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Labour Market Information **Resource**.

Northwest Territories Labour Market Forecast and Needs Assessment



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Preface

The following Labour Market Information Resource was prepared for the Government of the Northwest Territories Department of Education, Culture and Employment. Contributors include Adam Fiser and Kala Pendakur from Public Policy (Northern and Aboriginal Policy); and Marie-Christine Bernard, Julie Adès, Fares Bounajm, and Justin Cooke from Forecasting and Analysis (Economic Outlook and Analysis).

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CONTENTS

Chapter 1

1 Introduction

Chapter 2

- 6 Socio-Economic Profile of Labour Market Issues in the N.W.T.
- 9 Demographic Forces
- 15 Industry Activity and Occupational Classification
- 26 Labour Supply Characteristics
- 29 Labour Force Activity by Highest Level of Education
- 34 GNWT Labour Force

Chapter 3

45 Education and Skills Attainment

- 47 How Does the N.W.T. Perform on High School Attainment Compared With Other Territories?
- 48 How Does N.W.T. Perform on Post-Secondary Education Attainment Compared With Other Territories?
- 49 Is There a Gender Gap in Territorial Post-Secondary Attainment?
- **50** What Are the Income Advantages From Having Post-Secondary Degrees and Certification in the Territory?
- 53 Regional Profiles of Highest Education Attainment, by Census Division Working-Age Populations
- 54 Adult Workplace Skills and Competencies in the N.W.T.
- 60 Student Enrolment in Aurora College (Post-Secondary Education)
- 61 Data Gaps and Quality Issues
- 62 What Have We Learned From Chapters 2 and 3?

Chapter 4

65 Introduction to the Territorial Forecasting Model

- 70 The Base Case Economic Forecast
- 76 Alternative Economic Forecasting Assumptions
- 78 The Medium Case Economic Forecast
- 80 The High Case Economic Forecast
- 82 Demographic Trends: History and Forecasts

Chapter 5

87 Occupational Demand Scenarios

- 91 Forecast Results by Top Occupations
- 106 Forecast Results by Occupational Categories
- 120 Forecast Results for Rotational Workers
- 124 Forecast Results by NOC Skill Levels
- 130 What Have We Learned From Chapters 4 and 5?

Appendix A

133 Bibliography

Appendix B

- **138** Demographic Profile
- 138 Population by Age, Sex, and Ethnicity, N.W.T.
- 141 Population by Age, Gender, Ethnicity, and Region

Appendix C

153 Industry and Occupational Classification

Appendix D

179 Feeder Provinces and Territories

- 180 Population by Age and Sex
- 186 Highest Degree of Education
- 192 Labour Force Characterization

Appendix E

210 Government of the Northwest Territories Profile

- 210 GNWT Employee Demographics
- 220 GNWT Employee Distribution by Occupation

Appendix F

228 Education and Skills Attainment

- 228 Highest Level of Education, N.W.T.
- 233 Highest Degree of Education by Region
- 236 Programme for the International Assessment of Adult Competencies
- 239 Alberta Achievement Tests—English Language Arts
- 242 Alberta Achievement Tests—Math
- 245 Functional Grade Levels—English Language Arts
- 248 Functional Grade Levels—Math
- 251 Attendance Rates
- 254 Aurora College

Appendix G

262 Conference Board of Canada Labour Market Forecast

- GDP by Forecast
- **280** Top 50 Occupations by Employment
- 286 Top 50 Occupations by Job Openings
- 292 Top 50 Occupations by Expansion Demand
- 298 Forecast by Occupational Group
- 323 Rotational Workers
- 329 List of Occupations by Grouping

Acknowledgements

The Northwest Territories Labour Market Forecast and Needs Assessment was prepared for the Government of the Northwest Territories Department of Education, Culture and Employment. Contributors include Adam Fiser and Kala Pendakur from Public Policy (Northern and Aboriginal Policy); and Marie-Christine Bernard, Julie Adès, Fares Bounajm, and Justin Cooke from Forecasting and Analysis (Economic Outlook and Analysis).

Prepared for the Government of the Northwest Territories.

About Northern and Aboriginal Policy

Northern and Aboriginal Policy is an interdisciplinary practice under The Conference Board of Canada's Public Policy division. It is dedicated to advancing collaborative policy research within strategic areas of concern to Northerners and Aboriginal Peoples. The Northern and Aboriginal Policy team also works directly with clients to develop custom projects that address their particular issues and concerns. Current areas of focus include:

- community resilience and community-readiness based strategic planning;
- labour market development and entrepreneurship;
- infrastructure and major projects development; and
- · health and wellness.

CHAPTER 1 Introduction

Chapter Summary

- Chapter 1 presents an overview of the socio-economic profile and forecasts presented in this resource. This resource document is intended for readers who would like an in-depth look at the results of The Conference Board of Canada's briefing, entitled *Northwest Territories Labour Market Forecast and Needs Assessment*.
- The socio-economic profile in chapters 2 and 3 and the forecasts in chapters 4 and 5 are derived from information provided in a series of appendices, B through G. In total there are over 200 charts and over 170 tables. To fully capture the analysis, the reader should follow the data presented in the appendices.

The Northwest Territories (N.W.T.) is opening a new chapter in its history. With the onset of devolution and progress in Aboriginal selfgovernance, alongside increased global trade and strong national interest in the North and its natural resources, the N.W.T. economy has substantial growth potential. Yet, with increasing socio-economic change and pressures to be more competitive and innovative come an urgent need to boost workforce readiness and skills development.

Recognizing these opportunities and challenges, the Government of the Northwest Territories (GNWT) launched Skills 4 Success, an initiative to improve employment success for N.W.T. residents, close skills gaps for in-demand jobs, and develop education and training programs that more effectively respond to employer and industry needs.

In 2015, the GNWT engaged The Conference Board of Canada to develop a Labour Market Forecast and Needs Assessment (LMFNA) for the territory as part of the GNWT's Skills 4 Success Initiative. It has two main objectives.

- to help the GNWT and its stakeholders better understand the characteristics of the N.W.T.'s current labour market and resident labour force;
- to help the GNWT and its stakeholders anticipate employer hiring needs under current market conditions and reasonable alternative scenarios up to the year 2030.

The main findings of the LMFNA are presented in a separate briefing, Northwest Territories Labour Market Forecast and Needs Assessment (www.conferenceboard.ca/e-Library/abstract.aspx?did=7512). This companion resource provides a more detailed analysis of the contemporary N.W.T. labour force, along with forecasts of general economic activity and occupational demand in the territory under different scenarios.

The first objective of the LMFNA, captured in chapters 2 and 3, is to provide an overview of current and historic labour market characteristics in the Northwest Territories. To this end, Chapter 2 of the resource presents a socio-economic profile of the territorial population and its resident workforce. The profile reviews key demographics, industry activity and occupational classification, and labour supply characteristics. Chapter 3 then focuses in on the state of education and skills attainment in the territory. The profile pays careful attention to the territory's Northern economic characteristics and to the socio-economic differences between its resident Aboriginal and non-Aboriginal populations. The analysis draws on the 2014 NWT Community Survey,¹ and whenever available data allow, it breaks out into regional profiles of the territory's six census divisions.

The second objective of the LMFNA, captured in chapters 4 and 5, is to provide a set of economic forecasts and related occupational demand scenarios for the N.W.T. up to 2030. This work is based on The Conference Board of Canada's Territorial Forecasting Model. Three separate forecasts (base case, medium case, and high case) and occupational demand scenarios are undertaken for both the resident workforce and the rotational workforce. In the latter case, rotational workers consist of people who work in the N.W.T. but live outside the territory. The rotational workforce is considerably smaller than the resident workforce. In 2014, there were an estimated 1,943 rotational workers compared with 22,100 resident workforce is expected to be between 2,174 and 2,613 workers over the 15-year forecast period. By comparison, the average size of the resident workforce is expected to be between 23,600 and 26,417 over the 15 years.

1 Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Our base case forecast projects real GDP growth and occupational demand up to the year 2030 under current market conditions. Because current market conditions portray a fairly pessimistic scenario for new job growth in the territory, we contrast the base case with two alternative forecasts that make more optimistic assumptions about the state of the N.W.T.'s economy and population. We call these alternative forecasts our medium and high cases, based on their respective levels of optimism. They are also projected to the year 2030.

In Chapter 4, our discussion of each forecast projects real GDP growth and employment by industry sectors and examines key demographic trends affecting the labour force. The discussion in Chapter 5 then identifies the most in-demand occupations and related skill levels for each forecast, and assesses the economic conditions that may shape occupational demand in the territory over the coming years.

Each forecast scenario incorporates two kinds of occupational demand. There is occupational demand due to economic expansion, such as the opening of a new mine or the building of a new highway. Such "expansion demand" creates new jobs in the economy; but when the economy contracts—as has been the case in 2015 for the oil and gas and mining sectors—existing jobs may also be lost. Economic projects also have a limited life, and when a mine or highway construction project comes to an end, so do many of the temporary jobs that came with it. These aspects of economic activity are represented in our forecast of expansion demand.

In addition to expansion demand, the forecast scenarios also account for occupational demand that results from employers having to deal with population change, to replace workers who have retired, died, or migrated out of the territory. As we discuss in depth in Chapter 5, this "replacement demand" will be much greater over the 15-year forecast period than the expansion demand. The need to replenish and renew the N.W.T.'s skilled labour force over the coming years presents a significant opportunity for education, recruitment, and skills development policy. The reader should be aware of how the analysis is presented. The socioeconomic profile in chapters 2 and 3 and the forecasts in chapters 4 and 5 are derived from information provided in a series of appendices, B through G. In total there are over 200 charts and over 170 tables. To fully capture the analysis, each section of this resource should be read against the tables and charts featured in the corresponding appendices.

CHAPTER 2 Socio-Economic Profile of Labour Market Issues in the N.W.T.

Chapter Summary

- The following review of contemporary N.W.T. labour market trends seeks to capture the context shaping labour supply and demand in the territory.
- It profiles demographic forces, industry activity and occupational classification, labour supply characteristics, and the role of the GNWT as a top employer.
- The review also gathers evidence of labour market segmentation in the Northwest Territories. In particular, it compares labour market outcomes for the N.W.T.'s Aboriginal and non-Aboriginal subpopulations, and for males and females of the general population.
- The contemporary division of labour between males and females in the N.W.T. economy suggests there is potential to develop more professional and management training programs tailored to the needs and outlooks of females both Aboriginal and non-Aboriginal. In this regard the GNWT, a top employer in the territory, has an opportunity to lead by example.

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The development of new labour market opportunities in the N.W.T. cannot occur in isolation from the socio-economic conditions that shape present markets. Past labour market conditions have an influence on the current state of affairs, as do evolving demographic structures and macroeconomic dynamics. Moreover, labour market conditions do not develop in isolation from other social policy issues in the territory. In particular, the outcomes of resident education and learning opportunities are critical drivers of labour market supply, from curricular pathways in K–12 and post-secondary, to adult education, on-the-job training, and informal work experience.

The following socio-economic profile of contemporary N.W.T. labour market trends seeks to capture the context shaping labour supply and demand. Chapter 2 reviews demographic forces, industry activity and occupational classification, labour supply characteristics, and the role of the GNWT as a top employer. The review also gathers evidence of labour market segmentation in the Northwest Territories. In particular, it compares labour market outcomes for the N.W.T.'s Aboriginal and non-Aboriginal subpopulations, and for males and females of the general population. Labour market segmentation implies unequal participation in labour market opportunities, whether in different sectors of the N.W.T. economy or in different positions of an occupational hierarchy.

Two kinds of labour market segmentation will be encountered in this review—including labour market exclusion and labour market avoidance. Labour market segmentation implies that there are submarkets for labour that exclude certain individuals, or that certain individuals choose to avoid. In terms of the former, exclusion¹ from a labour market could result from a person not possessing in-demand labour characteristics, such as a relevant education, work experience, demonstrable skills, and so forth. In terms of the latter, labour market avoidance means that different subpopulations (e.g., based on age, ethnicity, or gender) may (to some degree of probability) avoid certain occupations and career paths for socio-cultural reasons, such as the perceived value of the work involved.

It should also be noted that labour markets are constantly shifting as new opportunities arise and others fade away. As such, understanding the reality of what is occurring in N.W.T. labour markets is an ongoing process that will require periodic review over the coming years.

The socio-economic profile developed in Chapter 2 is structured as follows:

Demographic Forces: This section provides a review of the labour market's demographic conditions in the territory and compares them with Canada as a whole. In turn, an analysis of each of the six territorial census divisions is presented. The analysis also includes a breakdown of populations by key subgroups, including by gender and ethnicity (i.e., Aboriginal populations vs. non-Aboriginal populations).

Industry Activity and Occupational Classification: This section provides an analysis of historical GDP and employment growth in the territory, including an assessment of changes to the labour market by industry over the last few years. Following this, evidence of industry sector labour market segmentation by gender is assessed using occupational data from the 2011 National Household Survey and occupational data from the 2014 NWT Community Survey. These data provide evidence of labour market segmentation by gender and occupational classification. This issue is further analyzed by assessing

¹ Though factors such as employer discrimination, racism, or sexism cannot necessarily be discounted from a thorough discussion of exclusion, they are beyond the scope of this review, which is based on secondary sources that have not addressed these issues directly.

National Occupational Classification (NOC) skill levels from the 2014 NWT Community Survey by gender and Aboriginal identity. The following section then provides an assessment of the mobility of the N.W.T. workforce, including the relationship between NOC skill levels and location of study.

Labour Supply Characteristics: There are several ways to characterize the labour supply. Some of the most basic indicators (e.g., the participation rate, employment rate, and unemployment rate) give the best "at a glance" view of the labour supply. As such, the following section will present some information on the current labour market by region through the use of these indicators.

This section also provides a brief analysis of the labour supply characteristics for provinces and territories that have historically featured high migration toward the territory. This analysis is shown through relevant demographic profiles, education and skills attainment comparisons, and a labour force analysis.

Government of the Northwest Territories Labour Force: Chapter 2 concludes with a cursory review of the GNWT labour force over the past 10 years. Given that the GNWT is a major employer in the territory, employing an average of 4,649 people over the past 10 years, this section provides important information on the demographic profile and skills developing in this key labour market. Information surrounding employment in other levels of government in the N.W.T. can be found in Appendix C, "Industry and Occupational Classification."

Each section of the socio-economic profile should be read against the tables and charts featured in the corresponding appendices.

Demographic Forces

Our socio-economic profile draws on the 2014 NWT Community Survey for most of its demographic data. The Northwest Territories Bureau of Statistics has conducted a community survey every five years since 1981. The survey is designed to provide community-level information on a variety of topics, including housing conditions, employment, education, language, and traditional activities. For most communities, all households were asked to participate in the survey. However, in the larger communities of Yellowknife, Behchoko, Fort Simpson, Hay River, and Inuvik, only a sample of households were asked to participate. The 2014 survey was conducted face-to-face in most communities, with the exception of Yellowknife, Inuvik, Hay River, and Fort Smith where the survey was conducted by phone. Since this survey is an N.W.T. household survey, those who work in the territory but live in a different province or territory were not included. These data provide the most up-to-date account of the N.W.T.'s resident population. The overall response rate for the 2014 NWT Community Survey was 77.5 per cent.²

Our socio-economic profile also draws on supporting data from Statistics Canada's 2011 National Household Survey (NHS). Readers should be aware that the 2011 NHS was voluntary and suffered from significantly higher non-response rates than the 2006 and 2001 long-form censuses that it replaced and on which its questions were largely based. As a result, Statistics Canada adopted a measure of data quality for the NHS called the global non-response rate (GNR). This combines complete non-response (household) and partial non-response (question) into a single rate, where the threshold for data suppression is 50 per cent. The GNR for the territory was 16.1 per cent, which is relatively better than the rate of 26.1 per cent for Canada as a whole.

Our review discussion in this section proceeds as follows:

- a review of the current demographic profile of the N.W.T.
- · a review of each region's demographic profile
- an analysis of current data gaps concerning demographic forces

² Jeff Barichello (Economic Statistician, Northwest Territories Bureau of Statistics), e-mail communication by Kala Pendakur, June 24, 2015.

Demographic Profile of the Northwest Territories

With these caveats in mind, we now proceed to our demographic profile. The 2014 NWT Community Survey enumerated a total population of 43,623 people. (See Table 1—Appendix B.) Just over 51 per cent (22,425 people) of the N.W.T.'s respondents identified with an Aboriginal identity population (of which 65.1 per cent identified as Dene, 12.1 per cent as Métis, and 22.8 per cent as Inuit). As we go further into our investigation of labour market conditions and segmentation, the differences between these groups will become increasingly important.

Information pertaining to non-Aboriginal minority subpopulations comes solely from the 2011 NHS. The non-Aboriginal subpopulations are primarily of European descent; however, about 14 per cent of NHS respondents indicated visible minority status (2,720 in total). The NHS also shows that the N.W.T.'s visible minority communities are mainly concentrated in the Yellowknife census agglomeration (CA), with just over 18 per cent of this subpopulation living in regions outside the CA. (See Table 2—Appendix B.)

Our demographic profile is primarily concerned with the age distribution of the N.W.T.'s Aboriginal and non-Aboriginal subpopulations. This focus helps us understand the structure of the working-age population for these two labour pools compared with cohorts that—in theory—are less likely to be in the labour force.

Based on median age, Canada's general population is older than that of the Northwest Territories. The median age for the N.W.T. as of 2014 was 32.9, whereas for Canada, the median age was estimated to be 40.4 years of age.³ Among the subpopulations identified in this analysis (e.g., Dene, Métis, Inuit, and non-Aboriginal populations), none has a median age higher than that of the Canadian average. While the non-Aboriginal population falls within a few years (a median age of

3 Statistics Canada, CANSIM table 051-0001.

36.3 years), the Inuit population, which constitutes the youngest group, falls well below the Canadian average with a median age of 27.3 years. (See Table 1—Appendix B.)

We are also interested in the age distribution of the N.W.T.'s male and female populations, particularly as evidence of labour market segmentation can also be found between the genders for both Aboriginal and non-Aboriginal subpopulations. (See Chart 1-Appendix B.) We find that the population of the N.W.T. is relatively young compared with the rest of Canada. However, much of this is due to the relative pull of the very young Aboriginal population in the territory. Chart 2-Appendix B provides an analysis of the age distribution of the N.W.T. by Aboriginal identity. From this chart, we can see that the Aboriginal population (e.g., any individual who self-identifies as Dene, Métis, or Inuit) is much younger than the non-Aboriginal population, with a particularly high proportion of people under the age of 24. In fact, we find that over 40 per cent of the Aboriginal population is under the age of 24. (See Chart 3—Appendix B.) This will be particularly significant when we discuss educational skills attainment, as it is extremely important to understand youth skill development opportunities (e.g., education and training strategies) that will help develop a strong workforce in the coming years.

Regional Demographic Profiles of N.W.T. Census Divisions

To review available data at the regional level, this document depends on the 2014 NWT Community Survey. The primary units of analysis at this level are the six census divisions (regions) used by Statistics Canada in the 2011 National Household Survey. Exhibit 1—Appendix B provides a map of the census division boundaries:

- Region 1 corresponds to the Beaufort-Delta Administrative area.
- Region 2 corresponds to the Sahtu Administrative area.
- **Region 3** corresponds to the Tlicho Land Claims Agreement area, which lies in the North Slave Administrative area.

- **Region 4** corresponds to the Dehcho Administrative area and part of the South Slave Administrative area.
- Region 5 corresponds to the South Slave Administrative area.
- **Region 6** corresponds to the Yellowknife area in the North Slave Administrative area (excluding the Tlicho Land Claims Agreement area).

To provide a more evocative description for the census divisions, we will use the names of Administrative areas instead of Region 1, 2, 3, and so on (except for the case of the Tlicho and Yellowknife areas, which we use instead of North Slave).

Beaufort-Delta (Region 1)

This region is roughly equivalent to the Beaufort-Delta Administrative area. As of 2014, the population of Beaufort-Delta was enumerated at 6,898, of which the vast majority, roughly 80 per cent, of the population identified with an Aboriginal ethnicity (5,521 people). (See Table 3— Appendix B.) Nearly a quarter of the population (23.5 per cent) is under the age of 15; however, looking at the population make-up organized by ethnicity demonstrates differing demographic compositions. (See Chart 4—Appendix B.) The Aboriginal population of the Beaufort-Delta region has a much younger population compared with the non-Aboriginal population. (See charts 5 and 6—Appendix B.) Inuk individuals make up the majority of the Aboriginal population (slightly over 65 per cent of the Aboriginal population) in the Beaufort-Delta region.

Sahtu (Region Area 2)

This region is roughly equivalent to the Sahtu Administrative area. As of 2014, the population of Sahtu was enumerated at 2,560, of which nearly 75 per cent identified with an Aboriginal ethnicity (1,919 people). (See Table 4—Appendix B.) Similar to the Beaufort-Delta region, the Sahtu region has a clear divide between its subpopulations in terms of age groups. (See charts 7 and 8—Appendix B.) The Aboriginal population, which consists primarily of Dene individuals, has a significantly younger population than the non-Aboriginal population. (See Chart 9—Appendix B.) The Aboriginal subpopulation in the Sahtu region has one of the youngest populations in the N.W.T., with over 40 per cent under 24 years of age. In comparison, less than 30 per cent of the non-Aboriginal population of the Sahtu region is younger than 24 years. (See Chart 9—Appendix B.)

Tlicho (Region 3)

This region isolates the Tlicho Land Claims Agreement area, which is part of the North Slave Region Administrative area. As of 2014, the population of Tlicho was enumerated at 2,974, of which fewer than 200 identified as being of non-Aboriginal ethnicity. (See Table 5-Appendix B.) The Tlicho region has one of the youngest populations in the N.W.T., with 29.7 per cent under the age of 15. (See Chart 10-Appendix B.) This large number of youth adds to the dependency ratio of the region.⁴ Similar to the Sahtu region, Dene individuals make up the vast majority of the Aboriginal population (roughly 98 per cent of the Aboriginal population). An analysis of the age distribution of Tlicho by Aboriginal identity demonstrates how young the population is-close to 50 per cent of the Aboriginal population in the Tlicho region is under the age of 24. (See charts 11 and 12—Appendix B.) It is important to note that, due to confidentiality issues, some information surrounding the non-Aboriginal population is not available for this analysis (i.e., the number of non-Aboriginal people between the ages of 15 and 24, and the number of non-Aboriginal people over the age of 75).

Dehcho (Region 4)

This region is roughly equivalent to the Dehcho Administrative area and includes part of the South Slave Administrative area. As of 2014, the population of Dehcho was enumerated at 3,483, of which 2,939 identified with an Aboriginal ethnicity. (See Table 6—Appendix B.) Chart 13—Appendix B provides an analysis of the age distribution of Dehcho by gender. Furthermore, charts 14 and 15—Appendix B provide

⁴ Under Statistics Canada guidelines, a dependency ratio reflects the number of youth (19 and younger) and seniors (65 and older) for every 100 working-age persons (defined more strictly as 20 to 64 years old). This model merely assumes that youth and seniors are not working and are therefore "dependent" on the 20- to 64-year-olds (in their subpopulations). Statistics Canada, *Dependency Ratio*.

a visual representation of the age distribution of Dehcho by Aboriginal identity. Following the same trend seen in other regions in the N.W.T., the Aboriginal population is significantly younger than the non-Aboriginal population. It is important to note that, due to confidentiality issues, some information surrounding the non-Aboriginal population is not available for this analysis (i.e., the number of non-Aboriginals over the age of 75).

South Slave (Region 5)

This region is roughly equivalent to the South Slave Administrative area. As of 2014, the population of South Slave was enumerated at 7,238, of which 4,011 identified as being of an Aboriginal ethnicity. (See Table 7— Appendix B.) South Slave has one of the populations closest in age to the Canadian average, in part due to the relatively large number of non-Aboriginal people who have an age make-up that is very similar to the overall Canadian population. (See charts 16 to 18—Appendix B.)

Yellowknife Area (Region 6)

This region is roughly equivalent to the North Slave Region (it includes the capital Yellowknife, but excludes the Tlicho communities included in the Region 3 Census Division). The Yellowknife area has by far the largest population of any of the other regions in the N.W.T., being enumerated at 20,470 during 2014. (See Table 8—Appendix B.) Slightly over 25 per cent of the population of Yellowknife is of an Aboriginal ethnicity (of which the majority identify as of Dene ethnicity), making this region vastly different from the other subregions in the territory. (See charts 19 to 21—Appendix B.)

Industry Activity and Occupational Classification

This section of the socio-economic profile examines current and historic economic forces shaping the N.W.T.'s labour market. This perspective on the territory's economy draws heavily from Statistics Canada's Labour Force Survey (LFS); Survey of Employment, Payrolls, and Hours

(SEPH); the Canadian System of National Accounts; and the 2014 NWT Community Survey. Our discussion of industry activity is based on the 2007 North American Industry Classification System (NAICS).

To understand the distribution of occupations and occupational skill levels in the territory and regions, this document relies on the 2014 NWT Community Survey. The discussion of occupations is based on the 2011 NOC and Statistics Canada's schema of NOC skill levels.

Our review in this section proceeds as follows:

- a review of which sectors drive employment in the N.W.T., including an analysis of the greatest contributors to Gross Domestic Product (GDP) and employment;
- a review of changes to the distribution of labour across industries from 2011 to 2014;
- a review of evidence of labour market segmentation by gender and occupational classification (e.g., through the different skills required for different occupations);
- a review of how mobile the N.W.T. labour supply is;
- a characterization of the labour force through an analysis of both regional labour force activity and labour force by highest level of education;
- an analysis of current gaps in labour force and industry activity data, including an analysis of the quality of current data.

Which Sectors Drive Total Employment in the N.W.T?

In regional economic analysis, it is important to think about which sectors of the economy drive total employment as well as employment in other sectors. Economic base theory suggests that export-driven sectors such as oil and gas, mining, or manufacturing drive employment growth in services-producing sectors.⁵ Other sectors, such as tourism, government, and defence, also bring in dollars from outside the local economy. As Goldsmith, in his 2008 structural analysis of the Alaska economy, states:

5 Schaffer, Web Book of Regional Science.

This way of thinking about the regional economy asserts that there must be jobs in a regional economy that bring in dollars from outside the local economy; these jobs are known as basic employment, and they produce the basic income of the region in the form of payroll, business profits, and public revenues. All the other jobs in the economy depend upon the presence of the basic income in the economy. They are known as non-basic employment. The non-basic jobs are in businesses that sell goods and services within the local economy and serve to recycle or turn over money within the local area (the multiplier effect).⁶

While we recommend proceeding with caution when making distinctions between basic and non-basic employment, Goldsmith provides a useful insight that supports the need for some deeper investigations of what drives employment growth in the territory.

GDP and Employment Growth in the N.W.T.

Looking back over 14 years of economic data collected by Statistics Canada since the separation of Nunavut in 1999, we see that, on average, the largest contributors to the N.W.T.'s real annual GDP were oil and gas extraction (18 per cent) and diamond mining (16 per cent), followed by public administration (all governments) at 14 per cent. (See Chart 1—Appendix C.) Of these three drivers of the N.W.T.'s real GDP from 1999 to 2013, oil and gas declined from a peak of 36 per cent of real GDP in 2000, to a low of 9 per cent in 2013. Diamond mining, by contrast, achieved a peak of 24 per cent midway in 2007 and closed 2013 at 16 per cent; while public administration, which started at a peak of 17 per cent in 1999 and bottomed out at 11 per cent in 2007, closed 2013 at 15 per cent. Chart 1—Appendix C depicts the annual fluctuations of these three drivers and two other industries (health and social assistance, and utilities) at basic prices (in chained 2007 dollars). This chart also disaggregates public administration into territorial and

6 Goldsmith, Structural Analysis of the Alaska Economy, 8.

federal components, to provide some insight into their separate dynamics leading up to devolution (with the territorial increasing and federal decreasing).

While informative, this focus on GDP can be misleading from a labour market assessment perspective. Both oil and gas extraction and diamond mining are high-technology industries, which means that their share of total employment from 1999 to 2013 was considerably less than their contributions to real GDP.

In terms of total employment, the services-producing sectors provided, on average, 82 per cent of jobs in the territory from 2001 to 2013. This profile of total employment, based on annual data from the Statistics Canada LFS, can be disaggregated down to the two-digit NAICS level.⁷ Here we find that oil and gas and mining, combined with fishing and forestry, provided, on average, 8 per cent of total employment, per year, during this 13-year time period. The top three average annual contributors to total employment in the N.W.T. from 2001 to 2013 were:

- public administration—all government levels—at 22 per cent (min. 19 per cent and max. 24 per cent);
- trade—including wholesale and retail—at 11 per cent (min. 9 per cent and max. 13 per cent);
- health care and social assistance at 11 per cent (min. 9 per cent and max. 12 per cent).

Chart 2—Appendix C depicts the fluctuation of these top contributors to total employment compared with the aggregate of goods-producing sectors from 2001 to 2013. The aggregate of goods-producing sectors includes agriculture, utilities, construction, and manufacturing, alongside forestry, fishing, mining, and oil and gas.

⁷ NAICS arranges industries into 20 sectors, 102 subsectors, and 324 industry groups. The criteria that Statistics Canada uses to create these categories include similarity of input structures and labour skills or production processes used by each documented establishment.

Logically, there should be a relationship between real GDP growth and employment growth. Even high-technology sectors such as mining and oil and gas eventually require some additional labour to support industrial expansion and intensification. However, discerning this relationship as it changes over time can be challenging. The annual data in charts 1 and 2—Appendix C, for example, clearly show trends and other time series patterns, but they also may obscure as much as they reveal. Depending on how we treat the data and provide additional context, we may see different patterns among industrial sectors in the relationship between sector-specific contributions to GDP and employment. At just 15 data points, the annual industry sector GDP data in Chart 1—Appendix C are insufficient for extending the discussion, and so we leave this subject for a more in-depth assessment in Chapter 4.

Changes to Labour Market Distribution 2011–14

In order to compare the distribution of employees in the N.W.T. in recent years, we relied on the 2011 National Household Survey and the 2014 NWT Community Survey. These two surveys allow for the most up-to-date, in-depth analysis of the labour market, including in which industries people are working and what type of jobs they are doing.

Chart 3—Appendix C examines occupations in the territory using information from the 2014 NWT Community Survey, coded by the National Occupational Classification (NOC) system.

The NOC system aggregates occupational data into four levels. The most general level consists of 10 occupational categories (from 0 to 9), which altogether contain 40 major groups that are further subdivided into 140 minor groups. The minor groups then include 500 occupational unit groups. According to Statistics Canada, "Occupational unit groups are formed on the basis of the education, training, or skill level required to enter the job, as well as the kind of work performed, as determined by the tasks, duties and responsibilities of the occupation."⁸

8 Statistics Canada, Portrait of Canada's Labour Force, 16.

A comparison of employment by the NOC system in 2011 and 2014 is provided in Chart 3—Appendix C. Occupational categories are provided at the highest (i.e., one-digit) level, and therefore show the overarching themes of each employment category. As shown, there was very little change in the composition of employment over the time period—in fact, almost all the categories show less than a 1 per cent change in the proportion of total employment (the exception being category **7 Trades**, **transport and equipment operators, and related occupations**, which had a 1.1 per cent change in the proportion of total employment).

This change is quite small, indicating that there has not been much movement in the proportion of employment by occupational category in the last few years. What changes there have been may also be accounted for by differences in sampling and methodology, but this cannot be said concretely without a more in-depth comparison of the two surveys.

A comparison of occupations in 2011 and 2014 using the North American Industry Classification System (NAICS) shows very little change in the proportion of employment by occupation over the last few years. (See Chart 4—Appendix C.) With few exceptions (48–49 Transportation and warehousing and 91 Public administration), the proportion of employment by category has remained relatively constant, with changes being roughly 1 per cent of total employment. As suggested by our analysis of the LFS, the top employing industries are 91 Public Administration, 62 Health care and social assistance, 44–45 Retail trade, and 61 Educational services.

Evidence of Industry Sector Labour Market Segmentation by Gender

An analysis of data from the 2014 NWT Community Survey presents a picture similar to the LFS of the distribution of employees by industry. In the N.W.T., the territorial government ranked first among all sectors in terms of its share of total employment with 15.4 per cent. (See Table 1— Appendix C.) For Canada as a whole, all public administration ranked fifth, while the retail trade sector ranked first with 11.5 per cent in 2011. Health care and social assistance ranked second in the N.W.T. in 2014 with 10.2 per cent of the employed population, followed closely by retail trade with 8.5 per cent. In Canada, health care and social assistance ranked second with 11.4 per cent, while manufacturing ranked third at 9.2 per cent during 2011. In the territory, manufacturing employed only 0.1 per cent of the workforce in 2014.

The 2014 NWT Community Survey data also provide some evidence of labour market segmentation by gender, particularly after we break public administration down to the two- to three-digit NAICS level. (See Table 1—Appendix C.) The top employer for males and females in N.W.T. was the territorial government.⁹ The second and third top employers for females in the N.W.T. were health care and social assistance (17.7 per cent), followed by educational services (12.1 per cent). In contrast, the second and third top employers for males in the N.W.T. were construction (11.1 per cent) and mining, quarrying, and oil and gas extraction (10.9 per cent).

Among the more extreme patterns discernible from Table 1— Appendix C, health care and social assistance employed over five females for every male (1,898:377), while the educational services sector employed over two females for every male (1,300:486). Furthermore, in the last few years there has been a shift in occupations such that females now fill a higher proportion of education jobs than previously. In 2011, it was reported that there were roughly two females employed for every male employed in the education industry (1,135:555), as opposed to the current 2.7 females for every male (1,300:486).

Conversely, construction employed over nine males for every female (1,293:143); mining, quarrying, and oil and gas employed over four males for every female (1,261:279); and transportation and warehousing employed over three males for every female (999:327) in 2014. Greater gender equality was prominent in public administration and retail.

9 A further breakdown of the territorial government is provided later.

Evidence of Labour Market Segmentation by Gender and Occupational Classification

Table 2—Appendix C provides an occupational profile of the N.W.T. workforce by the NOC system captured by the 2014 NWT Community Survey. It reveals some evidence of labour market segmentation by gender while also confirming our earlier discussion of LFS data around the concentration of N.W.T. employment in services-producing sectors such as public administration and retail.

In 2014, females comprised slightly less than half of the territory's employed labour force at 48 per cent of the employed population. Among the 10 broad occupational categories, N.W.T. females aged 15 years and over were most likely to be employed in business, finance, and administration occupations (27.6 per cent); education, law, and social, community, and government services (22.8 per cent); and sales and service occupations (19.5 per cent).

This differs from the general Canadian pattern found in the 2011 NHS where females aged 15 years and over were most likely to be employed in sales and service occupations (27 per cent); business, finance, and administration occupations (25 per cent); and occupations in education, law, and social, community, and government services (17 per cent).

By comparison, in 2014, N.W.T. males of the same working-age cohort were most likely to be employed in trades, transport and equipment operator, and related occupations (26.1 per cent); management occupations (15.3 per cent); and sales and service occupations (13.7 per cent).

This also differs from the general Canadian pattern found in the 2011 NHS where males were most likely to be employed in trades, transport and equipment operator, and related occupations (26 per cent); sales and service occupations (19 per cent); and management occupations (14 per cent).

It appears from this brief glance at the data that patterns of labour market segmentation between males and females in the N.W.T. mirror the occupational structure of the general Canadian population. Yet more females in the N.W.T. appear to be employed outside of sales and services, which likely reflects their substantial presence in public administration, social assistance, and education. N.W.T. males, while confirming the Canadian male bias for trades, transport, and equipment operator occupations, appear to be less likely in sales and services, while also being more likely to have management occupations than males in the general Canadian population.

Evidence of Labour Market Segmentation by NOC Skill Levels

The schema Statistics Canada applied to the occupational data also makes it possible to sort occupations into distinct skill levels. This schema involves the following four occupational skill levels:¹⁰

- NOC skill level A occupations:
 - Management occupations. These occupations are characterized by a high level of responsibility, accountability, and subject matter expertise. Expertise can either be acquired through formal education or workplace experience. Examples include retail sales managers, deputy ministers, and managers in health care.
 - Professional occupations. These occupations require a university degree (i.e., a bachelor's, master's, or doctorate). Examples include nurses, teachers, engineers, and lawyers.
- NOC skill level B occupations:
 - Occupations usually requiring two to three years of post-secondary education at a college (e.g., aggregate subgroups 12, 13, 22, 32, 42, 43, and 52 in Table 2—Appendix C). Examples include office administrative assistants, technical occupations in the physical

10 Government of Canada, NOC 2011 Tutorial.

sciences, paralegals, medical technologists, occupations in front line public protection services, and technical occupations in libraries and museums.

- Construction and equipment operation trades (e.g., aggregate subgroups 72 and 73 in Table 2—Appendix C). Examples include carpenters, plumbers, and machinery and transportation equipment mechanics.
- Supervisory occupations (e.g., aggregate subgroups 62, 63, 82, and 92 in Table 2—Appendix C). Examples include supervisors of logging and forestry activities, and supervisors of processing and manufacturing occupations.
- NOC skill level C occupations usually require secondary school or occupation-specific training (up to two years). Examples include general office workers; assisting occupations in support of health services, home care providers, sales representatives; occupations in food and beverage services; and motor vehicle and transit drivers.
- NOC skill level D occupations usually revolve around on-the-job training. This training can involve short work demonstrations and does not necessarily require formal education. Examples include cashiers; trades helpers and labourers; and labourers in processing, manufacturing, and utilities.

In 2014, skill level B was the most prevalent group in the territory, accounting for nearly one-third (31.2 per cent) of its employed workforce aged 15 years and older. (See Table 3—Appendix C.)

Skill level A, including managers and professionals, is the secondlargest grouping in both the N.W.T. and Canada as a whole. Skill Level A accounted for slightly under a third of the N.W.T. workforce in 2014 (roughly 32.4 per cent). In the N.W.T., managers accounted for 13.6 per cent of employed persons, while professionals represented 18.8 per cent.

Skill level C occupations represented 22.3 per cent of workers aged 15 years and over. Finally, skill level D occupations represented 10.6 per cent of the employed population. Table 3—Appendix C provides evidence of segmentation between males and females in the N.W.T. workforce. Within skill level A, nearly 60 per cent of managers are male, while nearly 60 per cent of professionals are female. In the other categories, slightly more females occupy positions in skill level C, while slightly more males occupy positions in skill level D.

Furthermore, tables 4 to 6—Appendix C provide evidence of labour market segmentation between males and females in subregions of the N.W.T., namely Yellowknife, regional centres, and smaller communities. Generally, a higher proportion of individuals are employed in skill level C and D occupations in the smaller communities than in the regional centres or in Yellowknife. In contrast, Yellowknife and the regional centres have a higher proportion of people who are employed in the higher skill level occupations (e.g., skill level A) than in the smaller communities. There is a strong correlation between education and employment, and smaller communities tend to have less access to post-secondary education, which contributes in part to the employment composition seen.

Do these patterns of gender inequality carry over into the N.W.T.'s Aboriginal and non-Aboriginal subpopulations? Table 7—Appendix C suggests they do for skill level A managers and professionals, while there appears to be more gender equality for the Aboriginal identity subpopulation at skill level B than for the non-Aboriginal identity population. Table 7—Appendix C also provides a sharp contrast in the attainment of skill levels between Aboriginal and non-Aboriginal workers, where 74 per cent of managers are non-Aboriginal and 58 per cent of skill level D workers are Aboriginal.

Mobility of the Workforce

The territory had an extremely high proportion of workers in 2011 who lived in another province or territory five years earlier (19.2 per cent). Mobility of workers is a particularly important topic in the N.W.T., given the need to recruit and retain skilled labour for a variety of positions (e.g., teachers or nurses).

Tables 8 and 9—Appendix C examine another aspect of labour mobility—in this case the relationship between NOC skill levels and an employee's location of study. As may be expected by those who understand the N.W.T.'s post-secondary educational system, workers who seek skill level A careers typically have to acquire educational qualifications from outside of the territory. Given the N.W.T.'s college system, skill level B occupations include more workers educated through the territorial post-secondary system. Meanwhile, skill levels C and D both reflect a different kind of qualification system, based on high school, job-specific training, and work experience.

A closer look at the relationship between location of study and NOC skill levels, however, reveals a substantial number of workers who, though lacking post-secondary credentials, have managed to climb the organizational hierarchy to occupations corresponding to skill level A management and professional positions, as well as skill level B positions. A deeper analysis of how this phenomenon is affected by age, gender, and Aboriginal identity is needed to better understand the patterns occurring.

Labour Supply Characteristics

There are several ways to characterize the labour supply. Some of the most basic indicators—for example, the participation rate, the employment rate, and the unemployment rate—give the best at-a-glance view of the labour supply. As such, the following section will present some information on the current labour market by region through the use of these indicators. Following the definitions provided by Statistics Canada, we present the employment rate as the proportion of the population over the age of 15 which is employed (whether or not they are part of the labour force). The unemployment rate is calculated as the proportion of the labour force which is unemployed (where the labour force consists of people over the age of 15 who are either employed or unemployed). While the unemployment rate presents a good picture of the state of the labour force, one has to be careful in interpreting it, as it gives no indication regarding the extent of underemployment or discouraged workers.¹¹ Finally, the participation rate is calculated as the proportion of the population over the age of 15 which constitutes the labour force. Information in this section comes entirely from the 2014 NWT Community Survey.

Labour Force Activity

Table 10—Appendix C provides an analysis of the labour force, including the participation, employment, and unemployment rates for the territory. The associated chart provides a visual representation of the same data by ethnicity and gender. (See Chart 5—Appendix C.) Three immediate trends present themselves at the territorial level. The first is that a lower proportion of the Aboriginal population is in the labour force compared with the non-Aboriginal population (64.9 per cent compared with an 81.7 per cent participation rate). The second is that the Aboriginal population has a significantly lower employment rate than the non-Aboriginal population (52 per cent compared with a 78.8 per cent employment rate). Varying proportions of the population in the labour force account for some of this difference; however, the remainder can be attributed to the difference in unemployment rates between the two subpopulations (the Aboriginal population has a 19.8 per cent unemployment rate, compared with a 3.5 per cent unemployment rate for the non-Aboriginal population). Finally, while there are differences between the male and female populations at the territorial level (e.g., a greater proportion of males are in the labour force while fewer females are unemployed within it), these differences are relatively small.

An analysis of the labour force by region follows.

¹¹ Underemployment refers to employment that, in one way or another, is insufficient to the worker. Discouraged workers are those who have left the labour force due to the inability to find work; as these people are not counted in the labour force, they do not show up in the unemployment rate.

Beaufort-Delta (Region 1)

Table 11—Appendix C provides an analysis of the labour force of the Beaufort-Delta region. In many ways, the rates found within this region reflect the territorial picture, but at an amplified rate. (See Chart 6—Appendix C.) For instance, there are large differences between the Aboriginal and non-Aboriginal populations' unemployment rates (22.7 per cent compared with 3.4 per cent) and employment rates (48.1 per cent compared with 85.1 per cent). The differences between males and females are also slightly increased as compared with the territorial average.

Sahtu (Region 2)

Table 12—Appendix C provides an analysis of the labour force of the Sahtu region. The Sahtu region has a very large difference in participation rates between the Aboriginal population (62.3 per cent) and non-Aboriginal population (90.2 per cent). This contributes to the large difference in employment rates between the two subpopulations (a 46.9 per cent employment rate for the Aboriginal population, compared with an 87.5 employment rate for the non-Aboriginal population). Males and females face similar rates as the territorial average. (See Chart 7— Appendix C.)

Tlicho (Region 3)

Table 13—Appendix C provides an analysis of the labour force for the Tlicho region. Due to data suppression, very little information is available on the divide between the Aboriginal and non-Aboriginal populations. As such, this analysis is limited to the differences between males and females. Chart 8—Appendix C shows that the male unemployment rate (39.3 per cent) is significantly higher than the female unemployment rate (24 per cent). Furthermore, these unemployment rates are significantly higher than the territorial average.

Dehcho (Region 4)

Table 14 and Chart 9—Appendix C provides an analysis of the labour force for the Dehcho region. Similar to the Tlicho region, data suppression prevents an analysis of the labour force by ethnicity (i.e., Aboriginal vs. non-Aboriginal ethnicity). Notably, the male unemployment rate (23.2 per cent) is significantly higher than the female unemployment rate (15.8 per cent) in Dehcho.

South Slave (Region 5)

Table 15—Appendix C provides an analysis of the labour force for the South Slave region. Similar rates present themselves for the South Slave region compared with the territory. (See Chart 10—Appendix C.) A higher proportion of Aboriginal people are unemployed compared with non-Aboriginal people. The same can be said for males over females. Furthermore, a higher proportion of non-Aboriginal individuals are in the labour force compared with Aboriginal individuals.

Yellowknife Area (Region 6)

Table 16—Appendix C provides an analysis of the labour force for the Yellowknife area. The Yellowknife area features similar relative rates among the various subpopulations, compared with the territorial average, but with a few changes. (See Chart 11—Appendix C.) Namely, unemployment rates across the subpopulations are generally lower. Notably, the employment rate for each subpopulation is higher than the territorial average (with the exception of the non-Aboriginal population, which is slightly lower).

Labour Force Activity by Highest Level of Education

Table 17—Appendix C provides an analysis of labour force activity within the N.W.T. by highest level of schooling and gender from 2014. Notably, employment rates differ greatly by highest level of education; in particular, people with a university degree have an employment rate of 88.1 per cent, whereas those with a high school diploma have a

significantly lower employment rate of 61.1 per cent. People with less than a high school diploma have an even lower employment rate of 37.7 per cent. Furthermore, employment rates for females are marginally lower than those for males of the same educational level.

Chart 12—Appendix C provides an analysis of employment in the N.W.T. by highest level of schooling. Most notably, the largest portion of the employed population, at 37.5 per cent, holds a college diploma or trades certificate, which helps to confirm earlier findings related to the NOC skills levels. The second-largest group of employed people is those with a university degree at 26.4 per cent (it should be noted that data limitations prevent us from distinguishing between degrees within the university degree category).

Tables 18 and 19—Appendix C provide an analysis of labour force activity for the Aboriginal and non-Aboriginal subpopulations in the territory. Notably, employment rates for Aboriginal people with less than a university degree are significantly lower than those of non-Aboriginal people. For instance, Aboriginal people with less than a high school diploma have an employment rate of 33.8 per cent compared with an employment rate of 58.5 per cent for non-Aboriginal people with the same qualifications. Furthermore, employment rates for non-Aboriginal individuals with a college or trades certificate have an employment rate over 10 per cent higher than Aboriginal individuals with the same qualifications (85.2 per cent compared with 72.3 per cent).

Charts 13 and 14—Appendix C present the varying employment proportions in the N.W.T. by highest level of schooling for Aboriginal and non-Aboriginal individuals. Most notably, the majority of employed Aboriginal people hold either a college diploma or trades certificate (39.8 per cent of employed Aboriginal people) or have a level of education lower than a high school diploma (27.8 per cent of employed Aboriginal people).¹² In comparison, the majority of non-Aboriginal employed workers hold a university degree (38.3 per cent) or a college

¹² The reader should note that these values represent employment by highest level of education and not population education rates.

or trades certificate (36 per cent). These large disparities point to a greater issue related to education and skills attainment for Aboriginal individuals in the N.W.T., which will need to be addressed in order to strengthen the territory's labour force in the coming years.

An analysis of labour force participation by highest level of schooling is provided for each of the areas in the N.W.T. in tables 20 to 25— Appendix C. Notably, with the exception of people with a university degree, employment rates in Tlicho are significantly lower than those of other areas.

An analysis of employment by highest level of schooling is provided for each of the subregions in the territory. (See charts 15 to 20— Appendix C.) Most notably, the employment make-up of Yellowknife vastly differs from the rest of the regions, with 33.8 per cent of employed workers holding a university degree. (See Chart 20—Appendix C.) In comparison, people with a university degree make up less than 20 per cent of the employed population in the remaining areas.

Feeder Provinces and Territories

In recent years, a large proportion of migrants going to the N.W.T. were from Alberta, Ontario, and British Columbia. While migration to the N.W.T. from Saskatchewan has declined, in the early 2000s it was quite prominent, and as such, Saskatchewan has been included in this analysis. Finally, Nunavut and Yukon have been included in this analysis in order to briefly consider the similarities and differences between the three territories.

In each case, data are provided on the population (age distribution), education (highest degree of education by gender), and labour force participation (labour force status by gender, labour force participation by the NOC system, and labour force participation by the NAICS). This section should be used only to provide context to who is migrating to the Northwest Territories. Furthermore, it should be noted that most data for this section come from the 2011 NHS, and are therefore a few years older than the majority of data used to analyze the territory in this
resource (the exception being population data that come from Statistics Canada's current population estimates). As such, some of the variation between the places of interest and the N.W.T. may be due to time frame differences.

