	3	4	4	3	3	3	3	4	4	3	3	3
28	CO3 Civil, mechanical, electrical and chemical engineers	1	1	1	1	2	2	2	2	1	2	2	1	2	2
29	CO4 Other engineers	2	2	2	3	3	2	2	2	2	2	3	2	2	2
30	CO7 Computer and information systems professionals	2	2	1	1	2	2	2	1	1	1	2	1	1	1
31	C11 Technical occupations in physical sciences	2	3	3	4	3	2	2	2	2	3	3	3	2	3
32	C12 Technical occupations in life sciences	3	3	3	3	3	3	2	3	3	3	2	3	3	3
33	C13 Technical occupations in civil, mechanical, industrial engineering	2	2	2	2	3	3	2	1	1	2	1	2	2	2
34	C14 Technical occupations in electronics and electrical engineering	3	2	2	3	3	4	4	3	3	3	4	2	3	3
35	C15 Technical occupations in architecture, drafting, surveying, mapping	2	2	2	2	3	4	3	2	2	2	2	2	2	2
36	C16 Other technical inspectors and regulatory officers	2	2	2	2	2	3	3	2	2	2	2	2	2	2
37	C17 Transportation officers and controllers	3	3	4	4	3	3	4	4	3	3	3	3	3	3
38	C18 Technical occupations in computer and information systems	2	2	2	2	2	2	2	2	2	2	2	2	2	2
39	Cxx Other Natural, applied sciences, related occupations (C02, C05, C06)	2	2	2	2	2	2	2	2	1	2	1	2	2	2
D	Health Occupations	3	3	3	3	2	2	2	3	3	3	2	3	3	3
40	D01 Physicians, dentists and veterinarians	3	3	3	3	3	3	3	3	3	3	3	3	3	3
41	D03 Pharmacists, dietitians and nutritionists	2	2	2	2	3	3	3	3	2	2	2	2	2	2
42	D04 Therapy and assessment professionals	2	2	2	2	1	2	2	2	3	2	2	2	2	2
43	D11 Nurse supervisors and registered nurses	4	4	3	3	3	3	3	3	4	3	3	3	3	3
44	D21 Medical technologists and technicians (except dental health)	3	3	3	3	2	2	2	3	3	3	2	3	2	2
45	D23 Other technical occupations in health care (except dental)	3	3	3	3	3	3	3	3	3	3	3	3	3	3
46	D31 Assisting occupations in support of health services	3	3	3	3	3	3	2	3	3	3	3	3	3	3
47	Dxx Other health occupations (D02, D22)	3	3	3	3	2	2	2	3	3	3	3	3	2	3

Table	15. Labour Market Outlook 2025 Occupational Ratings (Cont'd)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2015- 2018	2019- 2025	2015- 2025
E	Occupations in Social Science, Education, Government Service, Religon	3	2	2	2	2	2	2	2	2	2	2	2	2	2
48	E01 Judges, lawyers and Quebec notaries	3	1	2	1	2	3	3	2	2	2	2	2	2	2
49	E02 Psychologists, social workers, counsellors, clergy, probation officers	3	3	3	3	3	3	3	3	3	3	3	3	3	3
50	EO3 Policy and program officers, researchers and consultants	2	2	2	2	2	2	1	2	2	2	2	2	2	2
51	E11 and E12 University professors and assistants, College and Vocational Instructors	3	2	2	2	2	2	2	2	2	2	2	2	2	2
52	E13 Secondary, elementary school teachers, educational counsellors	2	3	2	2	2	2	2	2	3	2	2	2	2	2
53	E21 Paralegals, social services workers, occupations in education, religion	3	3	3	3	2	3	2	3	3	3	2	3	3	3
F	Occupations in Art, Culture, Recreation and Sport	3	2	2	2	2	2	2	2	2	2	2	2	2	2
54	F02 Writing, translating and public relations professionals	3	3	3	2	2	2	2	2	3	2	2	3	2	2
55	FO3 Creative and performing artists	3	3	3	3	2	3	3	3	3	3	3	3	3	3
56	F11 Technical occupations in libraries, archives, museums and art galleries	4	4	4	4	3	3	3	4	3	3	3	4	3	3
57	F12 Photographers, graphic arts technicians and technical and co-ordinating occupations in motion pictures, broadcasting and the performing arts	2	2	1	1	2	2	2	2	2	1	2	1	2	1
58	F14 Creative designers and craftspersons	2	1	1	1	2	2	2	1	1	1	2	1	1	1
59	F15 Athletes, coaches, referees and related occupations	2	2	2	2	1	2	2	2	2	1	2	2	1	2
60	Fxx Other Occupations in art, culture, recreation and sport (F01, F13)	3	3	3	3	3	3	3	4	4	3	3	3	3	3
G	Sales and Service Occupations	2	2	2	2	2	2	2	2	2	2	2	2	2	2
61	G01 Sales and service supervisors	2	2	2	2	3	2	2	2	2	2	2	2	2	2
62	G11 Sales representatives, wholesale trade	3	1	2	1	2	3	3	2	2	3	2	2	2	2
63	G12 Technical sales specialists, wholesale trade	3	1	2	2	3	4	3	3	2	3	2	2	3	2
64	G13 Insurance and real estate sales occupations and buyers	3	2	3	2	3	3	3	3	3	3	3	3	3	3
65	G21 Retail salespersons and sales clerks	2	2	2	2	3	3	3	3	2	2	2	2	2	2
66	G31 Cashiers	2	1	2	2	2	2	2	2	2	2	2	1	2	2
67	G41 Chefs and cooks	2	3	2	2	2	2	2	2	2	2	2	2	2	2