Population Dynamics

Of particular interest with regards to the population dynamics of each province/territory is the segment of the population that constitutes the working-age population (e.g., those between the ages of 15 and 64). For the purpose of this resource, we will focus on the younger half (e.g., those aged 15 to 34) of the working-age population, as these are the people who are more likely to migrate. Dion and Coulombe argue that younger populations are more likely to migrate than older generations due to the high number of transitions that occur during youth, including entering the labour market.¹³

Based on provincial and territorial population estimates, the N.W.T. had among the youngest populations in Canada in 2014, with roughly 32 per cent of the population falling within the younger segment of the working-age population. (See tables 1 to 6—Appendix D and Chart 1— Appendix B for N.W.T. demographics). Nunavut had a slightly younger population, with 33.7 per cent of the population falling within the same segment. The remaining provinces and territories had similar population dynamics, with between 26.4 per cent (British Columbia) and 30.1 per cent (Alberta) of the population falling within the younger working-age population. (See charts 1 to 6—Appendix D.) With the exception of British Columbia, all of the provinces and territories of interest have a larger segment of the population that falls within the younger segment of the working-age population than the Canadian average (26.8 per cent).¹⁴

14 Statistics Canada, CANSIM table 051-0001.

¹³ Dion and Coulombe, "Portrait of the Mobility of Canadians in 2006," 102.

Education

Tables 7 to 12—Appendix D provide information on the highest level of education of each feeder province/territory by gender. It should be noted that education information comes from the 2011 NHS, and as such cannot be directly compared with the education data coming from the 2014 NWT Community Survey (given the different time period, education reporting levels, and differences in reporting bias). As such, this section will present some information on the educational attainment of the feeder provinces, but will present the information only in a way that describes available skills.

Of the six provinces/territories of interest, Nunavut has by far the lowest educational achievement levels. In 2011, over half of the population of Nunavut had less than a high school diploma (56 per cent). This is significantly different from the remaining provinces/territories of interest, where 25 per cent of the population or less had less than a high school diploma. (See charts 7 to 12—Appendix D.)

Nearly all of the provinces and territories of interest fall within a few percentage points (roughly 16 to 20 per cent) of one another in terms of college attainment. The only exception is Nunavut, where, in 2011, 12.5 per cent of the population held a college, CÉGEP, or other non-university certificate or diploma. It is important to note that provinces/ territories that do very well on college attainment will likely not do as well on university attainment. The total percentage of college and university graduates in an area cannot exceed 100 per cent; therefore, at some point, increasing rates of graduates from college will decrease rates of graduation from university.

A similar trend presents itself with regards to university attainment. While university attainment levels vary (e.g., those who have completed a program below or above a bachelor's degree), most provinces/ territories fall within a few percentage points of one another. In 2011, between 25.1 and 27.8 per cent of Alberta, British Columbia, Ontario, and Yukon's populations held a university degree. In contrast, Nunavut's population had the lowest level of university degree attainment—with only 10.5 per cent, whereas 19.3 per cent of Saskatchewan's population earned university degrees.

Labour Force Participation

Labour force participation rates, ranging from a low of 63.4 per cent in Nunavut to a high of 77.3 per cent in Yukon, help to start to explain some of the key differences in the labour forces in these regions.¹⁵ The differences in labour force participation not only directly contribute to differences in the employment rate, but also provide the proportion of those who have chosen not to enter the labour force. Tables 13 to 30 and charts 13 to 24 in Appendix D provide more detailed information on labour market participation, employment, and the distribution of employees by occupation and industry. Most notable in this section is the difference in economies by industry between regions. In particular, natural resources extraction industries, as well as agriculture, forestry, fishing, and hunting industries, differ greatly between regions. This can partially be explained by the natural resources available to each region (e.g., regions with a high level of natural resources will have a higher proportion of people working in natural resources extraction industries). These data are meant as a guide to compare the economies of these regions to the territory.

GNWT Labour Force

The GNWT is an important employer in the territory, historically having employed over 4,000 people per year over the past 10 years. (See Table 1—Appendix E.) Between the various departments, education councils, agencies, and health and social services authorities, the GNWT plays a major role in employing highly skilled individuals. Furthermore,

¹⁵ The labour force participation rate indicates the percentage of the working-age population that is either employed or unemployed but looking for a job. As such, it does not include "discouraged workers" who have given up looking for a job and have thus left the labour force.

looking at the large number of people who work in the GNWT in the capital helps to partially explain the education and skills imbalance in the territory.

This section presents information on the role of the GNWT in employing skilled workers in the territory. Our review relies on data from the GNWT, specifically the Department of Education, Culture and Employment and the Department of Human Resources.

Our discussion in this section presents:

- an analysis of employee demographics in the GNWT. Employee demographics are analyzed by both gender and by ethnicity. Ethnicity is split into three categories:
 - Indigenous Aboriginal individuals
 - Indigenous non-Aboriginal individuals
 - other/non-Indigenous individuals;¹⁶
- an analysis of employee distribution by location. Specifically, we analyze where employees are located, and discuss how this may impact the level of skills and educational attainment in the region;
- an analysis of GNWT employee distribution by the NOC system major groupings;
- an analysis of GNWT employee distribution by occupation;
- a review of current data gaps in GNWT labour force data.

GNWT Employee Demographics

Employee demographics within the GNWT have been analyzed by age, gender, and ethnicity. Overall, very little has changed through the years with regards to employee distribution by age; however, the number of employees has grown considerably (from 4,049 in 2004 to

¹⁶ Following terminology from the GNWT Department of Human Resources, Indigenous Aboriginal Persons refers to those who are descendants of the Dene, Inuit, or Métis people, indigenous to the present boundaries of the Northwest Territories. Indigenous non-Aboriginal Persons refers to those non-Aboriginal persons born in the N.W.T. or who lived more than half of their lives in the Northwest Territories.

5,141 in 2014). People between the ages of 35 and 54 make up the majority of employees for both males and females. (See charts 1 and 2—Appendix E.)

While the age distribution of employees within the GNWT has remained relatively constant through the years, the split between males and females has shifted slightly. From 2004 to the present, female employees in the GNWT have made up slightly less than two-thirds of employees; however, this proportion has been slowly shrinking. (See Chart 3— Appendix E.) Furthermore, while females have made up the majority of employees overall, there are noticeable differences between the occupations that males and females have traditionally held in the GNWT (which will be analyzed in further detail in the following sections).

Finally, with regards to ethnicity, the proportion of Indigenous Aboriginal, Indigenous non-Aboriginal, and other/non-Indigenous employees has remained constant over the past 10 years. (See Table 2—Appendix E.) Most noticeably, non-Indigenous employees have consistently made up close to 55 per cent of the entire GNWT workforce. This large number of people coming from outside of the N.W.T. to work for the government may be partially explained by the need for university skills. In contrast, Indigenous Aboriginal individuals have consistently made up just shy of a third of all GNWT employees (between 31 and 32 per cent), while Indigenous non-Aboriginal individuals have consistently made up less than 15 per cent of all employees in the GNWT. (See Chart 4—Appendix E.)

GNWT Employee Distribution by Location

Historically, the Headquarters/North Slave Region has housed roughly half of the GNWT's employees. (See Table 3—Appendix E.) The remaining regions include the Beaufort-Delta Region, the Dehcho Region, the Sahtu Region, the South Slave Region, and the Tlicho Region. (See Chart 5—Appendix E.)

GNWT Employee Distribution by NOC System Skill Levels

Chart 6—Appendix D provides a visual representation of the breakdown of employees by the NOC system. The GNWT splits its employees into five skills categories: management, professional, college/apprenticeship, occupational training, and on-the-job training.

Using the definitions by Employment and Services Development Canada,¹⁷ these categories can be defined as follows:¹⁸

- Management occupations are found in all categories of the labour force and usually require a university degree or specialized on-the-job training and extensive experience. In the GNWT, examples include managers, directors, assistant deputy ministers, and regional superintendents.
- Professional occupations require a university degree at the bachelor's, master's, or doctorate level. In the GNWT, examples include teachers, registered nurses, social workers, public affairs officers, lawyers, and benefit officers.
- **College/apprenticeship** occupations usually require two to three years of post-secondary education, two to five years of apprenticeship training, or three to four years of secondary school and more than two years of on-the-job training, specialized training courses, or specific work experience. In the GNWT, examples include administrative assistants, licensed practical nurses, and finance officers.
- Occupational training positions usually require some secondary school with up to two years of on-the-job training, training courses, or specific work experience. In the GNWT, examples include youth officers, fire crew members, classroom assistants, and corrections officers.
- Finally, as indicated by the name, **on-the-job training** occupations require short work demonstrations or no formal educational requirements. In the GNWT, examples include janitors, security guards, and custodians.

17 Formerly known as Human Resources and Skills Development Canada.

18 Government of Canada, NOC 2011 Tutorial.

These categories will be examined individually below.

Managers

The number of managers in the GNWT has grown from 442 to close to 700 over the past 10 years, with a clear equalization process occurring originally, almost three-quarters of the managers in the GNWT were male; however, the current distribution of male and female managers is nearly equal. (See Table 4—Appendix E.) Indigenous Aboriginal individuals have historically made up (with the exception of a few years) less than 22 per cent of managers in the GNWT, as have Indigenous non-Aboriginal employees. (See Chart 7—Appendix E.) Given that Indigenous Aboriginal people make up roughly 30 per cent of the GNWT workforce, they are under-represented in managerial occupations. In turn, Indigenous non-Aboriginal employees are over-represented in managerial positions in the GNWT with regards to their proportion of the GNWT.

Professionals

The majority of professionals in the GNWT have consisted of female employees over the past 10 years. Indigenous non-Aboriginal employees have made up between 10.3 and 12.8 per cent of professionals within the GNWT per year. (See Table 5—Appendix E.) Indigenous Aboriginal employees have made up a slightly greater proportion of professional employees, coming just under 20 per cent of all professionals over the past 10 years. (See Chart 8—Appendix E.) Professional occupations have grown considerably from 1,711 positions in 2004 to 2,091 positions in 2014.

College/Apprenticeship

The majority of college/apprenticeship GNWT employees have been female over the past 10 years. The overall number of employees in this category has grown slightly, from 932 to 1,094 employees over the past 10 years. (See Table 6—Appendix E.) The proportion of Indigenous non-Aboriginal employees has gradually declined over the past 10 years,

from 15.8 to 12.9 per cent per year. The proportion of Indigenous Aboriginal employees, on the other hand, has grown from 35.6 to 40.4 per cent over the same time period. (See Chart 9—Appendix E.)

Occupational Training

Females have historically made up over two-thirds of employees under the occupational training category in the GNWT. (See Table 7— Appendix E.) Nearly half of employees who fall within this category are Indigenous Aboriginal people. Given that Indigenous Aboriginal people make up roughly a third of GNWT employees, they are over-represented in occupational training positions (e.g., their proportion of occupational training occupations is higher than their proportion of GNWT employees). In contrast, slightly more than 10 per cent of employees in this category are Indigenous non-Aboriginal people. (See Chart 10—Appendix E.) Finally, it is worth noting that occupations in this skill category have grown considerably since 2004 (from 873 to 1,174 positions).

On-the-Job Training

Over the past 10 years, there has been a gradual increase in the proportion of female workers who fill the on-the-job training category, from around 50 to roughly 60 per cent. (See Table 8—Appendix E.) Indigenous non-Aboriginal employees have historically made up less than 5 per cent of all on-the-job training employees. In contrast, Indigenous Aboriginal employees have historically made up over three-quarters of employed people in the same category. (See Chart 11—Appendix E.) Given that Aboriginal people make up roughly a third of GNWT employees, they are highly over-represented in on-the-job training positions.

GNWT Employee Distribution by Occupation

The GNWT categorizes its employees by various occupations, including management; business, finance, and administration; natural and applied sciences; health; social science, education, government service, and

religion; art, culture, recreation, and sport; sales and service; trades, transport, and equipment operation; primary industry; and processing, manufacturing, and utilities.

Using the definitions by Employment and Services Development Canada, these categories can be defined as follows:¹⁹

- Management occupations: This category contains senior managers and middle and other managers across all skill-type categories (including legislators). Examples in the GNWT include deputy ministers, program directors, and regional superintendents.
- Business, finance, and administration occupations: This category contains occupations that provide financial and business services. These occupations also include administrative and regulatory services as well as clerical supervisions and support services that are found in all industries. Examples in the GNWT include finance officers, human resources officers, and office support staff.
- Natural and applied sciences and related occupations: This occupational category includes professional and technical occupations in physical and life sciences, engineering, architecture, information technology, and other sciences. Examples in the GNWT include engineers, biologists, and renewable resources officers.
- Health occupations: This category includes occupations that provide health care services to patients, as well as occupations that support professional and technical health care staff. Examples within the GNWT include registered nurses, as well as medical lab and certified nursing assistants.
- Occupations in social science, education, government service, and religion: This category contains occupations that are concerned with matters such as teaching, the law, social and community services, social sciences, and religion, as well as occupations in public administration. Public administration occupations include front line public protection

services, government policy, and administrative activities. Examples in the GNWT include teachers, college instructors, as well as legal counsel and economic development officers.

- Occupations in arts, culture, recreation, and sport: This category includes professional and technical occupations in the arts and culture industries as well as recreation and sports industries. Examples include film and video, journalism, writing, and the performing arts. Examples in the GNWT include librarians and youth workers.
- Sales and service occupations: This category includes occupations that provide personal and customer service as well as sales occupations. Examples in the GNWT include correctional officers, classroom assistants, and custodial workers.
- Trades, transport, and equipment operation: This category includes construction, mechanical trades, and operators of transport and heavy equipment. It includes the majority of the apprentice trades. Examples in the GNWT include mechanics and equipment operators.
- Primary industry occupations: Occupations unique to the primary industry include fire crew members.
- **Processing, manufacturing, and utilities:** This category includes occupations in supervisory and production positions. It should be noted that this category has seen fewer than 15 employees per year in the past 10 years in the GNWT and, as such, has not been included in the analysis.

Each of these categories will be analyzed below.

Management

Although males have historically made up more than half of management occupations in the GNWT, this number has gradually been decreasing to near equity. (See Table 4—Appendix E.) However, considering that females make up a greater proportion of the GNWT workforce, they continue to be under-represented within managerial positions. Indigenous Aboriginal and Indigenous non-Aboriginal employees have consistently accounted for between 16 and 23 per cent of all management occupations, respectively. (See Chart 7—Appendix E.)

Business, Finance, and Administration

Females have consistently made up more than 85 per cent of all business, finance, and administration occupations in the GNWT. (See Table 9—Appendix E.) Indigenous Aboriginal employees have consistently made up roughly 40 per cent of all employees within these positions, whereas Indigenous non-Aboriginal employees have made up slightly less than 20 per cent of these occupations. (See Chart 12— Appendix E.) Business, finance, and administration occupations in the GNWT have grown by just over 100 positions since 2004 (from 962 up to 1,097 positions).

Natural and Applied Sciences

Males have consistently made up the majority of occupations in natural and applied science in the past 10 years in the GNWT. Specifically, during this time period, a little over three-quarters of all employees in these positions have been male. (See Table 10—Appendix E.) Indigenous Aboriginal employees have consistently made up roughly 20 to 24 per cent of the workforce in these occupations. In contrast, Indigenous non-Aboriginal employees have consistently made up less than 20 per cent of employees in these occupations. (See Chart 13—Appendix E.) This occupation has grown slightly during the studied time period, increasing from 339 up to 444 positions.

Health

Roughly 90 per cent of health occupations in the GNWT have been filled by female employees in the past 10 years. (See Table 11—Appendix E.) While Indigenous Aboriginal employees have accounted for roughly 16 per cent of all GNWT employees who work in health occupations, a much lower proportion of Indigenous non-Aboriginal employees fall into this category (roughly 6 per cent). (See Chart 14—Appendix E.) It is worth noting that occupations in health have grown considerably, from 502 employees in 2004 to 768 employees in 2014.

Social Science, Education, Government Service, and Religion

Social science, education, government service, and religion occupations have been predominantly filled by females in the GNWT (on average there have been over two female employees for every male employee in this occupation group). (See Table 12—Appendix E.) It should be noted that, as would be expected, this occupation category employs a large proportion of all GNWT employees. Indigenous Aboriginal people have historically accounted for a quarter of all positions in this category, whereas Indigenous non-Aboriginal employees have accounted for roughly 9 per cent of the same. (See Chart 15—Appendix E.)

Arts, Culture, Recreation, and Sport

Arts, culture, recreation, and sport occupations have employed a relatively small portion of GNWT employees. In the past 10 years, the number of people employed in this field has ranged from 59 to 72 employees per year. (See Table 13—Appendix E.) A visual representation of the distribution of these employees by ethnicity can be found in Chart 16—Appendix E.

Sales and Service

Similar to occupations in arts, culture, recreation, and sport, sales and service occupations have maintained a relatively small number of employees in the GNWT over the past 10 years. Since 2004, the number of people employed in this field in the GNWT has ranged from 388 to 589 per year. (See Table 14—Appendix E.) While only a small number of employees can be found in these occupations, Aboriginal individuals have accounted for more than half of them through the years. In contrast, less than 10 per cent of these occupations have been filled by Indigenous non-Aboriginal individuals during the same time period. (See Chart 17—Appendix E.)

Trades, Transport, and Equipment Operation

Occupations in trades, transport, and equipment operation have employed from 156 to 191 people per year during the studied time period. (See Table 15—Appendix E.) Most of these positions have been filled by males, and have been predominantly filled by Indigenous Aboriginal workers. (See Chart 18—Appendix E.)

Primary Industry

Occupations in primary industry have accounted for fewer than 60 employees per year in the GNWT over the past 10 years, and have nearly all been filled by males. (See Table 16—Appendix E.) Furthermore, Indigenous Aboriginal employees have accounted for over 90 per cent of these positions for most of the years studied. (See Chart 19—Appendix E.) It should be noted that the only occupation in this category in the GNWT is fire crew member, thus limiting the positions in the primary industry.

Data Gaps and Quality Issues

Data on employment in the GNWT are quite comprehensive, and for the most part are provided publicly through the GNWT Human Resources Public Service Annual Reports. While data in these reports vary from year to year, some core information (including the number of Indigenous Aboriginal, Indigenous non-Aboriginal, and non-Indigenous employees, as well as the number of full-time, part-time, and seasonal employees) has routinely been included. Earlier copies of these reports do not include information on employees by NOC, but this information was provided by the Department of Human Resources for this resource.

CHAPTER 3 Education and Skills Attainment

Chapter Summary

- This chapter reviews education and skills attainment among the territory's resident working-age population and youth.
- The review provides evidence of gaps in post-secondary attainment as well as evidence of relative income advantages from having post-secondary degrees and certification. The evidence shows that education helps to level the playing field for women and Aboriginal populations.
- An overview of adult workplace skills and competencies examines critical gaps in literacy, numeracy, and problem-solving in technology-rich environments. This is complemented by a review of performance results for youth in primary and secondary school, and student enrolment in the territory's only college (Aurora College).
- The results show that throughout the N.W.T. labour market, there are large disparities between Aboriginals and non-Aboriginals, as well as between regions, and between local talent and migrant labour. The gaps in education and skills attainment set in early and widen as people become of working age.

Much of the occupational variation between the territory's distinct subpopulations can be explained, at least partially, by group disparities in education and skills attainment. Most concerning is that group disparities between Aboriginals and non-Aboriginals set in at an early age. The disparities then escalate, both in terms of education attainment and in the demonstration of workplace skills, once people reach adulthood.

Given the importance of education and skills attainment for a productive workforce, this chapter assesses individuals in the N.W.T. on multiple dimensions. We begin by providing an overview of educational attainment among the territory's resident working-age population. Following this, we examine evidence of gender gaps in post-secondary attainment as well as evidence of relative income advantages from having post-secondary degrees and certification. Following the territorial overview, regional profiles of highest educational attainment among working-age populations in the six N.W.T. census divisions are provided. We then present an overview of adult workplace skills and competencies, including literacy, numeracy, and problem-solving in technology-rich environments (PS-TRE). The chapter concludes with an overview of how youth and young adults are faring in school from primary to post-secondary.

Our review predominantly relies on data from the 2014 NWT Community Survey. Additional data on adult skills attainment are drawn from the 2012 Programme for the International Assessment of Adult Competencies (PIAAC). PIAAC data provide valuable insights into the adequacy of workplace skills, based on an assessment of English literacy, numeracy, and PS-TRE. Portions of the PIAAC data set are, however, limited to an aggregate profile of the territorial North, combining survey responses for Yukon, N.W.T., and Nunavut.

How Does the N.W.T. Perform on High School Attainment Compared With Other Territories?

A high school diploma has generally been a prerequisite to postsecondary education and an essential driver of workforce readiness. From Table 3—Appendix C, we saw that almost 90 per cent of the employed workforce in 2014 occupied a NOC skill level that depended on fundamental skills acquired at this level (i.e., number employed at NOC skill levels A through C). As such, high school attainment is also a proxy indicator of socio-economic development. High school graduation rates vary widely across the territories. Data from the 2014 NWT Community Survey provide the following territorial high school attainment rates for populations aged 25 to 64, with 73.5 per cent attainment for the total population, 54.6 per cent attainment for the Aboriginal population, and 92 per cent attainment for the non-Aboriginal population. (Table 1— Appendix F provides a demographic profile for youth and young adults in the N.W.T. See also Chart 1—Appendix F for data captured for the population 15 years of age and over.)

Year-to-year graduation rates have been improving over time in the territory, increasing from 36 per cent in 2002 to 65 per cent in 2014.¹ (See Chart 2—Appendix F.) There are, however, differences between locations in the territory. Notably, graduation rates are consistently lower in small communities than in regional centres or Yellowknife.² Furthermore, while large improvements have been made over the years, the N.W.T. graduation rate remains below the Canadian average, which was 78.3 per cent in 2009–10 (versus 55.7 for the territory).³

- 2 Northwest Territories Bureau of Statistics, Graduation Rates Fact Sheet.
- 3 Statistics Canada, CANSIM table A.11.

¹ The high school graduation rate was found following methodology used by the GNWT. The high school graduation rate represents the number of graduates as a proportion of the number of 18-year-olds in the N.W.T. population in a given year. It is important to note that this method does not take into account people graduating at different ages.

How Does N.W.T. Perform on Post-Secondary Education Attainment Compared With Other Territories?

Post-secondary attainment indicators measure the share of the workingage population with a college diploma, an apprenticeship certification, a trade certification, or a university degree. College programming, apprenticeships, and trade certificates play particularly important roles in territorial skills development and workforce readiness (remember that NOC skill level B contained the highest number of occupations in the 2011 NHS, at over a third of the territory's employed workforce, as reflected in Table 3—Appendix C).

In 2014, 31 per cent of the overall population held a college diploma or trades certificate. This differs slightly among the Aboriginal population, where 28.6 per cent of the population hold a college diploma or trades certificate, and non-Aboriginal populations, where 33.3 per cent hold the same. (See Chart 1—Appendix F.)

Although no universities are physically based in the territories, all three territorial colleges offer university degrees in partnership with southern universities and professional organizations such as the Council for the Advancement of Native Development Officers (CANDO) and the Registered Nurses Association of N.W.T. and Nunavut. However, while distance-based and online university degree options may be available to territorial residents, they depend on supporting infrastructure, such as Internet connectivity, which may not be adequate in some of the small remote communities.⁴

Within the N.W.T., 19.6 per cent of the population hold a university degree (due to data limitations we are not able to break this down further into the various university degrees). (See Chart 1—Appendix F.) However, there are significantly large differences in university attainment between Aboriginal and non-Aboriginal populations in the territories.

4 Nordicity, The Conference Board of Canada, and the Canadian Northern Economic Development Agency, *Northern Connectivity*. While 34.2 per cent of the non-Aboriginal population has completed a university degree, only 4.7 per cent of the Aboriginal population has the same. (See Chart 1—Appendix F.)

Furthermore, comparing educational attainment rates between males and females in the N.W.T. highlights differing patterns. (See charts 3 and 4—Appendix F.) Notably, 45.8 per cent of Aboriginal males hold less than a high school diploma, compared with only 7.6 per cent of non-Aboriginal males. In comparison, 39.9 per cent of Aboriginal females have less than a high school diploma, compared with 8.1 per cent of non-Aboriginal females.

Both Aboriginal and non-Aboriginal females tend to have a higher university degree attainment rate than their male counterparts (22.4 per cent of the female population hold a university degree, compared with 17 per cent of the male population). Furthermore, a slightly higher proportion of Aboriginal females holds a college or trades certificate, compared with Aboriginal males (29.8 per cent compared with 27.5 per cent). However, a significantly higher proportion of non-Aboriginal males holds a college or trades certificate, compared with non-Aboriginal females (38.5 per cent vs. 27.7 per cent).

Is There a Gender Gap in Territorial Post-Secondary Attainment?

The gender gap is calculated by comparing the ratio of males to females in the population to the ratio of males to females with post-secondary education. When we exclude apprenticeships from the calculation, each of the territories has a calculated index of less than 1. In other words, females make up a larger share of the population with a post-secondary education than their share in the population would have suggested. This trend is also seen across the provinces and Canada as a whole. (See Table 2—Appendix F.) Furthermore, Aboriginal people experience a larger gender gap than non-Aboriginal people in the territories when apprenticeships are excluded. (See Table 2—Appendix F.) The gender gap drops dramatically when we include apprenticeships in the calculation. (See Table 3—Appendix F.) This drop is even more pronounced in the Aboriginal population. This indicates that, in the territories, a larger number of Aboriginal males than females pursue apprenticeships as a viable post-secondary option.

What Are the Income Advantages From Having Post-Secondary Degrees and Certification in the Territory?

Education improves labour market prospects for individuals, reduces their risk of unemployment, and boosts earnings. One proxy for understanding these benefits is the income advantage associated with higher levels of education. Chart 5—Appendix F presents the income advantage of an individual compared with someone with a high school certificate. Chart 6—Appendix F presents the income advantage of an individual compared with a non-Aboriginal male with the same level of education.

Income Advantage for High School Diploma or Below

Chart 6—Appendix F presents the difference in incomes earned between non-Aboriginal males, Aboriginal males, non-Aboriginal females, and Aboriginal females in 2010. Notably, there is a large dispersion in incomes for those with no certificate, diploma, or degree; in particular, Aboriginal females earned \$74.28 for every \$100 that a non-Aboriginal male earned. The numbers are not much better for Aboriginal males and non-Aboriginal females, both of whom earned less than \$86 for every \$100 that a non-Aboriginal male earned.

Looking at those who hold a high school diploma or equivalent shows a smaller gap in incomes between females and males—in particular, females earned just under \$95.50 for every \$100 that a non-Aboriginal male earned. However, Aboriginal males earned less than \$80 for every \$100 that a non-Aboriginal male earned, which is a significantly higher difference than that found for those with less than a high school diploma.

Income Advantage for College, Apprenticeships, and Trades Certification

Among the territories, the income advantage of a post-secondary certificate or diploma below the bachelor's level is highest in the N.W.T., where individuals with this education earned \$127.70 for every \$100 a high school graduate earned in 2010. (See Chart 5—Appendix F.) The N.W.T. significantly outperformed Yukon (\$119.80) and Nunavut (\$120.60). In absolute terms, Nunavut had the highest income for people with a post-secondary certificate or diploma below the bachelor's level in 2010. This high absolute income may be partially explained by the large proportion of the population employed by the government. In 2010, 48.4 per cent of total employment in Nunavut was in the government and education sectors, translating to roughly 5,600 jobs.⁵ In contrast, the education and government sectors accounted for roughly 33.5 per cent of total N.W.T. employment in 2011, translating to roughly 7,100 jobs.⁶

Comparing individuals within the same level of education, we see that males earned significantly higher incomes than females with the same qualifications. (See Chart 6—Appendix F.) Notably, for every \$100 that a non-Aboriginal male with a post-secondary certificate or diploma below bachelor's level earned, a non-Aboriginal female earned \$76.79 and an Aboriginal female earned \$76.09. Furthermore, Aboriginal males earned roughly \$92.26 for every \$100 that a non-Aboriginal male with the same qualification earned.

6 Statistics Canada, 2011 National Household Survey.

⁵ Statistics Canada, Labour Force Survey Data.

Income Advantage for University Graduates

University graduates earned \$154.40 in Nunavut, \$150 in Yukon, and \$149.90 in the N.W.T. for every \$100 earned by a high school graduate in 2010—making the territories relatively equal in terms of the university income advantage. (See Chart 5—Appendix F.) This high income advantage is partly due to scarcity, as the territories have unmet demands for university graduates in the non-renewable resources and public service sectors.

When comparing incomes within the same level of education, we see that, while there is a significant gap between Aboriginal and non-Aboriginal people, the overall gap is much smaller than that of post-secondary below the bachelor's level. (See Chart 6—Appendix F.) Notably, for every \$100 a non-Aboriginal male earned with a university degree at the bachelor's level or above, an Aboriginal male with the same qualification earned \$103.55. Both Aboriginal and non-Aboriginal females earned under \$92 for each \$100 that a non-Aboriginal male with the same level of education earned.

Income Advantage of Post-Secondary Degrees for Aboriginal Populations

With the exception of females in Nunavut, Aboriginal people across the territories receive a higher income advantage for post-secondary education than non-Aboriginal people. In addition, among Aboriginal people, the income advantage is consistently higher for males than for females, suggesting that males experience larger gains than females from pursuing higher education in the territories.

Aboriginal university graduates consistently earned over \$160 for every \$100 earned by Aboriginal high school graduates in 2010. Among Northern Aboriginal individuals with a post-secondary certificate or diploma below the bachelor's level, the territory offered the highest income advantage in 2010, with post-secondary graduates earning \$127.60 for every \$100 earned by a high school graduate. By comparison, the income advantage for post-secondary graduates in Yukon was \$116.90 and \$118.90 in Nunavut in 2010. (See Chart 5—Appendix F.)

Regional Profiles of Highest Education Attainment, by Census Division Working-Age Populations

The following section provides a regional breakdown of the highest level of education attained by individuals. Data for this section come solely from the 2014 NWT Community Survey. Due to data suppression, these data are not available at this level of detail by ethnicity.

Beaufort-Delta (Region 1)

Chart 7—Appendix F provides a visual representation of the highest degree of education for the population aged 15 and over for the Beaufort-Delta region. Of particular note is the large proportion of the population with a high school diploma or less (58.3 per cent of the population).

Sahtu (Region 2)

Chart 8—Appendix F provides a visual representation of the highest degree of education for the population aged 15 and over for the Sahtu region. The Sahtu region has a slightly higher proportion of the population with a high school diploma or less than the Beaufort-Delta region (62.8 per cent), but is otherwise relatively comparable.

Tlicho (Region 3)

Chart 9—Appendix F provides a visual representation of the highest degree of education for the population aged 15 and over for the Tlicho region. The Tlicho region has the lowest skills attainment in the N.W.T., with roughly 70.8 per cent of the population holding a high school diploma or less (of those, 20.5 per cent hold a high school diploma and 50.3 per cent have less than a high school diploma).

Dehcho (Region 4)

Chart 10—Appendix F provides a visual representation of the highest degree of education for the population aged 15 and over for the Dehcho region. The Dehcho region has the second-highest proportion of people with less than a high school diploma (43.5 per cent). Furthermore, just under 60 per cent of the population hold a high school diploma or less in this region.

South Slave (Region 5)

Chart 11—Appendix F provides a visual representation of the highest degree of education for the population aged 15 and over for the South Slave region. The South Slave region fares relatively better on educational skills attainment than the other regions (excluding the Yellowknife Area), with nearly 55 per cent of the population holding either a university degree or college or trades certification or diploma.

Yellowknife Area (Region 6)

Chart 12—Appendix F provides a visual representation of the highest degree of education for the population aged 15 and over for the Yellowknife region. The Yellowknife region has by far the highest proportion of people with a university degree or college or trades certification or diploma (60.8 per cent). Some of this can be explained by the heavy presence of government within the region.

Adult Workplace Skills and Competencies in the N.W.T.

The 2012 PIAAC measured the attainment of modern adult workplace skills in the territories. Except for Yukon, the territories generally underperformed relative to their provincial counterparts on PIAAC measures of English literacy, numeracy, and PS-TRE.

If we control for educational attainment in the territories, we find that the mean test scores of the non-Aboriginal population continue to exceed those of the Aboriginal population. Yet, evidence shows that Aboriginal attainment of higher education contributes to closing performance gaps, particularly in literacy and numeracy. (See Chart 13—Appendix F.) PIAAC tests are administered only in French and English, and therefore may not accurately capture the skills of those who speak another language as a first language. PIAAC oversampled the Aboriginal population to better assess the skills of this diverse group.

Literacy

When interpreting PIAAC literacy scores, adults are considered to have inadequate literacy skills if they score below level 3. The N.W.T. has an extremely high proportion of people with inadequate literacy skills, at 63.8 per cent of the population; this result largely reflects the Aboriginal population, where 82.4 per cent of the population have inadequate literacy skills. (See Chart 14—Appendix F.)

Adults are regarded as having high-level literacy skills if they test at levels 4 or 5. Roughly 10 per cent of the total population in the N.W.T. has high-level literacy skills. Findings for the estimated percentage of subpopulations operating at PIAAC's definition of high-level literacy are more difficult to interpret due to the greater variability in respondent scores. Nonetheless, taking standard errors into account, there are clearly steep contrasts between the test scores of the Aboriginal and non-Aboriginal populations, with the non-Aboriginal population performing considerably better. (See Chart 15—Appendix F.)

Numeracy

Adults are considered to have inadequate numeracy skills if they score below level 3. Nearly 70 per cent of the N.W.T. population have inadequate numeracy skills. (See Chart 16—Appendix F.) Large disparities exist between the adult Aboriginal and non-Aboriginal populations' numeracy skills. While 51.4 per cent of the non-Aboriginal population have inadequate numeracy skills in the territory, 86.6 per cent of the Aboriginal population fall within the same category. (See Chart 16—Appendix F.)

Adults who test at levels 4 and 5 are considered to have high-level numeracy skills. In the N.W.T., less than 2 per cent of the Aboriginal population have high-level numeracy skills. (See Chart 17—Appendix F.) In contrast, over 15 per cent of the non-Aboriginal population achieved high-level numeracy skill scores.

Problem-Solving in Technology-Rich Environments

Adults are regarded as having inadequate PS-TRE if they fell into one of three PIAAC test groups:

- 1. They scored below level 2 on the PIAAC test on PS-TRE.
- 2. They failed the test of their basic computer skills. A prerequisite for being able to assess proficiency in problem-solving skills was the completion of the computer-based version of PIAAC.
- 3. They self-reported that they had no experience with computers.

In the N.W.T., Aboriginal and non-Aboriginal individuals had equivalent scores in inadequate PS-TRE skills, although the Aboriginal non-response rate was over 36 per cent, compared with 10.3 per cent for non-Aboriginal respondents. (See Chart 18—Appendix F.)

Individuals scoring at level 3 are regarded as having high-level PS-TRE. Non-Aboriginal respondents generally fared better at the PS-TRE skills challenges than Aboriginal respondents, although both groups exhibit a high degree of within-population variation. (See Chart 19—Appendix F.)

How Are Youth in the N.W.T. Performing on Skills Tests?

The importance of accounting for youth skills in a labour market assessment for the territory hinges on the demographic forces we discussed earlier. At the time period captured by the 2011 NHS, 30 per cent of the population were under 20 years of age, with 8 per cent of the population between 15 and 19 years old. As Table 1—Appendix F shows, for different Aboriginal subpopulations, this demographic structure is even more pronounced, whereas for the non-Aboriginal subpopulation, it appears to be less significant. At 21 per cent, the proportion of non-Aboriginal youth under 20 years old in the N.W.T. is slightly lower than the corresponding Canadian proportion of 23 per cent inferred from the NHS.

The territory, which adopts some of Alberta's curriculum (especially in high school), uses Functional Grade Levels (FGLs) and Alberta Achievement Tests (AATs) to systemically measure K–12 student achievement in language arts and mathematics. The AATs are administered annually in English and mathematics in the N.W.T. in Grades 3, 6, and 9. While the AATs are meant to provide a territorial overview of how students are performing, it should be noted that many factors contribute to student learning and achievement, and as such, these tests can assess only part of what has been learned by any given student. Students fall within two categories following the marking of the test—*At or Above*, or *Below* the set score (in addition, those who don't write the test are categorized as either *Excused* or *Absent*).

Tables 4 to 6—Appendix F present the results for the English Language Arts AATs from 2007 to 2014 based on four geographic regions: the N.W.T. as a whole, regional centres (e.g., Fort Smith, Hay River, and Inuvik), Yellowknife, and the rest of the communities. Results for Grade 3 students show that within the N.W.T. as a whole, the proportion of students who have scored At or Above the score set has been steadily decreasing for both non-Aboriginal (from 77 per cent to 57 per cent) and Aboriginal (from 41 to 33 per cent) students. Two trends present themselves across the analyzed years—female students tended to perform slightly better than male students, and there are large degrees of variability between the geographic regions presented. (See Chart 20—Appendix F.) Students in Yellowknife and the regional centres tended to perform slightly better on average than students in the rest of the communities with regards to both Aboriginal and non-Aboriginal students. It should also be noted that there is a large degree of variability in non-Aboriginal student scores in the "rest of communities" geographic region year to year, but this is largely driven by the small number of students in this category inflating differences between years.

Non-Aboriginal students in Grades 6 and 9 tend to perform roughly the same on the English AATs, with between 64 and 81 per cent of students performing *At or Above* the set score per year. (See charts 21 and 22—Appendix F.) In contrast, Aboriginal students tended to perform much more poorly, with 18 to 37 per cent of students performing *At or Above* the set score per year. These low scores among Aboriginal students are driven in Chapter 3 by the very low proportion of students who are performing *At or Above* the grade level in communities outside of Yellowknife or the regional centres.

Tables 7 to 9—Appendix F present the results for the mathematics AATs from 2007 to 2014 based on the same geographic regions. While male and female students tend to have closer scores in mathematics throughout the years and grades, there remains a stark contrast between Aboriginal and non-Aboriginal students as well as students in Yellowknife and regional centres compared with those in the rest of the communities. (See charts 23 to 25—Appendix F.) Most notably, less than 10 per cent of Grade 9 Aboriginal students outside of regional centres and Yellowknife performed *At or Above* the set score during the time frame. (See Table 9—Appendix F.) While results are marginally better for students in Grades 3 and 6, less than 30 per cent performed *At or Above* the set score during the analyzed time. (See tables 7 and 8—Appendix F.)

FGLs, used for both language arts and mathematics, indicate the curriculum level at which a student worked on for the majority of year, according to the teacher's assessment. For the 2007–14 academic years, between 78 and 91 per cent of non-Aboriginal students in Grades 3, 6, and 9 were performing *at the appropriate grade level and above* in English per year. (See tables 10 to 12—Appendix F.) In contrast, between 43 and 61 per cent of Aboriginal students in these grades were performing *at the appropriate grade level and above* in English per year. Similar to the AATs, female students tended to outperform male students during the years analyzed. (See charts 26 to 28—Appendix F.)

Greater variability is found in math, where 83 to 97 per cent of non-Aboriginal students in Grades 3, 6, or 9 were performing *at the appropriate grade level and above*. (See tables 13 to 15—Appendix F.) In contrast, between 44 and 72 per cent of non-Aboriginal students performed *at the appropriate grade level and above* during the analyzed time period. Math performance in particular appears to decline at more advanced grade levels. (See charts 29 to 31—Appendix F.)

Furthermore, there is a sharp contrast in performance between students in the capital, Yellowknife, and larger regional centres (such as Hay River and Inuvik) as opposed to small communities. It should be noted that the capital has a greater concentration of non-Aboriginal children and youth than the rest of the Northwest Territories.

To help partially explain why results for the AATs decline as students progress through the years, as well as the differences found between geographic locations and Aboriginal and non-Aboriginal students, attendance rates have been presented in tables 16 to 18-Appendix F for Grades 6 and 9. Attendance rates are also included for students in Grade 12 to help demonstrate some of the issues that schools face in educating students. Most notably, as students progress through the years, attendance rates steadily decline. For instance, non-Aboriginal students in Grade 6 attended school 93 to 95 per cent of the time between 2007 and 2014. (See Chart 32—Appendix F.) Fast forward six years of schooling and we can see that non-Aboriginal students in Grade 12 attended school 90 per cent or less of the time. (See Chart 34—Appendix F.) This trend is amplified when comparing Aboriginal students—across the studied years, Aboriginal students in Grade 6 attended school between 85 and 88 per cent of the time. This attendance rate steadily drops when comparing Grade 9 Aboriginal students who attended school on average less than 79 per cent of the time and Grade 12 students who attended school on average between 73 and 81 per cent of the time. (See charts 33 and 34—Appendix F.) To understand this attendance rate, one should consider that an 80 per cent attendance rate indicates that students are missing one day of schooling per week every week. This has a tremendous impact on

learning. Interestingly, while there is some variability in attendance rates between geographical regions, the differences are small (usually falling within five percentage points of one another).

Student Enrolment in Aurora College (Post-Secondary Education)

Very little information is publicly available on current N.W.T. students enrolled in post-secondary education. Given the multitude of options for a student to enrol in post-secondary education outside of the territory, one of the few methods to track (at least some of) these students is through student financial assistance or labour market programming however, detailed data of these are not publicly available, and were unattainable for this resource. As such, current post-secondary education information in this resource is limited to students who are enrolled at Aurora College. The data gathered for this section come solely from the Aurora College annual reports from the 2009–14 academic years.

In Chapter 5, we will see which skills will be required in the coming years in the territory. As such, the programs that students are enrolling in will help to determine, in part, whether the required skills will be produced locally. Table 19—Appendix F provides the enrolment of students by program division for the past five academic years. By far, the majority of students are enrolled in the Developmental Studies and Trades, Apprenticeship and Industrial Training divisions. These two divisions taught over 580 full-time equivalent students in the 2013–14 academic year.⁷ In contrast, during the same year, fewer than 50 full-time equivalent students were enrolled in the School of Education. The number of full-time equivalent students by division is

⁷ Following the definition provided in an Aurora College annual report, "One full time student is equal to one 'full time equivalent' and full time status is defined as taking at least six (6) courses in a program over an academic year. Part time students are converted to full time equivalents using a ratio of ten (10) courses to one full-time equivalent. Apprenticeship programs are an exception and for these programs four (4) courses equal one full time equivalent." Aurora College, *Aurora College Annual Report, 2012–2013*, 34.

presented visually in charts 35 to 43—Appendix F (furthermore, the number of students per campus is provided in Table 20—Appendix F and presented visually in Chart 44—Appendix F).

Table 21—Appendix F presents some information on the number of graduates by program since 2011. The reader should note that this list is not complete, as it does not include all of the programs that Aurora College offers. Of particular interest are the high number of graduates from the School of Business and Leadership and the relatively small number of graduates from the School of Education. The School of Business and Leadership offers both business administration and office administration skills, both of which are forecasted to be in high demand (See Chapter 5). Given our previous discussion of the difficulties of skills attainment beginning at a very young age (as demonstrated through the AATs and FGLs) and, as we will see in Chapter 5, the forecasted need for teachers, the small number of graduates from the School of Education represents a step in the right direction, but overall there will be a greater need for workers with these skills.

Data Gaps and Quality Issues

There are several issues with regards to education information in the territory. To begin, due to data suppression, an understanding of educational attainment at the regional level is limited. For instance, while we are able to assess the number of people with a university degree, no data are available on the type of degree within that category (e.g., bachelor's, master's, doctorate, or post-doctorate) at the regional level. This issue is further complicated when assessing these skills by ethnicity. Educational institutions in the N.W.T. face significant information management challenges. Data on primary and secondary school outcomes, as well as historical records of student achievement, are (in some cases) either limited or difficult to access. Similarly, data on post-secondary education (e.g., program of study, ethnicity, number of students, or gender) in the N.W.T. (e.g., those students going through Aurora College) were mostly unattainable. While the data may exist and be available, there are significant challenges to obtaining these data in a short period of time. Furthermore, data on post-secondary students studying outside of the N.W.T. (through Student Financial Assistance reports) were not publicly available in a detailed way, and as such, were not included in this resource. To understand students and/or apprentices studying outside the N.W.T. would require further research and analysis of administration data. Greater and more detailed information on the number of both students and graduates by program going through Aurora College could greatly aid policy-makers as well as businesses in determining which skills are being developed in the territory.

The dual challenge of information access and availability is not solely limited to entities within the territory. Data collected by national-level entities, such as the PIAAC study, are difficult to obtain at a fine level of detail. Much of this is due to data suppression based on small numbers of respondents as well as the need for more effective information management practices.

What Have We Learned From Chapters 2 and 3?

Chapters 2 and 3 of this resource provided a socio-economic profile of the N.W.T.s' contemporary and historic labour market context. Understanding the context surrounding the territory's labour supply and demand is critical for properly interpreting the results of the territorial economic forecasts and related occupational demand scenarios to be explored in chapters 4 and 5.

Using the best available data, we examined key demographic issues; looked at labour force participation, mobility, and the breakdown of occupations; and assessed levels of education and skills attainment and their relative income advantages. The results show that throughout the N.W.T. labour market, there are large disparities between Aboriginal and non-Aboriginal subpopulations, as well as between regions, and between local talent and migrant labour. The N.W.T. labour market's demographic characteristics also require careful consideration. As of 2014, the median age for the N.W.T. was 32.9, whereas for Canada it was 40.4 years of age.⁸ Among the subpopulations identified in this analysis, including Dene, Métis, Inuit, and non-Aboriginal populations, none has a median age higher than Canada's as a whole. Nevertheless, the territory's demographic profile is a study in contrasts that complements the territory's socio-economic disparities. While the non-Aboriginal population's median age falls within a few years of Canada's (at 36.3 years), the Inuit population, which constitutes the youngest group, falls well below the Canadian median, at 27.3 years of age. (See Table 1—Appendix B.) In Chapters 4 and 5 of this resource, we will see how these demographics can become problematic for the future N.W.T. labour market.

Much of the occupational variation between the N.W.T.'s distinct subpopulations can be, at least partially, explained by group disparities in education and skills attainment. Most concerning is that group disparities between Aboriginals and non-Aboriginals set in at an early age (as shown through AATs and FGLs). The disparities then escalate, both in terms of education attainment and in the demonstration of workplace skills, once people reach adulthood. Disparities in education and skills are, in turn, partially reflected in the under-representation of Aboriginals (and locally born non-Aboriginals) in management and professional occupations. Being less qualified means that local labour, whether Aboriginal or non-Aboriginal, is at a real disadvantage when competing with migrant labour for occupations that require university or college certification.

Given the large number of Aboriginal youth in the N.W.T. (see Appendix B), and particularly in rural and remote areas where education and employment opportunities are limited, it is imperative to find new ways to nurture their potential to join the territory's skilled and productive labour force. Ensuring that students graduate with core workplace literacy, numeracy, and problem-solving skills is essential. And there

8 Statistics Canada, CANSIM table 051-0001.

is no reason why this emphasis on workplace readiness cannot be integrated with culturally sensitive programming that celebrates the N.W.T.'s rich cultural heritage and unique history. The overarching goal should be to prepare its youth to become leaders in the sectors that drive the territorial economy.

Finally, some important labour force characteristics can also be distinguished between males and females in the N.W.T. economy. Our analysis found that labour market segmentation between males and females in the territory generally mirrored the occupational structure of the Canadian population. Yet, more females in N.W.T. appear to be employed outside of sales and services, which reflects their greater presence in sectors such as public administration, social assistance, and education. For their part, N.W.T. males, while confirming the Canadian male bias for trades, transport, and equipment operator occupations, appear to be less likely to occupy positions in sales and services, while also being more likely to occupy management-level positions than males in the general Canadian population.

The hierarchical division of labour between males and females in the N.W.T. economy suggests there is potential to develop more professional and management training programs tailored to the needs and outlooks of females—both Aboriginal and non-Aboriginal. In this regard the GNWT, a top employer in the territory, has an opportunity to lead by example. Although males have historically made up more than half of management occupations in the GNWT, this number has gradually been decreasing to near equity. However, considering that females make up a greater proportion of the GNWT workforce, they continue to be underrepresented in government managerial positions.

CHAPTER 4 Introduction to the Territorial Forecasting Model

Chapter Summary

- In this chapter, we discuss the economic forecasting model used to construct the LMFNA's occupational demand scenarios.
- In particular, we present outlooks for mining, construction, and government spending under three separate sets of forecasting assumptions: the base, medium, and high cases.
- In addition, we discuss the demographic model at the heart of the economic forecasting model.
- The resulting economic outlooks are summarized and divided into three periods. The first begins in 2014 and ends in 2020. The second spans the years 2020 through 2025, while the third spans from 2026 to 2030.
- Any economic forecast is fraught with risks, both on the upside and downside. Unexpected events can trigger strong shocks that significantly alter the economic landscape, almost overnight. This is especially true in the world of mining, since much of the economic activity is determined by notoriously volatile commodity prices

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The Conference Board of Canada's Territorial Forecasting Model (TFM) was used to produce three sets of economic forecasts up to the year 2030. The model relies on a core set of consistent assumptions formed from our global, Canadian, and provincial forecasts, in addition to ongoing monitoring of international, national, and territorial events. Specific territorial forecasting assumptions were then developed through engagement with the GNWT, Labour Market Information Working Group, and industry experts, as well as through research of publicly available information on project plans and capital investments in the territory as of August 2015.

Economic growth in the N.W.T. is heavily influenced by the mining sector, which directly contributes approximately one-quarter of its GDP. The mining industry has been an economic driver and one of the most important industries in the N.W.T. for decades. At the time this forecast was developed (spring-summer 2015), there were four mines operating in the territory, with another under construction. The diamond mining sector in particular has formed a significant portion of the territory's GDP. (See Chart 1—Appendix G.) Presently, Diavik and Ekati compose the lion's share of production, while the smallest of the three diamond mines, Snap Lake, closed unexpectedly in December 2015. (See "Unexpected Closure at Snap Lake Mine.") Yet, while the Snap Lake closure came as a surprise to many, the GDP forecasts displayed in Chart 1—Appendix G indicate that our base case model had picked up on the undercurrents shaping short-term declines in both non-metals and metals in the 2015 period.

Unexpected Closure at Snap Lake Mine

Since producing this labour market forecast, the De Beers' Snap Lake mine went into care and maintenance on December 4, 2015.¹ Of the 747 direct De Beers' employees at the mine, 258 individuals were from the Northwest Territories. At this time, it is uncertain exactly how many of these employees will remain at the mine to help wind down operations, or how many may eventually find positions on the Gahcho Kué mine project.² Sources indicate that in the immediate aftermath of closure, De Beers' transferred 41 employees to their Gahcho Kué project, and may transfer another 60 in 2016.³ Of this group it is unknown how many were resident N.W.T. workers.

Our base case forecast has Snap Lake closing by 2029, with a steady decline in production over the last 10 years of the forecast period. While we cannot incorporate the December 2015 mine closure into the forecast, we can provide some context and a breakdown of likely economic impacts. The loss in GDP due to the mine closure is estimated to be between \$79 million and \$91 million annually over the course of the forecast period.⁴ To put these numbers into context, note that the non-metal mining sector contributed approximately \$651 million to N.W.T.'s 2015 GDP.

In terms of our occupational forecast, the Snap Lake closure's immediate impact on employment will be a loss of 258 resident jobs, with an indirect and induced impact of an additional 253 jobs in other sectors of the territory. While the 258 jobs lost is permanent and will stay constant throughout our forecast, the remaining 253 (indirect and induced) jobs are a short-term, worst-case scenario only. Over time, the impact of the indirect and induced jobs will be reduced as some residents find other employment in different sectors.

- 1 CBC News, N.W.T.'s Snap Lake Diamond Mine Halts Operations, De Beers Says.
- 2 Quenneville, N.W.T. Braces for Economic Sting of Snap Lake Mine Shutdown.
- 3 Canadian Mining Journal, "Diamonds: De Beers Mothballs Snap Lake."
- 4 In practice, the impact of the closure would taper gradually over the duration of the forecast. However, for a quick back-of-the-envelope estimate, remove between \$79 million to \$91 million from all years of the base case forecast in Table 5—Appendix G.
The N.W.T. is the second-largest of Canada's three territories by land area and the largest by population size. As discussed in Chapter 2, 43,623 people resided in the territory in 2014.⁵ With an average age of just 32.9, the territory's population is significantly younger than Canada's overall, whose average age is 40.⁶ As also discussed in Chapter 2, the territory includes substantial Aboriginal populations, including First Nations (Dene), Métis, and Inuit, whose presence largely contributes to the territory's lower average age.

Economic growth in the N.W.T. is heavily influenced by the mining sector, which directly contributes approximately one-quarter of the territory's GDP. The mining industry has been an economic driver and one of the most important industries in the N.W.T. for decades. There are currently four mines operating in the territory, with another under construction. Three diamond mines, Diavik, Ekati, and Snap Lake, form a significant portion of the territory's GDP. (See Chart 1—Appendix G.)

In addition, the Cantung tungsten mine near the Yukon border has been the territory's only producing metal mine, although most of the workers involved resided outside the N.W.T. (mainly in Yukon). In October 2015, the mine closed, as its owner, North American Tungsten, went into court-ordered creditor protection (after it laid off 50 employees in July).⁷ Though our forecast was produced before Cantung's closure was announced, the base case does pick up on the short-term decline in metals.⁸ More broadly, the forecast anticipates that global demand beyond 2017 could improve the viability of N.W.T.'s metals sector. (See Table 5—Appendix G.) While the territory is most known for its diamond mining, the N.W.T. has North America's largest tungsten deposit, and

- 5 Statistics Canada, CANSIM table 051-0005.
- 6 Statistics Canada, CANSIM table 052-0005.
- 7 CBC News, Cantung mine to close Oct. 27, says North American Tungsten.
- 8 For a back-of-the-envelope calculation, Cantung's loss removes approximately \$31 million annually from the territory's GDP, based on assumed constant production levels prior to the mine's closure in 2015.

significant reserves of gold and other metals such as zinc. As a direct source of occupational demand, the mining sector employs just under 7 per cent of the territory's resident workers.⁹

Similar to Canada overall, about 80 per cent of the territory's residents are employed in the services sector. Yet there are important differences in the labour market's composition. While the mining sector's share of employment in the N.W.T. is just under 7 per cent, its corresponding share of employment in Canada as a whole is only 1 per cent. The N.W.T. also has a relatively large share of its employed population in public administration and defence (28 per cent), and a small manufacturing sector. Aside from these prominent differences relative to the rest of Canada, the territory's economy is well-balanced and diversified between construction, transportation, wholesale and retail trade, real estate and financial services, and other commercial (including arts, tourism, and culture) and non-commercial services (e.g., health care and education). (See Chart 1—Appendix G for a breakdown of N.W.T.'s 2014 GDP by industry sector.)

To this end, the following sections provide an analysis of the economic forecasts driving the occupational demand scenarios discussed in the next chapter. The forecast analysis in Chapter 4 is structured as follows:

- The Base Case Economic Forecast: This section provides an analysis
 of the base case forecast, including the key assumptions that have been
 included in the making of it. Assumptions include information surrounding
 the mining, oil and gas, and government sectors, and changes in
 demographics over the next 15 years. The resulting economic outlook
 and impacts on employment growth are reported.
- The Medium Case Economic Forecast: This section provides an analysis of the medium case forecast, including the difference in assumptions between the medium, high, and base case forecasts. Assumptions include information surrounding the mining, oil and gas,

⁹ Mining's proportional share of GDP is significantly higher than its proportional share of employment, mainly due to the capital-intensive nature of the industry and the fact that many mining employees fly in to work from other provinces and territories.

and government sectors, and changes in demographics over the next 15 years. The resulting economic outlook and impacts on employment growth are reported.

- The High Case Economic Forecast: This section provides an analysis of the high case forecast, including the difference in assumptions between the high, medium, and base case forecasts. Assumptions include information surrounding the mining, oil and gas, and government sectors, and changes in demographics over the next 15 years. The resulting economic outlook and impacts on employment growth are reported.
- Demographic Trends—History and Forecasts: This section provides a review of demographic trends in the N.W.T. in recent history. It also presents a detailed analysis of the demographic structure of the N.W.T. under the base, medium, and high case forecasts.

The Base Case Economic Forecast

The base case economic forecast, as defined in this document, models the N.W.T.'s economy using a set of assumptions that were deemed likely to hold over the 15-year forecast period (based on information current to August 2015). Though it is true that individual events such as the Snap Lake and Cantung mine closures can challenge our forecast predictions, what is more important to understand is the bigger picture of economic forces and industrial activity that our base case modeling assumptions represent. At both instances the base case model picked up on the general weakness in metals and non-metals in 2015, and balanced those out against the activities of the mining sector as a whole. In that sense, the base case model and its assumptions do generally hold for the N.W.T. economy.

Mining

Diamond Mining

Diavik, which is owned by Rio Tinto and Dominion Diamond Corporation, is the largest mine in the three territories, and also one of the largest in Canada in terms of economic output. While the past decade has seen open-pit mining from the Diavik mine, 2013 was the first full year of underground operations. The mine produced 7.2 million carats, an amount relatively unchanged from the previous year. In 2014, the development of the A21 pipe, which is estimated to contain about 10 million carats, has been recently approved and will extend the life of the mine. The base case forecast calls for production to begin in 2018, which will extend the life of the mine until 2023. Yet production is still expected to drop to 6.8 million carats this year¹⁰ and slowly decline over the rest of this decade. (See Chart 3—Appendix G.)

The Ekati mine, which uses a mix of underground and open-pit mining, is majority owned by Dominion Diamond Corporation. Operations have gone well in the past few years, benefiting from higher-than-expected grades and improvements made to the processing plant. In the medium term, output will be boosted by the Misery and Pigeon deposits, which are next scheduled for development. Further ahead, Ekati production will be bolstered by the development of the Jay pipe, which is the mine's largest undeveloped deposit. Our forecast assumes that construction on the Jay pipe will start late next year, with production beginning in 2020. The Jay pipe will extend the life of the mine by 11 years and become the single most important driver of growth in the N.W.T. economy in the next decade. Under the current mining plan, which is used in the base case scenario, the Ekati mine is expected to finish operations in 2030. (See Chart 4—Appendix G.)

The smallest of the three diamond mines in operation under the base case forecast, De Beer's Snap Lake mine, is scheduled to close by 2029, with a steady decline during the last 10 years of production. As we have previously discussed, this mine went into care and maintenance in December 2015. For details on how this closure impacts the base case forecast, see "Unexpected closure at Snap Lake mine" on p. 67.

¹⁰ Dominion Diamond Corporation, *Dominion Diamond Corporation Reports Fiscal* 2016 *First Quarter Results.*

The Gahcho Kué mine began construction in 2014 and is expected to begin operations in 2016. While not as large as Ekati or Diavik at their peak production levels, the addition of Gahcho Kué is expected to raise diamond production in the territory above the pre-recession peak levels of 2007 by the year 2019. Gahcho Kué is owned by De Beers and Mountain Province Diamonds, and early stage development of the mine began in late 2013. Results from an updated feasibility study outline an average annual production of 4.45 million carats for 12 years, with production ending in 2028.

Metal Mining

While diamond mining has dominated the past two decades, a resurgence in metal mining is expected to occur in the territory. Canadian Zinc's Prairie Creek project is expected to be the next new metal mine to operate in the territory, producing zinc, silver, and lead. Currently, the company is undergoing optimization, geotechnical, and metallurgical studies in order to reduce initial development and operating costs, and shorten the development schedule. The company is beginning procurement, engineering, and site preparation. The construction of an all-weather access road would help to accelerate construction work on the mine. In April 2015, Canadian Zinc submitted its Developer's Assessment Report (DAR) to the Mackenzie Valley Review Board (MVRB). The MVRB has completed a preliminary review of the DAR and, as of August 17, 2015, the company is working on providing supplementary information to the MVRB. With a relatively short construction timeline, we expect the project to begin production in the second half of 2018. Production levels are expected to remain stable for the life of the mine, with operations coming to a close in 2028.

Oil and Gas

Since peaking in 2001, the N.W.T.'s mineral fuel industry has been on a downward trajectory. Production from existing conventional oil wells near Norman Wells has been drying up. As such, real mineral fuel output is forecast to fall at an average annual compound rate of 5.1 per cent from 2014 to 2030. Over the past few years, prospects for the Mackenzie Valley Pipeline have faded, but there has been continued interest in exploring the Canol shale oil play. Last winter, ConocoPhillips became the first company in the territory to combine horizontal drilling and fracking. Other companies with interests in the region are MGM Energy Corp., Husky Energy Inc., Imperial Oil Ltd., and Shell. Multi-stage hydraulic fracturing of horizontal wells is a new extraction technique for the territory, which is causing some concerns for stakeholders.

Husky Energy and MGM Energy/Shell Canada have also drilled vertical wells in the region over the past two years. However, over the summer MGM Energy decided to pull out of the region. MGM cited a lack of infrastructure in the Sahtu region and uncertainty around regulatory timelines as reasons for leaving.¹¹ (In June, MGM was also acquired by Paramount Resources—the company it spun off from in 2007.) In addition, Husky Energy and ConocoPhillips decided not to invest in exploration programs for the 2014–15 drilling season. ConocoPhillips has been approved to drill 10 new wells over the next five years, but will wait until at least 2015–16 to begin the work. And Husky has said it will wait until 2016–17 to resume exploration.¹²

In addition to the Sahtu region, Imperial Oil Canada, with partners ExxonMobil and BP, and Chevron Canada with partner Statoil, have submitted applications to drill exploratory oil and gas wells in the Beaufort Sea. Regulatory approval is expected to take three years, and the earliest that drilling could commence is 2020.

The development of oil and gas resources in the Canol shale play and the Beaufort Sea are in the very early stages. While this forecast does not include any new mineral fuels production between now and 2030 from these plays, they do represent an upside risk to the forecast.

12 Wohlberg, "Husky Withdraws Sahtu Fracking Plans."

¹¹ Quenneville, "Canol Concerns."

In this mainly pessimistic context for oil and gas production, there is pressure on the mining sector to help pick up the slack. From 2015 to 2022, diamond and metal ore production from new mines are expected to boost the mining industry to an average annual compound growth rate of 13.2 per cent. However, from 2022 to 2025, mining output will contract at an average compound rate of 12.4 per cent per year, as mining at Diavik comes to a close.

Government Sector

The GNWT will continue to be an important contributor to economic development and employment in the territory. The introduction of resource royalties could help the government finance needed program and infrastructure projects, including laying a fibre optic line along the Mackenzie Valley. Over the longer term, growth will be muted by lower oil and diamond production, but economic conditions should be relatively healthy.

The government sector will have a number of projects in development, which will also contribute to the favourable construction outlook. The GNWT began construction on a new office building in Yellowknife in 2014. The Inuvik-to-Tuktoyaktuk all-season road—part of the proposed Mackenzie Valley Highway-began construction in 2013, and is expected to cost \$300 million, with the federal government committed to funding two-thirds of the cost. The road is expected to be completed by late 2017 or early 2018, with most of the work taking place over the winter months. The next section of the road will likely be from Wrigley to Norman Wells, at an estimated cost of \$700 million. However, the project isn't likely to begin over the near term, as design work, environmental assessment, and funding still need to be finalized. This section of the road is included in the medium and high scenarios. In addition, the government has begun laying a fibre optic network to improve connectivity in the Mackenzie Valley. The project will cost over \$80 million and provide better Internet access to many communities. Finally, the Giant mine

remediation project has been approved and is expected to cost almost \$1 billion between 2015 and 2030, with the costs spread evenly during this time period.

Base Case Outlook

Our economic outlook is summarized and divided into three periods. The first period begins in 2014 and ends in 2020. The second period spans the years 2020 through 2025, while the third covers 2026 to 2030.

Real GDP in the N.W.T. is projected to grow by 4.5 per cent annually from 2014 to 2020. (See Table 1—Appendix G.) The expansion will mainly be driven by an expected recovery in both metal and nonmetal mining. Growth in non-metal mining will be led by the beginning of operations of the Gahcho Kué diamond mine, as well as the development of the Jay pipe at Ekati. During this period, metal mining could also see growth, as the Prairie Creek project is expected to enter commercial production in 2018. Construction GDP is also expected to expand in 2015 and 2016, during the construction of the Gahcho Kué mine, before winding down as the major projects are fully built.

The territorial government will continue to be an important contributor to the N.W.T. economy. The introduction of resource royalties will help the government finance needed program and infrastructure projects, including the Mackenzie Valley fibre optic link.

In the second period, our outlook turns negative, with a projected 0.8 per cent annual contraction in GDP from 2020 to 2025. (See Table 1—Appendix G.) Given its relatively large size and high volatility, the mining industry is once again the most important factor in the overall outlook. The decline in the second period is mainly caused by the planned shutdown of the Diavik diamond mine, which is assumed to occur in 2023–24.

In the third period, economic activity is set to contract by 1.8 per cent annually. Diamond production is expected to see further declines during that period (if not earlier). Similarly, metal mining is projected to plummet as Prairie Creek reaches the end of its 10-year life.

Employment by Industry

In our base case forecast, employment levels follow the projected growth in GDP, growing fast over the next five years with the development of Gahcho Kué, Prairie Creek, and Ekati's Jay pipe. As diamond and metal mining ramp up, employment is projected to increase significantly over the medium term, reaching its peak in 2020 at 24,521, before gradually declining thereafter as the mines shut down and the construction of new mines tapers off. While under this scenario mineral production benefits from the past 15 years of strong investment, current investment reductions in exploration and mine development are expected to ultimately take their toll in the medium term.

Subsequently, employment levels drop as several mines shut down. (See Table 2—Appendix G.) Throughout the forecast, employment growth will lag slightly behind GDP, as increases in productivity gradually reduce the demand for labour. More information on these impacts is presented in our discussion of the occupational demand scenarios in Chapter 5.

Alternative Economic Forecasting Assumptions

Any economic forecast is fraught with risks, both on the upside and downside. Unexpected events can trigger strong shocks that significantly alter the economic landscape, almost overnight. This is especially true in the world of mining, since much of the economic activity is determined by notoriously volatile commodity prices.

During the years 2002 to 2007, the commodities "super cycle" saw commodity prices soar, as supply struggled to catch up with strong demand growth from the BRIC economies (Brazil, Russia, India, and China). However, high prices contributed to a surge in global mineral exploration, which, ultimately, led to more mine development and an increase in production. Moreover, growth in BRIC countries has since slowed, resulting in lower-than-expected demand for commodities. The combination of slower demand and faster supply growth has brought the commodities boom to an end, and prices have begun to decline since they hit their peak in 2011. (See Chart 5—Appendix G.)

The prices of gold, copper, and nickel have retreated by more than 20 per cent, while iron ore prices have collapsed by 60 per cent. As a result, the cycle is now reversing; price declines have resulted in a severe reduction in mineral exploration, which have led to the cancellation or delay of several once-promising mine development projects, both in the N.W.T. and across Canada. Mineral production, benefiting from strong investment over the past 15 years, will still perform well in the short term, but the reduced investment in exploration and mine development is expected to ultimately take its toll in the medium term.

Given this weak environment, our base case projections for the mining sector in the N.W.T. are rather conservative. For this reason, we worked with GNWT stakeholders to develop two alternative forecasts, the medium and high cases, based on more optimistic assumptions. In these alternative forecasts, commodity prices are assumed to recover faster than in the base case. As a result, each alternative forecast includes several new projects, as well as projects that represent potential value but have a diminished impact in the base case (such as the Snap Lake and Cantung mines, which both went into maintenance and care near the close of 2015 after the forecast was completed). In the medium case, we chose proposed projects, while in the high case we included additional projects that would most likely only go ahead in the next decade. In the following sections, we describe the assumptions behind each of the two alternative forecasts and present their respective economic outlooks and impacts on employment growth.

The intention is to explore the impacts such alternative forecasts may have on GDP and occupational demand. Keep in mind however, that the most significant projected occupational demand in the N.W.T. is not due to the expansion of major projects, but due to the ongoing need to replace an aging workforce and worker out-migration across a variety of industry sectors. (See Chapter 5 for an in-depth look at expansion versus replacement demand.)

The Medium Case Economic Forecast

The medium case differs from the base case in a few important ways. The medium case includes Avalon's Nechalacho Rare Earths Elements (REE) Project, which is one of the world's largest undeveloped heavy REE projects and one of the few outside of China. The original plan included an underground mine and concentrator, a hydrometallurgical processing plant (hydromet), and a REE refinery. The mine itself will be an underground mine, producing about 2,000 tonnes of ore per day over 20 years. The company is now considering building the hydromet processing facility outside the territory, and in March signed an agreement to have refining take place in France, saving the company around \$400 million in capital development costs in the territory. The territory's financing environment-a primary barrier to beginning construction—is improving, but remains difficult. Key steps were taken last year toward advancing the REE project (including arranging both financing and off-take agreements for the product, in addition to authorizing the company's Type A land use permit for early phase development from the Mackenzie Valley Land and Water Board last summer). Yet, the company has since backed away from a more aggressive timeline for the construction and production of the mine.

Two more assumptions are related to metal mining. In particular, the medium case assumes that the Cantung tungsten mine does not close in 2015, but remains in operation until 2022. Further, we assume that construction on Fortune Mineral's NICO cobalt-gold-copper-bismuth mine will begin in 2016, with production starting in 2019. Production at this mine is assumed to ramp up, reaching full production by 2021. At full capacity, the mine is assumed to produce 50,000 ounces of gold, 4 million pounds of copper, and 4.2 million pounds of bismuth annually until beyond 2030.

Additionally, the medium case assumes that the Snap Lake mine does not close in December 2015, but benefits from a new deposit development in 2025, which gradually increases production and extends

the life of the mine past 2030. A similar expansion at Gahcho Kué is assumed to start in 2024, which would extend the life of the mine past 2030.

Our medium case also differs from the base case with regard to our oil and gas assumptions. We assume that, while oil production will continue to decline in the territory, it will decline at a slower pace. Further, we assume that shale oil exploration efforts at the Canol shale play will double relative to the base case, leading to \$38 million of investment annually from 2018 to 2025, compared with \$19 million in the base case. Similarly, we assume that exploration spending in the Beaufort Sea from 2018 to 2025 will increase from about \$50 million in the base case to \$120 million in the medium case.

The medium case forecast also assumes that the government builds the 333-kilometre Wrigley to Norman Wells phase of the Mackenzie Valley Highway, spending an additional \$700 million from 2023 to 2030. By comparison, the base case assumes that the government completes only the Tuktoyuktuk section of the highway.

Medium Case Outlook

The more optimistic medium-term forecasting assumptions lead to a superior outlook for the N.W.T. economy. (See Chart 6—Appendix G.) Annual growth in real GDP is now at 5.8 per cent annually in the first period (2014–20), 1.2 percentage points higher than in the base case. The difference is largely driven by the construction sector, which thrives in the medium case due to the development of Fortune Mineral's NICO mine. The slower decline in oil production also lifts the forecast during this period. Although no assumptions were specifically made about them, other sectors of the economy, such as wholesale and retail, as well as health care and education, also benefit from spillover effects from both industries and stronger population growth.

In the period from 2021 to 2025, our medium case assumptions boost annual growth by 0.2 per cent, instead of the 0.8 per cent decline in the base case. Metal mining plays an important role in the improved outlook, as the NICO mine begins production in 2019.

The medium case shows the most dramatic difference in the third period (2026–30) where it lifts annual growth to 2 per cent, up from a 1.8 per cent contraction in the base case. Metal production is responsible for most of the difference over this period as well, thanks to the inclusion of Avalon's Nechalacho Project, which is assumed to start operations in 2025 and ramp up production to full capacity by 2030. Moreover, the assumed expansions at the Gahcho Kué and Snap Lake mines keep diamond production increasing by 5.3 per cent annually during the period, instead of the 5 per cent annual decline projected in the base case.

As with real GDP, employment projections are significantly improved under the medium case. Under the medium case assumptions, employment increases from just 22,100 in 2014 to 26,100 in 2020 significantly higher than the base case forecast of 24,500. (See Table 3—Appendix G. For forecast changes in real GDP by industry, see tables 5 to 7—Appendix G.)

Employment declines slowly for several years after that, settling at 25,700 by 2030, largely due to labour productivity improvements as well as the end of several major construction projects in the territory.

The High Case Economic Forecast

The high case forecast includes all the assumptions of the medium case, and adds a few more. In this high case, global economic conditions and commodity prices would allow for further and rapid expansion of the mining sector. Accordingly, there would also be more public infrastructure projects to accommodate the new mines. The most significant change is the assumption that the Lynx kimberlite pipe will be developed at the Ekati mine. Construction is assumed to begin in 2021, with production starting in 2023 and boosting the mine's production throughout the rest of the forecast period. We also assume that, instead of closing in 2024 (as assumed in the medium case), the Diavik mine will continue producing beyond 2030, with annual production averaging 5 million carats from 2025 to 2030.

The high case forecast assumes that Kennady Diamonds will begin construction of its Kennady North (280 kilometres northeast of Yellowknife) diamond mine project in 2028. Construction is assumed to cost a total of \$800 million from 2028 to 2030.

When it comes to metal mining, the Cantung mine's closure is postponed to 2025 in the high case, extending the mine's life by three years more than in the medium case.

Furthermore, the high case assumes that oil production in the N.W.T. will decline at a slower pace than assumed in the medium case. Shale oil exploration efforts in the Canol shale play will increase further to \$50 million per year from 2018 to 2025, up from \$38 million in the medium case. Similarly, we assume that annual exploration spending in the Beaufort Sea from 2018 to 2025 will increase from about \$120 million in the medium case to \$200 million in the high case.

Finally, our high case includes the construction of a deep water port in Tuktoyaktuk. In this case, construction begins in 2024 and the project is assumed to cost an estimated \$200 million over two years.

High Case Outlook

The most optimistic of our three cases further improves the N.W.T. outlook. In the high case, annual growth in real GDP is projected to be 6.2 per cent in the first period (2014–20), 0.4 percentage points higher than in the medium case. (See Chart 7—Appendix G.) The difference is largely driven by the slower decline in oil production, as well as increased oil exploration in the Canol and Beaufort Sea.

The most important new assumptions introduced in the high case affect the second period (2020–25). Under the high case, the economy is projected to grow by 3.9 per cent annually in the second period—well

above the 0.2 per cent annual increase projected under the medium case. The increase is driven by the development of the Lynx pipe at the Ekati mine and the extension of the lives of both the Diavik and Cantung mines.

In the third period (2026–30), the economic growth rate in the high case is somewhat similar to the medium case. The increase in construction activity, thanks to the development of Kennady North, will be offset by the winding down of diamond production from higher levels.

The outlook for employment is also improved under the high case assumptions. Employment increases from just 22,100 in 2014 to 26,500 in 2020—about 400 more workers than in the medium case. (See Table 4—Appendix G.) Employment continues to increase for several years, hitting its peak in 2025 at 27,700.

Demographic Trends: History and Forecasts

This section reviews the main demographic trends in the N.W.T. observed in recent history, then presents the demographic trends expected under the base case forecast scenario and under the two alternative forecasts (medium and high). Three factors influence population growth: births, deaths, and net migration.

Historical Demographic Trends

The N.W.T.'s population has remained relatively constant from 2005 to 2014, in contrast with its two neighbours, Nunavut and Yukon, which have experienced steady population growth over this period. (See Chart 8—Appendix G.)

A number of factors can explain these different historical trends in population growth among the three territories.

The N.W.T. population had the second-highest natural rate of increase (births minus deaths as a percentage of the population) in 2013, standing at 0.29 per cent. (See Chart 9—Appendix G.) While this is a high natural rate of increase relative to the Canadian average, it is lower than

Nunavut's rate. Due to its high fertility rate, Nunavut's population had the fastest natural rate of increase among the three territories and the 10 provinces in 2013, standing at 0.5 per cent.

Yukon's population has a slower natural rate of increase than the N.W.T. (in fourth place in 2013), but it had positive net interprovincial migration between 2006 and 2011 (in contrast to the other two territories). This positive net interprovincial migration can be attributed to the strong growth in Yukon's construction industry from 2003 to 2011 as new mines were developed. In contrast, since 2003, out-migration from the N.W.T. to other parts of the country has consistently remained higher than in-migration from other regions of the country. (See Chart 10—Appendix G.) This trend in out-migration has been the main factor keeping the N.W.T. population relatively constant over the past decade.

Demographic Trends in the Base Case Forecast

A combination of factors will limit population growth in the N.W.T. under the base case scenario.

Out-Migration

The territory is expected to benefit from international immigration over the forecast period, but not enough to support population growth. Annual net international immigration to the N.W.T. is expected to average 95 people per year from 2015 to 2020, and this number is forecast to decline gradually over the rest of the forecast period, averaging about 75 people annually between 2025 and 2030. As such, international immigration is not expected to be sufficient to offset negative net interprovincial migration. (See Chart 11—Appendix G.) Under the base case, economic growth in the N.W.T. will be muted by lower oil and diamond production over the long term, which will keep interprovincial out-migration above in-migration from other territories, provinces, and countries.

In 2020, net interprovincial migration is forecast to account for 1,827 people moving into the N.W.T. from other provinces and territories, while 2,310 people are expected to move away. This represents a net loss of 482 people, which will only be partially offset by 90 international immigrants. Similar migration patterns are expected over the rest of the forecast period.

A Young, Yet Aging Population

The average age of the N.W.T.'s population is seven years younger than for the country as a whole (33 versus 40). This difference is in large part explained by differences in fertility rates and life expectancies. The fertility rate in the N.W.T. has historically been higher than the national fertility rate. In 2011, the fertility rate in the N.W.T. was 1.97 children per woman, while it was only 1.6 children per woman for Canada as a whole.¹³ (See Chart 12—Appendix G.)

Meanwhile, life expectancy in the territory has historically been lower than overall Canadian life expectancy. (See Chart 13—Appendix G.)

The differences in fertility rates and life expectancies between Canada and the N.W.T. are reflected in the age structure of their respective populations. (See Chart 14—Appendix G.)

In contrast to the national age structure, the territory's population is not skewed toward those born between 1947 and 1966—commonly known as the baby boomers. In other words, the baby boomers do not represent the largest age cohort in the N.W.T.'s population. While they accounted for over 27 per cent of the Canadian population in 2014, the baby boomers represented only 23 per cent of the N.W.T.'s population. In fact, the echo boomers—the children of the baby boomers, who were born between 1980 and 1995—represent a larger share of the N.W.T.'s population than the baby boomers. In 2014, the echo boomers represented 27 per cent of the territory's population, while they accounted for only 22 per cent of the total Canadian population.

Despite the territory's relatively young population, the share of the 15 to 29 age cohort in the overall working-age population is forecast to shrink—from 30.6 per cent of the population in 2014 to 26.6 per cent

13 Statistics Canada, CANSIM table 102-4505.

in 2030. Meanwhile, the share of the population aged 65 and over will more than double over the forecast period, from 6.5 per cent in 2014 to 14 per cent of the population by 2030. The aging of the population will increase the burden on governments and families to provide social security, health services, housing, and transportation.

Population Growth in the Base Case Forecast

In summary, after remaining relatively constant over the past decade, the N.W.T.'s population is expected to moderately contract from 43,600 in 2014 to 42,900 in 2019 in the base case economic forecast. (See Chart 15—Appendix G.) The population is then forecast to increase slowly over the following decade, with 200 fewer people living in the territory in 2030 than in 2014. The negative migration trends will be sustained over the forecast period and will weigh on population growth.

Demographic Trends in the Medium and High Case Forecasts

The medium and high economic forecasts are more optimistic than the base case, with more mining projects and government spending on infrastructure. These new assumptions will bolster both economic growth and job creation. The better job prospects in the medium and high scenarios, in turn, will curb out-migration to other parts of the country and attract more migrants from other provinces and territories to the N.W.T., thus improving the net interprovincial migration balance. A larger population will then lead to stronger demand for workers in other sectors of the economy, such as health care and retail trade.

The forecast assumptions related to the other components of the population—the natural rate of increase and net international immigration—remain identical to the base case forecasting assumptions.

The Medium Economic Forecast

In the medium case, the development of Fortune Mineral's NICO mine and the slower decline in oil production will lift economic growth and job prospects over the 2014–20 period. As a result of better job prospects, net interprovincial migration and population growth are more positive between 2015 and 2018. (See Chart 16—Appendix G.) However, from 2020 onward, there is not a sizable difference in net interprovincial migration between the base case and medium case, as labour productivity gains and fewer new economic opportunities in the 2020–30 decade lead to softer labour demand. As such, the population remains relatively constant from 2019 in the medium case. (See Chart 17—Appendix G.)

The High Economic Forecast

In the high case, global economic conditions and commodity prices would allow for the further and rapid expansion of the mining sector, which in turn would lead to more public infrastructure projects to accommodate the new mines. As such, the high case includes all the assumptions of the medium case, plus a few additional ones. These additional assumptions are mainly concentrated in the second period of the outlook (2021–25).

Not surprisingly, net interprovincial migration and population growth from now until the end of the decade follow a similar trend as in the medium case.

The most notable difference in demographic trends between the high and medium cases is found in the next decade. The development of the Lynx pipe at the Ekati mine—of which construction is assumed to begin in 2021 and production to start in 2023—and the extension of production at both the Diavik and Cantung mines will bolster economic growth and the demand for workers in the next decade. In 2025, there will be 1,800 more people employed in the high case than in the medium case, and the number of workers in the high case will remain more elevated in the last five years of the forecast period. This stronger demand for workers lifts net interprovincial migration in 2021, thus providing a boost to population growth. (See charts 18 and 19—Appendix G.)

CHAPTER 5 Occupational Demand Scenarios

Chapter Summary

- Three separate occupational demand scenarios are undertaken for both the resident workforce and the rotational workforce. In the latter case, rotational workers consist of people who work in the N.W.T. but live outside the territory.
- Current economic conditions will limit the creation of new jobs in the territorial economy. However, more optimistic conditions could create up to 5,000 new jobs for the resident workforce between 2015 and 2030.
- While new job growth may be limited and in some cases volatile, between 2015 and 2030 a major workforce renewal is projected to occur as job openings become available to satisfy replacement demand (based on the mortality, retirement, and out-migration of workers).
- Using the NOC skill levels first introduced in Chapter 2 allows for a more in-depth analysis of the top occupations by employment and occupational demand.

This chapter reviews the occupational demand scenarios that are based on the forecasting assumptions and economic outlooks reviewed in Chapter 4. In doing so, we present the forecast scenarios in two different ways: by the top 50 occupations by employment, job openings, and expansion demand; and by their skill-level grouping under the NOC system. The first analysis examines how the top 50 occupations change by scenario (e.g., base, medium, or high), whereas the latter examines how the total occupational numbers change by scenario.

The reader should note how the three forecast scenarios address changes in total employment in each major occupational category. The scenarios refer to job openings based on two complementary concepts: replacement demand and expansion demand. Replacement demand, as defined in this document, consists of three components: retirement, in-service mortality, and migration. Employees who retire, die, or migrate to a different territory, province, or country need to be replaced, which creates job openings. The number of these openings is referred to as the replacement demand. By comparison, expansion demand presents the real growth in an industry, taking out the demand for labour required to replace those who have left the industry and focusing in on the creation of new jobs. As such, an analysis of job openings due to expansion demand presents greater information on the real growth in the economy. (See "Defining Replacement Demand, Expansion Demand, Job Openings, and Employment.")

Defining Replacement Demand, Expansion Demand, Job Openings, and Employment

Replacement Demand: Replacement demand represents positions that employers need to fill to replace workers who have retired, died, or migrated out of the territory.

Expansion Demand: Expansion demand represents positions that need to be filled due to economic expansion, such as the opening of a new mine. Expansion demand creates new jobs in the economy, but when the economy contracts, existing jobs may also be lost.

Job Openings: Job openings represent the combination of replacement demand and expansion demand.

Employment: Employment represents the overall level of employment of an occupation at a given time.

Source: The Conference Board of Canada.

As the estimation of replacement demand involves more data components, it requires additional explanation. To estimate and forecast replacement demand by occupation, we relied on several data sources. Using The Conference Board of Canada's model of the economy (introduced in Chapter 4), we first developed an employment by industry forecast for the territory, dividing the economy into 12 distinct industry groups. Using detailed information from the NHS, we then broke down employment in each industry by occupation and age group. A forecast for the number of occupations by age group was then developed using a custom model that incorporates the projected demographic changes in the N.W.T., factoring in important changes such as the aging of the population (as discussed in Chapter 4).

Replacement demand attributable to in-service mortality was estimated using historical mortality rates by age group in the territory from Statistics Canada's Vital Statistics Death Database. Similarly, data from the LFS were used to estimate and project retirement demand. Due to a lack of reliable data for the N.W.T., retirement rates by age group were estimated using data at the national level. Migration rates (both international and in Canada) were estimated using the Conference Board's detailed population forecast, which has projections that extend to the year 2050 for births, deaths, and international and interprovincial immigration and emigration for all provinces and territories in Canada.

Interprovincial/territorial migration rates were further refined for occupational categories, using migration data retrieved from the NHS. First, migration rates by level of education were estimated for the year 2011 and assumed to remain constant throughout the forecast period up to 2030. Second, each occupation was assigned a general education level using Employment and Social Development Canada's National Occupational Classification Matrix 2011, which provides a correspondence between the NOC skill classification system and general education levels. (See "How Are Skill Levels Classified?") As such, migration rates for each occupation were determined based on the occupation's assigned education and skill levels.

Total replacement demand was then calculated for each occupation as the sum of employee retirements, deaths, and migrations. This approach allowed for a detailed and unique forecast for replacement demand by occupation in the territory, driven by each occupation's age profile and the outlook of the one or more industries with which it is associated.

How Are Skill Levels Classified?

The NOC system uses a skill classification system to provide further information on the requirements of an occupation.

- Skill Level A Occupations: These occupations can be classified as either "Management Occupations" or "Professional Occupations."
 - Management occupations are characterized by a high level of responsibility, accountability, and subject matter expertise. Expertise can be acquired either through formal education or extensive subject matter expertise.

- Professional occupations require a university degree (i.e., a bachelor's, master's, or doctorate).
- Skill Level B Occupations: These occupations usually require two to three years of post-secondary education at a college.
- Skill Level C Occupations: These occupations usually require secondary school or occupation-specific training (up to two years).
- Skill Level D Occupations: These occupations usually revolve around on-the-job training.

See Chapter 2 for an application of these NOC skill levels to the N.W.T.'s contemporary resident workforce.

Source: Government of Canada.

Forecast Results by Top Occupations

Base Case Scenario

Table 8—Appendix G presents the top 50 occupations by employment for the base case scenario by four-digit NOC codes. Of the top 50 positions, the vast majority fall within the services-producing sector,¹ which follows the current N.W.T. labour market as well as the Canadian labour market breakdown. These 50 positions constitute 56.6 per cent of the total forecasted employment in the base case, putting them slightly in the majority. As this forecast considers 500 separate occupations, this indicates a relatively high degree of employment concentration. Occupations in education, law, and social, community, and government services feature heavily in the top 50 occupations (12 of the top 50 occupations), as do occupations in trades, transport, and equipment operation (9 of the top 50 occupations), and occupations in the sales and service industries (9 of the top 50 occupations).

1 Exceptions include occupations such as 0711 construction managers, 7611 construction trade helpers and labourers, and 7271 carpenters.

Using the NOC skill levels first introduced in Chapter 2 allows for a more in-depth analysis of the top occupations by employment. Of the top 50 occupations, 29 require post-secondary schooling (i.e., skill level A or skill level B), 15 require the completion of high school and some on-thejob training (i.e., skill level C), and the remaining 6 occupations generally require on-the-job training. By their four-digit NOC code and title, the occupations requiring post-secondary education range from occupations such as **6322 cooks** to **1111 financial auditors and accountants**. This diversity speaks to the demand for a vast array of post-secondary skills. While the occupations requiring post-secondary are varied, a little over half are found in managerial occupations or occupations in education, law, and social, community, and government services.

A focus on the top 10 positions further demonstrates the extent of concentration in the forecast, as the top 10 occupations cover 21.1 per cent of total forecasted employment. Notably, 6 of the top 10 positions in the base case require either skill level A or B, which both usually require some form of post-secondary education (e.g., university or college education or apprenticeship training). The remaining occupations in the top 10 are split evenly between skill levels C and D (i.e., two skill level C and two skill level D occupations).

The third-highest occupation by employment, **4032 elementary school and kindergarten teachers**, and the twelfth-highest occupation by employment, **4031 secondary school teachers**, are both forecasted to see strong employment growth from 2014 to the early 2020s, before gradually declining throughout the rest of the time period to a lower level than in 2014. These two occupations, which both require skill level A, constitute 3.7 per cent of total forecasted employment from 2015 to 2030. Given the large number of youth in the N.W.T., employment in these occupations will be vital for supporting a productive and educated labour force.

The employment and retention of teachers will be a necessity in the coming years. Aurora College offers a Bachelor of Education program that will help to grow the pool of people who will be able to occupy these teaching positions. The program is available through a partnership with

the University of Saskatchewan and is aimed at providing an Aboriginal perspective to teaching techniques. However, given the small nature of the program at Aurora College,² there will be a need to employ and retain people who have attended post-secondary education outside of the territory.

The only health position, which falls in the top 10 positions by employment, **3012 registered nurses and registered psychiatric nurses**, is forecasted to increase from 377 positions in 2014 to 443 positions in 2030. Registered nurses and registered psychiatric nurses generally require post-secondary schooling, ranging from a college-approved registered nursing program up to a master's or doctoral degree for more specialized streams of the occupation (e.g., clinical nurse specialists or nursing researchers). Given the required training, registered nurses and registered psychiatric nurses are classified as skill level A occupations. Due to the N.W.T.'s aging population, registered nurses and registered psychiatric nurses will serve a vital role in supporting a variety of elder care services. Furthermore, these positions will be required more generally to support a healthy and productive labour force.

While there are no universities in the territories, those who wish to pursue a nursing education can still do so within the territory. Aurora College has previously provided programs for those wishing to obtain a Bachelor of Science in Nursing in partnership with the University of Victoria or a Master of Nursing, Nurse Practitioner Primary Health Care Stream, in partnership with Dalhousie University. The school has seen 10 students graduate with a Masters of Nursing and 51 students graduate with a Bachelor of Science in Nursing degree in the past three academic years. (See Table 21—Appendix F.) While these numbers are small compared with the overall level of forecasted employment, they will support the filling of these occupations.

2 The past three academic years saw just 15 graduates from the Bachelor of Education program. (See Table 21—Appendix F.)

The last skill level A occupation in the top 10 occupations by employment, **0621 retail and wholesale trade managers**, constitutes roughly 2.7 per cent of the total forecasted N.W.T. employment from 2015 to 2030. Retail and wholesale trade manager positions will see slight growth from 570 positions in 2014 to 625 in 2030. While this position may not require formal education, it does require extensive occupational experience as it is characterized by high levels of responsibility, accountability, and subject matter expertise.

Three occupations fall under skill level B in the top 10 positions: 1221 administrative officers, 1241 administrative assistants, and 4212 social and community service workers. All three occupations are forecasted to experience a moderate increase in employment from 2014 to 2030. Within the territory, Aurora College offers programs needed to prepare individuals for employment in all three of these occupations. For instance, Aurora College offers several programs related to office skills, including a one-year office administration certificate, a two-year office administration degree, as well as a relatively new program, Intro to Office *Skills*, which has been provided to various communities in the territory.³ Those who wish to pursue a career in social and community service work will have to complete either a college or university program in social work or child and youth care, or a degree in a related social science or health discipline. While Aurora College does offer a twoyear diploma in social work, the past three academic years have seen relatively few graduates compared with the overall need.⁴

The remaining top 10 occupations by employment fall under either skill level C or D, which require either secondary schooling and/or on-thejob training. These occupations are **6733 janitors, caretakers, and building superintendents**; **6611 cashiers**; **6421 retail salespersons**; and **7521 heavy equipment operators (except crane operators)**.

³ The *Intro to Office Skills* program helps people improve the skills that would be required to work in a professional setting and has seen a high completion rate in its first year (83 per cent).

⁴ In the past three academic years, 13 people have graduated with a social work diploma from Aurora College. (See Table 21—Appendix F.)

Excluding **7521 heavy equipment operators (except crane operators)**, these occupations are all required to support the general economy (e.g., providing services to the average consumer) and are, in turn, supported by economic activity within a region. All skill level C and D occupations are forecasted to experience a moderate increase in employment from 2014 to 2030.

Table 11—Appendix G presents the top 50 occupations by job openings for the base case. It is important to note that job openings encompass both replacement demand and expansion demand, and as such the occupations listed in this table may not see the greatest expansion demand during the forecasted time period. However, given the aging population of the N.W.T., replacement demand will be an important employment factor that should be considered. With the exception of a handful of occupations, the top 50 occupations by job openings are all found within the services-producing sector. In order to understand how these job openings relate to total employment, we have to compare the number of jobs coming from replacement demand with the number of job openings. In doing so, we find that 80 per cent or more of job openings can be accounted for by replacement demand, leading to low or negative expansion of individual occupations. (Low or negative expansion means limited new job growth combined with job losses due to economic contractions corresponding to the base case outlook discussed in Chapter 4.) These top 50 occupations comprise 57.4 per cent of the total forecasted job openings from 2015 to 2030 in the base case, putting them slightly into the majority of forecasted job openings.

An analysis of the top 50 occupations by skill level shows that 36 occupations require post-secondary education (either skill level A or B), 8 generally require secondary school and on-the-job training (skill level C), and the remaining 6 require on-the-job training (skill level D). Over half of skill level A occupations in the top 50 are managementrelated (e.g., **0012 senior government managers and officials**, **0423 managers in social, community, and correctional services**, and **0711 construction managers**), indicating a strong need for workers with managerial experiences and extensive subject matter expertise. The remaining skill level A occupations are split between occupations in education, law, and social, community, and government services (7 of the occupations); health occupations (1 occupation); natural and applied science occupations (1 occupation); and business, finance, and administration occupations (1 occupation). In contrast, sales and service occupations, and trades, transport, and equipment operation occupations dominate the types of occupations found in skill levels C and D in the top 50.

A focus on the top 10 positions presents a list similar to that of the top 10 positions by employment, with three exceptions: 4031 secondary school teachers, 4214 early childhood educators, and 6731 light duty cleaners replace 6421 retail salespersons, 6611 cashiers, and 7521 heavy equipment operators (except crane). The similarity between the lists makes sense intuitively given that occupations with a greater share of the total workforce will generally require greater replacement demand over time. Notably, there will be a large demand for individuals with skill level A or B to fill vacant positions. For example, from 2015 to 2030 there will be a need to fill 1,138 retail and wholesale trade manager positions and 740 registered nurse and registered psychiatric nurse positions. Furthermore, occupations in education will require a high number of skilled people. In particular, from 2015 to 2030, there will be a need to fill 777 elementary school and kindergarten teacher positions, 577 secondary school teacher positions, and 448 early childhood educators and assistant positions.

Table 14—Appendix G presents the top 50 occupations by expansion demand for the base case. As previously mentioned, expansion demand presents the real growth in an industry, taking out the demand for labour required to replace those who have left the industry. As such, an analysis of expansion demand presents greater information on the real growth of the economy. Notably, the top 50 occupations by expansion demand show 965 new positions being added to the industry over the 15-year forecast. This expansion is quite concentrated though, as the top 10 occupations account for over half of these positions.

Of particular interest in this table is the expansion of the health industry, as several health occupations are forecasted to experience real expansion growth.⁵ Furthermore, two health occupations, **3012 registered nurses and registered psychiatric nurses** and **3413 nurse aides, orderlies, and patient service associates**, appear in the top 10 occupations by expansion growth. From 2015 to 2030, registered nurse and registered psychiatric nurse positions are forecasted to expand by 66 positions, while nurse aides, orderlies, and patient service positions are forecasted to expand by 66 positions. The overall growth in the health industry will help to support an aging population.

Six of the positions in the top 10 occupations (6611 cashiers; 0621 retail and wholesale trade managers; 6421 retail salespersons; 6733 janitors, caretakers, and building superintendents; 6731 light duty cleaners; and 6622 store shelf stockers, clerks, and order fillers) are directly related to the sales and service industry. Together, they account for 304 new positions in the economy during the forecasted time period.

The two remaining top 10 occupations are **4214 early childhood** educators and assistants and **4212 social and community service** workers. These two occupations are forecasted to see a combined 105 new positions in the economy from 2015 to 2030. The need for early childhood educators speaks to the requirement to provide the large youth population with the tools to enter and progress through the labour force.

Medium Case Scenario

Table 9—Appendix G presents the top 50 occupations by employment for the medium case. It is worth noting that the only difference in the types of occupations found in the top 50 in the medium case (compared

⁵ Occupations include 3012 registered nurses and registered psychiatric nurse; 3413 nurse aides, orderlies, and patient service associates; 3233 licensed practical nurses; 3111 specialist physicians; 3112 general practitioners and family physicians; 3113 dentists; 3215 medical radiation technologists; 3211 medical laboratory technologists; and 3132 dieticians and nutritionists.

with base case) is that **4411 home child care providers** is replaced by **7251 plumbers**. Furthermore, while the top 50 occupations maintain a similar proportion of total employment from 2015 to 2030 as the base case, the scale is significantly larger. This is reflected by nearly all of the occupations experiencing positive employment increases from 2015 to 2030. This overall increase reflects additional public investment by the territorial government, which helps to fuel the economy, as well as generate greater outcomes from the mining and oil and gas sectors.