Table	e 15. Labour Market Outlook 2025 Occupational Ratings (Cont'd)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2015- 2018	2019- 2025	2015- 2025
68	G51 Occupations in food and beverage service	2	3	2	2	2	2	2	2	2	1	2	2	2	2
69	G61 Police officers and fire-fighters	3	3	3	3	2	2	2	3	3	3	3	3	2	2
70	G62 Other occupations in protective service	2	2	2	2	1	1	2	2	2	2	2	2	2	2
71	G63 Security guards and related occupations	3	2	2	2	3	3	3	2	2	2	2	2	2	2
72	G71 Occupations in travel and accommodation	2	3	2	2	2	2	2	3	3	2	3	2	2	2
73	G72 Tour and recreational guides and casino occupations	2	3	2	2	2	2	2	2	2	2	2	2	2	2
74	G73 Other occupations in travel, accommodation, amusement and recreation	2	3	2	2	2	2	2	2	2	2	2	2	2	2
75	G81 Childcare and home support workers	3	3	3	3	3	3	3	4	4	4	3	3	3	3
76	G91 Technical occupations in personal service	3	2	2	2	1	2	2	1	2	1	2	2	2	2
77	G92 Other occupations in personal service	2	2	2	2	2	2	2	1	2	1	2	2	2	2
78	G93 Cleaners	3	3	3	3	3	3	3	4	3	3	3	3	3	3
79	G94 Butchers and bakers, retail and wholesale	2	2	2	2	2	3	3	2	2	2	2	2	2	2
80	G96 Food counter attendants, kitchen helpers and related occupations	2	2	2	2	2	2	2	2	2	2	2	2	2	2
81	G97 Other sales and related occupations	2	1	2	2	2	3	3	2	2	2	2	2	2	2
82	G98 Other elemental service occupations	4	4	4	3	4	4	4	4	4	4	3	3	4	4
Н	Trades, Transportation and Equipment Operators	2	2	2	2	2	2	3	2	2	2	2	2	2	2
83	H01 Contractors and supervisors, trades and related workers	2	2	2	2	3	4	4	3	2	3	2	2	3	2
84	H11 Plumbers, pipefitters and gas fitters	1	1	1	1	2	2	2	1	1	1	1	1	1	1
85	H12 Carpenters and cabinetmakers	1	1	1	1	2	3	3	2	1	2	1	1	2	2
86	H13 Masonry and plastering trades	1	1	1	1	2	2	2	1	1	1	1	1	1	1
87	H14 Other construction trades	1	1	1	1	2	2	2	2	1	2	1	1	2	1
88	H21 Electrical trades and telecommunications occupations	2	2	2	2	2	2	3	2	1	2	1	2	2	2
89	H22 Stationary engineers and power station and system operators	3	3	3	4	4	3	3	3	4	4	3	3	3	3
90	H31 Machinists and related occupations	2	1	2	1	2	2	3	3	3	2	3	1	2	2
91	H32 Metal forming, shaping and erecting trades	1	1	1	1	2	2	2	1	1	1	1	1	1	1

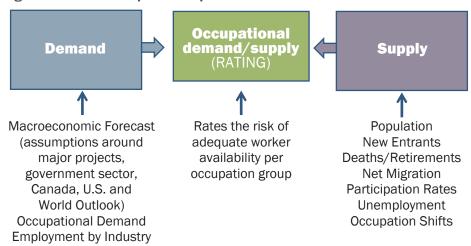
Table	15. Labour Market Outlook 2025 Occupational Ratings (Cont'd)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2015- 2018	2019- 2025	2015- 2025
92	H41 Machinery, transportation equipment mechanics (except motor vehicle)	2	2	2	2	3	3	3	3	2	2	3	2	3	2
93	H42 Automotive service technicians	2	2	2	2	3	3	3	3	2	2	3	2	3	2
94	H43 Other mechanics	2	2	2	2	2	3	3	2	2	2	3	2	2	2
95	H53 Other installers, repairers and servicers	2	1	1	1	2	2	3	1	1	1	1	1	2	1
96	H61 Heavy equipment operators	2	1	1	1	2	2	2	2	1	2	1	1	2	2
97	H62 Crane operators, drillers and blasters	2	1	2	2	2	3	3	2	1	2	2	2	2	2
98	H71 Motor vehicle and transit drivers	3	2	2	2	3	3	3	3	3	3	3	2	3	3
99	H73 Other transport equipment operators and related workers	2	2	3	3	3	3	3	3	3	3	3	2	3	3
100	H81 Longshore workers and material handlers	2	2	2	2	2	2	3	2	2	2	2	2	2	2
101	H82 Trades helpers and labourers	1	1	1	1	2	2	3	1	1	1	1	1	2	1
102	H83 Public works and other labourers, not elsewhere classified	3	2	2	2	2	3	3	2	2	3	2	2	2	2
103	Hxx Other Trades, transport and equipment operators and related occupations (H02, H51, H52, H72)	3	3	3	3	4	4	4	4	3	4	4	3	4	3
ı	Occupations Unique to the Primary Industry	2	3	3	3	3	2	2	2	2	2	3	3	2	3
104	IO1 Contractors, operators and supervisors in agriculture, horticulture and aquaculture	4	3	3	4	4	3	3	3	3	3	3	3	3	3
105	IO2 Agriculture and horticulture workers	3	2	2	3	3	2	1	2	2	2	1	2	2	2
106	I12 Supervisors, mining, oil and gas	2	3	3	4	3	2	2	3	2	3	4	3	3	3
107	I13 Underground miners, oil and gas drillers and related workers	2	3	3	3	3	2	1	2	2	2	3	3	2	2
108	I14 Mine service workers and operators in oil and gas drilling	2	2	3	3	3	1	1	2	2	2	3	2	2	2
109	I17 Fishing vessel masters and skippers and fishermen/women	2	4	4	4	4	3	4	4	4	4	4	3	3	3
110	I18 Other fishing and trapping occupations	2	3	3	3	2	2	2	2	3	3	3	3	2	2
111	I21 Primary production labourers	2	2	2	3	3	2	2	1	1	1	3	2	2	2
112	lxx Other Occupations unique to primary industry (I11, I15, I16)	4	3	4	4	4	4	3	3	3	4	3	3	3	3
J	Occupations Unique to Processing, Manufacturing, and Utilities	2	3	3	3	3	3	3	3	3	3	3	3	3	3

Table 15. Labour Market Outlook 2025 Occupational Ratings (Cont'd)		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2015- 2018	2019- 2025	2015- 2025
114	J11 Central control, process operators in manufacturing and processing	3	3	4	4	4	3	3	3	3	4	4	3	3	3
115	J12 Machine operators and related workers in metal and mineral products processing	2	3	3	4	4	3	3	3	3	3	3	3	3	3
116	J13 Machine operators and related workers in chemical, plastic and rubber processing	3	3	3	3	4	4	4	3	3	3	2	3	3	3
117	J17 Machine operators in food, beverage and tobacco processing and related workers	2	3	3	3	3	2	2	3	3	3	3	3	3	3
118	J19 Machining, metalworking, woodworking and related machine operators	3	2	2	2	2	3	3	3	3	3	2	2	3	2
119	J31 Labourers in processing, manufacturing and utilities	2	2	3	2	2	3	3	3	3	3	3	2	3	2
120	Jxx Other Occupations unique to processing, manufacturing and utilities (J02, J14, J15, J16, J18, J21, J22)	2	2	2	2	3	4	4	3	3	3	3	2	3	3