As the types of occupations in the top 50 change very little between the base and medium cases, the types of skills these occupations require remain relatively similar. Notably, 15 occupations require skill level A, 15 require skill level B, 14 require skill level C, and the remaining 6 require skill level D.

The top 10 positions in the medium scenario are the same as the top 10 base case employment occupations. However, while the occupations are the same, the level of employment is significantly higher. For example, the average employment of **6611 cashiers** in the medium case is 552, compared with 480 in the base case; the average employment of **0621 retail and wholesale trade managers** is 729, compared with 636 in the base case; and the average employment of **1221 administrative officers** is 547, compared with 507 in the base case. With the exception of **4032 elementary school and kindergarten teachers**, all of the top 10 occupations are forecasted to experience an increase in the number of available positions between 2014 and 2030.

The only health-related occupation in the top 10 is **3012 registered nurses and registered psychiatric nurses**. From 2015 to 2030, these occupations are forecasted to experience an employment increase of nearly 100 positions (increasing from 377 to 476 positions). This represents a 26 per cent increase in registered nurse and registered psychiatric nurse positions.

Within the top 10, occupations in the sales and service industry all are all forecasted to see strong increases in employment. Notably, 6733 janitors, caretakers, and building superintendents; 0621 retail

and wholesale trade managers; 6421 retail salespersons; and 6611 cashiers are forecasted to see average employment, ranging from 541 to 729 positions per year. These occupations are, in part, supported by the investments made by the territorial government as well as the strong mining and oil and gas industries, which help to foster the overall growth of the economy.

Two positions that require skill level B, **1221 administrative officers** and **1241 administrative officers**, are forecasted to experience strong increases in employment until the mid-2020s, followed by a small decline in employment until 2030. Graduates from Aurora College in related programs will help to support the filling of these positions.⁶

The last skill level B occupation, **4212 social and community service workers**, is forecasted to experience relatively constant increases in employment throughout the next 15 years. The medium case forecasts an increase from 340 positions in 2014 to 410 positions in 2030 (i.e., a 21 per cent increase in positions).

Table 12—Appendix G presents the top 50 occupations by job openings in the medium case. These occupations comprise 57.9 per cent of the total forecasted job openings from 2015 to 2030, indicating a strong concentration in the types of occupations that will see job openings. Within the top 50 occupations, skill level A occupations fill 43.4 per cent of the job openings, skill level B occupations fill 28.7 per cent of the job openings, skill level C occupations fill 14.2 per cent of the job openings, and skill level D occupations fill the remaining 13.7 per cent of job openings. This high proportion of skill levels A and B occupations speaks to the need to recruit highly skilled workers who have attended post-secondary institutions either in or outside of the territory.

⁶ In the past three academic years, 44 people have graduated with a Business Administration Certificate, 64 have graduated with a Business Administration Diploma, 35 have graduated with an Office Administration Certificate, and 19 have graduated with an Office Administration Diploma from Aurora College. (See Table 21–Appendix F.)

An analysis of the top 10 occupations by job openings in the medium case shows that they encompass 22.9 per cent of the total forecasted job openings. Within the top 10, 6 require skill level A or B, while 2 require skill level C, and the remaining 2 require skill level D.

Education occupations in the top 10 are forecasted to see a combined 1,434 job openings from 2015 to 2030. Notably, **4032 elementary school and kindergarten teachers** are forecasted to experience a high number of job openings in the first few years of the forecast, followed by a moderate decline in job openings in later years. Throughout the forecasted time period, elementary school and kindergarten teachers will see 824 total job openings. Similarly, **4031 secondary school teachers** are forecasted as having a little over 610 job openings during the time period. It should be noted that the majority of job openings in both cases are required to fill replacement demand. Given the relatively small number of students who have historically completed a Bachelor of Education degree at Aurora College each year, there will be a strong need to recruit and retain qualified people who have completed their education outside of the territory.⁷

The only health occupation in the top 10, **3012 registered nurses and registered psychiatric nurses**, is forecasted to see 816 job openings from 2015 to 2030. This means that there are over 50 forecasted job openings for registered nurses and registered psychiatric nurses per year across the territory.

Sales and service occupations in the top 10 are all forecasted to experience high numbers of job openings, although many of these are required to fill replacement demand. In particular, **6733 janitors**, **caretakers, and building superintendents** are forecasted to see 853 job openings, while **0621 retail and wholesale trade managers** are forecasted to see 1,464 job openings, respectively, over the next

7 In the past three academic years, 15 students have graduated from the Bachelor of Education program at Aurora College. (See Table 21—Appendix F.)

15 years. The remaining sales and service occupations, **6611 cashiers** and **6421 retail salespersons**, are forecasted to see a combined 1,077 job openings from 2015 to 2030.

The remaining occupations in the top 10 require either skill level B or C. The two skill level B occupations are both found in the business, finance, and administration category. Specifically, **1221 administrative officers** are forecasted to see 807 job openings and **1241 administrative assistants** are forecasted to see 682 job openings. The last occupation, **7521 heavy equipment operators (except crane)**, is forecasted to see 538 job openings from 2015 to 2030.

Table 15—Appendix G presents the top 50 occupations by expansion demand in the medium case. Compared with the base case, the medium case is forecasted to experience a much greater expansion demand. The top 50 occupations are forecasted to see 2,665 new positions, compared with 965 new positions in the base case. This expansion demand is relatively evenly split by skill level. Of these new positions, 549 are accounted for by occupations that require skill level A (20.6 per cent), 765 are accounted for by occupations that require skill level B (28.7 per cent), 734 are accounted for by occupations that require skill level B (28.7 per cent), and the remaining 617 require skill level D (23.2 per cent).

Much like the base case, a large proportion (just under half) of the 2,665 expansion positions are concentrated in the top 10 occupations.

The top four occupations by expansion demand are all directly related to the sales and service industries. These occupations, **0621 retail and wholesale trade managers**; **6611 cashiers**; **6421 retail salespersons**; and **6733 janitors, caretakers, and building superintendents**, are forecasted to expand by a collective 734 positions. While retail and wholesale trade managers require extensive experience and may require a university degree or college diploma, cashiers and janitors, caretakers, and janitors, and janitors, caretakers, and janitors, caretakers, and janitors, and janitors,

and building superintendents can receive on-the-job training. Retail salespersons are generally required to complete secondary school, and, in some cases, require a post-secondary education.

Two further occupations in the top 10 are directly related to the sales and service industries: **6731 light duty cleaners** and **6622 store shelf stockers, clerks, and order fillers**. These two occupations generally require on-the-job training. While light duty cleaners are forecasted to expand by 107 positions, store shelf stockers, clerks, and order fillers are forecasted to expand by 86 positions.

The only health occupation in the top 10, **3012 registered nurses and registered psychiatric nurses**, is forecasted to expand by 99 positions from 2015 to 2030.

The only skill level B occupation in the top 10, **4214 early childhood educators and assistants**, is forecasted to expand by 86 new positions from 2015 to 2030.

The remaining two occupations, **7521 heavy equipment operators (except crane)** and **7511 transport truck drivers**, are forecasted to expand by 121 and 81 positions, respectively. Each of these occupations generally requires secondary schooling and job-specific training.

High Case Scenario

Table 10—Appendix G presents the top 50 occupations by employment for the high case. These positions encompass 57.2 per cent of the total forecasted employment from 2015 to 2030, which helps to demonstrate the extent of job concentration in the territory. While employment levels in the high case are significantly greater than in the base case, the types of occupations in the top 50 remain relatively similar. In fact, there is only one difference; the high case includes **7251 plumbers** instead of **4411 home child care providers**. However, while the list of occupations remains relatively similar, the level of employment is significantly higher. For example, **0621 retail and wholesale trade managers** are forecasted to see an average employment of 761 positions in the high case, compared with 636 positions in the base case, and **3012 registered nurse and registered psychiatric nurse** positions are forecasted to see an average employment of 472 positions in the high case, compared with 437 positions in the base case.

A breakdown of the top 50 employment occupations by skill level shows a high need for post-secondary education. Notably, 15 occupations require skill level A (which generally requires university education) and 15 require skill level B (which generally requires post-secondary education at a college, similar certifications, or apprenticeship training).

A focus on the top 10 positions shows very little change from the base case in terms of which occupations see the greatest employment (the only difference being that the high case includes **7511 transport truck drivers**, which replaces **4212 social and community service workers**). Together, these occupations cover 21.5 per cent of total forecasted employment from 2015 to 2030. With the exception of **4032 elementary school teachers**, the top 10 positions all see increases in employment from 2015 to 2030. However, the decline of elementary school teacher positions is relatively small, resulting in a less than 1 per cent overall decline in positions from 2014 to 2030.

The top two positions, **0621 retail and wholesale trade managers** and **6733 janitors, caretakers, and building superintendents**, see an increase in employment of 285 and 164 positions, respectively, during the forecasted time period. Both of these occupations are found in the sales and service industries.

The remaining top 10 occupations in the sales and service industries, **6611 cashiers** and **6421 retail salespersons**, both see large increases (over 50 per cent) in the number of available positions from 2014 to 2030. The number of positions for cashiers is forecasted to increase from 451 in 2014 to 704 in 2030, whereas the number of positions for retail salespersons is forecasted to increase from 466 to 677.

The only health occupation in the top 10, **3012 registered nurses and registered psychiatric nurses**, is forecasted to experience a 29 per cent increase in available positions. This will result in employment increasing from 377 positions in 2014 to 486 positions in 2030
(i.e., 109 new positions). This significant increase in registered nurse and registered psychiatric nurse positions will cause pressure to recruit and retain skilled workers throughout the forecasted time period.

Two administrative occupations are found in the top 10 occupations: **1221 administrative officers** and **1241 administrative assistants**. Following the general trend found throughout the forecast, these occupations are forecasted to see employment increases up until the early 2020s, at which point they will experience a moderate decline. Administrative officer positions are forecasted to increase from 465 positions in 2014, to a high of 608 positions in 2024, followed by a moderate decline to 585 in 2030. Administrative assistant positions, on the other hand, are forecasted to increase from 447 positions in 2014, to 538 positions in 2024, followed by a slight decrease to 524 positions in 2030.

The only education occupation in the top 10, **4032 elementary school and kindergarten teachers**, is forecasted to see a slight decline in positions of less than 1 per cent (a decline of two positions) from 2015 to 2030.

The last two occupations found in the top 10 are **7521 heavy equipment operators (except cranes)** and **7511 transport truck drivers**. Heavy equipment operator (except crane) positions are forecasted to experience a nearly 60 per cent employment increase from 2014 to 2030 (from 353 positions in 2014 to 557 in 2030). While not quite as large an increase, transport truck drivers are forecasted to see a nearly 50 per cent increase in employment (from 310 positions in 2014 to 457 in 2030).

Table 13—Appendix G presents the top 50 occupations by job openings in the high case. Neither the proportion of total forecasted job openings nor the types of occupations vary significantly from the base case.⁸

⁸ The top 50 occupations in the high case vary from the base case by four occupations: 0811 managers in natural resources production and fishing; 0016 senior managers—construction, transportation, production, and utilities; 7312 heavy duty equipment mechanics; and 0731 managers in transportation replace the following four occupations from the base case: 0011 legislators; 1224 property administrators; 2131 civil engineers; and 4152 social workers.

However, while these occupations encompass 57.9 per cent of the total forecasted job openings (compared with 57.4 per cent in the base case), the scale changes considerably. While the top 50 base case occupations forecast 16,387 job openings from 2015 to 2030, the high case forecasts 21,267 job openings during the same time.

A focus on the top 10 occupations by job openings reveals a list similar to the base case; with the exception of the inclusion of **7521 heavy** equipment operators (except crane), 6421 retail salespersons, and 6611 cashiers, and the subsequent removal of 4212 social and community service workers, 4214 early childhood educators and assistants, and 6731 light duty cleaners, the lists are identical. The top 10 occupations encompass 22.5 per cent of the overall forecasted job openings, indicating a share similar (although on a different scale) to both the base and medium cases.

The top two occupations, **0621 retail and wholesale trade managers** and **6733 janitors, caretakers, and building superintendents**, are forecasted to see 1,581 and 911 job openings from 2015 to 2030, respectively. This translates to close to 100 job openings per year for retail and wholesale trade managers, and close to 60 job openings per year for janitors, caretakers, and building superintendents. The remaining occupations are forecasted to have an average of 38 to 56 job openings per year during the same time period.

Table 16—Appendix G presents the top 50 occupations by expansion demand in the high case. The top 50 occupations are forecasted to expand by a cumulative 3,935 positions from 2015 to 2030. Similar to the base and medium cases, much of this expansion is concentrated in the top 10 positions, which cumulatively represent 45 per cent of the expansion demand from the top 50 occupations.

Half of the positions in the top 10 are directly involved in the sales and service industry (0621 retail and wholesale trade managers; 6611 cashiers; 6421 retail salespersons; 6731 light duty cleaners; and 6733 janitors, caretakers, and building superintendents). Notably, the top three sales and service occupations, **0621 retail** and wholesale trade managers, **6611 cashiers**, and **6421 retail** salespersons, are forecasted to expand by over 230 positions each.

Two occupations in the top 10 require skill level B: **1221 administrative** officers and **8231 underground production and development** miners. Each of these is forecasted to see an expansion of over 100 new positions from 2015 to 2030.

The only health occupation in the top 10, **3012 registered nurses and registered psychiatric nurses**, is forecasted to see an expansion of 109 positions.

The remaining two occupations are both found in trades, transport and equipment operators, and related industries. These occupations are **7521 heavy equipment operators (except cranes)** and **7511 transport truck drivers**. While transport truck drivers are forecasted to see an expansion of 147 positions, heavy equipment operators (except cranes) are forecasted to see an expansion of 204 positions from 2015 to 2030.

Forecast Results by Occupational Categories

The following analysis groups forecast occupations by the 10 major NOC categories:

- management occupations;
- business, finance, and administration occupations;
- natural and applied sciences and related occupations;
- health occupations;
- occupations in education, law, and social, community, and government services;
- occupations in art, culture, recreation, and sport;
- sales and service occupations;
- trades, transport and equipment operators, and related occupations;
- natural resources, agriculture, and related production occupations;
- occupations in manufacturing and utilities.

Charts 20 to 59—Appendix G present the change in each occupational category from 2011 to 2030 in order to give a better sense of the underlying dynamics.

Management Occupations

For a list of management occupations, see Table 31—Appendix G. For a summary of the total change in expansion demand, replacement demand, and job openings from 2015 to 2030, see Table 17—Appendix G.

From 2015 to 2030, management occupations are forecasted to see 5,725 job openings in the base case; however, all but 100 of these openings are the result of replacement demand. (See charts 21 and 23—Appendix G.) In fact, within this time frame, expansion demand is predicted to lead to only 100 new positions. (See Chart 22—Appendix G.) The medium case forecasts a significantly higher expansion demand of 527 new jobs from 2015 to 2030, whereas the high case predicts an expansion demand of 783 new positions during the same period. All three scenarios present similar trends, an initial increase in employment followed by a slight decline in later years.

It should be noted that in all three scenarios, one managerial occupation, 0621 retail and wholesale trade managers, falls within both the Top 50 Occupations by Employment and the Top 50 Occupations by Job Openings, indicating a strong need for these occupations. Furthermore, in the base case, two managerial occupations, 0621 retail and wholesale trade managers and 0013 senior managers, financial, communications, and other business services, are forecasted to see among the highest levels of expansion demand from 2015 to 2030 (55 positions and 23 positions, respectively).

All management occupations are categorized as requiring skill level A. (See Table 17—Appendix G.) Given that there are no universities in the N.W.T., many of these jobs may depend on skill development from outside the territory. It should be noted, however, that while many of these occupations require a post-secondary education, in certain

cases, extensive work experience can replace formal education. For example, people who wish to pursue a career as retail and wholesale trade managers may be able to do so without acquiring post-secondary training.

In the base case, just under 30 per cent of management occupation job openings are concentrated in the sales and service industries, which (with few exceptions) do not necessarily require a university degree. In contrast, management occupations in the field of business, finance, and administration generally require a university degree or college diploma. These occupations take up roughly 16 per cent of management job openings in the base case.

Business, Finance, and Administration Occupations

For a list of occupations that fall under business, finance, and administration occupations, see Table 32—Appendix G. For a summary of the total change in expansion demand, replacement demand, and job openings from 2015 to 2030, see Table 18—Appendix G.

From 2015 to 2030, in the base case, these occupations are forecasted to see 4,741 job openings. (See Chart 27—Appendix G.) However, due to a high replacement demand of 4,684 positions, this occupational category will expand by only 58 jobs throughout the forecasted time period. (See Chart 26—Appendix G.) The base case's modest expansion demand improves once we turn to the alternative scenarios over the same time period. The medium case has a forecasted expansion demand of 485 jobs, while the high case has a forecasted expansion demand of 752 jobs.

Occupations in business, finance, and administration require skills ranging from skill level A to skill level C. (See Table 18—Appendix G.)

Occupations requiring skill level A constitute about 19 per cent of the overall job openings for business, finance, and administration occupations. The occupations with the highest job openings in skill level A include **1111 financial auditors and accountants** (310 job openings in the base case), **1114 other financial officers** (152 job openings in the base case), and **1121 human resources professionals** (146 job openings in the base case). All of these occupations require a university degree or college diploma, while financial auditors generally require the additional completion of a professional training program approved by an institute of chartered accountants.

Occupations requiring skill level B constitute roughly 55 per cent of the overall business, finance, and administration job openings across the three cases. Of these skill level B occupations, 1221 administrative officers constitute roughly 26 per cent of the job openings (688 job openings in the base case). Administrative officers require the completion of secondary school and usually require a university degree or college diploma in business or public administration; 1241 administrative assisstants constitute roughly 23 per cent of job openings (607 job openings in the base case). Those seeking employment in this occupation are usually required to complete a oneor two-year college or other certification program for administrative assistants or secretaries. As well, 1311 accounting technicians and **bookkeepers**, which generally require either the completion of a college program in accounting, bookkeeping, or a related field or the completion of two years of a recognized professional accounting program, constitute a further 15 per cent of overall skill level B job openings in the base case (408 job openings).

Occupations requiring skill level C constitute the remaining 26 per cent of overall job openings for occupations that fall under business, finance, and administration. As well, **1411 general office support workers** and **1414 receptionists** together constitute 474 of the 1,143 skill level C job openings in the base case (roughly 41 per cent). While general office support workers are usually required to complete secondary school or college business courses, receptionists can be given on-the-job training.

Natural and Applied Science Occupations

For a list of occupations that fall under natural and applied science occupations, see Table 33—Appendix G. For a summary of the total change in expansion demand, replacement demand, and job openings from 2015 to 2030, see Table 19—Appendix G.

In the base case, this occupational category will contract from 2015 to 2030, due to 2,014 job openings and a replacement demand of 2,061 positions. (See charts 31 and 29—Appendix G.) As a result, the base case forecasts that natural and applied science occupations as a whole will contract by 47 positions. In contrast, the high case for this occupational category forecasts an expansion demand of 311 new positions, a substantially higher number than that of the base case. (See Chart 30—Appendix G.)

Occupations in natural and applied sciences require either skill level A (roughly 44 per cent of job openings) or skill level B (roughly 56 per cent of job openings). (See Table 19—Appendix G.)

2131 civil engineers, which generally require a bachelor's degree in civil engineering or in a related engineering discipline, constitute almost 20 per cent of the skill level A job openings in the base case (187 job openings). Both **2121 biologists and related scientists** and **2171 information systems analysts and consultants** constitute 14 per cent of the skill level A job openings in the base case. Each of these occupations generally requires a university degree in their respective fields.

Among occupations requiring skill level B in natural and applied sciences, **2271 air pilots, flight engineers, and flying instructors** makes up the largest proportion of job openings at 22 per cent (242 job openings from 2015 to 2030 in the base case). Those who wish to pursue this occupation are generally required to complete secondary school and graduate from a certified flying or aviation school. Following air pilots, **2263 inspectors in public and environmental health and occupational health and safety** constitute the second-largest proportion of skill level B job openings, with roughly 11 per cent (120 job openings in the base case).

Health Occupations

For a list of occupations that fall under the health category, see Table 34—Appendix G. For a summary of the total change in expansion demand, replacement demand, and job openings from 2015 to 2030, see Table 20—Appendix G.

Health occupations, which are important for maintaining a strong and productive workforce, are expected to expand in the base case by 216 jobs. (See charts 32 to 35—Appendix G.) The medium case and high case scenarios forecast slightly more positive growth, with a total expansion demand of 325 and 359 positions, respectively, from 2015 to 2030.

Occupations in the health industry require skill level A (roughly 64 per cent of the overall job openings), skill level B (roughly 21 per cent of the job openings), or skill level C (roughly 15 per cent of the job openings). (See Table 20—Appendix G.)

By far the most in-demand occupation falling under skill level A by job openings is **3012 registered nurses and registered psychiatric nurses**. These occupations encompass 64 per cent of skill level A job openings in the base case (740 job openings). Those who wish to become registered nurses or registered psychiatric nurses must complete an approved registered nursing program at a university or college. Those who wish to become clinical nurse specialists are also usually required to complete a master's or doctoral degree.

3233 licensed practical nurses constitute roughly 28 per cent of job openings for skill level B health occupations (105 job openings in the base case). These occupations require the completion of a vocational, college, or other approved program for licensed practical nurses. Furthermore, these occupations require individuals to complete the Canadian Practical Nurse Registration Examination. Following licensed practical nurses, **3219 other medical technologists and electrophysiological diagnostic technologists, n.e.c. (not elsewhere classified)** form the second-highest proportion of skill level B job openings at roughly 13 per cent (49 job openings in the

base case). Depending on which stream individuals choose to pursue, employment requirements generally include either a two- to three-year college program or completion of secondary school and up to four years of supervised practical training. Finally, **3215 medical radiation technologists** constitute 13 per cent of skill level B job openings. Those who wish to pursue this occupation generally are required to complete a two- to three-year college, hospital, or other approved program in diagnostic radiography, or to complete a bachelor of health sciences in radiography, nuclear medicine, or radiation therapy followed by supervised practical training.

Lastly, **3413 nurse aides, orderlies, and patient service associates** make up roughly 79 per cent of job openings for skill level C occupations in the health industry (207 job openings in the base case). People in these occupations generally require some secondary school education and on-the-job training or a college nursing orderly program and supervised practical training.

Occupations in Education, Law, and Social, Community, and Government Services

For a list of occupations that fall under the education, law, and social, community, and government services category, see Table 35— Appendix G. For a summary of the total change in expansion demand, replacement demand, and job openings from 2015 to 2030, see Table 21—Appendix G.

From 2015 to 2030, this occupational category is forecasted to expand by 105 positions in the base case. (See charts 36 to 39— Appendix G.) The medium case and high case forecasts predict total expansion demand from 2015 to 2030 to be 299 and 386 new positions, respectively. Occupations in education, law, and social, community, and government services require skill level A (roughly 66 per cent of the overall job openings), skill level B (roughly 24 per cent of the job openings), or skill level C (roughly 9 per cent of the job openings). (See Table 21—Appendix G.)

The top two skill level A occupations by job openings are **4032 elementary school and kindergarten teachers** (roughly 22 per cent of job openings in the base case) and **4031 secondary school teachers** (roughly 16 per cent of job openings in the base case). Elementary and school kindergarten teachers require a bachelor's degree in education, and in some cases a bachelor's degree in child development. Similarly, secondary school teachers of academic subjects usually require a bachelor's degree in education, which is often supported by a previous bachelor's degree in the arts or sciences. Secondary school teachers of vocational or technical subjects generally require a bachelor's degree in education, which is often supported with specialized training or experience in the subject they teach.

The top two skill level B occupations by job openings are **4212 social and community service workers** (roughly 38 per cent of skill level B j ob openings in the base case) and **4214 early childhood educators and assistants** (roughly 35 per cent of skill level B job openings in the base case). Social and community service workers are required to complete a college or university program in social work, child and youth care, psychology, or other related social science or health-related discipline. Early childhood educators and assistants are generally required to complete a two- to four-year college program in early childhood education or a bachelor's degree in child development.

Finally, **4412 home support workers, housekeepers, and related occupations** (roughly 23 per cent of job openings) and **4413 elementary and secondary school teacher assistants** (roughly 26 per cent of job openings) make up just under half of skill level C job openings in the base case. Home support workers, housekeepers, and related occupations, which are forecasted to see 110 job openings in the base case, generally require some secondary school education, the completion of a training program in care of the elderly or care of persons with disabilities, or (in some cases) college or other courses in home support. Elementary and secondary school teacher assistants are forecasted to see 127 job openings in the base case. Those who wish to pursue this occupation must usually complete secondary school and a 10-month college program in teaching assistance, educational assistance, or some other social science program.

Occupations in Arts, Culture, Recreation, and Sport

For a list of occupations that fall under the arts, culture, recreation, and sport category, see Table 36—Appendix G. For a summary of the total change in expansion demand, replacement demand, and job openings from 2015 to 2030, see Table 22—Appendix G.

From 2015 to 2030, occupations in arts, culture, recreation, and sport will contract slightly. (See charts 40 to 43—Appendix G.) In the base case scenario, this occupational category will see a slight contraction of 2 positions, but overall will remain relatively constant. In contrast, the high case scenario will experience moderately higher expansion growth, with an expansion of 31 positions by the end of the forecasted period.

Occupations in arts, culture, recreation, and sport require skill level A (roughly 54 per cent of the overall job openings) or skill level B (roughly 46 per cent of the job openings). (See Table 22—Appendix G.)

The top three skill level A occupations by job openings are **5125 translators, terminologists, and interpreters** (roughly 24 per cent of job openings in the base case), **5123 journalists** (roughly 19 per cent of job openings in the base case), and **5122 editors** (roughly 16 per cent of job openings in the base case). Translators, terminologists, and interpreters generally require a university degree in translation or in a related discipline (such as languages, linguistics, or philology). Both journalists and editors generally require a university degree in either journalism, or English or French (editors only).

As well, **5254 program leaders and instructors in recreation, sport, and fitness** make up roughly 38 per cent of skill level B job openings (110 job openings) in the base case. Those who wish to pursue this occupation are generally required to complete secondary school, and also either a college program in recreation or physical education, or have extensive experience in a specific recreation or sports program.

Sales and Service Occupations

For a list of occupations that fall under the sales and service category, see Table 37—Appendix G. For a summary of the total change in expansion demand, replacement demand, and job openings from 2015 to 2030, see Table 23—Appendix G.

Sales and service occupations are expected to see the greatest growth across all major NOC groupings. In the base case, this occupational category is forecasted to expand by 217 positions. Sales jobs are expected to grow gradually, with a few periods of decline throughout the years. The high case scenario expects to see a substantially larger expansion of the industry, leading to 1,260 new positions within the same time frame. The medium case scenario forecasts an expansion of 921 new sales and service positions within the same time frame. (See charts 44 to 47—Appendix G.)

Occupations in sales and service require skill level B (roughly 23 per cent of the overall job openings), skill level C (roughly 24 per cent of job openings), or skill level D (53 per cent of job openings). (See Table 23—Appendix G.)

In the base case, **6322 cooks** make up roughly 31 per cent of skill level B job openings (289 total job openings). These occupations generally require completion of secondary school and completion of a three-year apprenticeship for cooks, completion of a college or other program in cooking, or several years of commercial cooking experience. As well, **6211 retail sales supervisors** make up roughly 16 per cent of skill level B job openings in the base case (154 job openings). To work in these occupations, people must usually complete secondary school and have previous retail sales experience.

The top two skill level C occupations by job openings in sales and service industries are **6421 retail salespersons** (roughly 42 per cent of skill level C base case job openings) and **6541 security guards and related security service occupations** (roughly 18 per cent of skill level C base case job openings). Retail salespersons usually require secondary school completion. Similarly, security guards and related security service occupations generally require completion of secondary school and, in some cases, a college diploma.

Finally, the top skill level D occupations by job openings are 6733 janitors, caretakers, and building superintendents (roughly 37 per cent of job openings in the base case), 6731 light duty cleaners (roughly 22 per cent of job openings in the base case), and 6611 cashiers (roughly 18 per cent of job openings in the base case). While cashiers generally require some secondary school education, both janitors and light duty cleaners generally receive on-the-job training. In some cases, janitors may require some secondary school education.

Trades, Transport and Equipment Operators, and Related Occupations

For a list of occupations that fall under the trades, transport and equipment operators, and related category, see Table 38— Appendix G. For a summary of the total change in expansion demand, replacement demand, and job openings from 2015 to 2030, see Table 24—Appendix G.

From 2015 to 2030, the base case forecasts that this occupational category will contract by 83 jobs. In fact, while this category does see periods of employment growth during this time frame, a noticeable

decline is present for most of the period. In contrast, the medium and high case scenarios both see high expansion demand of 681 and 1,323 positions, respectively. (See charts 48 to 51—Appendix G.)

Occupations in trades, transport and equipment operation, and related jobs require skill level B (roughly 61 per cent of the overall job openings), skill level C (roughly 31 per cent of the job openings), or skill level D (roughly 8 per cent of job openings). (See Table 24—Appendix G.)

Among the most popular skill level B job openings are **7271 carpenters** (roughly 16 per cent of base case job openings), **7321 automotive service technicians, truck and bus mechanics, and mechanical repairers** (roughly 8 per cent of base case job openings), and **7241 electricians (except industrial and power system)** (roughly 9 per cent of base case job openings). Carpenters are usually required to complete secondary school and a three- to four-year apprenticeship program. Similarly, automotive technicians and mechanics are generally required to complete secondary school and a four-year automotive service technician apprenticeship program. Electricians are generally required to complete secondary school as well as a four- to five-year apprenticeship program.

The top two skill level C occupations by job openings are **7521 heavy** equipment operators (except crane) (roughly 36 per cent of base case job openings) and **7511 transport truck drivers** (roughly 28 per cent of base case job openings). Those who wish to become heavy equipment operators are generally required to complete secondary school, a oneto two-year apprenticeship, and a trade certification. Those who wish to become transport truck drivers can be given on-the-job training and may be required to complete an accredited driver training course.

Finally, 66 per cent of skill level D job openings in the base case are forecasted as needed for **7611 construction trades helpers and labourers** (205 job openings in the base case). These positions provide on-the-job training, but in some cases may also require some previous experience in general construction.

Natural Resources, Agriculture, and Related Production Occupations

For a list of occupations that fall under the natural resources, agriculture, and related production occupations category, see Table 39— Appendix G. For a summary of the total change in expansion demand, replacement demand, and job openings from 2015 to 2030, see Table 25—Appendix G.

In the base case from 2015 to 2030, this occupational category is forecasted to contract by 57 jobs. In contrast, the medium case scenario is expected to see an expansion of 120 jobs. Furthermore, the high case scenario predicts an expansion of 248 new jobs. (See charts 52 to 55—Appendix G.)

Occupations in natural resources, agriculture, and related production require skill level B (roughly 77 per cent of the overall job openings), skill level C (roughly 6 per cent of the job openings), or skill level D (17 per cent of job openings). (See Table 24—Appendix G.)

Roughly 51 per cent of the job openings for skill level B in the base case are forecasted to be filled by **8231 underground production and development miners**. Those who wish to pursue this occupation are generally required to complete secondary school as well as formal training, followed by specialized training as a helper.

In skill level C, **8411 underground mine service and support workers** are forecasted to have a relatively high number of job openings over the next 15 years. This occupation requires people who have completed secondary school and have had formal training of up to six weeks, followed by periods of on-the-job training.

Similarly, in skill level D, **8614 mine labourers** are forecasted to have a relatively high number of job openings (roughly 52 per cent of base case skill level D job openings). These positions can generally be filled by those who have completed secondary school after a short period of introductory training.

Occupations in Manufacturing and Utilities

For a list of occupations that fall under the manufacturing and utilities category, see Table 40—Appendix G. For a summary of the total change in expansion demand, replacement demand, and job openings from 2015 to 2030, see Table 26—Appendix G.

From 2015 to 2030, the base case forecasts a contraction of manufacturing and utilities occupations of 23 jobs. In contrast, the medium and high case scenarios both forecast slight employment expansion of 21 and 52 jobs, respectively. (See charts 56 to 59—Appendix G.)

Occupations in manufacturing and utilities require skill level B (roughly 71 per cent of the overall job openings), skill level C (roughly 9 per cent of the job openings), or skill level D (21 per cent of job openings). (See Table 26—Appendix G.)

Over half of the skill level B job openings in the base case are forecasted to be filled by **9241 power engineers and power system operators**. These occupations generally require those who have completed secondary school as well as a college training program in stationary or power engineering.

The two occupations forecasted to see job openings in skill level C are **9411 machine operators, mineral and metal processing** and **9474 photographic and film processors**. While machine operators generally require the completion of secondary school and some on-the-job training, photographic and film processors are generally required to complete a college or other specialized photography program if they wish to work in film-processing laboratories (however, those who wish to work in retail outlets can generally be given on-the-job training).

Finally, the top skill level D occupation by job openings is **9619 other labourers in processing, manufacturing, and utilities**. These positions may require some secondary school education.

Forecast Results for Rotational Workers

A separate forecast was conducted for the territory's fly-in/fly-out workers. To estimate their number, the industries they work in, and their occupational profiles, data from the NHS were once again used. A fly-in/ fly-out worker is defined as a person who works in the territory, but lives in another province or territory. Using this definition, the number of such workers was estimated to be around 1,850 in 2011. For fly-in/fly-out workers, expansion demand and replacement demand attributable to mortality and retirement were forecast using the same method described for N.W.T. residents. Since fly-in/fly-out workers already live outside the territory, no replacement demand due to interprovincial/territorial migration could be associated with them. Instead, a general turnover rate was incorporated into the analysis. This rate was applied to account for all turnovers caused by factors other than in-service mortality and retirement. The rate was estimated using data from The Conference Board of Canada's Compensation Planning Outlook survey of employers and then adjusted to remove turnover caused by in-service mortality and retirement.

Estimating the Rotational Workforce: Methodological Considerations

N.W.T.'s rotational workforce is considerably smaller than its resident workforce. It is also more difficult to estimate, due to practical limitations in how Statistics Canada's labour market surveys are administered and reconciled with the System of National Accounts. In this report, our estimates of the rotational workforce are based on a custom dataset from the 2011 National Household Survey (NHS). This textbox explains our rationale for taking the NHS approach. Further details are provided in the discussion of forecast results.

Initially the forecasting team took a different approach, in line with estimates that have appeared in our Territorial Outlook. We first estimated N.W.T.'s rotational workforce by taking the difference between two Statistics Canada datasets, the Labour statistics consistent with the System of National Accounts (SNA) and the Labour Force Survey (LFS). Although this SNA-LFS approach produced an

estimate of the number of rotational workers, it gave us no information about the occupations that they hold. A forecast of occupations and related skill levels was a top priority for the GNWT in their scope of work for this project. That objective then led us to take an alternative approach using the National Household Survey (NHS).

The custom NHS dataset from Statistics Canada gave us a detailed breakdown of the occupations held by people who worked in the N.W.T. but resided elsewhere. This breakdown also enabled us to examine forecast results in terms of skill levels and related educational requirements associated with the National Occupational Classification (NOC).

Table 27—Appendix G presents forecasted employment of rotational workers by high-level (i.e., one-digit) NOC codes. In all cases, more than a third of rotational workers are forecasted to fill positions in trades, transport, and equipment operation. In the base case, this means that an average of 821 positions within these occupations will need to be filled by rotational workers. In contrast, the high case, which assumes higher mining activity than the base case as well as higher government investment in infrastructure, sees an average of 1,035 positions in trades, transport, and equipment operation for rotational workers. The next most popular occupations for rotational workers fall within natural resources, agriculture, and related production occupations. These occupations are forecasted to require between 15.5 and 16 per cent of all available rotational workers across the three scenarios. The remaining occupations see less than 10 per cent of the overall need for rotational workers. It is interesting to note, however, that just under 10 per cent of rotational workers are forecasted to work in management occupations.

In order to understand how employment of rotational workers may change over the forecasted period, Table 28—Appendix G presents the number of job openings by NOC for these workers. Notably, from 2015 to 2030, occupations in trades, transport, and equipment operation are forecasted to see 1,443 job openings for rotational workers in the base case. In the high case, this increases to over 2,300 job openings for rotational workers. Occupations in natural resources, agriculture, and

related production are forecasted to see 560 job openings for rotational workers in the base case, increasing to 951 job openings in the high case. The next two highest categories by job openings are management occupations (a forecasted 396 job openings in the base case) and occupations in natural and applied sciences and related fields (a forecasted 354 job openings in the base case).

While the base case sees a relatively high number of job openings for many categories, the vast majority of these positions are required to fill replacement demand. In fact, with the exception of health occupations (a forecasted expansion of 22 positions); business, finance, and administration occupations (a forecasted expansion of 2 positions); and natural and applied sciences and related occupations (a forecasted expansion of 2 positions), the overall industries are forecasted to contract or remain the same. (See Table 29-Appendix G.) Furthermore, even though trades, transport and equipment operators, and related occupations are forecasted to see over 1,400 job openings in the base case, the overall occupations are forecasted to contract by 13 jobs. Similarly, occupations in natural resources, agriculture, and related production are forecasted to contract by 17 positions in the base case. However, the medium case and high case, both of which assume higher activities in mining and higher government investment in infrastructure, are both forecasted to see all occupational categories expand. Notably, in the high case, occupations in trades, transport, and equipment operation are forecasted to expand by 473 occupations from 2015 to 2030. (See Table 29—Appendix G.)

Finally, Table 30—Appendix G presents the forecasted job openings from 2015 to 2030 by NOC skill level for rotational workers. Notably, the majority of forecasted job openings are required for skill level B occupations. Furthermore, more than half of skill level B job openings are forecasted to come from occupations in trades, transport, and equipment operation. Of these occupations, the top four in the base case are **7311 construction millwrights and industrial mechanics** (222 job openings), **7242 industrial electricians** (203 job openings), **7237 welders and related machine operators** (166 job openings), and **7271 carpenters** (146 job openings). Similar to skill level B, nearly half of skill level C job openings are forecasted to come from occupations in trades, transport, and equipment operation. Notably, **7521 heavy equipment operators (except crane)** positions are forecasted to see 138 job openings in the base case.

Roughly 39 per cent of skill level A job openings come from management occupations in the base case. Notably, **0811 managers in natural resources production and fishing** are forecasted to see 127 job openings, accounting for roughly a third of total management job openings. A further 27 per cent of skill level A base case job openings are forecasted to come from health occupations, of which **3112 general practitioners and family physicians** and **3012 registered nurses and registered psychiatric nurses** feature prominently.

Finally, skill level D job openings for rotational works are concentrated in natural resources, agriculture, and related production occupations. Specifically, there are high numbers of job openings forecasted for **8612 landscaping and grounds maintenance labours**.

Forecast Results by NOC Skill Levels

In addition to grouping occupations by their job category, it is possible to group them by their NOC skill level. Following the NOC system of skill classification, this section will analyze the forecasted occupations using six major categories:

- Skill Level A—Management Occupations
- Skill Level A—Professional Occupations
- Skill Level B—College Diploma Occupations
- Skill Level B—Trades Certificate Occupations
- Skill Level C—High School or Job-Specific Training Occupations
- Skill Level D—Less Than High School Occupations

Skill Level A—Management Occupations

Management occupations are characterized by a high level of responsibility, accountability, and subject matter expertise. This expertise can be acquired either through formal education or extensive work experience. Management occupations span all NOC categories, and range from such occupations as retail sales managers to deputy ministers to managers in health care.

From 2015 to 2030, N.W.T. residents are forecasted to see 5,725 job openings for management occupations in the base case. (See Table 41—Appendix G.) Many of these job openings are concentrated in the top 10 managerial occupations, which account for close to 3,400 job openings in the base case. Furthermore, the top managerial occupation, 0621 retail and wholesale trade managers, accounts for 1,138 job openings from 2015 to 2030 (roughly 20 per cent of overall job openings). The second-highest managerial occupation, 0711 construction managers, accounts for a further 371 job openings in the base case. The medium case forecasts 6,590 job openings for management occupations, whereas the high case forecasts 7,084 job openings for similar occupations.

During the same period, rotational workers are forecasted to see 396 job openings for management occupations in the base case. (See Table 42—Appendix G.) Nearly a third of these job openings (127 job openings) are for **0811 managers in natural resources production and fishing**, while over 50 of these openings are for **0621 retail and wholesale trade managers**. The medium case sees 503 job openings and the high case forecasts 583 job openings for rotational workers in management occupations.

Skill Level A—Professional Occupations

Professional occupations require a university degree (i.e., a bachelor's, master's, or doctorate). These occupations span five NOC categories: business, finance, and administration occupations; natural and applied sciences and related occupations; health occupations; occupations in education, law, and social, community, and government services; and occupations in art, culture, recreation, and sport.

From 2015 to 2030, N.W.T. residents are forecasted to see between 6,907 (base case) and 7,688 (high case) job openings for professional occupations. In the base case, over half of these job openings can be found in education, law, and social, community, and government services. For example, **4032 elementary school and kindergarten teachers** are forecasted to see 777 job openings, **4112 lawyers and Quebec notaries** are forecasted to see 201 job openings, **4031 secondary school teachers** are forecasted to see 577 job openings, and **4164 social policy researchers, consultants, and program officers** are forecasted to see 244 job openings from 2015 to 2030 in the base case. Outside of education, law, and social, community, and government service occupations, **3012 registered nurses and registered psychiatric nurses** are forecasted to see 740 job openings, and **1111 financial auditors and accountants** are forecasted to see 310 job openings in the base case.

Rotational workers are forecasted to see from 611 professional job openings in the base case to 755 professional job openings in the high case. (See Table 44—Appendix G.) Nearly 20 per cent of the job openings come from **3112 general practitioners and family physicians**, which are forecasted to see 112 job openings in the base case. The base case also sees 67 job openings for rotational workers who can fill positions for **3012 registered nurses and registered psychiatric nurses**.

Skill Level B—College Diploma Occupations

College diploma occupations are composed of skill level B occupations, which span all NOC categories with the exception of trades, transport and equipment operators, and related occupations.⁹ These occupations usually require two to three years of post-secondary education at a college.

Residents of the N.W.T. are forecasted to see 7,249 job openings for college diploma occupations in the base case and 9,121 similar job openings in the high case. (See Table 45—Appendix G.) Over a third of these job openings come from business, finance, and administration occupations in the base case. Notably, **1221 administrative officers** are forecasted to see 688 job openings, **1241 administrative assistants** are forecasted to see 607 job openings, and **1311 accounting technicians and bookkeepers** are forecasted to see 408 job openings in the base case. College diploma occupations also feature quite prominently in education, law, and social, community, and government service occupations. Notably, **4212 social and community service workers** are forecasted to see 479 job openings, and **4214 early childhood educators** and assistants are forecasted to see 448 job openings in the base case.

Rotational workers are forecasted to see 1,046 job openings for college diploma occupations in the base case and 1,576 similar job openings in the high case. (See Table 46—Appendix G.) Unlike college diploma occupations for N.W.T. residents, the most prominent categories for rotational workers are natural resources, agriculture and related production occupations, and natural and applied sciences and related occupations. Notably, **8231 underground production and development miners** are forecasted to see 293 job openings, **8221 supervisors, mining and quarrying** are forecasted to see 209 job openings, and **2212 geological and mineral technologists and technicians** are forecasted to see 40 job openings in the base case.

9 These occupations are analyzed on their own below.

Skill Level B—Trades Certificate Occupations

Trades certificate occupations include all skill level B occupations that are found under trades, transport and equipment operators, and related occupations. These occupations usually require two to three years of post-secondary education at a college and/or an apprenticeship level.

In the base case, N.W.T. residents are forecasted to see 2,312 job openings for trades certificate occupations. (See Table 47—Appendix G.) The medium case and high case, both which see greater investments in mining and exploration activities, are forecasted to see substantially more job openings in this category at 3,030 and 3,590 job openings, respectively. These job openings are relatively concentrated, as the top three occupations (7271 carpenters, 7241 electricians [except industrial and power system], and 7321 automotive service technicians, truck and bus mechanics, and mechanical repairers) account for roughly a third of total job openings in each case.

Rotational workers are forecasted to see a relatively high number of job openings for trades certificate occupations across the three cases (ranging from 1,251 in the base case to 2,006 in the high case). (See Table 48—Appendix F.) Similar to job openings for residents, these job openings are concentrated in the top three occupations that account for roughly half of the overall job openings. The top three occupations are **7311 construction millwrights and industrial mechanics**, **7242 industrial electricians**, and **7237 welders and related machine operators**.

Skill Level C—High School or Job-Specific Training Occupations

High school or job-specific training occupations usually require secondary school and up to two years of occupation-specific training. These occupations span all NOC categories with the exceptions of natural and applied sciences and related occupations, and occupations in art, culture, recreation, and sport. Residents of the N.W.T. are forecasted to see 3,871 job openings for occupations requiring high school or job-specific training in the base case from 2015 to 2030. (See Table 49—Appendix F.) The medium case sees a substantially high number of such job openings at 5,018, whereas the high case sees 5,733 similar job openings from 2015 to 2030. Across the base, medium, and high cases, an average of 28 per cent of these job openings can be found in business, finance, and administrative occupations, while an average of 30 per cent can be found in trades, transport and equipment operators, and related occupations. Notably, in the base case, **7521 heavy equipment operators (except crane)** account for 386 job openings, **6421 retail salespersons** account for 360 occupations, **7511 transport truck drivers** account for 297 job openings, and 1414 receptionists account for 264 job openings from 2015 to 2030.

Rotational workers are forecasted to see 450 similar job openings in the base case and 624 in the high case from 2015 to 2030. (See Table 50—Appendix G.) For rotational workers, these occupations are highly concentrated in trades, transport and equipment operators, and related occupations (43 per cent of job openings in the base case), and business, finance, and administrative occupations (31 per cent of job openings in the base case). Notably, **7521 heavy equipment operators (except crane)** are forecasted to see 138 job openings, and **1522 storekeepers and parts persons** are forecasted to see 63 job openings in the base case.

Skill Level D—Less Than High School Occupations

Occupations in this category usually revolve around on-the-job training, involving short work demonstrations, and do not necessarily require formal education. These occupations fall under four NOC categories: sales and service occupations; trades, transport and equipment operators, and related occupations; natural resources, agriculture, and related production occupations; and occupations in manufacturing and utilities. Residents of the N.W.T. are forecasted to see 2,468 job openings for occupations requiring less than high school from 2015 to 2030 in the base case. (See Table 51—Appendix G.) This number increases to 3,126 job openings in the medium case and to 3,501 job openings in the high case. While these occupations span four NOC categories, roughly 80 per cent of the job openings fall under sales and service occupations. Notably, **6733 janitors, caretakers, and building operators** are forecasted to see 757 job openings, **6731 light duty cleaners** are forecasted to see 447 job openings, and **6611 cashiers are forecasted** to see 354 job openings in the base case.

Rotational workers are forecasted to see 107 similar job openings in the base case from 2015 to 2030. This number increases to 115 job openings in the medium case and up to 120 job openings in the high case. For rotational workers, these job openings are distributed among four occupations: **8612 landscaping and grounds maintenance labourers**; **6742 other service support occupation**, **n.e.c.**; **9614 labourers in wood, pulp, and paper processing**; and **8614 mine labourers**.

What Have We Learned From Chapters 4 and 5?

Our base case forecast of new job growth (i.e., expansion demand) reflects limited economic prospects. Although real GDP in the base N.W.T. forecast is expected to grow from 2015 to 2030, employment growth will remain relatively flat, mainly because productivity gains over time will reduce the demand for labour (particularly in high-technology sectors such as mining). As a result, our base case forecast projects that employment in 2030 will be only marginally higher than it was in 2014. (See Table 2—Appendix G.)

The growth of skilled trades and professions requiring a college or university degree in the base case will be largely offset by job losses due to declining activities in the mining sector beginning in 2019. Based on expansion demand, the least-volatile job growth is expected to be among lower-skilled job categories, primarily in the service sector. (See tables 14 to 16—Appendix G.)

This is not to say that employment growth in the base case will remain flat throughout the 2014–30 period. As diamond and metal mining ramp up, employment is projected to increase significantly over the medium term, reaching its peak in 2020 at 24,521, before gradually declining thereafter as the mines shut down and the construction of new mines tapers off. While under this scenario, mineral production benefits from the past 15 years of strong investment, current investment reductions in exploration and mine development are expected to ultimately take their toll in the medium term. Given this weak environment, our base case projections for employment are rather conservative; and for this reason, we included two alternative scenarios: the medium and high. Under these more optimistic forecast scenarios, commodity prices are assumed to recover faster than in the base case. With faster recovery comes greater opportunity for employment growth.

Looking beyond limited expansion demand, we find that between 2015 and 2030, a major workforce renewal is projected to occur as job openings become available to satisfy replacement demand (based on mortality, retirements, and out-migration). Unlike our story of limited job growth and expansion demand, this story focuses on the territory's skilled professions and trades. Among the top 20 in-demand occupations—based on replacement—are elementary and secondary school teachers, early childhood educators, registered nurses, accounting technicians, and carpenters. (See Table 11—Appendix G.) In particular, the high replacement demand for teachers and instructors, from K–12 to college levels, presents an opportunity to re-examine recruitment strategies in the education sector and, more generally, to re-envision the teaching skills and curricula that the N.W.T.'s labour market needs to become more competitive and innovative.

While employment under our base case is expected to be at about the same level in 2030 as it was in 2014, the workforce of 2030 could be very different in terms of its educational qualifications and skills. That, however, depends on both the education and work experience of the replacement workforce, and on the policies and hiring practices established by top employers over the forecast period.

The more optimistic assumptions of our medium and high scenarios lead to brighter outlooks for the N.W.T. economy and employment. (See Chart 7—Appendix G.) Their difference from the base case forecast is largely driven by the construction sector, which thrives in the alternative scenarios due to favourable economic circumstances that encourage mining expansion. These scenarios also assume a slower decline in oil production than in the base case, and more generally benefit from higher projected population growth. Although no assumptions were specifically made about the rest of the economy, other sectors (such as wholesale and retail, and health care and education) will benefit from the more optimistic assumptions about population dynamics and the natural resources sector's faster recovery. The alternatives are therefore not a radical restructuring of the status guo economy. They reflect the reasonably better employment prospects that could appear if the conditions driving the N.W.T.'s mainly resources-based economy become more favourable.

In all three forecast scenarios, the GNWT will continue to have a strategic role to play, contributing to economic development and employment in the territory. Devolution could prove to be an important economic lever in this regard. The introduction of resource royalties could help the government finance needed programs and critical infrastructure projects. The possibility of an increase in the government's borrowing limit could also enhance its strategic investment capabilities.

The N.W.T. also has serious demographic forces to contend with. Despite its relatively young population, the share of the 15- to 29-age cohort in the overall working-age population is forecast to shrink—from 30.6 per cent of the population in 2014 to 26.6 per cent in 2030. Meanwhile, the share of the population aged 65 and over will more than double over the forecast period, from 6.5 per cent in 2014 to 13.7 per cent of the population by 2030. The aging of the population will increase challenges

and opportunities for governments, employers, entrepreneurs, and workers to provide adequate health and social services, housing, and transportation.

Finally, the N.W.T. will need to consider new strategies for attracting migrant labour to replenish the territory's diminishing labour supply. Our base case forecast does not expect international immigration to be sufficient to offset negative net interprovincial migration. (See Chart 11— Appendix G.) Moreover, under the base case, economic growth in the territory will be muted by lower oil and diamond production over the long term, which will keep interprovincial out-migration above in-migration from other territories, provinces, and other countries. The alternative scenarios provide a measurably more favourable outlook on migration tied to the more optimistic assumptions they make about recoveries in the natural resources sectors.

APPENDIX A Bibliography

Aurora College. *Aurora College Annual Report 2009–2010.* www.assembly.gov.nt.ca/sites/default/files/10-11-03td119-165.pdf (accessed September 6, 2015).

-... Aurora College Annual Report 2010–2011. www.assembly.gov.nt.ca/ sites/default/files/11-12-12td7-171.pdf (accessed September 6, 2015).

 —. Aurora College Annual Report 2011–2012. www.fin.gov.nt.ca/sites/ default/files/documents/annual_report_11-12_0.pdf (accessed September 6, 2015).

 —. Aurora College Annual Report 2012–2013. March 13, 2014.
 www.assembly.gov.nt.ca/sites/default/files/td75-175.pdf (accessed September 19, 2015).

 —. Aurora College Annual Report 2013–2014. www.auroracollege.nt.ca/ _live/documents/content/Annual_Report_13-14.pdf (accessed September 6, 2015).

Bank of Canada. *Commodity Price Index—Annual.* www.bankofcanada. ca/rates/price-indexes/bcpi/commodity-price-index-annual/ (accessed September 6, 2015).

Canadian Mining Journal. "Diamonds: De Beers Mothballs Snap Lake." December 7, 2015. www.canadianminingjournal.com/news/diamonds-debeers-mothballs-snap-lake/ (accessed December 7, 2015).

CBC News. Cantung Mine to Close Oct. 27, Says North American Tungsten. September 18, 2015. www.cbc.ca/news/canada/north/ cantung-mine-to-close-oct-27-says-north-american-tungsten-1.3233048 (accessed September 18, 2015). —. *N.W.T.'s Snap Lake Diamond Mine Halts Operations, De Beers Says.* December 5, 2015. www.cbc.ca/news/canada/north/n-w-t-s-snap-lakediamond-mine-to-cease-operations-immediately-1.3350770 (accessed December 5, 2015).

Dion, P., and S. Coulombe. "Portrait of the Mobility of Canadians in 2006: Trajectories and Characteristics of Migrants." In *Report on the Demographic Situation in Canada, 2005 and 2006*, 78–108. June 18, 2014 (update). Catalogue no. 91-209. Ottawa: Statistics Canada. www.statcan.gc.ca/pub/91-209-x/91-209-x2004000-eng.pdf (accessed September 6, 2015).

Dominion Diamond Corporation. *Dominion Diamond Corporation Reports Diavik Diamond Mine Fourth Calendar Quarter Production*. News release, Yellowknife: January 19, 2015. www.ddcorp.ca/investors/ news-single?id=2008617. (accessed September 6, 2015)

 —. Dominion Diamond Corporation Reports Fiscal 2016
 First Quarter Results. News release, Yellowknife: June 10, 2015.
 www.businesswire.com/news/home/20150610006444/en/#.VdK5fPIVh60
 (accessed September 6, 2015).

Goldsmith, Scott. *Structural Analysis of the Alaska Economy: What Are the Drivers?* Anchorage: Institute of Social and Economic Research, University of Alaska Anchorage, October 2008. www.iser.uaa.alaska.edu/ Publications/structureAKeconomy.pdf (accessed September 6, 2015).

Government of Canada. *NOC 2011 Tutorial*. www5.hrsdc.gc.ca/NOC/ English/NOC/2011/Tutorial.aspx#6 (accessed September 6, 2015).

Nordicity, The Conference Board of Canada, and the Canadian Northern Economic Development Agency, *Northern Connectivity: Ensuring Quality Communications*. Ottawa: January 2014. http://northernconnectivity.ca/ resources/ncis_wg_report.pdf (accessed September 28, 2015).

Northwest Territories Bureau of Statistics. 2014 NWT Community Survey. www.assembly.gov.nt.ca/sites/default/files/td_180-175.pdf (accessed September 6, 2015). —. Graduation Rates Fact Sheet. January 2015. www.ece.gov.nt.ca/files/ pages/770/factsheet-graduationratesinthenwtjan2015nt.pdf (accessed September 6, 2015).

Quenneville, Guy. "Canol Concerns." *Up Here Business*, June 2014. http://upherebusiness.ca/post/89972897832 (accessed September 6, 2015).

—. *N.W.T. Braces for Economic Sting of Snap Lake Mine Shutdown*.
 CBC News, December 7, 2015. www.cbc.ca/news/canada/north/snap-lake-shutdown-layoffs-1.3353295 (accessed December 7, 2015).

Schaffer, William A. *Web Book of Regional Science, Regional Impact Models*. West Virginia: Regional Research Institute, West Virginia University. www.rri.wvu.edu/WebBook/Schaffer (accessed September 6, 2015).

Statistics Canada. *2011 National Household Survey.* 2011. Catalogue no. 99-011-X2011037. www12.statcan.gc.ca/nhs-enm/index-eng.cfm (accessed September 6, 2015).

 CANSIM table A.11. Graduation Rate, Canada, Provinces and Territories, 2005/2006 to 2009/2010. www.statcan.gc.ca/pub/81-595-m/2011095/tbl/tbla.11-eng.htm (accessed September 6, 2015).

—. CANSIM table 051-0001. Estimates of Population, by Age Group and Sex for July 1, Canada, Provinces and Territories. www5.statcan. gc.ca/cansim/a26?lang=eng&retrLang=eng&id=0510001&paSer=&pat tern=&stByVal=1&p1=1&p2=37&tabMode=dataTable&csid= (accessed September 6, 2015).

 CANSIM table 051-0005. Estimates of Population, by Age Group and Sex for July 1, Canada, Provinces and Territories, Annual (Persons Unless Otherwise Noted). www5.statcan.gc.ca/cansim/ a26?lang=eng&id=510005 (accessed September 6, 2015). CANSIM table 052-0005. Projected Population, by Projection Scenario, Age and Sex, as of July 1, Canada, Provinces and Territories.
 www5.statcan.gc.ca/cansim/a26?lang=eng&id=520005 (accessed September 6, 2015).

 CANSIM table 102-4505. Crude Birth Rate, Age-Specific and Total Fertility (Live Births), Canada, Provinces and Territories. www5.statcan.
 gc.ca/cansim/a26?lang=eng&id=1024505 (accessed October 2, 2015).

 CANSIM table 379-0030. Provincial and Territorial GDP by Industry Chained Dollars Vectors. www.statcan.gc.ca/nea-cen/hr2012-rh2012/ data-donnees/cansim/tables-tableaux/gdpi-pibi/c379-0030-eng.htm (accessed September 28, 2015).

-... Dependency Ratio. www.statcan.gc.ca/pub/82-229-x/2009001/demo/ dep-eng.htm (accessed September 6, 2015).

—. *Labour Force Survey Data*. Nunavut: Nunavut Bureau of Statistics, January 14, 2014.

 Life Tables, Canada, Provinces and Territories. www.statcan.gc.ca/ pub/84-537-x/84-537-x2013005-eng.htm (accessed September 6, 2015).

—. NHS Profile, 2011. June 26, 2013. Catalogue no. 99-004-XWE.
 www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/index.cfm?Lang=E (accessed September 6, 2015).

 NHS Profile, Canada, 2011. April 28, 2014. www12.statcan.gc.ca/nhsenm/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=PR&Code1=01&D ata=Count&SearchText=canada&SearchType=Begins&SearchPR=01&A1 =All&B1=All&Custom=&TABID=1 (accessed October 1, 2015).

 Portrait of Canada's Labour Force. www12.statcan.gc.ca/nhsenm/2011/as-sa/99-012-x/99-012-x2011002-eng.cfm#a7 (accessed September 6, 2015).

Statistics Canada and Employment and Social Development Canada. Skills in Canada: First Results From the Programme for the International Assessment of Adult Competencies, (PIAAC). 2013. www.statcan.gc.ca/ pub/89-555-x/89-555-x2013001-eng.pdf (accessed October 1, 2015). Wohlberg, Meagan. "Husky Withdraws Sahtu Fracking Plans." *Northern Journal* (May 26, 2014). http://norj.ca/2014/05/9014 (accessed September 5, 2015)

APPENDIX B Demographic Profile

Population by Age, Sex, and Ethnicity, N.W.T.

Table 1

N.W.T. Demographic Profile, 2014

	Total population	Aboriginal identity	Dene single identity	Métis single identity	Inuk (Inuit) single identity	Non- Aboriginal identity
Total population	43,623	22,425	14,600	2,715	5,110	21,198
Under 15 years (per cent)	21.4	24.6	25.0	18.4	26.9	17.9
15 to 24 years (per cent)	15.2	18.6	19.0	16.5	18.6	11.6
25 to 64 years (per cent)	56.9	49.7	48.7	56.5	48.8	64.4
65 years and over (per cent)	6.6	7.1	7.3	8.6	5.7	6.1
Median age (years)	32.9	29.0	28.6	34.9	27.3	36.3

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 1



(per cent)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

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Chart 2

Age Distribution of N.W.T. by Aboriginal Identity, 2014 (number of people, 000s)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 3

Age Distribution of N.W.T. by Aboriginal Identity, 2014 (per cent)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.
Exhibit 1 N.W.T. 2011 Census Division Boundaries



Source: The Conference Board of Canada.

Table 2

Distribution of Aboriginal, Non-Aboriginal, and Visible Minority Subpopulations Among N.W.T.'s Census Divisions, 2011

Census Division	Region	Total population	Aboriginal population (per cent)	Non-Aboriginal population (including visible minorities) (per cent)	Visible minority population (per cent)
Region 1	Beaufort-Delta	6,635	79	21	2
Region 2	Sahtu	2,325	77	24	2
Region 3	Tłcho (North Slave)	2,800	94	6	<1
Region 4	Dehcho	3,150	85	14	1
Region 5	South Slave	6,510	57	43	4
Region 6	Yellowknife Area (North Slave)	19,040	26	74	12

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Population by Age, Gender, Ethnicity, and Region

Table 3

Beaufort-Delta (Region 1) Demographic Profile, 2014

	Total population	Aboriginal identity	Dene single identity	Métis single identity	Inuk (Inuit) single identity	Non- Aboriginal identity
Total population	6,898	5,521	1,714	204	3,603	1,377
Under 15 years (per cent)	23.5	25.4	24.1	6.9	27.0	16.1
15 to 24 years (per cent)	16.6	18.9	21.2	14.2	18.1	7.6
25 to 64 years (per cent)	52.1	47.7	44.6	69.1	48.0	69.9
65 years and over (per cent)	7.7	8.0	10.2	9.8	6.9	6.4
Median age (years)	30.6	28.4	28.4	42.6	27.7	37.3

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 4

Age Distribution of Beaufort-Delta by Gender, 2014



Age Distribution of Beaufort-Delta by Aboriginal Identity, 2014 (number of people, 000s)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 6

Age Distribution of Beaufort-Delta by Aboriginal Identity, 2014 (per cent)



Table 4Sahtu (Region 2) Demographic Profile, 2014

	Total population	Aboriginal identity	Dene single identity	Métis single identity	Inuk (Inuit) single identity	Non- Aboriginal identity
Total population	2,560	1,919	1,667	152	100	641
Under 15 years (per cent)	21.4	23.0	24.2	15.8	14.0	16.8
15 to 24 years (per cent)	18.2	21.2	21.9	17.1	16.0	9.2
25 to 64 years (per cent)	52.7	47.7	46.1	55.3	64.0	67.7
65 years and over (per cent)	7.6	8.1	7.9	11.8	6.0	6.2
Median age (years)	31.1	28.0	27.0	37.0	33.5	38.3

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 7

Age Distribution of Sahtu by Gender, 2014

(per cent)



Age Distribution of Sahtu by Aboriginal Identity, 2014 (number of people)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 9

Age Distribution of Sahtu by Aboriginal Identity, 2014 (per cent)



Table 5Tlicho (Region 3) Demographic Profile, 2014

	Total population	Aboriginal identity	Dene single identity	Métis single identity	Inuk (Inuit) single identity	Non- Aboriginal identity
Total population	2,974	2,808	2,744	38	26	166
Under 15 years (per cent)	29.7	30.1	30.4	15.8	19.2	23.5
15 to 24 years (per cent)	18.3	19.3	19.4	18.4	7.7	1.2
25 to 64 years (per cent)	45.9	44.6	44.2	60.5	65.4	67.5
65 years and over (per cent)	6.1	6.0	6.0	5.3	7.7	7.8
Median age (years)	26.2	25.4	25.1	38.0	42.0	34.0

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 10



(per cent)



Age Distribution of Tlicho by Aboriginal Identity, 2014 (number of people)



n.a. = not available

Note: Information on non-Aboriginal individuals aged 75 years and over or those between the ages of 15 and 24 are not available due to data suppression.

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 12

Age Distribution of Tlicho by Aboriginal Identity, 2014 (per cent)



n.a. = not available

Note: Information on non-Aboriginal individuals aged 75 years and over or those between the ages of 15 and 24 are not available due to data suppression.

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

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Table 6Dehcho (Region 4) Demographic Profile, 2014

	Total population	Aboriginal identity	Dene single identity	Métis single identity	Inuk (Inuit) single identity	Non- Aboriginal identity
Total population	3,483	2,939	2,675	180	84	544
Under 15 years (per cent)	19.9	20.8	21.3	14.4	16.7	15.1
15 to 24 years (per cent)	15.3	17.5	17.4	16.1	25.0	3.1
25 to 64 years (per cent)	56.3	52.8	52.7	55.0	51.2	75.2
65 years and over (per cent)	8.6	8.9	8.6	14.4	7.1	6.6
Median age (years)	35.0	33.7	33.5	38.0	30.5	42.7

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 13

Age Distribution of Dehcho by Gender, 2014

(per cent)



Age Distribution of Dehcho by Aboriginal Identity, 2014 (number of people)



n.a. = not available

Note: Information on non-Aboriginal individuals aged 75 years and over is not available due to data suppression.

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 15

Age Distribution of Dehcho by Aboriginal Identity, 2014 (per cent)



n.a. = not available

Note: Information on non-Aboriginal individuals aged 75 years and over is not available due to data suppression.

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

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Table 7South Slave (Region 5) Demographic Profile, 2014

	Total population	Aboriginal identity	Dene single identity	Métis single identity	Inuk (Inuit) single identity	Non- Aboriginal identity
Total population	7,238	4,011	2,416	1,297	298	3,227
Under 15 years (per cent)	20.4	22.2	23.0	19.9	26.2	18.2
15 to 24 years (per cent)	14.9	18.6	18.4	17.4	24.8	10.3
25 to 64 years (per cent)	54.6	50.3	49.6	52.4	47.0	59.9
65 years and over (per cent)	10.1	8.9	8.9	10.3	2.0	11.7
Median age (years)	35.8	31.0	30.7	34.1	24.4	41.5

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 16



(per cent)



Age Distribution of South Slave by Aboriginal Identity, 2014 (number of people)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 18

Age Distribution of South Slave by Aboriginal Identity, 2014 (per cent)



Table 8Yellowknife Area (Region 6) Demographic Profile, 2014

	Total population	Aboriginal identity	Dene single identity	Métis single identity	Inuk (Inuit) single identity	Non- Aboriginal identity
Total population	20,470	5,227	3,384	844	999	15,243
Under 15 years (per cent)	20.0	25.4	25.7	20.4	28.8	18.1
15 to 24 years (per cent)	13.9	17.6	17.7	15.5	18.7	12.7
25 to 64 years (per cent)	61.5	53.0	52.1	60.1	50.2	64.4
65 years and over (per cent)	4.6	4.0	4.5	4.0	2.3	4.8
Median age (years)	33.6	28.5	28.6	32.0	26.1	35.1

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 19

Age Distribution of Yellowknife Area by Gender, 2014

(per cent)



Age Distribution of Yellowknife Area by Aboriginal Identity, 2014 (number of people, 000s)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 21

Age Distribution of Yellowknife Area by Aboriginal Identity, 2014 (per cent)



APPENDIX C Industry and Occupational Classification

Chart 1

Select Components of N.W.T.'s GDP, at Basic Prices, by NAICS, Annual, 1999–2014

(2007 \$ billions)



Source: Statistics Canada, CANSIM table 379-0030.

Total Employment and Top Employment Sectors as Percentage of Total Employment, N.W.T., 2001–13

(number of employees, 000s, left; per cent, right)



Source: Statistics Canada, *Labour Force Survey* (prepared by the Northwest Territories Bureau of Statistics).

Chart 3 Territorial Labour Force by NOC, 2011 and 2014

(share of total employment, per cent)



Sources: Statistics Canada, 2011 National Household Survey; Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Territorial Labour Force by NAICS, 2011 and 2014

(share of total employment, per cent)



Sources: Statistics Canada, 2011 National Household Survey; Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Territorial Labour Force by NAICS, 2007, and Gender, 2014

	Тс	otal	Male		Female	
North American Industry Classification	Number	Per cent	Number	Per cent	Number	Per cent
Total Employed	22,353	100.0	11,601	100.0	10,751	100.0
11 Agriculture, forestry, fishing, and hunting	75	0.3	n.a.	n.a.	n.a.	n.a.
21 Mining, quarrying, and oil and gas extraction	1,540	6.9	1,261	10.9	279	2.6
211 Oil and gas extraction	105	0.5	n.a.	n.a.	n.a.	n.a.
212 Mining and quarrying (except oil and gas)	1,146	5.1	931	8.0	214	2.0
213 Support activities for mining and oil and gas extraction	289	1.3	n.a.	n.a.	n.a.	n.a.
22 Utilities	327	1.5	254	n.a.	72	n.a.
23 Construction	1,437	6.4	1,293	11.1	143	1.3
31-33 Manufacturing	33	0.1	n.a.	n.a.	n.a.	n.a.
41 Wholesale trade	265	1.2	207	1.8	57	0.5
44–45 Retail trade	1,891	8.5	913	7.9	978	9.1
48-49 Transportation and warehousing	1,326	5.9	999	8.6	327	3.0
51 Information and cultural industries	367	1.6	247	2.1	120	1.1
52 Finance and insurance	159	0.7	36	0.3	123	1.1
53 Real estate and rental and leasing	475	2.1	271	2.3	204	1.9
54 Professional, scientific, and technical services	722	3.2	423	3.6	299	2.8
55–56 Management of companies, administrative and support, waste management, and remediation services	347	1.6	143	1.2	204	1.9
61 Educational services	1,786	8.0	486	4.2	1,300	12.1
62 Health care and social assistance	2,276	10.2	377	3.2	1,898	17.7
71 Arts, entertainment, and recreation	253	1.1	148	1.3	105	1.0
72 Accommodation and food services	905	4.0	380	3.3	525	4.9
81 Other services (except public administration)	654	2.9	252	2.2	402	3.7
91 Public administration	6,265	28.0	3,117	26.9	3,148	29.3
911 Federal government public administration	1,118	5.0	680	5.9	437	4.1
912 Provincial and territorial public administration	3,435	15.4	1,494	12.9	1,941	18.1
913 Local, municipal, and regional public administration	718	3.2	474	4.1	244	2.3
914 Aboriginal public administration	981	4.4	455	3.9	526	4.9
Not stated	1,250	5.6	713	6.1	536	5.0

n.a. = not available

TABLE 2

TERRITORIAL LABOUR FORCE BY NAICS AND GENDER, 2014

	Total		M	ale	Female	
National Occupational Classification	Number	Per cent	Number	Per cent	Number	Per cent
Total	22,353	100.0	11,601	100.0	10,751	100.0
0 Management occupations	3,041	13.6	1,776	15.3	1,265	11.8
00 Senior management occupations	396	1.8	237	2.0	158	1.5
01-05 Specialized middle management occupations	1,329	5.9	581	5.0	747	6.9
06 Middle management occupations in retail and wholesale trade and customer services	590	2.6	323	2.8	268	2.5
07–09 Middle management occupations in trades, transportation, production, and utilities	726	3.2	635	5.5	92	0.9
1 Business, finance, and administration occupations	4,127	18.5	1,158	10.0	2,968	27.6
11 Professional occupations in business and finance	596	2.7	238	2.1	358	3.3
12 Administrative and financial supervisors and administrative occupations	1,716	7.7	475	4.1	1,241	11.5
13 Finance, insurance, and related business administrative occupations	288	1.3	64	0.6	223	2.1
14 Office support occupations	1,112	5.0	117	1.0	995	9.3
15 Distribution, tracking, and scheduling coordination occupations	415	1.9	265	2.3	150	1.4
2 Natural and applied sciences and related occupations	1,567	7.0	1,253	10.8	314	2.9
21 Professional occupations in natural and applied sciences	695	3.1	528	4.6	167	1.6
22 Technical occupations related to natural and applied sciences	872	3.9	725	6.2	147	1.4
3 Health occupations	1,020	4.6	178	1.5	841	7.8
30 Professional occupations in nursing	438	2.0	40	0.3	398	3.7
31 Professional occupations in health (except nursing)	203	0.9	94	0.8	109	1.0
32 Technical occupations in health	159	0.7	n.a.	n.a.	n.a.	n.a.
34 Assisting occupations in support of health services	220	1.0	n.a.	n.a.	n.a.	n.a.

(CONTINUED)

Table 2 (cont'd)

Territorial Labour Force by NAICS and Gender, 2014

	Тс	otal	Ma	ale	Female	
National Occupational Classification	Number	Per cent	Number	Per cent	Number	Per cent
4 Occupations in education, law, and social, community, and government services	3,845	17.2	1,394	12.0	2,451	22.8
40 Professional occupations in education services	1,026	4.6	324	2.8	702	6.5
41 Professional occupations in law and social, community, and government services	999	4.5	450	3.9	549	5.1
42 Paraprofessional occupations in legal, social, community, and education services	728	3.3	135	1.2	593	5.5
43 Occupations in front-line public protection services	345	1.5	274	2.4	71	0.7
44 Care providers and educational, legal, and public protection support occupations	747	3.3	212	1.8	535	5.0
5 Occupations in arts, culture, recreation, and sport	539	2.4	262	2.3	278	2.6
51 Professional occupations in arts and culture	255	1.1	153	1.3	102	0.9
52 Technical occupations in arts, culture, recreation, and sport	285	1.3	109	0.9	176	1.6
6 Sales and service occupations	3,686	16.5	1,584	13.7	2,101	19.5
62 Retail sales supervisors and specialized sales occupations	135	0.6	n.a.	n.a.	n.a.	n.a.
63 Service supervisors and specialized service occupations	435	1.9	178	1.5	257	2.4
64 Sales representatives and salespersons—wholesale and retail trade	448	2.0	253	2.2	195	1.8
65 Service representatives and other customer and personal services occupations	780	3.5	252	2.2	528	4.9
66 Sales support occupations	691	3.1	259	2.2	433	4.0
67 Service support and other service occupations, n.e.c.	1,196	5.4	623	5.4	573	5.3
7 Trades, transport and equipment operators, and related occupations	3,174	14.2	3,027	26.1	148	1.4
72 Industrial, electrical, and construction trades	893	4.0	n.a.	n.a.	n.a.	n.a.
73 Maintenance and equipment operation trades	731	3.3	685	5.9	46	0.4
74 Other installers, repairers and servicers, and material handlers	123	0.6	n.a.	n.a.	n.a.	n.a.
75 Transport and heavy equipment operation and related maintenance occupations	1,018	4.6	962	8.3	56	0.5
76 Trades helpers, construction labourers and related occupations	409	1.8	n.a.	n.a.	n.a.	n.a.

(continued)

Table 2 (cont'd)

Territorial Labour Force by NAICS and Gender, 2014

	Total		Male		Female	
National Occupational Classification	Number	Per cent	Number	Per cent	Number	Per cent
8 Natural resources, agriculture, and related production occupations	425	1.9	381	3.3	43	0.4
82 Supervisors and technical occupations in natural resources, agriculture, and related production	249	1.1	n.a.	n.a.	n.a.	n.a.
84 Workers in natural resources, agriculture, and related production	99	0.4	n.a.	n.a.	n.a.	n.a.
86 Harvesting, landscaping, and natural resources labourers	78	0.3	n.a.	n.a.	n.a.	n.a.
9 Occupations in manufacturing and utilities	155	0.7	n.a.	n.a.	n.a.	n.a.
92 Processing, manufacturing and utilities supervisors, and central control operators	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
94 Processing and manufacturing machine operators and related production workers	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Not stated	775	3.5	437	3.8	338	3.1

n.a. = not available

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Table 3

NOC Skill Levels, Employed Workforce in N.W.T. by Gender, 2014

	Total		Ma	ale	Female	
	Number	Per cent	Number	Per cent	Number	Per cent
Total	22,353	100.0	11,601	100.0	10,751	100.0
A: Managers	3,041	13.6	1,776	15.3	1,265	11.8
A: Professionals	4,212	18.8	1,826	15.7	2,386	22.2
B: College or apprenticeship training	6,968	31.2	3,920	33.8	3,047	28.3
C: High school or job-specific training	4,983	22.3	2,291	19.7	2,692	25.0
D: On-the-job training	2,374	10.6	1,352	11.7	1,022	9.5
Not stated	775	3.5	437	3.8	338	3.1

Table 4NOC Skill Levels, Employed Workforce in Yellowknife by Gender, 2014

	Total		Ма	ale	Female		
	Number	Per cent	Number	Per cent	Number	Per cent	
Total	12,045	100.0	6,197	100.0	5,848	100.0	
A: Managers	1,766	14.7	958	15.5	808	13.8	
A: Professionals	2,546	21.1	1,229	19.8	1,317	22.5	
B: College or apprenticeship training	3,750	31.1	2,041	32.9	1,710	29.2	
C: High school or job-specific training	2,645	22.0	1,195	19.3	1,451	24.8	
D: On-the-job training	972	8.1	559	9.0	413	7.1	
Not stated	366	3.0	216	3.5	150	2.6	

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Table 5

NOC Skill Levels, Employed Workforce in Regional Centres by Gender, 2014

	Total		M	ale	Female		
	Number	Per cent	Number	Per cent	Number	Per cent	
Total	5,173	100.0	2,728	100.0	2,444	100.0	
A: Managers	724	14.0	453	16.6	272	11.1	
A: Professionals	852	16.5	353	12.9	498	20.4	
B: College or apprenticeship training	1,705	33.0	1,072	39.3	633	25.9	
C: High school or job-specific training	1,140	22.0	450	16.5	690	28.2	
D: On-the-job training	568	11.0	306	11.2	262	10.7	
Not stated	184	3.6	94	3.4	90	3.7	

Note: Regional centres include Hay River, Inuvik, and Fort Smith.

Table 6NOC Skill Levels, Employed Workforce in Smaller Communities by Gender, 2014

	Total		Ma	ale	Female		
	Number	Per cent	Number	Per cent	Number	Per cent	
Total	5,135	100.0	2,676	100.0	2,459	100.0	
A: Managers	550	10.7	365	13.6	186	7.6	
A: Professionals	814	15.9	244	9.1	571	23.2	
B: College or apprenticeship training	1,512	29.4	807	30.2	705	28.7	
C: High school or job-specific training	1,198	23.3	646	24.1	552	22.4	
D: On-the-job training	834	16.2	487	18.2	347	14.1	
Not stated	226	4.4	127	4.7	99	4.0	

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Table 7

NOC Skill Levels, Employed Workforce in N.W.T. by Aboriginal Identity and Gender, 2014

	Total		Aboriginal				Non-Aboriginal				
	Number	Per cent	Male (number)	Male (per cent)	Female (number)	Female (per cent)	Male (number)	Male (per cent)	Female (number)	Female (per cent)	
Total	22,353	100.0	4,329	100.0	4,424	100.0	7,272	100.0	6,327	100.0	
A: Managers	3,041	13.6	450	10.4	347	7.8	1,326	18.2	918	14.5	
A: Professionals	4,212	18.8	407	9.4	611	13.8	1,419	19.5	1,775	28.1	
B: College or apprenticeship training	6,968	31.2	1,357	31.3	1,484	33.5	2,563	35.2	1,564	24.7	
C: High school or job-specific training	4,983	22.3	1,179	27.2	1,174	26.5	1,111	15.3	1,519	24.0	
D: On-the-job training	2,374	10.6	737	17.0	649	14.7	616	8.5	373	5.9	
Not stated	775	3.5	199	4.6	159	3.6	238	3.3	179	2.8	

Table 8Employed Workforce in N.W.T. by Location of Study, 2011

	Employed individuals (number)	No post-secondary certificate, diploma, or degree (per cent)	Same as province/territory of residence (per cent)	Another province/territory (per cent)	Location of study outside Canada (per cent)
All skill levels	21,200	39.9	13.3	41.1	5.7
A: Managers	2,940	4.2	1.6	7.2	0.8
A: Professionals	3,970	1.9	2.0	13.4	1.4
B: College or apprenticeship training	7,160	12.3	5.4	14.5	1.6
C: High school or job- specific training	4,795	12.8	3.4	5.2	1.2
D: On-the-job training	2,340	8.6	0.9	0.7	0.8

Source: Statistics Canada, 2011 National Household Survey.

Table 9

Employed Workforce in N.W.T. by NOC Skill Level, 2011

	Employed individuals (number)		Same as province/territory of residence (per cent)	Another province/territory (per cent)	Location of study outside Canada (per cent)
All skill levels	21,200	39.9	13.3	41.1	5.7
A: Managers	2,940	30.4	11.7	52.0	5.9
A: Professionals	3,970	10.3	10.6	71.8	7.3
B: College or apprenticeship training	7,160	36.5	15.9	42.9	4.7
C: High school or job- specific training	4,795	56.8	14.9	23.1	5.2
D: On-the-job training	2,340	78.0	8.1	6.6	7.3

Source: Statistics Canada, 2011 National Household Survey.

Labour Force Activity in N.W.T., 2014

(population aged 15 and over)

	Population 15+	Labour force		Not in labour force		Employed		Unemployed	
Population	Number	Number	Participation rate (per cent)	Number	Per cent	Number	Employment rate (per cent)	Number	Unemployment rate (per cent)
Total population	34,087	25,014	73.4	9,073	26.6	22,353	65.6	2,661	10.6
Aboriginal identity	16,837	10,919	64.9	5,918	35.1	8,753	52.0	2,166	19.8
Non-Aboriginal identity	17,250	14,094	81.7	3,156	18.3	13,599	78.8	495	3.5
Male	17,346	13,292	76.6	4,053	23.4	11,601	66.9	1,691	12.7
Female	16,741	11,721	70.0	5,020	30.0	10,751	64.2	970	8.3

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 5

Labour Force Activity by Ethnicity and Sex, N.W.T., 2014

(population aged 15 and over, per cent)



Table 11Labour Force Activity, Beaufort-Delta, 2014

(population aged 15 and over)

	Population 15+ Labour force Not in labour force Employed				Unemployed				
Population	Number	Number	Participation rate (per cent)	Number	Per cent	Number	Employment rate (per cent)	Number	Unemployment rate (per cent)
Total population	5,306	3,605	67.9	1,701	32.1	2,987	56.3	618	17.1
Aboriginal identity	4,129	2,568	62.2	1,561	37.8	1,984	48.1	583	22.7
Non-Aboriginal identity	1,178	1,038	88.1	140	11.9	1,003	85.1	35	3.4
Male	2,672	1,948	72.9	724	27.1	1,559	58.3	389	20.0
Female	2,635	1,658	62.9	977	37.1	1,428	54.2	229	13.8

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 6

Labour Force Activity by Ethnicity and Sex, Beaufort-Delta, 2014

(population aged 15 and over, per cent)



Labour Force Activity, Sahtu, 2014

(population aged 15 and over)

_				
P	op	ul	at	ion

	15+	Lat	our force	Not in la	oour force	our force Employed		Unemployed	
Population	Number	Number	Participation rate (per cent)	Number	Per cent	Number	Employment rate (per cent)	Number	Unemployment rate (per cent)
Total population	2,048	1,430	69.8	618	30.2	1,182	57.7	248	17.3
Aboriginal identity	1,498	934	62.3	564	37.7	702	46.9	232	24.8
Non-Aboriginal identity	550	496	90.2	54	9.8	481	87.5	16	3.2
Male	1,100	812	73.8	288	26.2	646	58.7	166	20.4
Female	948	618	65.2	330	34.8	536	56.5	82	13.3

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 7

Labour Force Activity by Ethnicity and Sex, Sahtu, 2014

(population aged 15 and over, per cent)



Table 13Labour Force Activity, Tlicho, 2014

(population aged 15 and over)

Population

	15+	Lat	oour force	Not in lat	Not in labour force Employed		Unemployed		
Population	Number	Number	Participation rate (per cent)	Number	Per cent	Number	Employment rate (per cent)	Number	Unemployment rate (per cent)
Total population	2,128	1,238	58.2	890	41.8	839	39.4	399	32.2
Aboriginal identity	1,980	n.a.	n.a.	n.a.	n.a.	709	35.8	n.a.	n.a.
Non-Aboriginal identity	148	n.a.	n.a.	n.a.	n.a.	130	87.8	n.a.	n.a.
Male	1,098	667	60.7	431	39.3	404	36.8	262	39.3
Female	1,030	572	55.5	459	44.6	435	42.2	137	24.0

n.a. = not available

Note: The participation rate, unemployment rate, and percentage of those not in the labour force are unavailable by ethnicity due to data suppression. Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 8

Labour Force Activity by Ethnicity and Sex, Tlicho, 2014

(population aged 15 and over, per cent)



n.a. = not available

Note: The participation rate, unemployment rate, and percentage of those not in the labour force are unavailable by ethnicity due to data suppression.

Labour Force Activity, Dehcho, 2014

(population aged 15 and over)

Population

	15+	Lat	oour force	Not in labour force Employed		Unemployed			
Population	Number	Number	Participation rate (per cent)	Number	Per cent	Number	Employment rate (per cent)	Number	Unemployment rate (per cent)
Total population	2,804	1,805	64.4	999	35.6	1,443	51.5	361	20.0
Aboriginal identity	2,340	n.a.	n.a.	n.a.	n.a.	1,054	45.0	n.a.	n.a.
Non-Aboriginal identity	464	n.a.	n.a.	n.a.	n.a.	390	84.1	n.a.	n.a.
Male	1,477	1,022	69.2	455	30.8	784	53.1	237	23.2
Female	1,327	783	59.0	544	41.0	659	49.7	124	15.8

n.a. = not available

Note: The participation rate, unemployment rate, and percentage of those not in the labour force are unavailable by ethnicity due to data suppression. Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 9

Labour Force Activity by Ethnicity and Sex, Dehcho, 2014

(population aged 15 and over, per cent)



n.a. = not available

Note: The participation rate, unemployment rate, and percentage of those not in the labour force are unavailable by ethnicity due to data suppression.

Table 15Labour Force Activity, South Slave, 2014

(population aged 15 and over)

Population

	15+	Lat	oour force	Not in lat	oour force	e Employed		Unemployed	
Population	Number	Number	Participation rate (per cent)	Number	Per cent	Number	Employment rate (per cent)	Number	Unemployment rate (per cent)
Total population	5,685	4,164	73.2	1,521	26.8	3,769	66.3	395	9.5
Aboriginal identity	3,090	2,108	68.2	982	31.8	1,793	58.0	314	14.9
Non-Aboriginal identity	2,596	2,057	79.2	539	20.8	1,976	76.1	81	3.9
Male	2,913	2,230	76.6	684	23.5	1,965	67.5	265	11.9
Female	2,772	1,935	69.8	837	30.2	1,804	65.1	131	0.1

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 10

Labour Force Activity by Ethnicity and Sex, South Slave, 2014

(population aged 15 and over, per cent)



Labour Force Activity, Yellowknife Area, 2014

(population aged 15 and over)

	Population 15+	Labour force		Not in labour force		E	mployed	Unemployed	
Population	Number	Number	Participation rate (per cent)	Number	Per cent	Number	Employment rate (per cent)	Number	Unemployment rate (per cent)
Total population	16,115	12,770	79.2	3,345	20.8	12,131	75.3	639	5.0
Aboriginal identity	3,800	2,819	74.2	981	25.8	2,511	66.1	308	10.9
Non-Aboriginal identity	12,315	9,951	80.8	2,364	19.2	9,620	78.1	331	3.3
Male	8,086	6,615	81.8	1,471	18.2	6,243	77.2	372	5.6
Female	8,029	6,155	76.7	1,874	23.3	5,888	73.3	267	4.3

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 11

Labour Force Activity by Ethnicity and Sex, Yellowknife Area, 2014

(population aged 15 and over, per cent)



Table 17 Labour Force Activity by Highest Level of Education and Gender, Population Aged 15 and Over, N.W.T., 2014

	Total				Male			Female		
	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	
Total population	34,087	22,353	65.6	17,346	11,601	66.9	16,741	10,751	64.2	
Less than high school	8,552	3,224	37.7	4,528	1,717	37.9	4,025	1,507	37.4	
High school diploma	7,813	4,771	61.1	3,862	2,485	64.3	3,951	2,286	57.9	
College or trades	10,566	8,381	79.3	5,759	4,679	81.2	4,807	3,702	77.0	
University degree	6,698	5,903	88.1	2,953	2,676	90.6	3,745	3,227	86.2	
Not stated	458	74	16.2	245	45	18.4	214	29	13.6	

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 12

Employment by Highest Level of Education, Employed Population Aged 15 and Over, N.W.T., 2014

(per cent of total; number, 000s)



Labour Force Activity by Highest Level of Education and Gender, Aboriginal Population Aged 15 and Over, N.W.T., 2014

	Total				Male		Female		
	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)
Total population	16,837	8,753	52.0	8,400	4,329	51.5	8,437	4,424	52.4
Less than high school	7,195	2,431	33.8	3,845	1,332	34.6	3,351	1,099	32.8
High school diploma	3,589	2,069	57.6	1,742	1,071	61.5	1,847	998	54.0
College or trades	4,816	3,484	72.3	2,313	1,656	71.6	2,503	1,828	73.0
University degree	790	699	88.5	261	230	88.1	529	469	88.7
Not stated	447	70	15.7	239	41	17.2	208	29	13.9

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 13

Employment by Highest Level of Education, Aboriginal Population Aged 15 and Over, N.W.T., 2014

(per cent of total; number, 000s)



Labour Force Activity by Highest Level of Education and Gender, Non-Aboriginal Population Aged 15 and Over, N.W.T., 2014

	Total				Male			Female		
	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	
Total population	17,250	13,599	78.8	8,946	7,272	81.3	8,304	6,327	76.2	
Less than high school	1,356	793	58.5	683	385	56.4	674	408	60.5	
High school diploma	4,224	2,702	64.0	2,120	1,414	66.7	2,104	1,287	61.2	
College or trades	5,750	4,897	85.2	3,446	3,024	87.8	2,304	1,874	81.3	
University degree	5,908	5,204	88.1	2,692	2,446	90.9	3,216	2,757	85.7	
Not stated	11	4	36.4	6	4	66.7	6	0	0	

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 14

Employment by Highest Level of Education, Non-Aboriginal Population Aged 15 and Over, N.W.T., 2014

(per cent of total; number, 000s)



Labour Force Activity by Highest Level of Education and Gender, Population Aged 15 and Over, Beaufort-Delta, 2014

	Total				Male			Female		
	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	
Total population	5,306	2,987	56.3	2,672	1,559	58.3	2,635	1,428	54.2	
Less than high school	2,199	670	30.5	1,177	394	33.5	1,023	277	27.1	
High school diploma	898	585	65.1	418	285	68.2	480	299	62.3	
College or trades	1,496	1,176	78.6	726	591	81.4	770	585	76.0	
University degree	586	524	89.4	280	266	95.0	306	258	84.3	
Not stated	127	33	26.0	71	23	32.4	56	10	17.9	

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 15

Employment by Highest Level of Education, Population Aged 15 and Over, Beaufort-Delta, 2014

(per cent of total; number, 000s)



Table 21 Labour Force Activity by Highest Level of Education and Gender, Population Aged 15 and Over, Sahtu, 2014

	Total				Male			Female		
	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	
Total population	2,048	1,182	57.7	1,100	646	58.7	948	536	56.5	
Less than high school	834	268	32.1	453	139	30.7	382	129	33.8	
High school diploma	453	278	61.4	237	154	65.0	216	124	57.4	
College or trades	492	421	85.6	264	229	86.7	228	192	84.2	
University degree	235	212	90.2	127	120	94.5	108	92	85.2	
Not stated	34	3	8.8	18	3	16.7	16	0	0.0	

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 16

Employment by Highest Level of Education, Population Aged 15 and Over, Sahtu, 2014

(per cent of total; number)



Table 22Labour Force Activity by Highest Level of Education and Gender, Population Aged 15 and Over, Tlicho, 2014

	Total			Male			Female		
	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)
Total population	2,128	839	39.4	1,098	404	36.8	1,030	435	42.2
Less than high school	1,070	263	24.6	601	164	27.3	469	99	21.1
High school diploma	437	206	47.1	189	86	45.5	248	121	48.8
College or trades	378	251	66.4	200	111	55.5	179	140	78.2
University degree	124	112	90.3	42	40	95.2	81	71	87.7
Not stated	119	7	5.9	66	3	4.5	53	4	7.5

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 17

Employment by Highest Level of Education, Population Aged 15 and Over, Tlicho, 2014




Table 23Labour Force Activity by Highest Level of Education and Gender, Population Aged 15 and Over,Dehcho, 2014

	Total				Male			Female			
	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)		
Total population	2,804	1,443	51.5	1,477	784	53.1	1,327	659	49.7		
Less than high school	1,220	378	31.0	653	223	34.2	567	155	27.3		
High school diploma	461	231	50.1	233	121	51.9	228	110	48.2		
College or trades	792	568	71.7	449	332	73.9	344	236	68.6		
University degree	261	249	95.4	102	99	97.1	159	150	94.3		
Not stated	70	18	25.7	41	9	22.0	29	9	31.0		

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 18

Employment by Highest Level of Education, Population Aged 15 and Over, Dehcho, 2014

(per cent of total; number)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Labour Force Activity by Highest Level of Education and Gender, Population Aged 15 and Over, South Slave, 2014

		Total			Male		Female		
	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)
Total population	5,685	3,769	66.3	2,913	1,965	67.5	2,772	1,804	65.1
Less than high school	1,374	586	42.6	710	279	39.3	664	306	46.1
High school diploma	1,165	734	63.0	540	345	63.9	625	389	62.2
College or trades	2,233	1,741	78.0	1,288	1,044	81.1	944	697	73.8
University degree	867	701	80.9	346	296	85.5	520	406	78.1
Not stated	46	8	17.4	29	2	6.9	18	6	33.3

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 19

Employment by Highest Level of Education, Population Aged 15 and Over, South Slave, 2014

(per cent of total; number, 000s)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Labour Force Activity by Highest Level of Education and Gender, Population Aged 15 and Over, Yellowknife Area, 2014

		Total			Male		Female		
	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)	Population 15+ (number)	Employed (number)	Employment rate (per cent)
Total population	16,115	12,131	75.3	8,086	6,243	77.2	8,029	5,888	73.3
Less than high school	1,852	1,059	57.2	934	518	55.5	919	542	59.0
High school diploma	4,399	2,737	62.2	2,245	1,495	66.6	2,154	1,243	57.7
College or trades	5,175	4,225	81.6	2,832	2,372	83.8	2,343	1,853	79.1
University degree	4,626	4,105	88.7	2,055	1,855	90.3	2,571	2,250	87.5
Not stated	62	4	6.5	20	4	20.0	42	0	0.0

Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 20

Employment by Highest Level of Education, Population Aged 15 and Over, Yellowknife Area, 2014

(per cent of total; number)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

APPENDIX D Feeder Provinces and Territories

Population by Age and Sex

Table 1

Age Distribution of Alberta by Gender, 2014

	Ма	ale	Fen	nale	
	Number	Number Per cent		Per cent	
Under 15 years of age	409,994	19.3	389,343	19.0	
15 to 24 years	278,806	13.2	261,536	12.8	
25 to 34 years	358,722	16.9	340,726	16.6	
35 to 44 years	311,769	14.7	289,286	14.1	
45 to 54 years	299,147	14.1	278,091	13.6	
55 to 64 years	247,392	11.7	235,692	11.5	
65 to 74 years	130,671	6.2	137,333	6.7	
75 years and over	83,534	3.9	116,521	5.7	
Total	2,120,035	100.0	2,048,528	100.0	

Note: The total population was found by summing individual age groups. Source: Statistics Canada, CANSIM table 051-0001.

Chart 1

Age Distribution of Alberta by Gender, 2014

(per cent)



Age Distribution of British Columbia by Gender, 2014

	Ma	ale	Fen	nale
	Number	Per cent	Number	Per cent
Under 15 years of age	375,250	16.1	352,321	12.2
15 to 24 years	311,174	13.4	287,426	13.5
25 to 34 years	312,272	13.4	316,916	13.1
35 to 44 years	302,127	13.0	308,456	14.8
45 to 54 years	338,796	14.6	349,355	13.7
55 to 64 years	318,607	13.7	323,421	9.5
65 to 74 years	217,465	9.4	224,571	8.2
75 years and over	149,872	6.4	193,169	100.0
Total	2,325,563	100.0	2,355,635	1.0

Note: The total population was found by summing individual age groups. Source: Statistics Canada, CANSIM table 051-0001.

Chart 2

Age Distribution of British Columbia by Gender, 2014 (per cent)



Age Distribution of Ontario by Gender, 2014

	Ма	ale	Ferr	nale
	Number	Per cent	Number	Per cent
Under 15 years of age	1,203,659	17.7	1,142,849	16.2
15 to 24 years	941,333	13.8	899,042	12.8
25 to 34 years	907,127	13.3	939,494	13.3
35 to 44 years	885,207	13.0	924,926	13.1
45 to 54 years	1,036,370	15.2	1,043,338	14.8
55 to 64 years	868,068	12.8	906,423	12.9
65 to 74 years	563,921	8.3	623,296	8.9
75 years and over	391,755	5.8	558,097	7.9
Total	6,797,440	100.0	7,037,465	100.0

Note: The total population was found by summing individual age groups. Source: Statistics Canada, CANSIM table 051-0001.