APPENDIX A: METHODOLOGY

The occupational demand projections in this report and the associated job prospect ratings were prepared by the Economic Research and Analysis Division, Economics and Statistics Branch, Department of Finance. The projections are based on economic and demographic forecasts also prepared by the Department of Finance. Users requiring further detail and/or with questions concerning the methodology (such as underlying economic/demographic forecasts) should contact the Department of Finance (see contact information on page 44). The basic concept of the occupational model is illustrated in Figure 6.

Figure 6. Basic Concept of Occupational Model



The occupational demand projections are based on a macroeconomic forecast (prepared by the Department of Finance in May 2015) which includes key indicators such as Gross Domestic Product, household income and employment. The macroeconomic forecast is used to project employment demand for over 40 industry groups. This employment by industry forecast is the basis for the occupational demand projections.

The macroeconomic forecast is produced using the Newfoundland and Labrador Econometric Model (NALEM) which utilizes a collection of historical data and assumptions regarding the Canadian, United States and world economies; the government sector; and the level of expected economic activity in the province's key export industries as well as major projects (Hibernia, Terra Nova, White Rose, Hebron, Statoil's Bay du Nord, Muskrat Falls, Voisey's Bay Underground Mine, and Kami Iron Ore). The assumptions regarding provincial industries are assembled in consultation with relevant Provincial Government departments, and other data such as interest and exchange rates are obtained from external sources.

Statistics Canada's Census and 2011 National Household Survey data were used to determine occupational concentrations among industries. This information was used in conjunction with the forecasted employment demand by industry to project the employment demand by occupation. This method of forecasting occupational demand is similar to methods used by other forecasters across the country.

The Department of Finance's population projections formed the basis for estimates of new entrants and net migration. The population projections are based on a number of assumptions regarding fertility rates, mortality and migration, and are consistent with the aggregate labour supply and demand projections in the provincial macroeconomic forecast.

The Canadian Occupational Projection System (COPS) was used to estimate retirement and death rates by occupation.

Historical estimates of labour force, total employment, employment by industry, participation rates by age and sex, and unemployment rates were sourced from Statistics Canada's Labour Force Survey.

Statistics Canada's Small Area and Administrative Data Division provided historical counts of taxfilers by detailed industry. These data were used to derive the historical data for the number of workers by industry.

Data, Information Sources and Tools

Detailed descriptions of some of the main data sources and tools used in the occupational projections are provided below.

Newfoundland and Labrador Econometric Model (NALEM)

NALEM is a detailed model of the relationships between key economic variables affecting the provincial economy and is used by the Government of Newfoundland and Labrador for economic forecasting and to assess the economic impacts created by major development projects (as well as government policy changes). NALEM is used and maintained by the Economic Research and Analysis Division, Department of Finance.

Population Projection System (POPPS)

The Population Projection System is a custom-built projection system which projects the population by age and gender for Newfoundland and Labrador and sub-provincial regions. The system uses information/assumptions about fertility, mortality and migration to produce the projection. POPPS is used and maintained by the Economic Research and Analysis Division, Department of Finance.

Statistics Canada, Labour Force Survey (LFS)

The Labour Force Survey is a monthly survey conducted by Statistics Canada. The LFS produces estimates of employment and the unemployment rate, as well as other standard labour market indicators such as the labour force, employment rate and participation rate. The LFS also provides employment estimates by industry, public and private sector, and hours worked.

Statistics Canada, Census and 2011 National Household Survey (NHS)

Statistics Canada conducts a census of the population every five years. Prior to 2011, the Census collected information about the demographic, social and economic characteristics of the Canadian population, including detailed labour market data by occupation and industry. In 2011, the approach to collecting this information changed. The Census continued to collect demographic information, but the social and economic information was collected through the new voluntary National Household Survey.

Statistics Canada, Custom Taxfiler by Industry, Small Area Data

From the income tax forms submitted each year by Canadians, the Small Area and Administrative Data Division of Statistics Canada produces a wealth of aggregated economic and demographic information for use by both the private and public sectors. The Division examines and processes over 22 million tax and other administrative records in an effort to offer clients the most reliable information possible. The data is highly accurate as it is a direct count from the tax file – not a sample. The file contains 100 per cent of all taxfilers and the data covers approximately 96 per cent of all Canadians.

Statistics Canada, Survey of Employment, Payrolls and Hours (SEPH)

The Survey of Employment, Payrolls and Hours is a monthly Statistics Canada survey that provides detailed information on the total number of paid employees, payrolls, hours and job vacancies at detailed industrial, national and provincial/territorial levels. The SEPH is produced from the combination of the Business Payroll Survey results and the payroll deductions administrative data received from the Canada Revenue Agency.

Canadian Occupational Projection System (COPS)

The Canadian Occupational Projection System is a set of economic models used to assess and project future labour market conditions on an industrial and occupational basis. Employment and Social Development Canada uses COPS to develop projections of future trends in the major sources (e.g., attrition) of job openings.

Canadian Provincial Occupational Modelling System (POMS)

The Canadian Provincial Occupational Modelling System is an occupation modelling system developed and used by the Centre for Spatial Economics (a private sector consulting firm). It produces information on future labour demand that arises from employment growth and through attrition, and it provides information on future labour supply from new entrants, net inmigration and other occupational mobility.

Acknowledgement

The methods and approaches used to produce Outlook 2025 have been considerably informed by the advancements made in the field of occupational modeling by the Centre for Spatial Economics.

APPENDIX B: NOC-S (FOR OCCUPATIONS) AND NAICS (FOR INDUSTRIES)

The occupation statistics in this report reflect the National Occupational Classification for Statistics (NOC-S), while the industry statistics are based on the North American Industry Classification System (NAICS). Information on both of these systems is provided below for users.

National Occupational Classification for Statistics (NOC-S)

The National Occupational Classification for Statistics (NOC-S) is a statistical classification designed by Statistics Canada to classify data on occupations from the Census of Population and other Statistics Canada surveys. It is based on the National Occupational Classification (NOC) which was developed and is maintained by Employment and Social Development Canada. The NOC is the nationally accepted classification system on occupations in Canada. It organizes over 30,000 job titles into 520 occupational group descriptions.

The NOC and NOC-S categorize occupations on the basis of the type of work that is carried out or performed. Occupations are therefore identified and grouped primarily in terms of the work usually performed, this being determined by the tasks, duties and responsibilities of the occupation. Factors such as the materials processed or used, the industrial processes used, the equipment used, the degree of responsibility and complexity of work, the products made and services provided have been taken as indicators of the work performed when combining jobs into occupations and occupations into groups.

An occupation is defined as a collection of jobs, sufficiently similar in work performed to be grouped under a common title for classification purposes. A job, in turn, encompasses all the tasks carried out by a particular worker to complete her/his duties.

Further information about NOC-S can be found at www.statcan.gc.ca/subjects-sujets/standard-norme/soc-cnp/2006/noc2006-cnp2006-menu-eng.htm.

There are 10 major categories within the NOC-S. All other occupations are categorized within these groupings.

• A – Management Occupations: Occupations in this broad occupational category are primarily concerned with carrying out the functions of management by planning, organizing, coordinating, directing, controlling, staffing, and formulating, implementing or enforcing policy, either directly or through other levels of management. Supervising is not considered to be a management function.

- B Business, Finance and Administrative Occupations: Occupations in this broad occupational category are primarily concerned with providing financial and business services, administrative and regulatory services and clerical support services.
- C Natural and Applied Sciences and Related Occupations: Occupations
 in this broad occupational category are primarily concerned with conducting
 theoretical and applied research and providing technical support in natural
 and applied sciences.
- **D Health Occupations**: Occupations in this broad occupational category are primarily concerned with providing health care services directly to patients and providing support to health care delivery.
- E Occupations in Social Science, Education, Government Service and Religion: Occupations in this broad occupational category are primarily concerned with law, teaching, counselling, conducting social science research, providing religious services and developing and administering government policies and programs.
- **F Occupations in Art, Culture, Recreation and Sport**: Occupations in this broad occupational category are primarily concerned with providing artistic and cultural services and providing direct support to the service providers.
- G Sales and Service Occupations: Occupations in this broad occupational
 category are primarily concerned with selling goods and services and
 providing personal, protective, household, tourism and hospitality services.
- H Trades, Transport and Equipment Operators and Related Occupations:
 Occupations in this broad occupational category are primarily concerned
 with contracting, supervising and doing trades work, and supervising and
 operating transportation equipment and heavy equipment.
- I Occupations Unique to Primary Industry: Occupations in this broad occupational category are primarily concerned with operating farms and supervising or doing farm work, operating fishing vessels and doing specialized fishing work, and in doing supervision and production work in oil and gas production, mining, and forestry and logging.
- J Occupations Unique to Processing, Manufacturing and Utilities:
 Occupations in this broad occupational category are primarily concerned with supervisory and production work in manufacturing, processing and utilities.

A guide to the occupational categories included in this report is provided on the following pages.

NOC-S	Occupation Title	Examples	
A Man	A Management Occupations		
A01	Legislators and senior management	Legislators; senior government managers and officials; senior managers	
A11	Administrative services managers	Financial managers; human resources managers; purchasing managers	
A12	Managers in engineering, architecture, science and information systems	Managers in engineering, architecture, science, information systems	
A13	Sales, marketing and advertising managers	Sales, marketing and advertising managers	
A14	Facility operation and maintenance managers	Facility operation and maintenance managers	
A21	Managers in retail trade	Retail trade managers	
A22	Managers in food service and accommodation	Restaurant and food service managers; accommodation service managers	
A30	Managers in financial and business services	Insurance, real estate and financial brokerage managers; banking, credit and other investment managers	
A32	Managers in health, education, social and community services	Managers in health care; administrators - post-secondary education and vocational training; school principals and administrators of elementary and secondary education	
A37	Managers in construction and transportation	Construction managers; residential home builders and renovators; transportation managers	
A38	Managers in primary production (except agriculture)	Managers in primary production (except agriculture)	
A39	Managers in manufacturing and utilities	Managers in manufacturing and utilities	
Axx	Other Management occupations (A31, A33, A34, A35, A36)	Telecommunications managers; postal and courier managers; government managers; art, culture, recreation and sport managers; police, firefighter and armed forces managers; other service managers not classified elsewhere (including dry cleaning, hairdressing and residential cleaning managers)	
B Busi	ness, finance and administrative occupations		
B01	Auditors, accountants and investment professionals	Financial auditors and accountants; financial and investment analysts; securities agents, investment dealers and brokers	
B02	Human resources and business service professionals	Specialists in human resources; professional occupations in business services to management	
B11	Finance and insurance administrative occupations	Bookkeepers; loan officers; insurance adjusters and claims examiners; assessors, valuators and appraisers; customs, ship and other brokers	
B21	Secretaries, recorders and transcriptionists	Secretaries; recorders; transcriptionists	
B31	Administrative and regulatory occupations	Administrative officers; executive assistants; purchasing agents; court officers	
B41	Clerical supervisors	Supervisors for clerks (e.g., administrative support clerks; finance and insurance clerks; library, correspondence and related information clerks, etc.)	
B51	Clerical occupations, general office skills	General office clerks; records management and filing clerks; receptionists	
B52	Office equipment operators	Data entry clerks; desktop publishing; telephone operators	