Chart 3

Age Distribution of Ontario by Gender, 2014

(per cent)



Age Distribution of Saskatchewan by Gender, 2014

	Ma	ale	Fen	nale
	Number	Per cent	Number	Per cent
Under 15 years of age	116,198	20.2	110,488	19.6
15 to 24 years	79,875	13.9	73,191	13.0
25 to 34 years	85,990	15.0	81,742	14.5
35 to 44 years	71,210	12.4	67,342	11.9
45 to 54 years	76,752	13.4	72,919	12.9
55 to 64 years	71,454	12.4	69,100	12.2
65 to 74 years	41,274	7.2	43,494	7.7
75 years and over	31,917	5.6	46,174	8.2
Total	574,670	100.0	564,450	100.0

Note: The total population was found by summing individual age groups. Source: Statistics Canada, CANSIM table 051-0001.

Chart 4

Age Distribution of Saskatchewan by Gender, 2014 (per cent)



Age Distribution of Nunavut by Gender, 2014

	Ma	ale	Fen	nale
	Number	Per cent	Number	Per cent
Under 15 years of age	6,113	31.7	5,879	32.8
15 to 24 years	3,391	17.6	3,163	17.7
25 to 34 years	3,104	16.1	3,142	17.5
35 to 44 years	2,474	12.8	2,171	12.1
45 to 54 years	2,174	11.3	1,804	10.1
55 to 64 years	1,317	6.8	1,109	6.2
65 to 74 years	522	2.7	489	2.7
75 years and over	178	0.9	158	0.9
Total	19,273	100.0	17,915	100.0

Note: The total population was found by summing individual age groups. Source: Statistics Canada, CANSIM table 051-0001.

Chart 5

Age Distribution of Nunavut by Gender, 2014

(per cent)



Age Distribution of Yukon by Gender, 2014

	Ма	ale	Fer	nale
	Number	Per cent	Number	Per cent
Under 15 years of age	3,330	17.6	3,132	17.4
15 to 24 years	2,513	13.3	2,184	12.1
25 to 34 years	2,601	13.8	2,593	14.4
35 to 44 years	2,632	13.9	2,827	15.7
45 to 54 years	2,902	15.4	2,837	15.7
55 to 64 years	2,882	15.2	2,642	14.7
65 to 74 years	1,496	7.9	1,192	6.6
75 years and over	548	2.9	611	3.4
Total	18,904	100.0	18,018	100.0

Note: The total population was found by summing individual age groups. Source: Statistics Canada, CANSIM table 051-0001.

Chart 6

Age Distribution of Yukon by Gender, 2014

(per cent)



Highest Degree of Education

Table 7

Highest Degree of Education by Gender, Population Aged 15 and Over, Alberta, 2011

Total population aged 15 years and over	Total population		Male		Female	
by highest certificate, diploma, or degree	Number	Per cent	Number	Per cent	Number	Per cent
No certificate, diploma, or degree	550,465	19.1	283,115	19.6	267,350	18.5
High school diploma or equivalent	764,390	26.5	365,625	25.3	398,765	27.6
College, CÉGEP, or other non-university certificate or diploma	530,100	18.4	225,215	15.6	304,885	21.1
Apprenticeship or trades certificate or diploma	318,280	11.0	233,190	16.1	85,095	5.9
University certificate or diploma below bachelor's level	122,465	4.2	51,345	3.6	71,120	4.9
University certificate, diploma, or degree at bachelor's level or above	603,040	20.9	287,335	19.9	315,705	21.9

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 7 Highest Degree of Education, Population Aged 15 and Over, Alberta, 2011





Highest Degree of Education by Gender, Population Aged 15 and Over, British Columbia, 2011

Total population aged 15 years and over	Total population		Male		Female	
by highest certificate, diploma, or degree	Number	Per cent	Number	Per cent	Number	Per cent
No certificate, diploma, or degree	607,655	16.7	305,040	17.2	302,620	16.2
High school diploma or equivalent	1,009,400	27.7	475,670	26.8	533,735	28.5
College, CÉGEP, or other non-university certificate or diploma	628,115	17.2	260,580	14.7	367,535	19.6
Apprenticeship or trades certificate or diploma	387,455	10.6	262,245	14.8	125,210	6.7
University certificate or diploma below bachelor's level	208,245	5.7	86,995	4.9	121,250	6.5
University certificate, diploma, or degree at bachelor's level or above	805,965	22.1	384,920	21.7	421,045	22.5

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 8

Highest Degree of Education, Population Aged 15 and Over, British Columbia, 2011 (per cent)



Table 9Highest Degree of Education by Gender, Population Aged 15 and Over, Ontario, 2011

Total population aged 15 years and over	Total pop	oulation	Male		Female	
by highest certificate, diploma, or degree	Number	Per cent	Number	Per cent	Number	Per cent
No certificate, diploma, or degree	1,954,520	18.7	957,040	18.9	997,475	18.4
High school diploma or equivalent	2,801,805	26.8	1,337,055	26.4	1,464,755	27.1
College, CÉGEP, or other non-university certificate or diploma	2,070,875	19.8	894,235	17.7	1,176,640	21.8
Apprenticeship or trades certificate or diploma	771,140	7.4	520,390	10.3	250,750	4.6
University certificate or diploma below bachelor's level	427,150	4.1	193,355	3.8	233,790	4.3
University certificate, diploma, or degree at bachelor's level or above	2,448,175	23.4	1,162,635	23.0	1,285,535	23.8

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 9 Highest Degree of Education, Population Aged 15 and Over, Ontario, 2011 (per cent)



Highest Degree of Education by Gender, Population Aged 15 and Over, Saskatchewan, 2011

Total population aged 15 years and over	Total population		Male		Female	
by highest certificate, diploma, or degree	Number	Per cent	Number	Per cent	Number	Per cent
No certificate, diploma, or degree	200,430	24.7	106,880	26.7	93,550	22.7
High school diploma or equivalent	228,755	28.2	115,075	28.7	113,680	27.6
College, CÉGEP, or other non-university certificate or diploma	127,295	15.7	44,805	11.2	82,490	20.0
Apprenticeship or trades certificate or diploma	98,820	12.2	65,090	16.2	33,730	8.2
University certificate or diploma below bachelor's level	32,780	4.0	12,735	3.2	20,040	4.9
University certificate, diploma, or degree at bachelor's level or above	124,425	15.3	56,380	14.1	68,045	16.5

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 10

Highest Degree of Education, Population Aged 15 and Over, Saskatchewan, 2011 (per cent)



Table 11Highest Degree of Education by Gender, Population Aged 15 and Over, Nunavut, 2011

Total population aged 15 years and over		Total population		Male		Female	
by highest certificate, diploma, or degree	Number	Per cent	Number	Per cent	Number	Per cent	
No certificate, diploma, or degree	11,890	56.0	5,985	54.9	5,905	57.1	
High school diploma or equivalent	2,835	13.3	1,420	13.0	1,415	13.7	
College, CÉGEP, or other non-university certificate or diploma	2,665	12.5	1,190	10.9	1,475	14.3	
Apprenticeship or trades certificate or diploma	1,620	7.6	1,285	11.8	335	3.2	
University certificate or diploma below bachelor's level	260	1.2	125	1.1	135	1.3	
University certificate, diploma, or degree at bachelor's level or above	1,980	9.3	900	8.3	1,080	10.4	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 11

Highest Degree of Education, Population Aged 15 and Over, Nunavut, 2011 (per cent)



Table 12Highest Degree of Education by Gender, Population Aged 15 and Over, Yukon, 2011

Total population aged 15 years and over	Total population		Male		Female	
by highest certificate, diploma, or degree	Number	Per cent	Number	Per cent	Number	Per cent
No certificate, diploma, or degree	5,040	18.3	2,870	20.9	2,165	15.8
High school diploma or equivalent	6,655	24.2	3,325	24.2	3,335	24.3
College, CÉGEP, or other non-university certificate or diploma	5,490	20.0	2,175	15.8	3,310	24.1
Apprenticeship or trades certificate or diploma	3,335	12.1	2,475	18.0	860	6.3
University certificate or diploma below bachelor's level	1,145	4.2	455	3.3	690	5.0
University certificate, diploma, or degree at bachelor's level or above	5,835	21.2	2,455	17.8	3,380	24.6

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 12

Highest Degree of Education, Population Aged 15 and Over, Yukon, 2011

(per cent)



Labour Force Characterization

Table 13

Labour Force Activity by Gender, Population Aged 15 and Over, Alberta, 2011

	Total population		Ма	le	Female		
	Number	Per cent	Number	Per cent	Number	Per cent	
Employed	1,993,225	69.0	1,078,370	74.6	914,855	63.4	
Unemployed	122,415	4.2	65,470	4.5	56,945	3.9	
Not in labour force	773,095	26.8	301,975	20.9	471,120	32.7	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 13

Labour Force Activity by Gender, Population Aged 15 and Over, Alberta, 2011





Table 14Labour Force Participation by NOC, Population Aged 15 and Over, Alberta, 2011

	Total population		Ма	ale	Female		
	Number	Per cent	Number	Per cent	Number	Per cent	
Management	248,520	11.7	160,145	14.0	88,370	9.1	
Business, finance, and administration	347,880	16.4	93,875	8.2	254,005	26.1	
Natural and applied sciences	168,725	8.0	131,715	11.5	37,005	3.8	
Health	125,125	5.9	22,050	1.9	103,070	10.6	
Education, law, and government	211,945	10.0	71,815	6.3	140,135	14.4	
Arts, culture, and recreation	45,140	2.1	18,290	1.6	26,855	2.8	
Sales and service	438,865	20.7	180,675	15.8	258,190	26.6	
Trades	367,650	17.4	342,230	29.9	25,425	2.6	
Natural resources	69,950	3.3	59,115	5.2	10,835	1.1	
Manufacturing and utilities	64,345	3.0	51,385	4.5	12,960	1.3	
Not applicable	27,490	1.3	12,545	1.1	14,945	1.5	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 14

Labour Force Participation by NOC, Population Aged 15 and Over, Alberta, 2011

(number, 000s)



Table 15Labour Force Participation by NAICS, Population Aged 15 and Over, Alberta, 2011

	Total wo	orkforce	Ма	le	Female	
	Number	Per cent	Number	Per cent	Number	Per cent
11 Agriculture, forestry, fishing, and hunting	61,165	2.9	41,465	3.6	19,700	2.0
21 Mining, quarrying, and oil and gas extraction	136,500	6.5	104,825	9.2	31,670	3.3
22 Utilities	22,035	1.0	15,725	1.4	6,305	0.6
23 Construction	195,905	9.3	166,270	14.5	29,635	3.0
31–33 Manufacturing	123,465	5.8	93,895	8.2	29,570	3.0
41 Wholesale trade	89,000	4.2	63,590	5.6	25,415	2.6
44-45 Retail trade	229,225	10.8	104,725	9.2	124,500	12.8
48-49 Transportation and warehousing	104,770	5.0	76,070	6.7	28,700	3.0
51 Information and cultural industries	35,465	1.7	18,990	1.7	16,470	1.7
52 Finance and insurance	68,760	3.3	24,355	2.1	44,410	4.6
53 Real estate and rental and leasing	40,090	1.9	22,305	2.0	17,790	1.8
54 Professional, scientific, and technical services	162,490	7.7	91,715	8.0	70,780	7.3
55 Management of companies and enterprises	2,535	0.1	1,270	0.1	1,260	0.1
56 Administrative and support, waste management and remediation services	72,965	3.4	40,320	3.5	32,645	3.4
61 Educational services	141,550	6.7	44,045	3.9	97,505	10.0
62 Health care and social assistance	206,695	9.8	33,030	2.9	173,665	17.9
71 Arts, entertainment, and recreation	39,720	1.9	19,510	1.7	20,215	2.1
72 Accommodation and food services	125,810	5.9	50,795	4.4	75,020	7.7
81 Other services (except public administration)	101,275	4.8	49,330	4.3	51,950	5.3
91 Public administration	128,720	6.1	69,075	6.0	59,650	6.1
All industries	2,088,145	98.7	1,131,295	98.9	956,855	98.5
Industry—not applicable	27,490	1.3	12,545	1.1	14,945	1.5
Total labour force population aged 15 years and over by industry	2,115,640	100.0	1,143,840	100.0	971,795	100.0

Table 16Labour Force Activity by Gender, Population Aged 15 and Over, British Columbia, 2011

	Total population		Ма	le	Female		
	Number	Per cent	Number	Per cent	Number	Per cent	
Employed	2,171,465	59.5	1,124,590	63.3	1,046,875	55.9	
Unemployed	182,775	5.0	98,785	5.6	83,990	4.5	
Not in labour force	1,292,595	35.4	552,070	31.1	740,530	39.6	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 15

Labour Force Activity by Gender, Population Aged 15 and Over, British Columbia, 2011

(per cent)



Labour Force Participation by NOC, Population Aged 15 and Over, British Columbia, 2011

	Total po	Total population		ale	Female		
-	Number	Per cent	Number	Per cent	Number	Per cent	
Management	263,685	11.2	162,365	13.3	101,320	9.0	
Business, finance, and administration	368,980	15.7	104,285	8.5	264,690	23.4	
Natural and applied sciences	154,055	6.5	122,570	10.0	31,480	2.8	
Health	147,620	6.3	32,490	2.7	115,125	10.2	
Education, law, and government	265,910	11.3	89,645	7.3	176,265	15.6	
Arts, culture, and recreation	78,565	3.3	38,300	3.1	40,270	3.6	
Sales and service	554,345	23.5	233,065	19.1	321,285	28.4	
Trades	337,140	14.3	317,385	25.9	19,755	1.7	
Natural resources	60,295	2.6	45,155	3.7	15,135	1.3	
Manufacturing and utilities	74,720	3.2	54,470	4.5	20,250	1.8	
Not applicable	48,930	2.1	23,625	1.9	25,305	2.2	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 16

Labour Force Participation by NOC, Population Aged 15 and Over, British Columbia, 2011

(number, millions)



Table 18Labour Force Participation by NAICS, Population Aged 15 and Over, British Columbia, 2011

	Total workforce		Ма	Male		Female	
	Number	Per cent	Number	Per cent	Number	Per cent	
11 Agriculture, forestry, fishing, and hunting	61,210	2.6	40,810	3.3	20,405	1.8	
21 Mining, quarrying, and oil and gas extraction	25,450	1.1	21,175	1.7	4,275	0.4	
22 Utilities	13,215	0.6	9,650	0.8	3,560	0.3	
23 Construction	181,510	7.7	159,605	13.0	21,910	1.9	
31-33 Manufacturing	148,810	6.3	108,480	8.9	40,335	3.6	
41 Wholesale trade	90,560	3.8	61,730	5.0	28,820	2.5	
44-45 Retail trade	266,265	11.3	121,750	10.0	144,515	12.8	
48-49 Transportation and warehousing	118,675	5.0	89,155	7.3	29,520	2.6	
51 Information and cultural industries	62,235	2.6	37,250	3.0	24,980	2.2	
52 Finance and insurance	91,790	3.9	35,375	2.9	56,415	5.0	
53 Real estate and rental and leasing	54,840	2.3	29,790	2.4	25,055	2.2	
54 Professional, scientific, and technical services	179,355	7.6	98,760	8.1	80,590	7.1	
55 Management of companies and enterprises	2,440	0.1	1,320	0.1	1,120	0.1	
56 Administrative and support, waste management and remediation services	98,890	4.2	55,745	4.6	43,145	3.8	
61 Educational services	167,875	7.1	55,635	4.5	112,235	9.9	
62 Health care and social assistance	249,030	10.6	47,020	3.8	202,010	17.9	
71 Arts, entertainment, and recreation	56,915	2.4	29,750	2.4	27,175	2.4	
72 Accommodation and food services	179,625	7.6	73,570	6.0	106,055	9.4	
81 Other services (except public administration)	112,745	4.8	49,130	4.0	63,615	5.6	
91 Public administration	143,875	6.1	74,040	6.1	69,840	6.2	
All industries	2,305,315	97.9	1,199,750	98.1	1,105,570	97.8	
Industry—not applicable	48,930	2.1	23,625	1.9	25,300	2.2	
Total labour force population aged 15 years and over by industry	2,354,245	100.0	1,223,375	100.0	1,130,870	100.0	

Table 19Labour Force Activity by Gender, Population Aged 15 and Over, Ontario, 2011

	Total population		Ма	ale	Female		
	Number	Per cent	Number	Per cent	Number	Per cent	
Employed	6,297,005	60.1	3,249,165	64.2	3,047,840	56.3	
Unemployed	567,985	5.4	292,865	5.8	275,120	5.1	
Not in labour force	3,608,685	34.5	1,522,690	30.1	2,085,990	38.6	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 17

Labour Force Activity by Gender, Population Aged 15 and Over, Ontario, 2011

(per cent)



Labour Force Participation by NOC, Population Aged 15 and Over, Ontario, 2011

	Total population		Ма	ale	Female		
	Number	Per cent	Number	Per cent	Number	Per cent	
Management	770,580	11.2	474,655	13.4007	295,920	8.9	
Business, finance, and administration	1,138,330	16.6	352,505	9.9521	785,825	23.6	
Natural and applied sciences	494,500	7.2	384,345	10.8510	110,150	3.3	
Health	392,695	5.7	78,330	2.2114	314,370	9.5	
Education, law, and government	801,465	11.7	264,570	7.4695	536,895	16.2	
Arts, culture, and recreation	206,420	3.0	96,055	2.7119	110,370	3.3	
Sales and service	1,550,260	22.6	673,880	19.0253	876,380	26.4	
Trades	868,515	12.7	812,280	22.9326	56,230	1.7	
Natural resources	106,810	1.6	82,610	2.3323	24,200	0.7	
Manufacturing and utilities	350,685	5.1	233,565	6.5941	117,115	3.5	
Not applicable	184,735	2.7	89,230	2.5192	95,510	2.9	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 18

Labour Force Participation by NOC, Population Aged 15 and Over, Ontario, 2011

(number, millions)



Table 21Labour Force Participation by NAICS, Population Aged 15 and Over, Ontario, 2011

	Total workforce		Ма	le	Female	
	Number	Per cent	Number	Per cent	Number	Per cent
11 Agriculture, forestry, fishing, and hunting	101,280	1.5	66,485	1.9	34,800	1.0
21 Mining, quarrying, and oil and gas extraction	29,985	0.4	25,650	0.7	4,340	0.1
22 Utilities	57,035	0.8	42,685	1.2	14,350	0.4
23 Construction	417,900	6.1	369,300	10.4	48,595	1.5
31–33 Manufacturing	697,565	10.2	493,305	13.9	204,260	6.1
41 Wholesale trade	305,030	4.4	197,770	5.6	107,260	3.2
44-45 Retail trade	751,200	10.9	344,480	9.7	406,720	12.2
48-49 Transportation and warehousing	307,405	4.5	225,245	6.4	82,160	2.5
51 Information and cultural industries	178,720	2.6	98,835	2.8	79,885	2.4
52 Finance and insurance	364,415	5.3	153,125	4.3	211,290	6.4
53 Real estate and rental and leasing	133,980	2.0	72,835	2.1	61,145	1.8
54 Professional, scientific, and technical services	511,020	7.4	281,420	7.9	229,600	6.9
55 Management of companies and enterprises	6,525	0.1	3,540	0.1	2,990	0.1
56 Administrative and support, waste management and remediation services	309,630	4.5	172,475	4.9	137,155	4.1
61 Educational services	499,690	7.3	162,765	4.6	336,925	10.1
62 Health care and social assistance	692,130	10.1	120,165	3.4	571,965	17.2
71 Arts, entertainment, and recreation	144,065	2.1	75,035	2.1	69,030	2.1
72 Accommodation and food services	417,675	6.1	177,240	5.0	240,430	7.2
81 Other services (except public administration)	296,340	4.3	133,795	3.8	162,550	4.9
91 Public administration	458,665	6.7	236,655	6.7	222,015	6.7
All industries	6,680,250	97.3	3,452,795	97.5	3,227,450	97.1
Industry—not applicable	184,735	2.7	89,230	2.5	95,510	2.9
Total labour force population aged 15 years and over by industry	6,864,985	100.0	3,542,030	100.0	3,322,960	100.0

Table 22 Labour Force Activity by Gender, Population Aged 15 and Over, Saskatchewan, 2011

	Total population		Ma	ale	Female		
	Number Per cent Number Per cent		Number Per cent				
Employed	529,100	65.1	282,565	70.5	246,530	59.9	
Unemployed	33,210	4.1	17,850	4.5	15,355	3.7	
Not in labour force	250,190	30.8	100,545	25.1	149,650	36.4	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 19

Labour Force Activity by Gender, Population Aged 15 and Over, Saskatchewan, 2011

(per cent)



Labour Force Participation by NOC, Population Aged 15 and Over, Saskatchewan, 2011

	Total population		Ма	ale	Female		
-	Number	Per cent	Number	Per cent	Number	Per cent	
Management	81,235	14.4	54,370	18.1	26,860	10.3	
Business, finance, and administration	80,645	14.3	20,530	6.8	60,110	23.0	
Natural and applied sciences	26,280	4.7	20,525	6.8	5,750	2.2	
Health	38,800	6.9	6,145	2.0	32,660	12.5	
Education, law, and government	62,310	11.1	20,645	6.9	41,665	15.9	
Arts, culture, and recreation	10,000	1.8	3,950	1.3	6,045	2.3	
Sales and service	118,755	21.1	47,770	15.9	70,980	27.1	
Trades	94,870	16.9	89,055	29.6	5,810	2.2	
Natural resources	26,390	4.7	20,960	7.0	5,430	2.1	
Manufacturing and utilities	15,445	2.7	12,760	4.2	2,685	1.0	
Not applicable	7,595	1.4	3,700	1.2	3,895	1.5	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 20

Labour Force Participation by NOC, Population Aged 15 and Over, Saskatchewan, 2011

(number, 000s)



Table 24 Labour Force Participation by NAICS, Population Aged 15 and Over, Saskatchewan, 2011

	Total wo	orkforce	Ма	le	Fem	Female		
	Number	Per cent	Number	Per cent	Number	Per cent		
11 Agriculture, forestry, fishing, and hunting	51,360	9.1	37,210	12.4	14,150	5.4		
21 Mining, quarrying, and oil and gas extraction	22,985	4.1	19,940	6.6	3,045	1.2		
22 Utilities	5,330	0.9	3,810	1.3	1,520	0.6		
23 Construction	42,975	7.6	38,140	12.7	4,830	1.8		
31-33 Manufacturing	26,460	4.7	21,000	7.0	5,460	2.1		
41 Wholesale trade	21,135	3.8	15,950	5.3	5,185	2.0		
44-45 Retail trade	60,940	10.8	28,545	9.5	32,395	12.4		
48-49 Transportation and warehousing	25,390	4.5	19,460	6.5	5,930	2.3		
51 Information and cultural industries	10,900	1.9	5,390	1.8	5,510	2.1		
52 Finance and insurance	21,120	3.8	6,425	2.1	14,695	5.6		
53 Real estate and rental and leasing	7,445	1.3	4,140	1.4	3,305	1.3		
54 Professional, scientific, and technical services	23,520	4.2	12,180	4.1	11,345	4.3		
55 Management of companies and enterprises	575	0.1	240	0.1	330	0.1		
56 Administrative and support, waste management and remediation services	13,425	2.4	7,390	2.5	6,035	2.3		
61 Educational services	43,995	7.8	14,600	4.9	29,400	11.2		
62 Health care and social assistance	65,450	11.6	9,635	3.2	55,815	21.3		
71 Arts, entertainment, and recreation	9,825	1.7	5,035	1.7	4,795	1.8		
72 Accommodation and food services	34,085	6.1	12,620	4.2	21,460	8.2		
81 Other services (except public administration)	25,445	4.5	12,695	4.2	12,750	4.9		
91 Public administration	42,335	7.5	22,310	7.4	20,025	7.6		
All industries	554,715	98.6	296,720	98.8	257,990	98.5		
Industry—not applicable	7,590	1.3	3,700	1.2	3,895	1.5		
Total labour force population aged 15 years and over by industry	562,310	100.0	300,420	100.0	261,885	100.0		

Table 25Labour Force Activity by Gender, Population Aged 15 and Over, Nunavut, 2011

	Total population		Ma	ale	Female		
	Number Per cent Number Per cent		Number	Per cent			
Employed	11,070	52.1	5,710	52.3	5,360	51.8	
Unemployed	2,415	11.4	1,455	13.3	965	9.3	
Not in labour force	7,770	36.6	3,745	34.3	4,020	38.9	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 21

Labour Force Activity by Gender, Population Aged 15 and Over, Nunavut, 2011

(per cent)



Labour Force Participation by NOC, Population Aged 15 and Over, Nunavut, 2011

	Total population		Ma	ale	Female		
-	Number	Per cent	Number	Per cent	Number	Per cent	
Management	1,260	9.3	750	10.5	505	8.0	
Business, finance, and administration	1,980	14.7	555	7.7	1,425	22.5	
Natural and applied sciences	440	3.3	345	4.8	95	1.5	
Health	355	2.6	70	1.0	290	4.6	
Education, law, and government	2,590	19.2	885	12.4	1,705	27.0	
Arts, culture, and recreation	475	3.5	255	3.6	220	3.5	
Sales and service	2,910	21.6	1,300	18.1	1,610	25.5	
Trades	2,360	17.5	2,275	31.8	80	1.3	
Natural resources	220	1.6	210	2.9	10	0.2	
Manufacturing and utilities	190	1.4	145	2.0	35	0.6	
Not applicable	710	5.3	360	5.0	345	5.5	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 22

Labour Force Participation by NOC, Population Aged 15 and Over, Nunavut, 2011

(number, 000s)



Table 27Labour Force Participation by NAICS, Population Aged 15 and Over, Nunavut, 2011

	Total workforce		M	ale	Female		
	Number	Per cent	Number	Per cent	Number	Per cent	
11 Agriculture, forestry, fishing, and hunting	75	0.6	65	0.9	10	0.2	
21 Mining, quarrying, and oil and gas extraction	370	2.7	290	4.1	80	1.3	
22 Utilities	230	1.7	205	2.9	25	0.4	
23 Construction	930	6.9	855	11.9	70	1.1	
31–33 Manufacturing	120	0.9	80	1.1	40	0.6	
41 Wholesale trade	110	0.8	65	0.9	45	0.7	
44-45 Retail trade	1,495	11.1	675	9.4	820	13.0	
48-49 Transportation and warehousing	750	5.6	570	8.0	185	2.9	
51 Information and cultural industries	190	1.4	115	1.6	75	1.2	
52 Finance and insurance	90	0.7	30	0.4	60	0.9	
53 Real estate and rental and leasing	445	3.3	330	4.6	120	1.9	
54 Professional, scientific, and technical services	210	1.6	110	1.5	100	1.6	
55 Management of companies and enterprises	10	0.1	0	0.0	0	0.0	
56 Administrative and support, waste management and remediation services	305	2.3	180	2.5	120	1.9	
61 Educational services	1,240	9.2	355	5.0	880	13.9	
62 Health care and social assistance	930	6.9	170	2.4	755	11.9	
71 Arts, entertainment, and recreation	235	1.7	165	2.3	65	1.0	
72 Accommodation and food services	520	3.9	185	2.6	335	5.3	
81 Other services (except public administration)	335	2.5	185	2.6	145	2.3	
91 Public administration	4,185	31.0	2,150	30.0	2,035	32.2	
All industries	12,780	94.8	6,800	95.0	5,980	94.5	
Industry—not applicable	705	5.2	360	5.0	345	5.5	
Total labour force population aged 15 years and over by industry	13,485	100.0	7,160	100.0	6,325	100.0	

Table 28Labour Force Activity by Gender, Population Aged 15 and Over, Yukon, 2011

	Total population		Ma	ale	Female		
	Number Per cent Number Per cent		Number	Per cent			
Employed	19,165	69.7	9,675	70.3	9,485	69.1	
Unemployed	2,085	7.6	1,135	8.3	950	6.9	
Not in labour force	6,250	22.7	2,945 21.4		3,300	24.0	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 23

Labour Force Activity by Gender, Population Aged 15 and Over, Yukon, 2011

(per cent)



Table 29Labour Force Participation by NOC, Population Aged 15 and Over, Yukon, 2011

	Total population		Ma	ale	Female		
-	Number	Per cent	Number	Per cent	Number	Per cent	
Management	2,515	11.8	1,375	12.7	1,135	10.9	
Business, finance, and administration	3,640	17.1	825	7.6	2,815	27.0	
Natural and applied sciences	1,625	7.6	1,255	11.6	370	3.5	
Health	940	4.4	175	1.6	760	7.3	
Education, law, and government	3,010	14.2	975	9.0	2,035	19.5	
Arts, culture, and recreation	730	3.4	225	2.1	500	4.8	
Sales and service	4,060	19.1	1,740	16.1	2,320	22.2	
Trades	3,680	17.3	3,430	31.7	250	2.4	
Natural resources	390	1.8	335	3.1	55	0.5	
Manufacturing and utilities	290	1.4	260	2.4	30	0.3	
Not applicable	370	1.7	210	1.9	160	1.5	

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 24

Labour Force Participation by NOC, Population Aged 15 and Over, Yukon, 2011

(number, 000s)



Table 30Labour Force Participation by NAICS, Population Aged 15 and Over, Yukon, 2011

	Total workforce		M	ale	Female		
	Number	Per cent	Number	Per cent	Number	Per cent	
11 Agriculture, forestry, fishing, and hunting	145	0.7	100	0.9	50	0.5	
21 Mining, quarrying, and oil and gas extraction	705	3.3	555	5.1	150	1.4	
22 Utilities	200	0.9	195	1.8	0	0.0	
23 Construction	1,935	9.1	1,700	15.7	235	2.3	
31-33 Manufacturing	330	1.6	300	2.8	30	0.3	
41 Wholesale trade	235	1.1	185	1.7	50	0.5	
44-45 Retail trade	2,265	10.7	1,190	11.0	1,080	10.3	
48-49 Transportation and warehousing	845	4.0	605	5.6	240	2.3	
51 Information and cultural industries	590	2.8	280	2.6	310	3.0	
52 Finance and insurance	255	1.2	65	0.6	190	1.8	
53 Real estate and rental and leasing	180	0.8	125	1.2	60	0.6	
54 Professional, scientific, and technical services	1,045	4.9	520	4.8	525	5.0	
55 Management of companies and enterprises	15	0.1	0	0.0	10	0.1	
56 Administrative and support, waste management and remediation services	600	2.8	330	3.1	265	2.5	
61 Educational services	1,190	5.6	310	2.9	880	8.4	
62 Health care and social assistance	1,385	6.5	255	2.4	1,130	10.8	
71 Arts, entertainment, and recreation	500	2.4	180	1.7	320	3.1	
72 Accommodation and food services	1,460	6.9	605	5.6	855	8.2	
81 Other services (except public administration)	960	4.5	380	3.5	580	5.6	
91 Public administration	6,035	28.4	2,720	25.2	3,315	31.8	
All industries	20,880	98.3	10,605	98.1	10,275	98.4	
Industry—not applicable	370	1.7	210	1.9	160	1.5	
Total labour force population aged 15 years and over by industry	21,245	100.0	10,815	100.0	10,440	100.0	

APPENDIX E Government of the Northwest Territories Profile

GNWT Employee Demographics

Table 1

GNWT Employees by Age, 2004–14

(number)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Under 25 years	95	130	132	118	99	93	93	88	90	101	110
25 to 34 years	906	978	1,028	1,034	992	1,003	1,065	1,022	1,017	1,011	1,086
35 to 44 years	1,185	1,258	1,281	1,277	1,220	1,179	1,194	1,177	1,183	1,224	1,357
45 to 54 years	1,270	1,371	1,428	1,472	1,430	1,469	1,468	1,432	1,404	1,424	1,459
55 to 64 years	562	662	716	775	781	805	849	874	924	962	980
65 to 74 years	31	36	38	47	49	64	69	78	97	121	147
75 years and over	0	1	0	2	1	2	4	4	4	2	2

Source: Government of the Northwest Territories, Department of Human Resources.





Source: Government of the Northwest Territories, Department of Human Resources.

Chart 2 GNWT Female Employees by Age, 2004–14

(number, 000s)



Source: Government of the Northwest Territories, Department of Human Resources.

Find Conference Board research at www.e-library.ca
Chart 3 GNWT Employee Distribution by Sex, 2004–14 (number, 000s) Male Female

Source: Government of the Northwest Territories, Department of Human Resources.

Table 2GNWT Employee Distribution by Ethnicity, 2004–14

	Indigenous	Aboriginal	Indigenous n	on-Aboriginal	Non-Ind	igenous	Total
	Number	Per cent	Number	Per cent	Number	Per cent	(number)
2004	1,296	32.0	533	13.2	2,220	54.8	4,049
2005	1,365	30.8	506	11.4	2,565	57.8	4,436
2006	1,445	31.3	535	11.6	2,643	57.2	4,623
2007	1,475	31.2	547	11.6	2,703	57.2	4,725
2008	1,421	31.1	535	11.7	2,616	57.2	4,572
2009	1,431	31.0	555	12.0	2,629	57.0	4,615
2010	1,508	31.8	602	12.7	2,632	55.5	4,742
2011	1,493	31.9	596	12.7	2,586	55.3	4,675
2012	1,502	31.8	623	13.2	2,594	55.0	4,719
2013	1,559	32.2	666	13.7	2,620	54.1	4,845
2014	1,598	31.1	671	13.1	2,872	55.9	5,141

Chart 4

GNWT Employee Distribution by Ethnicity, 2004–14 (number, 000s)



Source: Government of the Northwest Territories, Department of Human Resources.

Table 3GNWT Employment by Location, 2004–14

	Headqu North S Regi	arters Slave on	Beaufort Regi	-Delta on	Dehc Regi	ho on	Sah Regi	tu on	South South	Slave on	Tłcł Regi	no on	Totals
Year	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number
2004	2,009	49.6	652	16.1	319	7.9	185	4.6	718	17.7	166	4.1	4,049
2005	2,199	49.6	685	15.4	354	8.0	198	4.5	798	18.0	202	4.6	4,436
2006	2,278	49.3	723	15.6	354	7.7	211	4.6	835	18.1	222	4.8	4,623
2007	2,291	48.5	721	15.3	375	7.9	248	5.2	860	18.2	230	4.9	4,725
2008	2,193	48.0	707	15.5	375	8.2	243	5.3	839	18.4	215	4.7	4,572
2009	2,232	48.4	718	15.6	373	8.1	242	5.2	833	18.0	217	4.7	4,615
2010	2,314	48.8	734	15.5	378	8.0	256	5.4	836	17.6	224	4.7	4,742
2011	2,323	49.7	691	14.8	379	8.1	242	5.2	822	17.6	218	4.7	4,675
2012	2,393	50.7	662	14.0	365	7.7	253	5.4	818	17.3	228	4.8	4,719
2013	2,452	50.6	683	14.1	376	7.8	255	5.3	842	17.4	237	4.9	4,845
2014	2,683	52.2	719	14.0	371	7.2	261	5.1	851	16.6	256	5.0	5,141

Chart 5

GNWT Employment by Location and Percentage of Total GNWT Employment Excluding Head Office, 2004–14

(number, 000s, left; per cent, right)



Source: Government of the Northwest Territories, Department of Human Resources.

Chart 6

GNWT Employee Distribution by National Occupational Classification System Skill Level, 2004–14

(number, 000s, left; per cent, right)



Source: Government of the Northwest Territories, Department of Human Resources.

Table 4GNWT Employee Distribution by NOC Skill Level, Managers, 2004–14

	Indig Abo emp	jenous riginal loyees	Indig non-Al emp	jenous boriginal loyees	O emp	ther loyees	Total number of	Per cent Indigenous Aboriginal	Per cent Indigenous non-Aboriginal	Per cent other employees.
Year	Male	Female	Male	Female	Male	Female	managers	managers	managers	managers
2004	41	36	52	31	189	93	442	17.4	18.8	63.8
2005	42	30	48	29	181	96	426	16.9	18.1	65.0
2006	45	36	56	23	187	111	458	17.7	17.2	65.1
2007	42	37	52	25	188	126	470	16.8	16.4	66.8
2008	42	38	53	29	180	129	471	17.0	17.4	65.6
2009	46	61	61	34	199	140	541	19.8	17.6	62.7
2010	49	62	65	43	191	141	551	20.1	19.6	60.3
2011	50	71	70	48	177	142	558	21.7	21.1	57.2
2012	53	73	79	51	172	147	575	21.9	22.6	55.5
2013	55	80	81	53	174	166	609	22.2	22.0	55.8
2014	65	81	79	62	203	183	673	21.7	21.0	57.4

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 7

GNWT Distribution of "Managers Skill Level" Employees by Sex and Ethnicity, 2004–14

(number, left; per cent, right)



Source: Government of the Northwest Territories, Department of Human Resources.

Table 5GNWT Employee Distribution by NOC Skill Level, Professionals, 2004–14

	Indigenous Aboriginal employees r Male Female	ndigenous Indigenous Aboriginal non-Aboriginal employees employees ale Female Male Female		Other employees		Total number of	Per cent Indigenous Aboriginal	Per cent Indigenous non-Aboriginal	Per cent other employees,	
Year	Male	Female	Male	Female	Male	Female	professionals	professionals	professionals	professionals
2004	41	36	52	31	189	93	442	17.4	18.8	63.8
2005	42	30	48	29	181	96	426	16.9	18.1	65.0
2006	45	36	56	23	187	111	458	17.7	17.2	65.1
2007	42	37	52	25	188	126	470	16.8	16.4	66.8
2008	42	38	53	29	180	129	471	17.0	17.4	65.6
2009	46	61	61	34	199	140	541	19.8	17.6	62.7
2010	49	62	65	43	191	141	551	20.1	19.6	60.3
2011	50	71	70	48	177	142	558	21.7	21.1	57.2
2012	53	73	79	51	172	147	575	21.9	22.6	55.5
2013	55	80	81	53	174	166	609	22.2	22.0	55.8
2014	65	81	79	62	203	183	673	21.7	21.0	57.4

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 8

GNWT Distribution of "Professionals Skill Level" Employees by Sex and Ethnicity, 2004–14

(number, 000s, left; per cent, right)



Table 6 GNWT Employee Distribution by NOC Skill Level, College/Apprenticeship, 2004–14

	Indiç Abo emp	genous riginal loyees	Indig non-Al emp	genous boriginal loyees	O emp	ther loyees	Total number	Per cent Indigenous Aboriginal	Per cent Indigenous non-Aboriginal	Per cent other employees,
Year	Male	Female	Male	Female	Male	Female	apprenticeship	apprenticeship	apprenticeship	apprenticeship
2004	122	210	61	86	164	289	932	35.6	15.8	48.6
2005	129	227	60	72	187	334	1,009	35.3	13.1	51.6
2006	130	241	56	75	196	322	1,020	36.4	12.8	50.8
2007	154	253	61	80	197	314	1,059	38.4	13.3	48.3
2008	144	244	56	73	179	310	1,006	38.6	12.8	48.6
2009	156	232	59	75	179	312	1,013	38.3	13.2	48.5
2010	165	248	63	89	188	284	1,037	39.8	14.7	45.5
2011	161	248	59	77	189	280	1,014	40.3	13.4	46.3
2012	166	238	60	80	187	281	1,012	39.9	13.8	46.2
2013	169	273	62	83	187	281	1,055	41.9	13.7	44.4
2014	166	276	63	78	205	306	1,094	40.4	12.9	46.7

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 9 GNWT Distribution of "College/Apprenticeship Skill Level" Employees by Sex and Ethnicity, 2004–14

(number, 000s, left; per cent, right)



Table 7GNWT Employee Distribution by NOC Skill Level, Occupational Training, 2004–14

	Indig Abo emp	jenous riginal loyees	Indig non-Al emp	jenous boriginal loyees	O emp	ther loyees	Total number of	Per cent Indigenous Aboriginal	Per cent Indigenous non-Aboriginal	Per cent other employees,
Year	Male	Female	Male	Female	Male	Female	training	training	training	training
2004	152	327	39	61	77	217	873	54.9	11.5	33.7
2005	169	368	43	69	140	330	1,119	48.0	10.0	42.0
2006	172	384	45	72	138	346	1,157	48.1	10.1	41.8
2007	171	376	47	76	140	340	1,150	47.6	10.7	41.7
2008	158	362	47	76	138	342	1,123	46.3	11.0	42.7
2009	148	374	50	73	123	342	1,110	47.0	11.1	41.9
2010	162	393	50	77	132	348	1,162	47.8	10.9	41.3
2011	155	375	47	79	129	318	1,103	48.1	11.4	40.5
2012	155	372	48	81	145	298	1,099	48.0	11.7	40.3
2013	150	385	47	88	150	309	1,129	47.4	12.0	40.7
2014	151	399	47	88	162	327	1,174	46.8	11.5	41.7

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 10 GNWT Distribution of "Occupational Training Skill Level" Employees by Sex and Ethnicity, 2004–14

(number, 000s, left; per cent, right)



Table 8GNWT Employee Distribution by NOC Skill Level, On-the-Job Training, 2004–14

	Indigenous Aboriginal employees ar Male Female	Indigenous Indigenous Aboriginal non-Aboriginal employees employees Male Female		Other employees		Total number of college/	Per cent Indigenous r Aboriginal college/ pip apprenticeship	Per cent Indigenous non-Aboriginal	Per cent other al employees, college/	
Year	Male	Female	Male	Female	Male	Female	apprenticeship	apprenticeship	apprenticeship	apprenticeship
2004	37	40	1	1	5	7	91	84.6	2.2	13.2
2005	40	38	1	1	13	15	108	72.2	1.9	25.9
2006	41	51	1	1	14	13	121	76.0	1.7	22.3
2007	38	55	1	1	11	11	117	79.5	1.7	18.8
2008	33	50	1	3	10	12	109	76.1	3.7	20.2
2009	34	51	1	1	12	17	116	73.3	1.7	25.0
2010	31	56	1	1	8	12	109	79.8	1.8	18.3
2011	32	56	1	2	7	11	109	80.7	2.8	16.5
2012	30	64	4	1	6	10	115	81.7	4.3	13.9
2013	32	59	3	1	8	9	112	81.3	3.6	15.2
2014	33	54	2	1	10	9	109	79.8	2.8	17.4

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 11 GNWT Distribution of "On-the-Job Training Skill Level" Employees by Sex and Ethnicity, 2004–14

(number, left; per cent, right)



GNWT Employee Distribution by Occupation

Table 9

GNWT Employee Distribution by Occupational Category, Business, Finance, and Administration (BFA), 2004–14

	Indigenous Aboriginal employees Year Male Femal	genous riginal loyees	Indigenous non-Aboriginal employees Male Female		Other employees		Total number _ of BFA employees	Per cent er Indigenous Aboriginal BFA s employees	Per cent Indigenous non-Aboriginal	Per cent other BFA
Year	Male	Female	Male	Female	Male	Female	employees	employees	BFA employees	employees
2004	38	342	38	147	56	341	962	39.5	19.2	41.3
2005	38	371	31	134	66	411	1,051	38.9	15.7	45.4
2006	40	381	36	137	71	412	1,077	39.1	16.1	44.8
2007	38	362	36	138	75	391	1,040	38.5	16.7	44.8
2008	40	349	35	138	65	374	1,001	38.9	17.3	43.9
2009	39	331	36	133	66	384	989	37.4	17.1	45.5
2010	34	366	40	137	67	381	1,025	39.0	17.3	43.7
2011	31	364	35	132	72	366	1,000	39.5	16.7	43.8
2012	38	375	37	147	70	362	1,029	40.1	17.9	42.0
2013	42	396	40	151	77	355	1,061	41.3	18.0	40.7
2014	42	405	43	143	75	389	1,097	40.7	17.0	42.3

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 12

GNWT Distribution of "Business, Finance, and Administration" Employees by Sex and Ethnicity, 2004–14

(number, 000s, left; per cent, right)



Source: Government of the Northwest Territories, Department of Human Resources.

Table 10 GNWT Employee Distribution by Occupational Category, Natural and Applied Sciences (NAS), 2004–14

	Indigenous Aboriginal employees Male Female		Indigenous Indigenous Aboriginal non-Aboriginal employees employees lale Female	Other employees		Total number _ of NAS employees	Per cent Indigenous Aboriginal NAS	Per cent Indigenous non-Aboriginal	Per cent other NAS	
Year	Male	Female	Male	Female	Male	Female	employees	employees	NAS employees	employees
2004	57	14	42	14	167	45	339	20.9	16.5	62.5
2005	61	15	50	11	182	48	367	20.7	16.6	62.7
2006	55	18	53	14	192	49	381	19.2	17.6	63.3
2007	69	22	53	12	196	44	396	23.0	16.4	60.6
2008	68	20	50	11	176	53	378	23.3	16.1	60.6
2009	74	17	49	15	177	51	383	23.8	16.7	59.5
2010	76	19	54	18	186	42	395	24.1	18.2	57.7
2011	72	14	52	18	186	43	385	22.3	18.2	59.5
2012	70	17	47	16	182	45	377	23.1	16.7	60.2
2013	71	20	50	19	187	46	393	23.2	17.6	59.3
2014	70	21	54	18	218	63	444	20.5	16.2	63.3

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 13

GNWT Distribution of "Natural and Applied Sciences" Employees by Sex and Ethnicity, 2004–14

(number, left; per cent, right)



Source: Government of the Northawest Territories, Department of Human Resources.

Table 11GNWT Employee Distribution by Occupational Category, Health, 2004–14

	Indigenous Aboriginal employees Male Female	Indigenous Indigenous Aboriginal non-Aboriginal employees employees Male Female		Other employees		Total number of health	Per cent Indigenous Aboriginal	Per cent Indigenous non-Aboriginal	Per cent	
Year	Male	Female	Male	Female	Male	Female	employees	employees	employees	employees
2004	5	79	6	28	38	346	502	16.7	6.8	76.5
2005	5	84	7	28	47	418	589	15.1	5.9	78.9
2006	5	93	6	34	47	422	607	16.1	6.6	77.3
2007	4	100	7	33	47	459	650	16.0	6.2	77.8
2008	6	94	6	31	54	461	652	15.3	5.7	79.0
2009	6	96	6	28	45	477	658	15.5	5.2	79.3
2010	8	107	7	28	51	490	691	16.6	5.1	78.3
2011	7	105	7	28	48	490	685	16.4	5.1	78.5
2012	6	109	5	30	55	497	702	16.4	5.0	78.6
2013	7	121	7	44	60	487	726	17.6	7.0	75.3
2014	8	119	7	45	70	519	768	16.5	6.8	76.7

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 14 GNWT Distribution of "Health" Employees by Sex and Ethnicity, 2004–14

(number, left; per cent, right)



Source: Government of the Northwest Territories, Department of Human Resources.

GNWT Employee Distribution by Occupational Category, Social Science, Education, Government Service, and Religion (SSEGR), 2004–14

	Indigenous Aboriginal employees r Male Female	Indigenous Indigenous Aboriginal non-Aboriginal employees employees Male Female		Other employees		Total number of SSEGR	Per cent Indigenous Aboriginal SSEGR employees	Per cent Indigenous non-Aboriginal	Per cent other SSEGR	
Year	Male	Female	Male	Female	Male	Female	employees	employees	employees	employees
2004	56	249	49	60	280	447	1,141	26.7	9.6	63.7
2005	56	233	39	55	295	488	1,166	24.8	8.1	67.2
2006	62	250	41	62	306	518	1,239	25.2	8.3	66.5
2007	66	259	43	66	322	530	1,286	25.3	8.5	66.3
2008	62	262	41	57	307	485	1,214	26.7	8.1	65.2
2009	62	261	42	62	277	503	1,207	26.8	8.6	64.6
2010	63	257	42	67	277	496	1,202	26.6	9.1	64.3
2011	68	255	41	71	282	492	1,209	26.7	9.3	64.0
2012	66	244	45	72	279	497	1,203	25.8	9.7	64.5
2013	69	250	44	77	278	492	1,210	26.4	10.0	63.6
2014	68	268	40	76	293	540	1,285	26.1	9.0	64.8

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 15





Source: Government of the Northawest Territories, Department of Human Resources.

GNWT Employee Distribution by Occupational Category, Arts, Culture, Recreation, and Sport (ACRS), 2004–14

	Indigenous Aboriginal employees Male Female	IndigenousIndigenousAboriginalnon-AboriginalemployeesemployeesMaleFemale		Other employees		Total number	Per cent Indigenous Aboriginal	Per cent Indigenous non-Aboriginal	I Per cent other ACRS employees	
Year	Male	Female	Male	Female	Male	Female	employees	employees	employees	employees
2004	2	5	3	9	11	29	59	11.9	20.3	67.8
2005	1	4	4	8	13	32	62	8.1	19.4	72.6
2006	1	4	5	10	9	34	63	7.9	23.8	68.3
2007	2	5	4	11	8	32	62	11.3	24.2	64.5
2008	2	6	4	11	10	32	65	12.3	23.1	64.6
2009	1	7	5	7	8	25	53	15.1	22.6	62.3
2010	1	9	5	11	7	27	60	16.7	26.7	56.7
2011	1	8	4	12	6	28	59	15.3	27.1	57.6
2012		8	3	11	7	27	56	14.3	25.0	60.7
2013	1	7	3	17	13	29	70	11.4	28.6	60.0
2014	1	8	3	18	14	28	72	12.5	29.2	58.3

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 16

GNWT Distribution of "Arts, Culture, Recreation, and Sport" Employees by Sex and Ethnicity, 2004–14

(number, left; per cent, right)



Table 14 GNWT Employee Distribution by Occupational Category, Sales and Service (SS), 2004–14

	Indigenous Aboriginal employees		Indigenous non-Aboriginal employees		Other employees		Total number of SS	Per cent Indigenous Aboriginal SS	Per cent Indigenous non-Aboriginal	Per cent other
Year	Male	Female	Male	Female	Male	Female	employees	employees	SS employees	SS employees
2004	83	149	26	9	62	59	388	59.8	9.0	31.2
2005	105	182	31	12	120	112	562	51.1	7.7	41.3
2006	104	202	31	10	122	109	578	52.9	7.1	40.0
2007	103	212	31	14	119	110	589	53.5	7.6	38.9
2008	92	197	29	17	118	115	568	50.9	8.1	41.0
2009	81	202	32	19	105	115	554	51.1	9.2	39.7
2010	92	207	34	23	110	110	576	51.9	9.9	38.2
2011	84	202	30	20	104	99	539	53.1	9.3	37.7
2012	89	198	37	17	115	86	542	53.0	10.0	37.1
2013	89	198	32	20	118	90	547	52.5	9.5	38.0
2014	86	200	32	26	136	93	573	49.9	10.1	40.0

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 17

GNWT Distribution of "Sales and Service" Employees by Sex and Ethnicity, 2004–14

(number, left; per cent, right)



GNWT Employee Distribution by Occupational Category, Trades, Transport, and Equipment Operation (TTEO), 2004–14

	Indigenous Aboriginal employees Male Female		Indigenous non-Aboriginal employees		Other employees		Total number	Per cent Indigenous Aboriginal TTEO	Per cent Indigenous non-Aboriginal TTEO	Per cent
Year	Male	Female	Male	Female	Male	Female	employees	employees	employees	employees
2004	83	2	19		50	2	156	54.5	12.2	33.3
2005	83	2	19		50	3	157	54.1	12.1	33.8
2006	90	2	17		48	3	160	57.5	10.6	31.9
2007	101	2	21	1	51	3	179	57.5	12.3	30.2
2008	92	4	22	1	54	2	175	54.9	13.1	32.0
2009	104	3	25	1	51	3	187	57.2	13.9	28.9
2010	109	2	26	2	50	2	191	58.1	14.7	27.2
2011	110	1	26	2	46	1	186	59.7	15.1	25.3
2012	109	2	24	2	48	1	186	59.7	14.0	26.3
2013	108	3	25	2	42	2	182	61.0	14.8	24.2
2014	111	4	22	2	45	1	185	62.2	13.0	24.9

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 18

GNWT Employee Distribution by Occupational Category, "Trades, Transport, and Equipment Operation," 2004–14

(number, 000s, left; per cent, right)



Source: Government of the Northwest Territories, Department of Human Resources.

Table 16 GNWT Employee Distribution by Occupational Category, Primary Industry (PI), 2004–14

	Indigenous Aboriginal employees		Indigenous non-Aboriginal employees		Other employees		Total number of Pl	Per cent Indigenous Aboriginal Pl	Per cent Indigenous non-Aboriginal	Per cent other	
Year	Male	Female	Male	Female	Male	Female	employees	employees	PI employees	PI employees	
2004	51	1			2		54	96.3		3.7	
2005	50	1			1		52	98.1		1.9	
2006	54	1			1		56	98.2		1.8	
2007	49	1			1		51	98.0		2.0	
2008	45	1			1		47	97.9		2.1	
2009	39	1			3		43	93.0		7.0	
2010	44	2			4		50	92.0		8.0	
2011	47	2			4		53	92.5		7.5	
2012	43	1			4		48	91.7		8.3	
2013	40	1	1		4		46	89.1	2.2	8.7	
2014	39	1	1		2		43	93.0	2.3	4.7	

Source: Government of the Northwest Territories, Department of Human Resources.

Chart 19

GNWT Distribution of "Primary Industry" Employees by Sex and Ethnicity, 2004–14

(number, left; per cent, right)



APPENDIX F Education and Skills Attainment

Highest Level of Education, N.W.T.

Table 1

NHS Demographic Profile for Youth and Young Adults, N.W.T., 2011

(per cent)

	Total population	Aboriginal identity	First Nations (North American Indian) single identity	Métis single identity	Inuk (Inuit) single identity	Non-Aboriginal identity
Target population (number)	40,800	21,160	13,350	3,250	4,335	19,640
Under 25 years	38	48	49	41	50	28
Under 20 years	30	39	40	34	40	21
Under 15 years	22	29	29	24	29	15
0 to 4 years	8	10	10	9	11	6
5 to 9 years	7	9	9	8	10	5
10 to 14 years	7	9	10	8	8	5
15 to 24 years	16	19	19	17	21	13
15 to 19 years	8	10	10	9	11	6
20 to 24 years	8	9	9	8	10	7

Sources: Statistics Canada, NHS Profile, 2011; 2011 National Household Survey.

Chart 1 Highest Level of Education, Population Aged 15 and Over, N.W.T., 2014





Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 2



(per cent)



Note: The high school graduation rate is found following the GNWT methodology of dividing the number of graduates each year by the number of 18-year-olds in the N.W.T. during the same year. Source: Northwest Territories Bureau of Statistics.

Chart 3 Highest Level of Education, Male Population Aged 15 and Over,

N.W.T., 2014





Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 4

Highest Level of Education, Female Population Aged 15 and Over, N.W.T., 2014

(per cent)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Table 2Calculating Gender Gap in Post-Secondary Education, Excluding Apprenticeships,Population Aged 25 to 64, Territories, 2011

	Α	В	С	D	E
	Ratio of men to women who have completed tertiary education	Ratio of men to women in the population	Gender index (A÷B)	Difference from 1 (1–C)	Gender gap (absolute value of D)
Yukon					
Total population	0.71	0.94	0.75	0.25	0.25
Non-Aboriginal	0.74	0.98	0.76	0.24	0.24
Aboriginal	0.46	0.80	0.57	0.43	0.43
Northwest Territories					
Total population	0.74	1.02	0.73	0.27	0.27
Non-Aboriginal	0.80	1.11	0.72	0.28	0.28
Aboriginal	0.53	0.90	0.59	0.41	0.41
Nunavut					
Total population	0.78	1.04	0.75	0.25	0.25
Non-Aboriginal	0.82	1.23	0.67	0.33	0.33
Aboriginal	0.62	0.99	0.63	0.37	0.37

Source: Statistics Canada, 2011 National Household Survey.

Table 3

Calculating Gender Gap in Post-Secondary Education, Including Apprenticeships, Population Aged 25 to 64, Territories, 2011

_	Α	В	С	D	E
	Ratio of men to women who have completed tertiary education	Ratio of men to women in the population	Gender index (A÷B)	Difference from 1 (1–C)	Gender gap (absolute value of D)
Yukon					
Total population	0.99	1.02	0.98	0.02	0.02
Non-Aboriginal	0.99	1.11	0.90	0.10	0.10
Aboriginal	0.91	0.90	1.01	-0.01	0.01
Northwest Territories					
Total population	1.09	1.04	1.04	-0.04	0.04
Non-Aboriginal	0.93	1.23	0.76	0.24	0.24
Aboriginal	1.13	0.99	1.14	-0.14	0.14
Nunavut					
Total population	0.92	0.94	0.98	0.02	0.02
Non-Aboriginal	0.93	0.98	0.95	0.05	0.05
Aboriginal	0.84	0.80	1.05	-0.05	0.05

Source: Statistics Canada, 2011 National Household Survey.

Chart 5

Income Advantage by Highest Level of Education, Full-Time Employees, 2010

(\$ earned compared with individual with high school diploma)

Income advantage—post-secondary certificate (or diploma) below bachelor's level



Income advantage—university certificate, diploma, or degree at bachelor's level or above

Source: Statistics Canada, 2011 National Household Survey.

Chart 6

Income Advantage by Highest Level of Education, Full-Time Employees, 2010

(\$ earned compared with non-Aboriginal male with same level of education)



Source: Statistics Canada, 2011 National Household Survey.

Highest Degree of Education by Region

Chart 7

Highest Degree of Education, Population Aged 15 and Over, Beaufort-Delta, 2014

(per cent; number, 000s)



Source: Statistics Canada, 2011 National Household Survey.

Chart 8

Highest Degree of Education, Population Aged 15 and Over, Sahtu, 2014

(per cent; number)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 9

Highest Degree of Education, Population Aged 15 and Over, Tlicho, 2014

(per cent; number, 000s)



Source: Statistics Canada, 2011 National Household Survey.

Chart 10

Highest Degree of Education, Population Aged 15 and Over, Dehcho, 2014

(per cent; number, 000s)



Source: Northwest Territories Bureau of Statistics, 2014 NWT Community Survey.

Chart 11

Highest Degree of Education, Population Aged 15 and Over, South Slave, 2014

South Slave, 2014



Source: Statistics Canada, 2011 National Household Survey.

Chart 12

Highest Degree of Education, Population Aged 15 and Over, Yellowknife Area, 2014

(per cent; number, 000s)



Source: Statistics Canada, 2011 National Household Survey.

Programme for the International Assessment of Adult Competencies

Chart 13

Gaps in Mean PIAAC Performance Scores Between Aboriginal and Non-Aboriginal Territorial Populations (Yukon, N.W.T., and Nunavut Combined), by Educational Attainment, 2012

(gap in test scores)



Sources: Statistics Canada; Employment and Social Development Canada.

Chart 14

Inadequate Literacy Skills, Population Aged 16 to 65 With Inadequate Literacy Skills, 2012

(per cent)



Sources: Statistics Canada; Employment and Social Development Canada.

Chart 15

High-Level Literacy Skills, Population Aged 16 to 65, 2012 (per cent)



Sources: Statistics Canada; Employment and Social Development Canada.

Chart 16

Inadequate Numeracy Skills, Population Aged 16 to 65, 2012 (per cent)



Sources: Statistics Canada; Employment and Social Development Canada.

Chart 17

High-Level Numeracy Skills, Population Aged 16 to 65, 2012 (per cent)



Sources: Statistics Canada; Employment and Social Development Canada.

Chart 18





Sources: Statistics Canada; Employment and Social Development Canada.

Chart 19





Sources: Statistics Canada; Employment and Social Development Canada.

Alberta Achievement Tests—English Language Arts

Table 4

Alberta Achievement Tests, Grade 3 English Students "At or Above" Set Score, 2007-2014 (per cent)

	N.V	ν.т.	Regiona	l centres	Rest of co	mmunities	Yellow	vknife
	Non- Aboriginal population	Aboriginal population						
2007	77.4	41.2	66.7	63.2	72.7	16.4	80.6	69.2
2008	72.7	35.7	78.8	54.0	62.5	17.6	72.5	50.6
2009	75.3	31.8	74.3	53.6	50.0	17.8	78.9	41.3
2010	73.8	34.1	78.9	55.8	28.6	20.2	74.6	47.8
2011	69.1	40.7	61.5	65.1	27.3	25.9	73.2	46.9
2012	60.4	34.9	67.3	53.7	75.0	18.0	56.7	52.8
2013	57.4	31.3	63.2	49.5	54.5	17.2	56.2	44.7
2014	57.3	32.7	59.0	48.7	66.7	20.0	56.0	44.7

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 20

Alberta Achievement Tests, Grade 3 English Students "At or Above" Set Score by Ethnicity and Sex, N.W.T., 2007–14

(per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Alberta Achievement Tests, Grade 6 English Students "At or Above" Set Score, 2007–14 (per cent)

	N.V	ν.т.	Regiona	l centres	Rest of co	mmunities	Yellow	vknife
	Non- Aboriginal population	Aboriginal population						
2007	75.3	37.2	71.4	50.0	83.3	19.9	75.6	64.6
2008	72.9	30.5	81.8	54.1	77.8	15.5	70.7	34.9
2009	81.3	29.2	93.8	48.6	63.6	13.1	80.0	45.1
2010	80.6	32.7	82.1	55.4	75.0	15.1	80.4	47.4
2011	77.1	36.0	83.3	71.7	71.4	12.7	75.9	50.6
2012	72.4	28.8	81.5	54.7	75.0	16.7	70.5	28.9
2013	77.3	33.1	83.7	59.0	75.0	14.8	75.6	51.5
2014	80.4	32.2	87.0	54.3	33.3	19.9	81.4	44.4

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 21

Alberta Achievement Tests, Grade 6 English Students "At or Above" Set Score by Ethnicity and Sex, N.W.T, 2007–14

(per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Alberta Achievement Tests, Grade 9 English Students "At or Above" Set Score, 2007–14 (per cent)

	N.V	ν.т.	Regiona	l centres	Rest of co	mmunities	Yellow	vknife
	Non- Aboriginal population	Aboriginal population						
2007	73	23	74	29	46	11	75	45
2008	69	18	68	27	45	8	70	32
2009	64	23	57	33	83	10	64	41
2010	71	24	79	40	75	10	69	47
2011	72	28	7	49	82	11	71	40
2012	79	22	85	42	75	9	78	31
2013	78	27	91	47	100	11	74	46
2014	72	24	68	43	63	10	73	34

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 22

Alberta Achievement Tests, Grade 9 English Students "At or Above" Set Score by Ethnicity and Sex, N.W.T., 2007–14

(per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Alberta Achievement Tests—Math

Table 7

Alberta Achievement Tests, Grade 3 Math Students "At or Above" Set Score, 2007–14 (per cent)

	N.V	ν.т.	Regiona	l centres	Rest of co	mmunities	Yellov	vknife
	Non- Aboriginal population	Aboriginal population						
2007	87.0	47.4	85.7	58.6	90.9	27.7	87.1	76.9
2008	77.0	37.4	78.8	50.0	68.8	21.8	77.5	55.6
2009	76.3	36.5	71.4	52.6	72.2	23.4	78.2	50.7
2010	67.7	33.0	57.4	40.2	42.9	23.8	72.3	49.3
2011	73.6	39.9	76.0	59.8	27.3	24.1	76.4	53.1
2012	81.3	35.2	84.6	47.6	81.3	23.4	80.3	48.6
2013	72.8	31.3	78.9	41.1	54.5	24.1	72.6	37.6
2014	65.9	30.1	54.5	44.2	66.7	22.7	68.9	33.0

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 23

Alberta Achievement Tests, Grade 3 Math Students "At or Above" Set Score by Ethnicity and Sex, N.W.T., 2007–14

(per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Alberta Achievement Tests, Grade 6 Math Students "At or Above" Set Score, 2007–14 (per cent)

	N.V	ν.т.	Regiona	l centres	Rest of co	mmunities	Yellow	vknife
	Non- Aboriginal population	Aboriginal population						
2007	66.5	31.3	76.2	41.7	66.7	20.8	64.6	44.8
2008	63.8	29.9	69.7	53.2	77.8	13.0	61.8	39.8
2009	73.7	27.3	81.3	48.6	45.5	11.7	74.2	39.0
2010	63.8	23.4	87.2	39.1	25.0	11.0	58.8	29.1
2011	68.1	29.2	72.2	56.6	71.4	12.7	66.9	36.7
2012	64.9	28.1	74.2	49.5	62.5	18.1	63.0	27.6
2013	67.1	28.6	76.7	47.4	87.5	15.4	63.5	41.5
2014	68.8	28.9	74.1	53.4	33.3	17.0	69.2	36.1

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 24

Alberta Achievement Tests, Grade 6 Math Students "At or Above" Set Score by Ethnicity and Sex, N.W.T., 2007–14

(per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Alberta Achievement Tests, Grade 9 Math Students "At or Above" Set Score, 2007–14 (per cent)

	N.V	ν.т.	Regiona	l centres	Rest of co	mmunities	Yellow	vknife
	Non- Aboriginal population	Aboriginal population						
2007	62.3	18.2	66.7	27.7	38.5	6.0	63.1	36.6
2008	57.7	13.3	70.0	21.1	27.3	4.6	56.2	27.8
2009	50.7	14.3	52.2	21.0	50.0	6.4	50.5	25.9
2010	64.4	19.0	66.7	31.5	90.0	7.4	62.6	36.3
2011	59.9	19.3	59.5	34.0	72.7	8.2	59.1	23.5
2012	65.6	18.7	69.2	33.7	75.0	9.3	64.7	23.0
2013	67.8	20.9	81.8	38.6	80.0	8.6	64.1	31.6
2014	71.2	18.7	66.7	32.3	62.5	4.3	72.7	36.8

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 25

Alberta Achievement Tests, Grade 9 Math Students "At or Above" Set Score by Ethnicity and Sex, N.W.T., 2007–14

(per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Functional Grade Levels—English Language Arts

Table 10

Functional Grade Levels, Grade 3 English Students Performing "At Grade Level," 2007–14 (per cent)

	N.W.T.		Regional centres		Rest of communities		Yellowknife	
	Non- Aboriginal population	Aboriginal population						
2007	91.1	48.1	92.9	57.9	100.0	37.6	88.9	72.1
2008	82.7	46.6	88.9	58.1	75.0	33.7	81.5	59.0
2009	90.2	60.7	82.4	63.2	75.0	42.6	92.8	86.4
2010	84.7	52.9	84.8	50.0	100.0	48.6	84.0	66.7
2011	83.4	48.5	68.2	63.4	81.8	34.6	85.8	64.2
2012	88.0	52.8	88.9	59.2	87.5	43.1	87.8	68.0
2013	78.4	46.1	80.6	63.3	88.9	34.7	77.2	53.4
2014	85.6	50.1	82.9	70.7	83.3	37.8	86.5	58.3

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 26





Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Functional Grade Levels, Grade 6 English Students Performing "At Grade Level," 2007–14 (per cent)

	N.W.T.		Regional centres		Rest of communities		Yellowknife	
	Non- Aboriginal population	Aboriginal population						
2007	81.9	44.7	95.3	58.9	100.0	35.7	74.2	52.8
2008	87.1	46.3	92.5	71.9	100.0	29.5	85.0	52.9
2009	84.2	55.1	96.9	67.6	33.3	34.9	83.6	74.7
2010	87.2	48.1	94.6	71.0	100.0	36.6	85.0	47.6
2011	82.5	48.3	97.2	72.9	71.4	37.7	79.5	41.0
2012	86.7	51.9	93.8	72.6	87.5	43.8	85.1	47.3
2013	88.1	48.4	93.0	63.9	75.0	37.8	87.4	58.3
2014	83.7	45.4	92.9	63.9	66.7	36.1	82.6	51.9

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 27

Functional Grade Levels, Grade 6 English Students Performing "At Grade Level" by Ethnicity and Sex, N.W.T., 2007–14 (per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Functional Grade Levels, Grade 9 English Students Performing "At Grade Level," 2007–14 (per cent)

	N.W.T.		Regional centres		Rest of communities		Yellowknife	
	Non- Aboriginal population	Aboriginal population						
2007	82.9	42.9	88.1	58.4	63.6	28.1	82.9	60.7
2008	91.2	45.8	92.2	60.0	100.0	31.6	90.6	62.0
2009	89.9	51.4	92.9	64.5	100.0	29.4	89.0	75.0
2010	85.3	46.2	95.1	60.0	90.9	34.3	82.9	63.2
2011	90.7	50.9	83.3	67.6	90.9	37.2	92.8	60.9
2012	89.6	49.4	96.3	65.1	60.0	38.6	89.4	56.6
2013	86.5	49.1	97.1	74.4	100.0	34.9	83.2	55.8
2014	81.0	43.9	96.9	64.6	87.5	37.3	77.1	32.9

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 28

Functional Grade Levels, Grade 9 English Students Performing "At Grade Level" by Ethnicity and Sex, N.W.T., 2007–14 (per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.
Functional Grade Levels—Math

Table 13

Functional Grade Levels, Grade 3 Math Students Performing "At Grade Level," 2007–14 (per cent)

	N.W.T.		Regiona	l centres	Rest of communities		Yellowknife	
	Non- Aboriginal population	Aboriginal population						
2007	94.8	65.0	100.0	80.0	100.0	53.0	91.4	83.7
2008	90.2	60.7	88.9	76.0	81.3	48.9	92.0	64.0
2009	96.0	72.5	85.4	85.9	87.5	48.1	99.3	95.1
2010	97.0	68.0	100.0	84.1	100.0	58.3	95.9	75.0
2011	92.0	63.4	96.3	85.7	100.0	49.5	90.7	72.8
2012	93.7	60.8	98.0	79.3	93.8	45.5	92.3	74.7
2013	91.2	58.3	94.4	70.6	100.0	51.0	89.9	61.4
2014	85.8	64.5	87.2	84.2	91.7	55.9	84.9	66.0

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 29

Functional Grade Levels, Grade 3 Math Students Performing "At Grade Level" by Ethnicity and Sex, N.W.T., 2007–14

(per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Find Conference Board research at www.e-library.ca

Functional Grade Levels, Grade 6 Math Students Performing "At Grade Level," 2007–14 (per cent)

	N.W.T.		Regiona	l centres	Rest of communities		Yellowknife	
	Non- Aboriginal population	Aboriginal population						
2007	85.9	53.8	97.7	68.2	88.9	45.0	80.4	61.1
2008	88.8	54.3	95.0	80.3	100.0	38.6	86.3	57.6
2009	93.8	65.8	97.1	80.0	66.7	47.3	94.1	79.5
2010	90.8	53.4	97.5	73.7	100.0	45.4	88.9	48.2
2011	86.8	53.8	97.2	78.1	85.7	44.0	84.2	45.8
2012	87.8	56.5	87.5	80.0	87.5	47.3	87.8	51.4
2013	92.5	56.0	95.5	63.9	100.0	48.4	91.3	66.7
2014	84.3	47.9	96.4	69.4	50.0	37.6	83.3	54.3

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 30

Functional Grade Levels, Grade 6 Math Students Performing "At Grade Level" by Ethnicity and Sex, N.W.T., 2007–14





Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Functional Grade Levels, Grade 9 Math Students Performing "At Grade Level," 2007–14 (per cent)

	N.W.T.		Regiona	l centres	Rest of communities		Yellow	Yellowknife	
	Non- Aboriginal population	Aboriginal population							
2007	83.1	44.0	85.7	53.0	81.8	35.7	81.7	52.6	
2008	90.4	45.6	96.0	56.9	90.0	34.7	88.8	59.2	
2009	86.2	51.4	75.0	51.2	100.0	39.5	89.0	84.1	
2010	88.8	49.6	97.6	66.1	90.9	34.4	86.9	72.6	
2011	90.8	53.8	92.9	77.8	90.9	40.3	90.2	54.7	
2012	90.7	47.9	96.3	64.2	60.0	34.6	90.7	59.0	
2013	91.0	49.4	97.1	71.3	100.0	35.4	89.1	59.0	
2014	84.2	45.6	96.9	64.6	87.5	37.3	81.3	40.8	

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 31

Functional Grade Levels, Grade 9 Math Students Performing "At Grade Level" by Ethnicity and Sex, N.W.T., 2007–14 (per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Attendance Rates

Table 16

Grade 6 Attendance Rate, 2007–14

(per cent)

	N.W.T.		Regiona	l centres	Rest of communities		Yellowknife	
	Non- Aboriginal population	Aboriginal population						
2007	93.5	88.0	93.5	88.2	92.3	86.8	93.5	90.9
2008	94.2	86.1	92.1	87.9	92.3	83.1	94.8	91.6
2009	93.1	87.2	92.8	87.2	94.2	85.3	93.0	92.3
2010	93.2	86.3	93.3	89.7	89.9	83.3	93.3	90.7
2011	93.3	85.8	90.9	85.5	90.9	83.6	94.1	91.2
2012	93.6	85.2	92.3	86.1	93.3	83.4	94.0	89.1
2013	95.4	87.6	95.1	81.4	92.8	88.6	95.7	92.5
2014	94.0	86.4	92.8	82.4	89.0	85.8	94.4	91.3

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 32





Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Find Conference Board research at www.e-library.ca

Grade 9 Attendance Rate, 2007–14

(per cent)

	N.W.T.		Regiona	I centres	Rest of communities		Yellov	Yellowknife	
	Non- Aboriginal population	Aboriginal population							
2007	89.8	74.2	87.6	69.4	92.6	69.7	90.0	88.0	
2008	92.4	79.3	91.0	71.1	90.3	80.8	93.0	87.9	
2009	87.3	75.1	87.2	70.2	85.4	76.2	87.4	78.9	
2010	90.3	76.6	93.9	75.5	85.2	74.4	90.0	84.4	
2011	89.3	78.1	89.2	77.3	86.8	79.1	89.5	76.9	
2012	90.0	77.3	89.5	73.9	81.0	78.4	90.6	79.2	
2013	86.6	78.2	89.1	74.1	91.0	81.1	85.9	76.4	
2014	90.9	78.4	90.7	73.6	90.1	80.2	91.0	80.7	

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 33

Grade 9 Attendance Rate by Ethnicity and Sex, N.W.T., 2007–14 (per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Grade 12 Attendance Rate, 2007–14

(per cent)

	N.W.T.		Regiona	l centres	Rest of communities Yellow		knife	
	Non- Aboriginal population	Aboriginal population						
2007	78.8	62.1	59.1	48.0	68.4	64.5	83.1	71.7
2008	76.9	64.4	72.8	58.5	81.3	64.3	77.7	73.8
2009	75.2	62.6	64.5	57.0	87.1	62.3	77.7	71.3
2010	76.5	65.3	84.4	75.5	83.8	62.1	75.0	63.8
2011	70.1	60.1	65.3	58.5	88.7	63.1	70.9	55.9
2012	73.1	59.3	56.5	52.5	77.4	59.3	75.2	65.9
2013	72.5	52.9	67.1	64.5	60.8	45.6	73.5	55.5
2014	80.9	53.4	73.9	60.4	67.5	43.4	82.4	68.0

Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Chart 34

Grade 12 Attendance Rate by Ethnicity and Sex, N.W.T., 2007–14 (per cent)



Source: Government of the Northwest Territories, Department of Education, Culture and Employment.

Aurora College

Aurora College Enrolment by Division

Table 19

Enrolment by Division, Full-Time Equivalent Students, 2009–14

(number)

	2009–10	2010–11	2011–12	2012–13	2013–14
Developmental studies	373.4	347.2	352.7	281.5	329.1
Trades, apprenticeship, and industrial training	425.8	280.1	285.6	169.9	252.7
School of education	55.1	59.4	94.8	58.8	46.8
School of health and human services	152.7	148.0	149.8	168.0	127.9
School of business and leadership	97.1	107.8	127.1	123.8	112.5
Arts and science programs	28.5	31.2	30.0	33.2	39.1
Career development	303.9	212.1	141.6	137.6	144.5
Personal development	11.9	18.7	13.4	3.4	4.9
University partnerships	0.2	1.0	n.a.	n.a.	n.a.
Alberta North Distance Learning	2.7	5.6	n.a.	n.a.	n.a.
Total	1,451.3	1,204.5	1,195.0	976.2	1,057.5

n.a. = not applicable

Chart 35 Enrolment by Division, Full-Time Equivalent Students, 2009–14

(number)



Source: Aurora College Annual Reports.

Chart 36

Enrolment in Developmental Studies and Enrolments as a Proportion of Total Students, 2009–14

(number, left; per cent, right)



Enrolment in Trades, Apprenticeships, and Industrial Training and Enrolments as a Proportion of Total Students, 2009-14

(number, left; per cent, right)



Source: Aurora College Annual Reports.

Chart 38

Enrolment in School of Education and Enrolments as a Proportion of Total Students, 2009–14

(number, left; per cent, right)



Enrolment in School of Health and Human Services and Enrolments as a Proportion of Total Students, 2009–14

(number, left; per cent, right)



Source: Aurora College Annual Reports.

Chart 40

Enrolment in School of Business and Leadership and Enrolments as a Proportion of Total Students, 2009–14

(number, left; per cent, right)



Enrolment in Arts and Science Programs and Enrolments as a Proportion of Total Students, 2009–14

(number, left; per cent, right)



Source: Aurora College Annual Reports.

Chart 42

Enrolment in Career Development and Enrolments as a Proportion of Total Students, 2009–14

(number, left; per cent, right)



Enrolment in Personal Development and Enrolments as a Proportion of Total Students, 2009–14

(number, left; per cent, right)



Source: Aurora College Annual Reports.

Aurora College Enrolment by Campus

Table 20

Enrolment by Campus, Full-Time Equivalent Students, 2009–14

(number)

	2009–10	2010–11	2011–12	2012–13	2013–14
Aurora	442.9	390.2	333.9	221.3	235.9
Thebacha	534.0	469.8	503.7	388.7	460.5
Yellowknife North Slave	474.4	344.3	357.4	366.2	361.1
Total College	1,451.3	1,204.3	1,195.0	976.2	1,057.5

Enrolment by Campus as a Proportion of the School, Full-Time Equivalent Students, 2009–14

(per cent)



Source: Aurora College Annual Reports.

Aurora College Graduates by Program

Table 21

Aurora College Graduates by Program, 2011–14

(n	ur	nl	De	er)
· · ·	<u>u</u>		00	~,

2011–12	2012–13	2013–14
12	5	9
16	19	9
25	21	18
11	20	4
8	n.a.	11
	2011–12 12 16 25 11 8	2011-12 2012-13 12 5 16 19 25 21 11 20 8 n.a.

(continued)

Table 21 (cont'd)

Aurora College Graduates by Program, 2011–14 (number)

	2011–12	2012–13	2013–14
School of Education			
Certificate in adult education	4	1	2
Early childhood development certificate	1	5	1
Teacher education diploma	n.a.	1	4
Bachelor of Education	3	6	6
ALCIP diploma	11	n.a.	n.a.
ALCIP certificate	15	n.a.	n.a.
School of Health and Human Services			
Community health representative certificate	1	n.a.	4
Personal support worker certificate	9	30	9
Social work diploma	7	4	2
Bachelor of Science in Nursing	13	26	12
Master of Nursing	4	3	3

n.a. = not applicable

APPENDIX G Conference Board of Canada Labour Market Forecast



Source: Statistics Canada, CANSIM table 379-0030.

Employment by Industry, 2014 (000s)



Sources: Statistics Canada, CANSIM table 379-0030; The Conference Board of Canada.

Chart 3



(millions of carats)



f = forecast

Sources: Dominion Diamond Corporation, *Dominion Diamond Corporation Reports Diavik Diamond Mine Fourth Calendar Quarter Production*; "Dominion Diamond Corporation Reports Fiscal 2016 First Quarter Results"; The Conference Board of Canada.

Chart 4 Ekati Diamond Production, 2014–30

(millions of carats)



e = estimate; f = forecast Sources: Dominion Diamond Corporation; The Conference Board of Canada.

Table 1

GDP Growth Projections by Industry, Base Case

(compound annual growth rate, per cent)

Industry	Period 1: 2014–20f	Period 2: 2020f–25f	Period 3: 2025f–30f
Metal mining	30.1	-2.5	-82.9
Non-metal ore mining	12.4	-3.2	-5.0
Oil and gas and coal	-5.3	-4.8	-5.0
Construction	3.7	-1.7	-1.3
Utilities	3.3	-0.7	-1.7
Wholesale and retail trade	2.9	0.7	0.8
Finance, insurance, and real estate	2.6	1.0	0.5
Other commercial services	2.0	0.9	0.5
Education	0.2	0.4	0.8
Health care	1.9	2.1	1.9
Public administration	0.8	1.5	1.4
Total GDP	4.5	-0.8	-1.8

f = forecast

Sources: Statistics Canada; The Conference Board of Canada.

Employment Projections by Industry, Base Case (000s)

Industry	2014	2020f	2025f	2030f
Goods	3.9	4.9	4.4	3.8
Mining and oil and gas	1.6	2.0	1.9	1.5
Other primary sector	0.1	0.1	0.0	0.0
Manufacturing	0.1	0.2	0.1	0.1
Utilities	0.3	0.3	0.3	0.3
Construction	1.8	2.3	2.1	1.8
Commercial services	9.7	10.7	10.2	9.7
Wholesale and retail trade	2.8	3.2	3.1	3.1
Transportation and warehousing	1.4	1.6	1.4	1.1
Finance, insurance, and real estate	1.0	1.1	1.1	1.1
Other commercial services	4.5	4.8	4.6	4.4
Health care and education	3.9	4.3	4.4	4.4
Public administration and defence	4.6	4.6	4.7	4.7
Total employment	22.1	24.5	23.7	22.6

f = forecast

Sources: Statistics Canada, custom dataset; The Conference Board of Canada.

Chart 5

Metals and Minerals Price Index

(1972 = 100, US\$)



Source: Bank of Canada.

Chart 6 Real GDP in N.W.T. by Scenario, 2012–30

(2007 \$ billions)



f = forecast

Source: The Conference Board of Canada.

Table 3

Employment Projections by Industry, Medium Scenario (000s)

Industry	2014	2020f	2025f	2030f
Goods	3.9	5.5	5.5	4.9
Mining and oil and gas	1.6	2.1	2.0	2.3
Other primary sector	0.1	0.1	0.0	0.0
Manufacturing	0.1	0.2	0.2	0.2
Utilities	0.3	0.4	0.3	0.3
Construction	1.8	2.8	2.9	2.1
Commercial services	9.7	11.2	11.1	11.2
Wholesale and retail trade	2.8	3.6	3.7	3.9
Transportation and warehousing	1.4	1.7	1.6	1.6
Finance, insurance, and real estate	1.0	1.1	1.1	1.1
Other commercial services	4.5	4.8	4.7	4.6
Health care and education	3.9	4.5	4.6	4.7
Public administration and defence	4.6	4.8	4.8	4.9
Total employment	22.1	26.1	25.9	25.7

f = forecast

Sources: Statistics Canada, custom dataset; The Conference Board of Canada.

Real GDP in N.W.T. by Scenario, 2012-30

(2007 \$ billions)



f = forecast Source: The Conference Board of Canada.

Table 4

Employment Projections by Industry, High Scenario 5)

(0	0	0	S
· · ·				

Industry	2014	2020f	2025f	2030f
Goods	3.9	5.7	6.3	6.0
Mining and oil and gas	1.6	2.1	2.5	2.8
Other primary sector	0.1	0.1	0.0	0.0
Manufacturing	0.1	0.2	0.2	0.3
Utilities	0.3	0.4	0.4	0.4
Construction	1.8	3.0	3.2	2.5
Commercial services	9.7	11.3	11.8	12.0
Wholesale and retail trade	2.8	3.6	4.0	4.2
Transportation and warehousing	1.4	1.8	1.9	1.9
Finance, insurance, and real estate	1	1.1	1.2	1.2
Other commercial services	4.5	4.8	4.8	4.7
Health care and education	3.9	4.6	4.6	4.7
Public administration and defence	4.6	4.9	4.9	4.9
Total employment	22.1	26.5	27.7	27.6

f = forecast

Sources: Statistics Canada, custom dataset; The Conference Board of Canada.

Population Growth in Yukon, Nunavut, and N.W.T., 2003–14 (per cent)



Sources: The Conference Board of Canada; Statistics Canada, CANSIM table 051-0001.

Chart 9

Natural Rate of Increase of Population by Province and Territory, 2013

(per cent)



Sources: The Conference Board of Canada; Statistics Canada, CANSIM table 102-4505.

Out-Migration Exceeding In-Migration to N.W.T., 1992–2030

(number, 000s) f = forecast

- Out-migration to other parts of the country
- Migration to N.W.T. from other parts of the country



Sources: The Conference Board of Canada; Statistics Canada, custom dataset.

Chart 11 Net International Immigration Not Sufficient to Offset Negative Interprovincial Migration (number, 000s)



Sources: The Conference Board of Canada; Statistics Canada, custom dataset.

Fertility Rate by Mother's Place of Residence, 2011 (number)



Sources: The Conference Board of Canada; Statistics Canada, CANSIM table 102-4505.

Chart 13

Life Expectancy at Birth, Canada, Provinces, and Territories, 2009–11

(years)



Sources: The Conference Board of Canada; Statistics Canada, Life Tables.

Population in Different Age Groups as Percentage of Total Population in N.W.T. and Canada, 2014

(per cent)



Sources: The Conference Board of Canada; Statistics Canada, CANSIM table 051-0005.

Chart 15

Population Forecast, N.W.T., Base Case Scenario, 1992–2030 (number, 000s)



Sources: The Conference Board of Canada; Statistics Canada, CANSIM table 051-0001.

Find Conference Board research at www.e-library.ca

Net Interprovincial Migration, Base Case and Medium Case, 1991–2030

(number, 000s)



Sources: The Conference Board of Canada; Statistics Canada, CANSIM table 051-0001.

Chart 17

Population Trends in N.W.T., Base Case and Medium Case, 1992–2030

(number, 000s)



Sources: The Conference Board of Canada; Statistics Canada, CANSIM table 051-0001.

Net Interprovincial Migration, Base Case, Medium Case, and High Case, 1991–2030

(number, 000s)



Sources: The Conference Board of Canada; Statistics Canada, custom dataset.

Chart 19

Population in N.W.T., Base Case, Medium Case, and High Case, 1992–2030

(number, 000s)



Sources: The Conference Board of Canada; Statistics Canada, custom dataset.

GDP by Forecast

Table 5

Base Case Forecast, GDP at Basic Prices by Industry

(2007 \$ millions)

	2012	2013	2014	2015f	2016f	2017f	2018f	2019f	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f	2029f	2030f
GDP	3,453	3,587 3.9	3,830 <i>6.8</i>	3,872 1.1	4,140 6.9	4,608 11.3	4,748 3.0	4,622 -2.6	4,998 <i>8.1</i>	4,963 <i>-0.7</i>	5,074 2.2	4,797 -5.5	4,674 -2.6	4,790 2.5	4,868 1.6	4,979 2.3	4,739 <i>-4.8</i>	4,339 <i>–8.4</i>	4,364 <i>0.6</i>
Other primary sector	2.3	2.3 0.0	2.5 8.7	2.5 -1.5	2.5 -0.5	2.5 1.5	2.5 -0.8	2.5 1.2	2.5 0.1	2.5 0.1	2.5 0.1	2.5 0.1	2.5 0.1	2.5 0.0	2.5 0.0	2.5 0.0	2.5 0.0	2.5 0.0	2.5 -0.1
Mining	1,006	1,005 <i>–0.1</i>	1,109 <i>10.4</i>	1,060 <i>-4.5</i>	1,190 <i>12.3</i>	1,598 <i>34.2</i>	1,672 <i>4.7</i>	1,564 <i>-6.5</i>	1,864 <i>19.2</i>	1,847 <i>–0.9</i>	1,912 <i>3.5</i>	1,645 <i>–14.0</i>	1,513 <i>–8.1</i>	1,584 <i>4.7</i>	1,639 <i>3.5</i>	1,705 <i>4.0</i>	1,479 <i>–13.2</i>	1,121 –24.2	1,113 <i>–0.7</i>
Metal mining	27	41 50.0	39 <i>-4.5</i>	31 <i>–20.1</i>	31 0.0	31 0.0	93 199.2	155 66.6	188 21.6	160 <i>–15.1</i>	160 <i>0.0</i>	160 <i>0.0</i>	163 <i>1.9</i>	166 <i>1.9</i>	169 <i>1.9</i>	172 1.9	114 <i>–34.0</i>	0 -100.0	0 0.0
Non-metal mining	521	563 <i>8.0</i>	679 20.7	651 <i>-4.1</i>	794 21.9	1220 53.7	1249 2.4	1092 -12.6	1370 25.5	1392 <i>1.6</i>	1469 5.5	1213 <i>–17.4</i>	1086 <i>–10.4</i>	1164 <i>7.1</i>	1226 5.3	1297 5.8	1139 <i>–12.2</i>	903 <i>–20.8</i>	901 - <i>0.2</i>
Mineral fuels	385	336 -12.7	333 - <i>0.7</i>	318 <i>-4.6</i>	303 <i>-4.8</i>	283 -6.5	267 -5.6	252 -5.6	240 -4.9	228 -4.8	217 -4.8	207 -4.8	197 -4.8	187 <i>-4.8</i>	176 -5.8	168 <i>-4.8</i>	160 <i>–4.7</i>	152 -4.7	145 <i>–4.7</i>
Mining services	48	55 13.5	54 -1.6	56 2.9	59 5.9	60 1.5	60 <i>0.0</i>	62 3.2	62 0.6	63 1.1	62 -1.0	62 -0.4	63 1.1	63 1.0	64 1.0	63 <i>–1.0</i>	62 -2.4	62 0.4	63 1.7
Manufacturing	17	19 <i>11.2</i>	16 <i>–16.0</i>	15 -2.8	17 <i>13.7</i>	24 35.6	25 5.6	24 -5.7	28 20.1	28 -0.4	29 4.1	25 –13.4	24 -7.4	25 5.4	26 4.2	27 4.8	24 –12.5	18 <i>–23.6</i>	18 <i>0.1</i>
Construction	193	276 43.3	336 21.6	413 23.1	489 18.3	440 -9.8	450 2.3	412 -8.5	418 <i>1.5</i>	387 -7.5	389 <i>0.7</i>	384 <i>–1.4</i>	381 <i>-0.7</i>	384 <i>0.8</i>	371 <i>–3.4</i>	374 0.9	369 -1.3	359 -2.6	360 <i>0.3</i>
Utilities	66.3	66.7 <i>0.6</i>	67.5 <i>1.2</i>	67.5 <i>0.0</i>	70.2 <i>4.1</i>	77.7 10.6	79.0 1.6	77.6 <i>–1.</i> 7	82.2 5.9	82.1 <i>–0.1</i>	83.1 <i>1.2</i>	79.8 -4.0	78.0 -2.2	79.2 1.6	80.2 1.2	81.3 <i>1.4</i>	78.2 -3.8	72.6 <i>–</i> 7.1	72.6 <i>0.0</i>
Goods-producing industries	1269	1,375 <i>8.4</i>	1,574 <i>14.5</i>	1,601 <i>1.7</i>	1,812 <i>13.2</i>	2,185 <i>20.6</i>	2,273 4.0	2,123 -6.6	2,438 <i>14.8</i>	2,389 <i>–2.0</i>	2,459 2.9	2,179 <i>–11.4</i>	2,040 -6.4	2,118 3.8	2,161 <i>2.1</i>	2,232 3.3	1,995 <i>–10.6</i>	1,616 <i>–19.0</i>	1,610 <i>–0.4</i>
Transportation and warehousing	240	241 <i>0.4</i>	248 2.9	249 <i>0.2</i>	266 <i>6.9</i>	298 12.2	306 2.6	296 -3.3	321 <i>8.3</i>	317 <i>–1.1</i>	322 1.6	302 -6.4	291 -3.6	297 2.1	301 <i>1.1</i>	306 1.9	288 -6.0	257 –10.7	256 -0.2
Information and cultural industries	90	90 -0.1	86 -4.4	87 1.3	89 1.3	90 1.2	91 1.2	92 1.1	93 1.1	94 1.0	95 0.9	95 0.9	96 0.9	97 0.8	98 0.8	99 0.7	99 0.7	100 <i>0.7</i>	100 <i>0.6</i>
Wholesale and retail trade	307	309 <i>0.9</i>	319 <i>3.1</i>	320 <i>0.3</i>	330 <i>3.1</i>	348 5.7	367 5.4	380 <i>3.6</i>	378 -0.6	373 -1.4	378 1.4	386 2.1	391 <i>1.3</i>	391 <i>0.1</i>	391 <i>0.0</i>	399 1.8	400 <i>0.2</i>	400 <i>0.1</i>	407 <i>1.8</i>
Wholesale trade	125	125 -0.2	133 5.8	121 -8.9	125 <i>3.4</i>	132 6.0	140 5.5	145 3.8	144 -0.5	142 <i>–1.4</i>	144 <i>1</i> .5	148 2.2	150 <i>1.4</i>	150 <i>0.2</i>	150 <i>0.1</i>	153 <i>1.9</i>	154 <i>0.3</i>	154 0.3	157 <i>1.8</i>
Retail trade	181	184 <i>1.6</i>	186 <i>1.3</i>	199 6.9	205 2.8	216 5.5	228 5.3	235 <i>3.4</i>	234 -0.7	230 -1.4	234 1.4	238 2.1	241 <i>1.2</i>	241 <i>0.0</i>	241 <i>0.0</i>	246 1.8	246 0.2	246 <i>0.0</i>	250 1.7

(continued)

Table 5 (cont'd)

Base Case Forecast, GDP at Basic Prices by Industry

(2007 \$ millions)

	2012	2013	2014	2015f	2016f	2017f	2018f	2019f	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f	2029f	2030f
Finance and insurance, real estate and renting and leasing, and management of companies, enterprises, and real estate	441	447 1.4	446 - <i>0.2</i>	452 1.3	465 2.8	488 5.0	498 2.0	503 <i>0.9</i>	519 3.3	526 1.2	535 <i>1.7</i>	534 -0.1	537 0.5	546 <i>1.7</i>	554 1.5	563 1.6	562 -0.2	554 –1.3	560 1.0
Commercial services (sum of the five categories below)	277	278 0.5	278 0.1	284 2.0	291 2.6	299 2.7	304 <i>1.8</i>	307 <i>0.9</i>	314 2.3	317 <i>1.0</i>	322 1.4	323 <i>0.3</i>	325 <i>0.6</i>	329 1.3	332 1.1	336 1.2	337 <i>0.1</i>	335 -0.5	338 <i>0.8</i>
Professional, scientific, and technical services	93	91 <i>–1.4</i>	92 0.1	94 2.7	97 3.5	101 3.5	103 2.5	105 <i>1.3</i>	108 3.0	109 <i>1.4</i>	111 <i>1.</i> 9	112 0.5	113 0.9	115 <i>1.7</i>	116 <i>1.4</i>	118 <i>1.5</i>	119 <i>0.2</i>	118 <i>–0.5</i>	119 <i>1.0</i>
Arts, entertainment, and recreation	7	8 5.6	7 -2.6	8 2.6	8 0.9	8 1.6	8 1.4	8 1.5	8 1.4	8 1.4	8 1.5	8 1.5	9 1.6	9 1.6	9 1.6	9 1.6	9 1.7	9 1.8	10 1.7
Administrative and support, waste management and remediation services	71	72 2.1	69 -4.7	71 3.3	74 4.0	77 4.0	79 3.0	80 1.8	83 3.5	85 1.8	87 2.2	87 0.9	88 1.2	90 2.0	92 1.7	93 1.8	94 0.5	94 -0.3Ó	95 1.3
Accommodation and food services	65	66 0.9	70 5.5	70 0.6	71 1.4	72 1.5	72 0.6	72 -0.5	73 1.3	73 -0.2	73 0.3	72 -0.9	72 -0.5	72 0.4	73 0.2	73 0.4	72 -0.9	71 -1.6	71 0.0
Other services (except public administration)	41	41 0.2	41 0.2	41 0.4	41 0.4	42 0.3	42 0.3	42 0.3	42 0.3	42 0.3	42 0.3	42 0.3	42 0.2	43 0.2	43 0.2	43 0.2	43 0.2	43 0.2	43 0.2
Non-commercial services	411	414 0.8	416 <i>0.6</i>	423 1.5	428 1.2	433 1.3	437 <i>0</i> .9	443 <i>1.4</i>	448 1.1	451 <i>0.6</i>	458 1.6	464 <i>1.4</i>	473 1.8	481 <i>1.7</i>	489 1.7	496 1.3	501 <i>1.1</i>	509 1.5	518 <i>1.7</i>
Educational services	174	176 <i>1.1</i>	176 <i>0.1</i>	177 0.6	178 0.2	178 <i>0.2</i>	178 <i>0.0</i>	179 <i>0.2</i>	179 <i>0.1</i>	179 <i>0.1</i>	180 <i>0.4</i>	181 <i>0.4</i>	182 <i>0.5</i>	183 <i>0.6</i>	184 <i>0.6</i>	185 <i>0.6</i>	186 <i>0.8</i>	188 <i>1.0</i>	190 <i>0.8</i>
Health care and social assistance	237	238 <i>0.5</i>	240 <i>0.9</i>	245 2.2	250 1.9	255 2.1	259 1.5	265 2.2	269 1.7	272 0.9	278 2.4	284 2.0	291 2.6	298 2.4	305 <i>2.4</i>	311 <i>1.8</i>	315 <i>1.3</i>	321 <i>1.9</i>	328 2.3
Public administration and defence	541	542 0.2	552 1.7	545 -1.1	550 <i>0.7</i>	555 1.1	560 <i>0.9</i>	567 1.3	577 1.7	586 <i>1.6</i>	596 1.6	603 1.2	611 <i>1.4</i>	621 <i>1.6</i>	631 <i>1.6</i>	638 1.2	647 1.4	657 1.5	665 1.2
Services-producing industries	2,305	2,320 <i>0.7</i>	2,346 <i>1.1</i>	2,361 <i>0.6</i>	2,418 <i>2.4</i>	2,513 <i>3.9</i>	2,565 <i>2.1</i>	2,589 <i>0.9</i>	2,651 <i>2.4</i>	2,664 <i>0.5</i>	2,705 <i>1.6</i>	2,707 0.1	2,724 0.6	2,763 <i>1.4</i>	2,797 1.2	2,836 <i>1.4</i>	2,834 <i>–0.1</i>	2,813 <i>–0.7</i>	2,844 1.1

f = forecast Note: For each industry, the first line is the level and the italicized second line is the percentage change from the previous period.