NOC-S	Occupation Title	Examples	
B53	Finance and insurance clerks	Accounting and related clerks; payroll clerks; customer service representatives (financial services); banking, insurance and financial clerks	
B54	Administrative support clerks	Administrative clerks; personnel clerks; court clerks	
B55	Library, correspondence and related information clerks	Library clerks; correspondence, publication and related clerks; survey interviewers and statistical clerks	
B56	Mail and message distribution occupations	Mail clerks; letter carriers; couriers	
B57	Recording, scheduling and distributing occupations	Shippers and receivers; storekeepers and parts clerks; purchasing and inventory clerks; dispatchers	
C Natu	ral and applied sciences and related occupations		
CO1	Physical science professionals	Chemists; physicists; geologists; meteorologists	
C03	Civil, mechanical, electrical and chemical engineers	Civil, mechanical, electrical and chemical engineers	
C04	Other engineers	Industrial, metallurgical, mining, petroleum, aerospace, and computer engineers	
C07	Computer and information systems professionals	Information systems analysts and consultants; database analysts and administrators; software engineers and designers; web designers	
C11	Technical occupations in physical sciences	Chemical, geological and meteorological technologists and technicians	
C12	Technical occupations in life sciences	Biological, agricultural, forestry, horticulture technologists and technicians; conservation and fishery officers	
C13	Technical occupations in civil, mechanical, industrial engineering	Civil, mechanical, industrial and manufacturing technologists and technicians; construction estimators	
C14	Technical occupations in electronics and electrical engineering	Electrical and electronics engineering technologists and technicians; electronic service technicians; industrial instrument technicians and mechanics	
C15	Technical occupations in architecture, drafting, surveying, mapping	Architectural technologists and technicians; industrial designers; drafting technologists and technicians; land survey technologists and technicians	
C16	Other technical inspectors and regulatory officers	Non-destructive testers; engineering inspectors; inspectors in public and environmental health and occupation health and safety; construction inspectors	
C17	Transportation officers and controllers	Air pilots; flight engineers and flying instructors; air traffic control; deck officers and engineer officers (water transport);	
C18	Technical occupations in computer and information systems	Computer network technicians; user support technicians; systems testing technicians	
Cxx	Other natural applied sciences, related occupations (CO2, CO5, CO6)	Biologists; agricultural representatives; architects; land surveyors; statisticians	
D Health occupations			
D01	Physicians, dentists and veterinarians	Physicians; dentists; veterinarians	
D03	Pharmacists, dietitians and nutritionists	Pharmacists; dietitians; nutritionists	
D04	Therapy and assessment professionals	Audiologists and speech-language pathologists; physiotherapists; occupational therapists	

NOC-S	Occupation Title	Examples	
D11	Nurse supervisors and registered nurses	Nurse supervisors; registered nurses	
D21	Medical technologists and technicians (except dental health)	Medical laboratory technologists; medical sonographers; veterinary health technologists and technicians	
D23	Other technical occupations in health care (except dental)	Opticians; licensed practical nurses; midwives; paramedics	
D31	Assisting occupations in support of health services	Dental assistants; nurse aides; orderlies	
Dxx	Other health occupations (D02, D22)	Denturists; dental hygienists; optometrists; chiropractors	
E Occu	pations in social science, education, government serv	rice, religion	
E01	Judges, lawyers and Quebec notaries	Judges; lawyers; Quebec notaries	
E02	Psychologists, social workers, counsellors, clergy, probation officers	Psychologists; social workers; counsellors; clergy; probation officers	
E03	Policy and program officers, researchers and consultants	Economic, social, education, health policy researchers and analysts; business development officers; marketing researchers and consultants	
E11 and E12	University professors and assistants, college and vocational instructors	University professors; post-secondary teaching and research assistants; college and other vocational instructors	
E13	Secondary, elementary school teachers, educational counsellors	Secondary school teachers; elementary and kindergarten teachers; educational counsellors	
E21	Paralegals, social services workers, occupations in education, religion	Paralegals; employment counsellors; early childhood educators and assistants; instructors and teachers of persons with disabilities	
F Occupations in art, culture, recreation and sport			
F02	Writing, translating and public relations professionals	Journalists; authors and writers; translators; terminologists; interpreters	
F03	Creative and performing artists	Producers; directors; musicians and singers; actors; painters and sculptors	
F11	Technical occupations in libraries, archives, museums and art galleries	Library, archive, and museum technicians and assistants	
F12	Photography, graphics, technical occupation in movies, broadcasting and performing	Photographers; film and camera operators; graphic arts technicians; audio and video recording technicians	
F14	Creative designers and craftspersons	Graphic designers; interior designers; fashion designers	
F15	Athletes, coaches, referees and related occupations	Athletes; coaches; referees	
Fxx	Other occupations in art, culture, recreation and sport (F01, F13)	Librarians; curators; archivists; announcers; broadcasters	
G Sale	s and service occupations		
G01	Sales and service supervisors	Supervisors in retail trade, food service, laundry, executive, and cleaning	

NOC-S	Occupation Title	Examples	
G11	Sales representatives, wholesale trade	Sales representatives - wholesale trade (non-technical)	
G12	Technical sales specialists, wholesale trade	Technical sales specialists - wholesale trade	
G13	Insurance and real estate sales occupations and buyers	Insurance agents; real estate agents; retail and wholesale buyers; grain elevator operators	
G21	Retail salespersons and sales clerks	Retail salespersons and sales clerks	
G31	Cashiers	Cashiers	
G41	Chefs and cooks	Chefs and cooks	
G51	Occupations in food and beverage service	Hosts/hostesses; bartenders; food and beverage servers	
G61	Police officers and fire-fighters	Police officers (except commissioned); firefighters	
G62	Other occupations in protective service	Sheriffs; correctional service officers; protective service occupations	
G63	Security guards and related occupations	Security guards and related occupations	
G71	Occupations in travel and accommodation	Travel counsellors; flight attendants; airline sales and service agents; ticket agents; hotel front desk clerks	
G72	Tour and recreational guides and casino occupations	Tour and travel guides; outdoor sport and recreational guides	
G73	Other occupations in travel, accommodation, amusement and recreation	Operators and attendants in amusement, recreation, sport, accommodation and travel	
G81	Childcare and home support workers	Homemakers; housekeepers; elementary and secondary school teacher assistants; babysitters; nannies	
G91	Technical occupations in personal service	Hairstylists and barbers; funeral directors and embalmers	
G92	Other occupations in personal service	Pet groomers; image consultants; estheticians; electrologists	
G93	Cleaners	Light duty and specialized cleaners; janitors, caretakers and building superintendents	
G94	Butchers and bakers, retail and wholesale	Butchers and meat cutters; bakers	
G96	Food counter attendants, kitchen helpers and related occupations	Food counter attendants; kitchen helpers	
G97	Other sales and related occupations	Service station attendants; grocery clerks; shelf stockers	
G98	Other elemental service occupations	Dry cleaners; laundry attendants; beauty salon attendants; movie ushers	
H Trade	es, transportation and equipment operators		
H01	Contractors and supervisors, trades and related workers	Contractors and supervisors - trades and related workers	
H11	Plumbers, pipefitters and gas fitters	Plumbers; pipefitters; gas fitters	
H12	Carpenters and cabinetmakers	Carpenters; cabinetmakers	
H13	Masonry and plastering trades	Bricklayers; concrete finishers; tilesetters; plasterers	

NOC-S	Occupation Title	Examples	
H14	Other construction trades	Roofers; insulators; painters and decorators; floor covering installers	
H21	Electrical trades and telecommunications occupations	Electricians; electrical power line and cable workers; telecommunications line, cable, and repair workers	
H22	Stationary engineers and power station and system operators	Stationary engineers and auxiliary equipment operators; power systems and power station operators	
H31	Machinists and related occupations	Machinists; tool and die makers	
H32	Metal forming, shaping and erecting trades	Sheet metal workers; boilermakers; ironworkers; welders	
H41	Machinery, transportation equipment mechanics (except motor vehicle)	Construction millwrights and industrial mechanics; heavy-duty equipment mechanics; refrigeration and air conditioning mechanics	
H42	Automotive service technicians	Automotive service technicians; motor vehicle body repairers	
H43	Other mechanics	Oil heating mechanics; electric appliance repairers; motorcycle mechanics; other small engine and equipment mechanics	
H53	Other installers, repairers and servicers	Pest controllers; residential/commercial installers and servicers; automotive mechanical installers and servicers	
H61	Heavy equipment operators	Heavy equipment operators	
H62	Crane operators, drillers and blasters	Crane operators; drillers and blasters	
H71	Motor vehicle and transit drivers	Truck drivers; bus drivers; taxi and limousine drivers; delivery and courier service drivers	
H73	Other transport equipment operators and related workers	Water transport engine and deck crew; boat operators; air transport ramp attendants	
H81	Longshore workers and material handlers	Longshore workers; material handlers	
H82	Trades helpers and labourers	Construction trades helpers and labourers	
H83	Public works and other labourers, not elsewhere classified	Public works and maintenance labourers	
Hxx	Other trades, transport and equipment operators and related occupations (H02, H51, H52, H72)	Commercial divers; tailors; shoe repairers; printing press operators; supervisors (motor transportation)	
I Occup	pations unique to primary industry		
101	Contractors, operators and supervisors in agriculture, horticulture and aquaculture	Contractors, operators, and supervisors in agriculture, horticulture, and aquaculture	
102	Agriculture and horticulture workers	General farm workers; nursery and greenhouse workers	
112	Supervisors, mining, oil and gas	Supervisors in mining and quarrying; supervisors in oil and gas drilling and service	
113	Underground miners, oil and gas drillers and related workers	Underground miners; oil and gas drillers, servicers, and testers	
114	Mine service workers and operators in oil and gas drilling	Underground mine service and support workers; oil and gas drilling workers and services operators	

NOC-S	Occupation Title	Examples	
117	Fishing vessel masters and skippers and fishermen/women	Fishing masters and officers; fishing vessel skippers and fishermen/women	
118	Other fishing and trapping occupations	Fishing vessel deckhands; trappers and hunters	
121	Primary production labourers	Labourers in harvesting, landscaping, aquaculture, mines, oil and gas drilling, and forestry	
lxx	Other Occupations unique to primary industry (I11, I15, I16)	Logging machinery operators; chain saw and skidder operators; forestry workers; supervisors in logging and forestry	
J Occu	pations unique to processing, manufacturing and util	ities	
J01	Supervisors, processing occupations	Supervisors in processing (mineral and metal; petroleum, gas and chemical; food, beverage and tobacco; plastic and rubber products; forest products, etc.)	
J11	Central control, process operators in manufacturing and processing	Central control and process operators; petroleum, gas and chemical process operators; pulping control operators	
J12	Machine operators in metal and mineral products processing	Machine operators (mineral and metal processing); concrete, clay and stone forming operators; inspectors and testers (mineral and metal processing)	
J13	Machine operators in chemical, plastic and rubber processing	Machine operators (chemical plant; plastics processing; rubber processing; water and waste plant, etc.)	
J17	Machine operators in food, beverage and tobacco processing and related workers	Machine operators (food and beverage processing); industrial butchers; fish plant workers; testers and graders (food and beverage processing)	
J19	Machining, metalworking, woodworking and related machine operators	Machining tool operators; metalworking machine operators; woodworking machine operators	
J31	Labourers in processing, manufacturing and utilities	Labourers (mineral and metal processing; wood, pulp and paper processing; food, beverag tobacco processing; fish processing, etc.); other labourers in processing, manufacturing an utilities	
Jxx	Other Occupations unique to processing, manufacturing and utilities (J02, J14, J15, J16, J18, J21, J22)	Sawmill machine operators; wood processing machine operators; pulp mill operators; weavers and knitters; textile dyeing machine operators; sewing machine operators; fabric, fur, and leather cutters; hide and pelt processing workers; printing machine operators; mechanical, electrical and electronic assemblers; furniture and fixture assemblers; wood product assemblers and inspectors; industrial painter and coaters	

North American Industry Classification System (NAICS)

The North American Industry Classification System (NAICS) is an industry classification system developed by the statistical agencies of Canada, Mexico and the United States. Created against the background of the North American Free Trade Agreement, it is designed to provide common definitions of the industrial structure of the three countries and a common statistical framework to facilitate the analysis of the three economies. NAICS is based on supply-side or production-oriented principles, to ensure that industrial data, classified to NAICS, are suitable for the analysis of production-related issues such as industrial performance.

NAICS is a comprehensive system encompassing all economic activities. It has a hierarchical structure. At the highest level, it divides the economy into 20 sectors. At lower levels, it further distinguishes the different economic activities in which businesses are engaged.

NAICS is based on a framework in which establishments are grouped into industries according to similarity in the production processes used to produce goods and services. A production-oriented industry classification

system ensures that statistical agencies in the three countries can produce information on inputs and outputs, industrial performance, productivity, unit labour costs, employment and other statistics that reflect structural changes occurring in the three economies.

The activity of an establishment can be described in terms of what is produced, namely, the type of goods and services produced or how they are produced; the raw material and service inputs used; and the process of production or skills and technology used.

Further information about NAICS can be found at www.statcan.gc.ca/subjects-sujets/standard-norme/naics-scian/2007/introduction-eng.htm.

The industries included in this report are listed as follows:

Industry Type NAICS		Industry Title	Examples	
	11 (except 114), 22	Utilities, Forestry and Logging, and Other Primary	Electric Power Generation; Forestry; Logging; Agriculture; Aquaculture	
	114	Fishing, Hunting and Trapping	Fishing; Hunting and Trapping	
	21	Mining, Oil and Gas	Oil and Gas; Ore Mining; Metallic and Non-Metallic Mineral Mining; Quarrying; Support Activities such as Drilling	
Goods-Producing	23	Construction	Residential and Non-Residential Building Construction; Heavy and Civil Engineering Construction; Specialty Trade Contractors (Foundation, Framing, Electrical, Plumbing, Finishing, etc.)	
Industries	31-33 (except 3117)	Other Manufacturing	Food Manufacturing (except Seafood); Beverage Manufacturing; Pulp and Paper Mills; Wood Product Manufacturing; Petroleum Refineries; Printing; Chemical and Plastics Manufacturing; Primary Metal Manufacturing and Smelters; Fabricated Metal Product Manufacturing; Machinery and Equipment Manufacturing; Furniture Manufacturing	
	3117	Seafood Product Preparation and Packaging	Seafood Product Preparation & Packaging, such as Fish Plants and Canneries	

Industry Type	NAICS	Industry Title	Examples	
	41, 44-45	Wholesale and Retail Trade	Wholesalers and Distributors for Food Products, Personal and Household Goods and Building Materials; Car Dealers; Furniture, Electronics and Appliance Stores; Building Materials Stores; Grocery Stores; Pharmacies; Gas Stations; Clothing Stores; and General Merchandise Stores	
	48-49	Transportation and Warehousing	Air Transportation; Deep Sea, Coastal and Inland Water Transportation Trucking; Transit and Ground Passenger Transportation; Sightseeing Tours; Airports; Dock and Harbour Operations; Postal Services; Couriers and Messenger Services; and Warehousing and Storage	
	51	Information and Culture	Newspapers; Motion Picture, Video and Sound Recording; Broadcasting; and, Telecommunications Carriers	
	52-53 Finance, Insurance, Real Estate and Leasing		Banks and Credit Unions; Mortgage Brokers; Financial Investment Firms; Insurance Carriers; Pension and Other Funds; Real Estate Selling and Leasing; Automotive, Consumer Goods and Commercial/Industrial Equipment Rental Companies	
Services- Producing Industries	54	Professional, Scientific and Technical Services	Legal Services; Accounting and Tax Preparation; Architectural and Engineering Services; Design Services; Computer Systems Services; Consulting Services; Advertising, Market Research and Public Relations Agencies; and Veterinary Services	
	55-56	Management of Companies & Enterprises, and Administrative & Support Services	Head Offices and Holding Companies; Employment Services; Administrative, Facilities and Business Support Services; Travel Agencies and Tour Operators; Security Services; Janitorial Services; Waste Management and Remediation Services	
	61	Educational Services	Schools; Colleges; Universities; and Technical and Trade Schools	
	62	Health Care and Social Assistance	Medical, Chiropractor, Optometrist, Dental and Other Health Clinics and Offices; Community and Family Health Centres; Medical and Diagnostic Laboratories; Home Health Care Services; Ambulance Services; Hospitals; Nursing Homes and Long-Term Care Facilities; Child, Youth and Family Services; Community Food, Housing and Emergency Services; and Child Care Services	
	71-72	Arts, Entertainment & Recreation, Accommodations & Food Services	Theatre, Dance, Musical Groups and Companies; Sports Teams and Spectator Sports; Promoters of Arts and Sports Events; Writers, Artists and Performers; Museums and Parks; Lotteries; Recreation Facilities; Hotels, Motels and Bed & Breakfasts; Recreational Camp Sites; Restaurants; Bars; and Caterers	

81	Other Services	Automotive, Electronics, Appliance, Commercial and Industrial Machinery and Equipment Repair and Maintenance; Hair Salons; Funeral Homes; Dry Cleaning and Laundry Services; Pet Groomers; Religious Organizations; Social Advocacy Organizations; Civic and Social Organizations; Business, Professional and Labour Membership Organizations; Private Households	
91	Public Administration	Federal and Provincial Government Public Administration; Local, Municipal and Regional Public Administration; Aboriginal Public Administration	

ENDNOTES

- ¹ The job openings reported are a net figure (i.e., they include job openings through attrition plus changes in the number of jobs due to employment expansion or contraction over the period).
- ² Occupations unique to primary industry includes Contractors, Operators and Supervisors in Agriculture, Horticulture, and Aquaculture; Agriculture and Horticulture Workers; Supervisors in Mining, Oil and Gas; Underground Miners, Oil and Gas Drillers and Related Workers; Fishing Vessel Masters and Skippers and Fishermen/women; and Primary Production Labourers.
- ³ Other manufacturing (excluding seafood processing) is an industry category not found in the original industry classification system (i.e., North American Industry Classification System [NAICS]). See Appendix B for more details on this category and the industry classification system in general.
- ⁴ The annual employment data referenced in this section are from Statistics Canada's Labour Force Survey. This survey measures the average monthly employment level during the year. This figure is lower than other employment references in this document which report the total number of people working at some time during the year.
- ⁵ CANSIM table 281-0027, Survey of Payroll Hours and Earnings, Statistics Canada
- ⁶ Source: International Monetary Fund World Economic Outlook database, April 2015.
- ⁷ Source: CANSIM Tables 380-0064 and 384-0038; Average of the forecasts of Canadian major banks and the Conference Board of Canada.
- ⁸ Source: Average forecast of the Canadian major banks and the Conference Board of Canada.
- ⁹ For more information visit <u>www.gov.nl.ca/populationgrowth/index.html</u>.
- ¹⁰ Readers should note that the Department of Health and Community Services (HCS) has performed detailed supply and demand analysis on several health occupations, in particular registered nurses and licensed practical nurses. Users with an interest in these occupations are advised to consult both Outlook 2025 and the HCS sources.
- ¹¹ Assisting occupations in support of health services includes Dental Assistants: Nurse Aides, Orderlies and Patient Service Associates (which includes Personal Care Assistants, or PCAs); and Other Assisting Occupations in Support of Health Services.
- ¹² Other technical occupations in health care (except dental) includes Opticians; Midwives and Practitioners of Natural Healing; Licensed Practical Nurses; Ambulance Attendants and Other Paramedical Occupations; and Other Technical Occupations in Therapy and Assessment (includes hearing, ophthalmic and speech aides, and massage therapists).

- ¹³ Other technical inspectors and regulatory officers includes Non-destructive Testers and Inspectors; Engineering Inspectors and Regulatory Officers; Inspectors in Public and Environmental Health and Occupational Health and Safety; and Construction Inspectors.
- ¹⁴ Technical occupations in architecture, drafting, surveying, mapping includes Architectural Technologists and Technicians; Industrial Designers; Drafting Technologists and Technicians; Land Survey Technologists and Technicians; and Mapping and Related Technologists and Technicians.
- ¹⁵ Administrative and regulatory occupations includes Administrative Officers; Executive Assistants; Personnel and Recruitment Officers; Property Administrators; Purchasing Agents and Officers; Conference and Event Planners; Court Officers and Justices of the Peace; and Immigration, Employment Insurance and Revenue Officers.
- ¹⁶ Paralegals, social services workers and occupations in education and religion includes Paralegal and Related Occupations; Community and Social Service Workers; Employment Counsellors; Instructors and Teachers of Persons with Disabilities; Other Instructors; Other Religious Occupations; and Early Childhood Educators and Assistants.
- ¹⁷ Please see endnote number 10.
- ¹⁸ Please see endnote number 11.
- ¹⁹ Please see endnote number 12.
- ²⁰ Primary production labourers includes Harvesting Labourers; Landscaping and Grounds Maintenance Labourers; Aquaculture and Marine Harvest Labourers; Mine Labourers; Oil and Gas Drilling, Servicing and Related Labourers; and Logging and Forestry Labourers.
- ²¹ Further explanation of the differences in ratings 1 to 4 are presented in the Occupational Job Prospects section of this report (see page 23).
- ²² Other occupations unique to primary industry includes Supervisors, Logging and Forestry; Logging Machinery Operators; and Logging and Forestry Workers.
- ²³ Please see endnote number 10.
- ²⁴ Please see endnote number 12.
- ²⁵ Please see endnote number 11.
- ²⁶ Other natural, applied sciences, related occupations includes Life Science Professionals; Architects, Urban Planners and Land Surveyors; and Mathematicians, Statisticians and Actuaries.
- ²⁷ Other sales and related occupations includes Service Station Attendants; Grocery Clerks and Store Shelf Stockers; and Other Elemental Sales Occupations (including those who sell goods or services during home demonstrations, telephone soliciting, retail exhibitions, or street vending).
- ²⁸ Other occupations unique to processing, manufacturing and utilities includes Supervisors in Assembly and Fabrication; Machine Operators and Related Workers in Pulp and Paper Production and Wood Processing; Machine Operators and Related Workers in Textile Processing; Machine Operators and Related Workers in Fabric, Fur and Leather Products Manufacturing; Printing Machine Operators and Related Occupations; Mechanical, Electrical and Electronics Assemblers; and Other Assembly and Related Occupations
- ²⁹ Please see endnote number 10.
- ³⁰ Please see endnote number 12.
- 31 Please see endnote number 10.
- ³² Please see endnote number 12.
- ³³ Please see endnote number 26.

- ³⁴ Other occupations in personal service includes Image, Social and Other Personal Consultants; Estheticians, Electrologists and Related Occupations; Pet Groomers and Animal Care Workers; and Other Personal Service Occupations.
- ³⁵ Technical occupations in personal service includes Hairstylists and Barbers; and Funeral Directors and Embalmers.
- ³⁶ Please see endnote number 10.
- ³⁷ Other occupations in art, recreation and sport includes Librarians, Archivists, Conservators and Curators; and Announcers and Other Performers.
- ³⁸ Please see endnote number 22.
- ³⁹ Physical science professionals includes Physicists and Astronomers; Chemists; Geologists, Geochemists and Geophysicists; Meteorologists; and Other Professional Occupations in Physical Sciences.

CONTACT INFORMATION

Looking for some labour market help?

Labour Market and Career Information Hotline

Call: 1-800-563-6600

Click: www.aes.gov.nl.ca

Come in:

Employment Centres

Avalon Region	
St. John's	285 Duckworth Street; Regatta Plaza Building, 80-84 Elizabeth Ave
Bell Island	Bennett Street
Mount Pearl	1170 Topsail Road
Carbonear	17 Industrial Crescent
Placentia/Dunville	1116-1120 Main Street
Central Region	
Baie Verte	College of the North Atlantic, 1 Terra Nova Road
Bonavista	Hayley Building, 122 Confederation Drive
Clarenville	45 Tilley's Road
Gander	Fraser Mall
Grand Falls-Windsor	42 Hardy Avenue
Lewisporte	224 Main Street
Marystown	The Farrell Building, 3 Mall Street
Springdale	142 Little Bay Road
St. Alban's	Buffett Building, 43 Cromier Avenue
Twillingate	Toulinquet Street

Western Region				
Stephenville	29 Carolina Ave			
Channel-Port aux Basques	239 Grand Bay West Road			
Corner Brook	1-3 Union Street, 2nd Floor			
Port Saunders	Dobbin Building			
Rocky Harbour	120 Pond Road			
St. Anthony	398 Goose Cove Road			
Labrador Region				
Happy Valley-Goose Bay	The Bursey Building, 163 Hamilton River Road			
Hopedale	5 Government Road			
Mary's Harbour	32-36 Lodge Bay Road			
Nain	2 Morhardt Road			
Wabush	Wabush Plaza, 4 Grenfell Drive			

Methodology

Questions concerning how the occupational projections were prepared (methodology) or about the underlying economic and demographic forecasts should be directed to:

Economic Research and Analysis Division Economics and Statistics Branch Department of Finance P.O. Box 8700, St. John's, NL A1B 4J6

Telephone: (709) 729-3255
Facsimile: (709) 729-6944
e-mail: infoera@gov.nl.ca



Department of Advanced Education and Skills P.O. Box 8700 St. John's, NL A1B 4J6 Canada