Sources: The Conference Board of Canada; Statistics Canada, custom dataset.

Medium Case Forecast, GDP at Basic Prices by Industry (2007 \$ millions)

	2012	2013	2014	2015f	2016f	2017f	2018f	2019f	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f	2029f	2030f
GDP	3,453	3,587 3.9	3,830 <i>6.8</i>	3,884 <i>1.4</i>	4,269 9.9	4,791 <i>12.2</i>	4,949 <i>3.3</i>	4,863 <i>–1.7</i>	5,367 10.4	5,427 1.1	5,511 <i>1.6</i>	5,242 <i>-4.</i> 9	5,230 <i>-0.2</i>	5,422 3.7	5,504 <i>1.5</i>	5,725 <i>4.0</i>	5,820 <i>1.7</i>	5,862 <i>0.7</i>	5,988 2.2
Other primary sector	2.3	2.3 0.0	2.5 8.7	2.5 <i>–1.5</i>	2.5 -0.5	2.5 <i>1.5</i>	2.5 -0.8	2.5 <i>1.2</i>	2.5 0.1	2.5 0.1	2.5 0.1	2.5 0.1	2.5 0.1	2.5 0.0	2.5 0.0	2.5 0.0	2.5 0.0	2.5 0.0	2.5 -0.1
Mining	1,006	1,005 <i>–0.1</i>	1,109 <i>10.4</i>	1,060 <i>-4.5</i>	1,190 <i>12.3</i>	1,602 <i>34.6</i>	1,681 <i>4.9</i>	1,632 <i>–2.9</i>	2,020 23.7	2,089 3.5	2,129 <i>1.9</i>	1,837 <i>–13.7</i>	1,732 -5.7	1,880 <i>8.5</i>	2,022 7.6	2,178 7.7	2,231 2.5	2,259 1.3	2,326 2.9
Metal mining	27	41 50.0	39 -4.5	31 <i>–20.1</i>	31 0.0	31 0.0	93 199.2	210 <i>126.5</i>	328 55.8	383 17.0	355 <i>–7.4</i>	326 -8.0	333 1.9	381 14.5	441 15.7	502 13.8	504 <i>0.5</i>	443 <i>–12.2</i>	503 13.8
Non-metal mining	521	563 <i>8.0</i>	679 20.7	651 <i>–4.1</i>	794 21.9	1220 53.7	1249 <i>2.4</i>	1092 <i>–12.6</i>	1370 25.5	1392 <i>1.6</i>	1469 5.5	1213 <i>–17.4</i>	1109 <i>-8.6</i>	1214 9.5	1305 7.5	1406 7.7	1464 <i>4.1</i>	1559 <i>6.5</i>	1571 <i>0.7</i>
Mineral fuels	385	336 <i>–12.7</i>	333 -0.7	318 <i>–4.6</i>	303 <i>-4.8</i>	287 -5.0	275 -4.1	264 - <i>4.1</i>	255 -3.4	247 -3.3	239 -3.3	231 -3.3	223 -3.3	216 -3.3	206 -4.3	200 -3.3	193 <i>–3.2</i>	187 -3.2	181 -3.2
Mining services	48	55 13.5	54 –1.6	56 2.9	59 5.9	60 1.5	60 <i>0.4</i>	62 3.7	63 1.1	63 0.9	63 <i>–1.0</i>	63 <i>–0.1</i>	64 1.6	65 1.4	66 1.4	66 0.7	66 0.6	67 0.7	67 0.1
Manufacturing	17	19 <i>11.2</i>	16 <i>–16.0</i>	15 –2.8	17 13.7	24 36.0	25 5.9	25 -2.1	31 24.7	32 4.0	33 2.4	28 –13.2	27 -5.0	29 9.2	32 8.4	35 8.5	36 3.3	37 2.1	38 3.7
Construction	193	276 43.3	336 21.6	413 23.0	556 34.7	537 -3.4	551 2.5	495 -10.2	504 1.8	464 -7.9	463 -0.1	496 <i>7.0</i>	556 12.2	539 <i>–3.1</i>	434 –19.5	436 <i>0.4</i>	433 -0.5	409 -5.7	418 2.4
Utilities	66.3	66.7 <i>0.6</i>	67.5 1.2	67.5 <i>0.1</i>	70.3 <i>4.1</i>	77.9 10.8	79.2 1.7	78.7 -0.6	84.4 7.3	85.4 <i>1.2</i>	86.0 <i>0.7</i>	82.6 <i>-4.0</i>	81.4 <i>–1.5</i>	83.6 <i>2.8</i>	85.7 2.5	87.8 2.5	88.6 <i>0.9</i>	89.1 <i>0.6</i>	90.1 <i>1.1</i>
Goods-producing industries	1,269	1,375 <i>8.4</i>	1,574 <i>14.5</i>	1,601 <i>1.7</i>	1,880 <i>17.4</i>	2,287 21.6	2,382 <i>4.2</i>	2,276 <i>-4.4</i>	2,684 17.9	2,716 <i>1.2</i>	2,757 1.5	2,489 -9.7	2,442 -1.9	2,577 5.5	2,619 <i>1.6</i>	2,781 6.2	2,834 <i>1.</i> 9	2,839 <i>0.2</i>	2,917 2.8
Transportation and warehousing	240	241 <i>0.4</i>	248 2.9	251 <i>1.0</i>	276 10.0	309 12.2	316 <i>2.3</i>	308 -2.5	339 10.0	342 0.7	344 <i>0.8</i>	326 -5.4	322 -1.0	332 <i>3.1</i>	335 <i>0.9</i>	347 3.5	351 <i>1.1</i>	351 <i>0.1</i>	356 <i>1.</i> 5
Information and cultural industries	90	90 <i>-0.1</i>	86 -4.4	87 1.3	89 1.3	90 1.2	91 1.2	92 1.1	93 1.1	94 1.0	95 0.9	95 0.9	96 <i>0.9</i>	97 0.8	98 0.8	99 0.7	99 0.7	100 <i>0.7</i>	100 <i>0.6</i>
Wholesale and retail trade	307	309 <i>0.9</i>	319 <i>3.1</i>	320 <i>0.3</i>	359 12.1	383 <i>6.8</i>	397 <i>3.7</i>	400 <i>0.6</i>	422 5.6	427 1.2	437 2.2	437 0.1	450 2.9	462 2.7	467 <i>1.1</i>	483 <i>3.4</i>	494 2.3	503 1.8	516 <i>2.7</i>
Wholesale trade	125	125 -0.2	133 5.8	121 -8.9	136 12.5	146 7.2	151 3.8	152 0.8	161 <i>5.7</i>	163 <i>1.2</i>	167 2.3	167 0.2	172 3.0	177 2.8	179 <i>1.2</i>	185 <i>3.5</i>	190 <i>2.4</i>	194 <i>1.9</i>	199 2.8
Retail trade	181	184 <i>1.6</i>	186 <i>1.3</i>	199 6.9	223 11.9	238 6.6	246 3.6	248 0.5	261 5.5	264 1.2	270 2.2	270 <i>0.0</i>	278 2.8	285 2.6	288 1.1	298 3.3	304 2.2	309 1.7	318 2.7

(continued)

Table 6 (cont'd)

Medium Case Forecast, GDP at Basic Prices by Industry (2007 \$ millions)

	2012	2013	2014	2015f	2016f	2017f	2018f	2019f	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f	2029f	2030f
Finance and insurance, real estate and renting and leasing, and management of companies, enterprises, and real estate	441	447 1.4	446 -0.2	452 1.3	465 2.8	489 5.1	499 2.0	505 1.2	524 3.8	533 <i>1.7</i>	541 <i>1.5</i>	540 -0.1	544 0.7	555 2.1	566 1.9	577 1.9	585 1.4	592 1.3	600 1.4
Commercial services (sum of the five categories below)	277	278 0.5	278 <i>0.1</i>	284 2.2	294 <i>3.4</i>	302 2.7	307 1.7	310 <i>0.9</i>	318 2.5	322 1.2	326 1.3	327 0.6	331 <i>1.2</i>	336 <i>1.3</i>	338 <i>0.7</i>	343 <i>1.4</i>	346 <i>1.0</i>	349 <i>0.8</i>	353 1.0
Professional, scientific, and technical services	93	91 <i>–1.4</i>	92 0.1	94 3.0	98 4.5	102 3.6	104 <i>2.4</i>	106 <i>1.3</i>	109 3.3	111 <i>1.6</i>	113 <i>1.7</i>	114 0.8	116 <i>1.6</i>	118 <i>1.7</i>	119 <i>1.0</i>	121 <i>1.8</i>	123 <i>1.3</i>	124 <i>1.0</i>	125 <i>1.3</i>
Arts, entertainment, and recreation	7	8 5.6	7 -2.6	8 2.6	8 0.9	8 1.6	8 1.4	8 1.5	8 1.4	8 1.4	8 1.5	8 1.5	9 1.6	9 1.6	9 1.6	9 1.6	9 1.7	9 1.8	10 1.7
Administrative and support, waste management and remediation services	71	72 2.1	69 -4.7	71 3.5	75 5.0	78 4.1	80 2.9	81 1.7	84 3.7	86 2.0	88 2.1	89 1.2	91 1.9	92 2.0	94 1.3	96 2.0	97 1.6	98 1.3	100 <i>1.6</i>
Accommodation and food services	65	66 <i>0.9</i>	70 5.5	70 0.8	72 2.4	73 1.6	73 0.5	73 -0.5	74 1.6	74 0.0	74 0.2	74 -0.6	74 0.2	74 0.4	74 -0.3	74 0.6	75 0.2	75 0.0	75 0.3
Other services (except public administration)	41	41 <i>0.2</i>	41 <i>0.2</i>	41 <i>0.4</i>	41 <i>0.4</i>	42 0.3	42 0.3	42 0.3	42 0.3	42 0.3	42 0.3	42 0.3	42 0.2	43 0.2	43 0.2	43 0.2	43 0.2	43 0.2	43 0.2
Non-commercial services	411	414 <i>0.8</i>	416 <i>0.6</i>	432 3.8	441 <i>2.1</i>	451 2.2	461 2.3	469 <i>1.6</i>	473 1.0	474 0.2	482 1.7	489 1.4	498 1.8	506 1.7	515 <i>1.7</i>	522 1.3	528 1.0	535 1.5	544 1.7
Educational services	174	176 <i>1.1</i>	176 <i>0.1</i>	181 <i>2.4</i>	182 0.9	182 <i>0.0</i>	184 <i>0.9</i>	185 <i>0.4</i>	185 <i>0.2</i>	185 -0.2	186 <i>0.5</i>	186 <i>0.4</i>	187 <i>0.5</i>	188 <i>0.5</i>	189 <i>0.6</i>	191 <i>0.6</i>	192 <i>0.7</i>	194 <i>0.9</i>	195 <i>0.7</i>
Health care and social assistance	237	238 <i>0.5</i>	240 <i>0.9</i>	252 4.9	259 2.9	269 3.8	277 3.2	284 2.3	289 1.6	290 <i>0.4</i>	297 2.5	303 2.1	311 2.6	318 <i>2.4</i>	326 2.4	332 1.8	336 1.2	342 1.8	349 <i>2.3</i>
Public administration and defence	541	542 0.2	552 1.7	545 –1.1	555 1.7	570 2.7	584 2.5	593 1.4	603 <i>1.7</i>	609 1.1	619 <i>1.6</i>	627 1.2	635 1.3	645 1.6	656 1.6	663 1.2	672 1.3	682 1.5	690 1.2
Services-producing industries	2305	2320 <i>0.7</i>	2346 1.1	2373 1.1	2479 <i>4</i> .5	2594 <i>4.7</i>	2656 2.4	2676 <i>0.8</i>	2772 3.6	2801 <i>1.0</i>	2844 1.6	2843 <i>-0.1</i>	2878 1.2	2935 2.0	2976 1.4	3034 <i>2.0</i>	3075 1.4	3112 <i>1.2</i>	3161 <i>1.6</i>

f = forecast Note: For each industry, the first line is the level and the italicized second line is the percentage change from the previous period.

Sources: The Conference Board of Canada; Statistics Canada, custom dataset.

High Case Forecast, GDP at Basic Prices by Industry (2007 \$ millions)

	2012	2013	2014	2015f	2016f	2017f	2018f	2019f	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f	2029f	2030f
GDP	3,453	3,587 <i>3.</i> 9	3,830 <i>6.8</i>	3,869 <i>1.0</i>	4,263 10.2	4,839 <i>13.5</i>	5,048 <i>4.3</i>	5,004 <i>–0.9</i>	5,484 9.6	5,625 2.6	5,753 2.3	6,197 <i>7.7</i>	6,460 <i>4.2</i>	6,636 2.7	6,689 <i>0.8</i>	6,934 <i>3.7</i>	7,055 1.7	7,240 2.6	7,406 2.3
Other primary sector	2.3	2.3 0.0	2.5 8.7	2.5 <i>–1.5</i>	2.5 -0.5	2.5 <i>1.5</i>	2.5 -0.8	2.5 <i>1.2</i>	2.5 <i>0.1</i>	2.5 0.1	2.5 0.1	2.5 0.1	2.5 0.1	2.5 0.0	2.5 0.0	2.5 0.0	2.5 0.0	2.5 0.0	2.5 -0.1
Mining	1,006	1,005 <i>–0.1</i>	1,109 <i>10.4</i>	1,059 <i>-4.6</i>	1,189 <i>12.3</i>	1,626 <i>36.8</i>	1,722 5.9	1,689 <i>–2.0</i>	2,073 22.8	2,161 <i>4.3</i>	2,235 <i>3.4</i>	2,577 15.3	2,737 6.2	2,862 4.5	3,015 <i>5.4</i>	3,187 5.7	3,236 1.5	3,345 <i>3.4</i>	3,469 <i>3.7</i>
Metal mining	27	41 50.0	39 <i>-4.5</i>	31 <i>–20.1</i>	31 0.0	31 0.0	93 199.2	210 <i>126.5</i>	328 55.8	383 17.0	383 <i>0.0</i>	383 <i>0.0</i>	390 1.9	411 5.4	443 7.8	504 13.7	507 0.5	445 <i>–12.1</i>	506 13.7
Non-metal mining	521	563 <i>8.0</i>	679 20.7	654 -3.6	797 21.8	1223 53.5	1252 2.4	1095 <i>–12.5</i>	1373 25.4	1396 <i>1.6</i>	1473 5.5	1808 22.7	1961 <i>8.5</i>	2065 5.3	2189 6.0	2300 5.0	2349 2.2	2522 7.4	2585 2.5
Mineral fuels	385	336 <i>–12.7</i>	333 -0.7	318 <i>-4.6</i>	303 <i>–4.8</i>	294 -2.9	288 -2.0	282 –2.0	278 -1.3	275 –1.2	272 –1.2	268 -1.2	265 -1.2	262 -1.2	256 -2.2	253 -1.2	250 <i>–1.1</i>	247 -1.1	245 –1.1
Mining services	48	55 13.5	54 –1.6	51 <i>–4.</i> 9	54 5.6	74 36.2	85 15.5	97 13.5	90 -7.7	103 <i>15.4</i>	104 <i>0.1</i>	114 9.6	117 3.4	120 <i>1.8</i>	122 2.0	125 2.6	125 <i>0.1</i>	126 0.5	128 2.0
Manufacturing	17	19 <i>11.2</i>	16 <i>–16.0</i>	15 –2.9	17 13.6	24 38.1	26 6.9	25 -1.1	32 23.8	33 4.8	34 3.9	40 16.0	43 7.0	45 5.2	48 6.2	51 6.5	52 2.4	54 4.2	57 4.5
Construction	193	276 43.3	336 21.6	402 19.9	547 36.0	547 -0.1	585 6.9	551 -5.8	541 <i>–1.7</i>	546 <i>0.8</i>	549 <i>0.6</i>	561 <i>2.3</i>	595 <i>6.0</i>	592 -0.5	451 -23.8	460 <i>2.0</i>	486 5.6	504 3.8	493 -2.3
Utilities	66.3	66.7 <i>0.6</i>	67.5 1.2	67.5 <i>–0.1</i>	70.2 <i>4.1</i>	78.2 11.4	79.8 2.0	79.5 <i>–0.4</i>	85.1 <i>7.0</i>	86.3 <i>1.4</i>	87.3 1.2	91.5 <i>4.8</i>	93.4 2.1	94.9 <i>1.6</i>	96.6 1.8	98.4 1.9	99.0 <i>0.7</i>	100.2 <i>1.2</i>	101.5 <i>1.3</i>
Goods-producing industries	1,269	1,375 <i>8.4</i>	1,574 <i>14.5</i>	1,590 <i>1.0</i>	1,870 <i>17.6</i>	2,321 <i>24.1</i>	2,458 5.9	2,390 <i>–2.8</i>	2,777 16.2	2,872 3.4	2,951 <i>2.8</i>	3,315 <i>12.3</i>	3,514 <i>6.0</i>	3,639 <i>3.5</i>	3,656 <i>0.5</i>	3,841 <i>5.1</i>	3,918 <i>2.0</i>	4,049 3.3	4,165 2.9
Transportation and warehousing	240	241 <i>0.4</i>	248 2.9	250 <i>0.6</i>	275 10.1	312 13.6	322 3.3	317 <i>–1.6</i>	346 <i>9.0</i>	353 1.9	358 1.5	383 6.9	395 <i>3.3</i>	403 <i>2.0</i>	404 0.2	415 2.8	420 <i>1.1</i>	428 1.8	435 1.6
Information and cultural industries	90	90 -0.1	86 -4.4	87 1.3	89 1.3	90 1.2	91 1.2	92 1.1	93 1.1	94 1.0	95 0.9	95 0.9	96 0.9	97 0.8	98 0.8	99 0.7	99 0.7	100 <i>0.7</i>	100 <i>0.6</i>
Wholesale and retail trade	307	309 <i>0.9</i>	319 <i>3.1</i>	320 <i>0.3</i>	359 12.3	385 7.0	400 3.9	403 <i>0.8</i>	426 5.8	432 1.4	443 <i>2.4</i>	462 <i>4.4</i>	482 <i>4.2</i>	494 2.5	496 <i>0.4</i>	512 3.2	526 2.7	541 2.9	554 2.4
Wholesale trade	125	125 -0.2	133 5.8	121 -8.9	136 12.7	146 <i>7.4</i>	152 <i>4.0</i>	153 <i>1.0</i>	163 5.9	165 <i>1.4</i>	169 2.5	177 <i>4.5</i>	184 <i>4.4</i>	189 <i>2.6</i>	190 <i>0.5</i>	196 3.3	202 2.8	208 3.1	213 2.5
Retail trade	181	184 <i>1.6</i>	186 <i>1.3</i>	199 <i>6.9</i>	223 12.1	239 6.8	248 3.8	249 <i>0.7</i>	264 5.7	267 1.4	274 2.4	286 <i>4.4</i>	297 4.1	305 2.5	306 <i>0.3</i>	315 3.2	324 2.6	333 2.9	341 <i>2.4</i>

(continued)

Table 7 (cont'd)

High Case Forecast, GDP at Basic Prices by Industry (2007 \$ millions)

	2012	2013	2014	2015f	2016f	2017f	2018f	2019f	2020f	2021f	2022f	2023f	2024f	2025f	2026f	2027f	2028f	2029f	2030f
Finance and insurance, real estate and renting and leasing, and management of companies, enterprises, and real estate	441	447 1.4	446 -0.2	452 1.3	465 2.8	490 5.3	500 2.1	507 1.3	525 3.7	535 1.8	544 1.7	559 2.8	569 1.9	579 1.7	589 1.7	599 <i>1.7</i>	607 1.3	616 <i>1.5</i>	625 1.4
Commercial services (sum of the five categories below)	277	278 0.5	278 <i>0.1</i>	284 2.1	294 3.5	303 <i>3.0</i>	308 2.0	312 <i>1.1</i>	319 2.3	324 1.5	328 1.4	335 <i>2.0</i>	340 <i>1.6</i>	344 1.3	347 0.6	351 <i>1.3</i>	355 <i>1.1</i>	359 1.2	363 1.0
Professional, scientific, and technical services	93	91 <i>–1.4</i>	92 0.1	94 2.9	98 4.5	102 3.9	105 2.6	107 <i>1.5</i>	110 3.0	112 2.0	114 <i>1.8</i>	117 2.6	119 <i>2.1</i>	121 <i>1.7</i>	122 0.9	124 <i>1.7</i>	126 <i>1.4</i>	128 <i>1.4</i>	130 <i>1.3</i>
Arts, entertainment, and recreation	7	8 5.6	7 -2.6	8 2.6	8 0.9	8 1.6	8 1.4	8 1.5	8 1.4	8 1.4	8 1.5	8 1.5	9 1.6	9 1.6	9 1.6	9 1.6	9 1.7	9 1.8	10 1.7
Administrative and support, waste management and remediation services	71	72 2.1	69 -4.7	71 3.4	75 5.1	78 4.4	80 3.1	82 2.0	85 3.4	87 2.4	89 2.2	91 2.9	93 2.4	95 2.0	96 1.2	98 2.0	100 <i>1.7</i>	102 <i>1.7</i>	103 <i>1.5</i>
Accommodation and food services	65	66 0.9	70 5.5	70 0.7	72 2.5	73 1.9	74 0.7	73 -0.3	74 1.3	75 0.4	75 0.3	76 1.1	76 0.7	77 0.4	76 -0.3	77 0.5	77 0.3	77 0.4	77 0.3
Other services (except public administration)	41	41 0.2	41 0.2	41 0.4	41 0.4	42 0.3	42 0.3	42 0.3	42 0.3	42 0.3	42 0.3	42 0.3	42 0.2	43 0.2	43 0.2	43 0.2	43 0.2	43 0.2	43 0.2
Non-commercial services	411	414 0.8	416 <i>0.6</i>	430 <i>3.3</i>	442 2.7	453 2.5	465 2.6	472 1.5	477 1.0	482 1.2	490 1.7	497 1.4	504 1.5	512 <i>1.6</i>	521 <i>1.8</i>	529 1.5	534 1.0	542 1.4	551 <i>1.7</i>
Educational services	174	176 <i>1.1</i>	176 <i>0.1</i>	180 <i>2.0</i>	183 <i>1</i> .5	183 <i>0.1</i>	185 <i>1.2</i>	186 <i>0.4</i>	186 <i>0.1</i>	187 <i>0.7</i>	188 <i>0.5</i>	189 <i>0.4</i>	189 <i>0.3</i>	190 <i>0.4</i>	191 <i>0.6</i>	193 <i>0.7</i>	194 <i>0.7</i>	196 <i>0.9</i>	197 <i>0.7</i>
Health care and social assistance	237	238 <i>0.5</i>	240 <i>0.9</i>	250 <i>4.3</i>	259 3.7	270 <i>4.1</i>	280 3.6	286 2.3	291 <i>1.6</i>	295 1.5	302 2.4	308 <i>2.0</i>	315 2.3	322 2.2	330 2.5	336 1.9	340 <i>1.2</i>	346 <i>1.7</i>	354 <i>2.3</i>
Public administration and defence	541	542 0.2	552 1.7	545 -1.1	559 2.5	576 3.0	593 <i>3.0</i>	601 <i>1.4</i>	611 <i>1.6</i>	624 2.2	634 1.6	641 <i>1.1</i>	648 1.1	657 1.5	668 1.6	677 1.3	685 1.3	695 1.4	703 1.2
Services-producing industries	2305	2320 <i>0.7</i>	2346 1.1	2369 1.0	2483 <i>4.8</i>	2608 5.0	2679 2.7	2704 <i>0</i> .9	2797 3.4	2843 1.7	2891 <i>1.7</i>	2972 2.8	3036 2.1	3088 1.7	3123 <i>1.2</i>	3182 <i>1.9</i>	3227 1.4	3281 <i>1.7</i>	3331 <i>1.5</i>

f = forecast Note: For each industry, the first line is the level and the italicized second line is the percentage change from the previous period.

Sources: The Conference Board of Canada; Statistics Canada, custom dataset.

Top 50 Occupations by Employment

Table 8

Top 50 Occupations by Employment, N.W.T. Residents, Base Case

(number)

		NOC skill					2015–30f	2015–30f (per cent
	Occupation	level	2014	20201	20251	20301	(average)	share of total
1	6733 Janitors, caretakers, and building superintendents	D	596	674	678	662	662	2.8
2	0621 Retail and wholesale trade managers	А	570	666	646	625	636	2.7
3	4032 Elementary school and kindergarten teachers	А	521	567	530	490	534	2.3
4	1221 Administrative officers	В	465	533	508	473	507	2.1
5	6611 Cashiers	D	451	467	508	514	480	2.0
6	1241 Administrative assistants	В	447	494	475	456	475	2.0
7	6421 Retail salespersons	С	446	471	485	494	471	2.0
8	3012 Registered nurses and registered psychiatric nurses	А	377	444	454	443	437	1.9
9	7521 Heavy equipment operators (except crane)	С	353	445	413	369	412	1.7
10	4212 Social and community service workers	В	340	374	378	385	372	1.6
11	6731 Light duty cleaners	D	323	370	366	370	363	1.5
12	4031 Secondary school teachers	А	334	370	352	322	351	1.5
13	7511 Transport truck drivers	С	310	382	352	299	349	1.5
14	4214 Early childhood educators and assistants	В	290	339	349	350	337	1.4
15	7271 Carpenters	В	278	339	303	276	315	1.3
16	1411 General office support workers	С	299	307	299	301	303	1.3
17	7611 Construction trades helpers and labourers	D	268	321	289	266	301	1.3
18	1311 Accounting technicians and bookkeepers	В	265	297	287	273	286	1.2
19	6711 Food counter attendants, kitchen helpers, and related support occupations	D	276	286	292	269	283	1.2
20	1414 Receptionists	С	258	276	271	282	274	1.2
21	1431 Accounting and related clerks	С	244	270	262	252	261	1.1
22	6322 Cooks	В	237	251	242	235	243	1.0
23	3413 Nurse aides, orderlies, and patient service associates	С	211	240	244	250	238	1.0
24	0711 Construction managers	А	194	246	222	195	228	1.0
25	2271 Air pilots, flight engineers, and flying instructors	В	213	257	213	178	223	0.9

(continued)

Table 8 (cont'd)

Top 50 Occupations by Employment, N.W.T. Residents, Base Case

(number)

	Occupation	NOC skill level	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total
26	8231 Underground production and development miners	В	189	251	214	169	216	0.9
27	1111 Financial auditors and accountants	А	201	223	212	184	210	0.9
28	4413 Elementary and secondary school teacher assistants	С	206	210	199	200	204	0.9
29	6622 Store shelf stockers, clerks, and order fillers	D	185	204	207	211	201	0.9
30	6541 Security guards and related security service occupations	С	193	214	197	180	200	0.8
31	4021 College and other vocational instructors	А	181	205	203	193	199	0.8
32	7241 Electricians (except industrial and power system)	В	160	205	180	157	188	0.8
33	0111 Financial managers	А	179	189	188	183	186	0.8
34	4311 Police officers (except commissioned)	В	176	183	180	173	179	0.8
35	7321 Automotive service technicians, truck and bus mechanics, and mechanical repairers	В	164	177	167	164	169	0.7
36	7513 Taxi and limousine drivers and chauffeurs	С	150	189	167	135	167	0.7
37	4164 Social policy researchers, consultants, and program officers	А	146	160	155	138	153	0.6
38	7452 Material handlers	С	144	162	146	133	149	0.6
39	0714 Facility operation and maintenance managers	А	133	151	146	131	143	0.6
40	0631 Restaurant and food service managers	А	132	144	142	135	141	0.6
41	0012 Senior government managers and officials	А	127	135	140	142	137	0.6
42	4112 Lawyers and Quebec notaries	А	131	138	139	127	136	0.6
43	4422 Correctional service officers	С	132	139	136	129	136	0.6
44	1521 Shippers and receivers	С	130	140	135	135	135	0.6
45	0112 Human resources managers	А	131	140	132	123	133	0.6
46	7312 Heavy duty equipment mechanics	В	119	144	126	116	131	0.6
47	2131 Civil engineers	А	123	135	130	111	128	0.5
48	6211 Retail sales supervisors	В	113	130	123	124	123	0.5
49	4412 Home support workers, housekeepers, and related occupations	С	107	122	126	131	122	0.5
50	4411 Home child care providers	С	108	127	123	120	122	0.5
	Share of Top 50 Employment Occupations Total Employment fro	om 2015 to	o 2030					56.6

f = forecast

Note: Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training.

Source: The Conference Board of Canada.

Top 50 Occupations by Employment, N.W.T. Residents, Medium Case (number)

	Occupation	NOC skill level	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total
1	0621 Retail and wholesale trade managers	А	570	743	763	792	729	2.9
2	6733 Janitors, caretakers, and building superintendents	D	596	701	717	724	694	2.7
3	4032 Elementary school and kindergarten teachers	А	521	588	549	510	552	2.2
4	6611 Cashiers	D	451	520	598	653	552	2.2
5	1221 Administrative officers	В	465	570	563	539	547	2.2
6	6421 Retail salespersons	С	446	524	571	628	541	2.1
7	1241 Administrative assistants	В	447	521	510	497	502	2.0
8	7521 Heavy equipment operators (except crane)	С	353	489	490	473	465	1.8
9	3012 Registered nurses and registered psychiatric nurses	А	377	476	486	476	465	1.8
10	4212 Social and community service workers	В	340	395	399	410	392	1.5
11	7511 Transport truck drivers	С	310	413	405	391	390	1.5
12	6731 Light duty cleaners	D	323	385	391	429	385	1.5
13	7271 Carpenters	В	278	396	400	317	369	1.5
14	4031 Secondary school teachers	А	334	383	365	336	363	1.4
15	4214 Early childhood educators and assistants	В	290	364	373	376	358	1.4
16	7611 Construction trades helpers and labourers	D	268	377	386	308	354	1.4
17	1411 General office support workers	С	299	325	323	328	321	1.3
18	1311 Accounting technicians and bookkeepers	В	265	311	309	297	301	1.2
19	6711 Food counter attendants, kitchen helpers, and related support occupations	D	276	291	301	292	292	1.2
20	1414 Receptionists	С	258	291	291	305	289	1.1
21	1431 Accounting and related clerks	С	244	286	282	285	278	1.1
22	0711 Construction managers	А	194	293	305	228	273	1.1
23	3413 Nurse aides, orderlies, and patient service associates	С	211	257	261	269	254	1.0
24	6322 Cooks	В	237	258	252	257	253	1.0
25	2271 Air pilots, flight engineers, and flying instructors	В	213	273	239	250	247	1.0

(continued)

Table 9 (cont'd)

Top 50 Occupations by Employment, N.W.T. Residents, Medium Case

(number)

	Occupation	NOC skill level	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total
26	8231 Underground production and development miners	В	189	264	238	247	240	0.9
27	6622 Store shelf stockers, clerks, and order fillers	D	185	228	246	271	233	0.9
28	7241 Electricians (except industrial and power system)	В	160	245	249	183	225	0.9
29	1111 Financial auditors and accountants	А	201	230	224	212	220	0.9
30	4413 Elementary and secondary school teacher assistants	С	206	218	207	209	211	0.8
31	6541 Security guards and related security service occupations	С	193	219	205	197	207	0.8
32	4021 College and other vocational instructors	А	181	213	211	201	206	0.8
33	0111 Financial managers	А	179	197	198	197	194	0.8
34	7321 Automotive service technicians, truck and bus mechanics, and mechanical repairers	В	164	192	189	200	188	0.7
35	4311 Police officers (except commissioned)	В	176	192	187	181	186	0.7
36	7513 Taxi and limousine drivers and chauffeurs	С	150	200	186	186	185	0.7
37	7452 Material handlers	С	144	172	162	175	164	0.6
38	4164 Social policy researchers, consultants, and program officers	А	146	168	162	145	159	0.6
39	1521 Shippers and receivers	С	130	155	158	176	155	0.6
40	0714 Facility operation and maintenance managers	А	133	156	153	143	149	0.6
41	7312 Heavy duty equipment mechanics	В	119	159	150	142	147	0.6
42	0631 Restaurant and food service managers	А	132	146	145	141	143	0.6
43	6211 Retail sales supervisors	В	113	146	146	159	142	0.6
44	0012 Senior government managers and officials	А	127	141	146	149	142	0.6
45	4422 Correctional service officers	С	132	146	142	135	141	0.6
46	4112 Lawyers and Quebec notaries	А	131	142	143	133	140	0.6
47	7251 Plumbers	В	107	148	148	120	139	0.5
48	0112 Human resources managers	А	131	145	138	133	138	0.5
49	2131 Civil engineers	А	123	139	134	117	131	0.5
50	4412 Home support workers, housekeepers, and related occupations	С	107	130	134	140	130	0.5
	Share of Top 50 Employment Occupations Total Employment from 2015 to 2030							

f = forecast

Note: Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training.

Source: The Conference Board of Canada.
Top 50 Occupations by Employment, N.W.T. Residents, High Case

(number)

	Occupation	NOC skill level	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total
1	0621 Retail and wholesale trade managers	А	570	751	821	856	761	2.9
2	6733 Janitors, caretakers, and building superintendents	D	596	708	751	760	714	2.7
3	6611 Cashiers	D	451	525	643	704	576	2.2
4	1221 Administrative officers	В	465	582	606	585	573	2.2
5	6421 Retail salespersons	С	446	530	614	677	564	2.1
6	4032 Elementary school and kindergarten teachers	А	521	591	558	519	559	2.1
7	1241 Administrative assistants	В	447	529	534	524	518	2.0
8	7521 Heavy equipment operators (except crane)	С	353	506	563	557	509	1.9
9	3012 Registered nurses and registered psychiatric nurses	А	377	480	496	486	472	1.8
10	7511 Transport truck drivers	С	310	422	468	457	425	1.6
11	6731 Light duty cleaners	D	323	389	426	470	405	1.5
12	7271 Carpenters	В	278	421	437	364	399	1.5
13	4212 Social and community service workers	В	340	399	408	420	398	1.5
14	7611 Construction trades helpers and labourers	D	268	401	424	357	384	1.5
15	4031 Secondary school teachers	А	334	386	371	341	367	1.4
16	4214 Early childhood educators and assistants	В	290	366	380	384	364	1.4
17	1411 General office support workers	С	299	331	338	345	331	1.3
18	1311 Accounting technicians and bookkeepers	В	265	316	324	314	311	1.2
19	6711 Food counter attendants, kitchen helpers, and related support occupations	D	276	293	316	308	300	1.1
20	1414 Receptionists	С	258	295	304	320	297	1.1
21	0711 Construction managers	А	194	313	335	266	297	1.1
22	1431 Accounting and related clerks	С	244	289	299	302	288	1.1
23	2271 Air pilots, flight engineers, and flying instructors	В	213	278	292	307	276	1.0
24	8231 Underground production and development miners	В	189	268	293	303	268	1.0
25	6322 Cooks	В	237	259	265	271	260	1.0

(continued)

Table 10 (cont'd)

Top 50 Occupations by Employment, N.W.T. Residents, High Case

(number)

	Occupation	NOC skill level	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total
26	3413 Nurse aides, orderlies, and patient service associates	С	211	259	266	275	258	1.0
27	7241 Electricians (except industrial and power system)	В	160	263	274	215	246	0.9
28	6622 Store shelf stockers, clerks, and order fillers	D	185	230	264	292	243	0.9
29	1111 Financial auditors and accountants	А	201	232	242	229	230	0.9
30	4413 Elementary and secondary school teacher assistants	С	206	220	210	212	214	0.8
31	6541 Security guards and related security service occupations	С	193	221	216	209	213	0.8
32	4021 College and other vocational instructors	А	181	215	215	205	209	0.8
33	7513 Taxi and limousine drivers and chauffeurs	С	150	204	225	226	206	0.8
34	0111 Financial managers	А	179	198	204	204	199	0.8
35	7321 Automotive service technicians, truck and bus mechanics, and mechanical repairers	В	164	194	203	216	195	0.7
36	4311 Police officers (except commissioned)	В	176	194	192	186	190	0.7
37	7452 Material handlers	С	144	174	187	203	178	0.7
38	1521 Shippers and receivers	С	130	157	174	194	164	0.6
39	4164 Social policy researchers, consultants, and program officers	А	146	170	166	149	162	0.6
40	7312 Heavy-duty equipment mechanics	В	119	164	167	162	158	0.6
41	0714 Facility operation and maintenance managers	А	133	158	162	152	154	0.6
42	7251 Plumbers	В	107	159	163	141	152	0.6
43	6211 Retail sales supervisors	В	113	147	157	171	148	0.6
44	0631 Restaurant and food service managers	А	132	146	149	145	145	0.6
45	0012 Senior government managers and officials	А	127	143	149	153	145	0.5
46	4422 Correctional service officers	С	132	148	146	138	144	0.5
47	0112 Human resources managers	А	131	146	145	141	143	0.5
48	4112 Lawyers and Quebec notaries	А	131	143	147	137	142	0.5
49	2131 Civil engineers	А	123	140	137	120	134	0.5
50	4412 Home support workers, housekeepers, and related occupations	С	107	131	136	143	132	0.5
	Share of Top 50 Employment Occupations Total Employment from	om 2015 to	o 2030					57.2

f= forecast

Note: Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training.

Top 50 Occupations by Job Openings

Table 11

Top 50 Occupations by Job Openings, N.W.T. Residents, Base Case

(number)

		NOC skill					2015–30f	2015–30f (per cent
	Occupation	level	2014	2020f	2025f	2030f	(average)	share of total
1	0621 Retail and wholesale trade managers	А	67	68	60	70	1,138	4.0
2	4032 Elementary school and kindergarten teachers	А	-11	58	39	41	777	2.7
3	6733 Janitors, caretakers, and building superintendents	D	34	58	50	45	757	2.7
4	3012 Registered nurses and registered psychiatric nurses	А	33	52	45	42	740	2.6
5	1221 Administrative officers	В	6	58	42	38	688	2.4
6	1241 Administrative assistants	В	-4	46	35	37	607	2.1
7	4031 Secondary school teachers	А	-3	42	31	30	577	2.0
8	4212 Social and community service workers	В	12	31	30	31	479	1.7
9	4214 Early childhood educators and assistants	В	19	31	27	27	448	1.6
10	6731 Light duty cleaners	D	38	35	34	32	447	1.6
11	1311 Accounting technicians and bookkeepers	В	17	31	25	24	408	1.4
12	7521 Heavy equipment operators (except crane)	С	-3	48	27	21	386	1.4
13	4021 College and other vocational instructors	А	-1	27	22	21	382	1.3
14	7271 Carpenters	В	-3	31	22	20	378	1.3
15	0711 Construction managers	А	0	31	22	17	371	1.3
16	6421 Retail salespersons	С	14	14	25	26	360	1.3
17	6611 Cashiers	D	9	15	28	24	354	1.2
18	1111 Financial auditors and accountants	А	22	27	20	14	310	1.1
19	7511 Transport truck drivers	С	-16	39	21	13	297	1.0
20	6322 Cooks	В	35	21	19	18	289	1.0
21	0111 Financial managers	А	7	20	17	16	285	1.0
22	0012 Senior government managers and officials	А	-6	18	18	18	277	1.0
23	1414 Receptionists	С	4	17	18	21	264	0.9
24	4164 Social policy researchers, consultants, and program officers	А	-1	20	14	11	244	0.9
25	2271 Air pilots, flight engineers, and flying instructors	В	-43	36	17	15	242	0.8

(continued)

Table 11 (cont'd)

Top 50 Occupations by Job Openings, N.W.T. Residents, Base Case

(number)

	Occupation	NOC skill level	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total
26	0632 Accommodation service managers	А	24	15	15	17	238	0.8
27	0714 Facility operation and maintenance managers	А	5	20	15	10	237	0.8
28	0013 Senior managers—financial, communications, and other business services	A	19	16	15	16	233	0.8
29	8231 Underground production and development miners	В	14	38	17	12	232	0.8
30	4154 Professional occupations in religion	А	17	13	14	15	213	0.7
31	1411 General office support workers	С	-14	14	15	15	210	0.7
32	3413 Nurse aides, orderlies, and patient service associates	С	8	14	12	14	207	0.7
33	7241 Electricians (except industrial and power system)	В	-6	18	11	9	207	0.7
34	7611 Construction trades helpers and labourers	D	-14	20	14	11	205	0.7
35	0014 Senior managers—health, education, social and community services, and membership organizations	А	18	15	12	10	202	0.7
36	4112 Lawyers and Quebec notaries	А	11	14	13	9	201	0.7
37	0423 Managers in social, community, and correctional services	А	6	15	11	10	198	0.7
38	0631 Restaurant and food service managers	А	26	14	12	10	198	0.7
39	0112 Human resources managers	А	3	16	11	11	195	0.7
40	1431 Accounting and related clerks	С	-11	16	11	10	193	0.7
41	7321 Automotive service technicians, truck and bus mechanics, and mechanical repairers	В	11	11	10	13	189	0.7
42	2131 Civil engineers	А	9	15	11	7	187	0.7
43	4311 Police officers (except commissioned)	В	-19	14	10	10	183	0.6
44	0011 Legislators	А	-4	10	12	14	182	0.6
45	6711 Food counter attendants, kitchen helpers, and related support occupations	D	32	17	16	7	176	0.6
46	6622 Store shelf stockers, clerks, and order fillers	D	7	7	9	12	165	0.6
47	7513 Taxi and limousine drivers and chauffeurs	С	-30	27	12	7	163	0.6
48	4152 Social workers	А	7	11	10	9	158	0.6
49	1224 Property administrators	В	15	13	10	8	155	0.5
50	6211 Retail sales supervisors	В	9	8	7	11	154	0.5
	Share of Top 50 Job Opening Occupations Total Job Openings fr	om 2015	to 2030					57.4

f = forecast

Note: Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training.

Top 50 Occupations by Job Openings, N.W.T. Residents, Medium Case

(number)

	Occupation	NOC skill level	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total
1	0621 Retail and wholesale trade managers	А	67	117	89	96	1,464	4.4
2	6733 Janitors, caretakers, and building superintendents	D	34	65	54	52	853	2.5
3	4032 Elementary school and kindergarten teachers	А	-11	61	41	43	824	2.5
4	3012 Registered nurses and registered psychiatric nurses	А	33	56	48	46	816	2.4
5	1221 Administrative officers	В	6	67	45	47	807	2.4
6	1241 Administrative assistants	В	-4	51	37	42	682	2.0
7	4031 Secondary school teachers	А	-3	44	33	31	610	1.8
8	6421 Retail salespersons	С	14	46	43	39	540	1.6
9	7521 Heavy equipment operators (except crane)	С	-3	57	29	34	538	1.6
10	6611 Cashiers	D	9	47	48	36	536	1.6
11	6731 Light duty cleaners	D	38	39	37	40	532	1.6
12	4212 Social and community service workers	В	12	33	32	33	526	1.6
13	4214 Early childhood educators and assistants	В	19	33	29	29	499	1.5
14	7271 Carpenters	В	-3	38	16	28	482	1.4
15	0711 Construction managers	А	0	39	19	24	478	1.4
16	1311 Accounting technicians and bookkeepers	В	17	34	26	27	453	1.3
17	7511 Transport truck drivers	С	-16	50	26	23	426	1.3
18	4021 College and other vocational instructors	А	-1	29	23	22	404	1.2
19	1111 Financial auditors and accountants	А	22	30	23	17	354	1.1
20	2271 Air pilots, flight engineers, and flying instructors	В	-43	43	21	25	346	1.0
21	8231 Underground production and development miners	В	14	44	21	21	336	1.0
22	6322 Cooks	В	35	23	21	20	323	1.0
23	0111 Financial managers	А	7	22	19	18	311	0.9
24	1414 Receptionists	С	4	19	19	24	300	0.9
25	0012 Senior government managers and officials	А	-6	19	19	18	294	0.9

(continued)

Table 12 (cont'd)

Top 50 Occupations by Job Openings, N.W.T. Residents, Medium Case

(number)

	Occupation	NOC skill level	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total
26	7611 Construction trades helpers and labourers	D	-14	25	5	19	284	0.8
27	7241 Electricians (except industrial and power system)	В	-6	23	6	15	274	0.8
28	4164 Social policy researchers, consultants, and program officers	А	-1	21	15	12	262	0.8
29	0714 Facility operation and maintenance managers	А	5	22	16	12	259	0.8
30	1411 General office support workers	С	-14	17	16	17	249	0.7
31	0632 Accommodation service managers	А	24	15	15	18	247	0.7
32	7321 Automotive service technicians, truck and bus mechanics, and mechanical repairers	В	11	20	15	18	246	0.7
33	6622 Store shelf stockers, clerks, and order fillers	D	7	22	17	17	245	0.7
34	0013 Senior managers—financial, communications, and other business services	A	19	16	15	17	243	0.7
35	1431 Accounting and related clerks	С	-11	21	14	13	237	0.7
36	3413 Nurse aides, orderlies, and patient service associates	С	8	15	12	16	237	0.7
37	7513 Taxi and limousine drivers and chauffeurs	С	-30	31	15	13	233	0.7
38	4154 Professional occupations in religion	А	17	14	14	16	220	0.7
39	0014 Senior managers—health, education, social and community services, and membership organizations	A	18	16	13	10	216	0.6
40	0423 Managers in social, community, and correctional services	А	6	16	12	11	214	0.6
41	0112 Human resources managers	А	3	17	12	12	213	0.6
42	4112 Lawyers and Quebec notaries	А	11	15	14	9	212	0.6
43	6211 Retail sales supervisors	В	9	18	12	16	210	0.6
44	0631 Restaurant and food service managers	А	26	15	12	11	207	0.6
45	6711 Food counter attendants, kitchen helpers, and related support occupations	D	32	18	17	9	204	0.6
46	4311 Police officers (except commissioned)	В	-19	14	11	11	199	0.6
47	7312 Heavy duty equipment mechanics	В	5	19	9	14	198	0.6
48	0016 Senior managers—construction, transportation, production, and utilities	А	-4	17	8	11	198	0.6
49	2131 Civil engineers	А	9	16	11	8	197	0.6
50	0011 Legislators	А	-4	11	13	14	193	0.6
	Share of Top 50 Job Opening Occupations Total Job Openings fr	om 2015	to 2030					57.9

f = forecast

Note: Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training.

Top 50 Occupations by Job Openings, N.W.T. Residents, High Case

(number)

	Occupation	NOC skill level	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total
1	0621 Retail and wholesale trade managers	А	67	118	95	100	1,581	4.3
2	6733 Janitors, caretakers, and building superintendents	D	34	64	56	54	911	2.5
3	1221 Administrative officers	В	6	64	49	47	889	2.4
4	4032 Elementary school and kindergarten teachers	А	-11	61	41	44	843	2.3
5	3012 Registered nurses and registered psychiatric nurses	А	33	56	48	47	837	2.3
6	1241 Administrative assistants	В	-4	50	39	43	729	2.0
7	7521 Heavy equipment operators (except crane)	С	-3	52	35	34	661	1.8
8	4031 Secondary school teachers	А	-3	44	33	32	623	1.7
9	6421 Retail salespersons	С	14	47	45	40	604	1.6
10	6611 Cashiers	D	9	48	50	37	601	1.6
11	6731 Light duty cleaners	D	38	38	39	43	595	1.6
12	7271 Carpenters	В	-3	29	26	19	566	1.5
13	0711 Construction managers	А	0	32	29	17	555	1.5
14	4212 Social and community service workers	В	12	33	32	34	543	1.5
15	7511 Transport truck drivers	С	-16	48	29	24	523	1.4
16	4214 Early childhood educators and assistants	В	19	33	29	30	512	1.4
17	1311 Accounting technicians and bookkeepers	В	17	33	27	27	483	1.3
18	2271 Air pilots, flight engineers, and flying instructors	В	-43	41	23	31	440	1.2
19	8231 Underground production and development miners	В	14	43	22	26	425	1.2
20	4021 College and other vocational instructors	А	-1	29	23	22	413	1.1
21	1111 Financial auditors and accountants	А	22	30	23	19	386	1.1
22	7611 Construction trades helpers and labourers	D	-14	15	15	8	354	1.0
23	6322 Cooks	В	35	23	21	21	345	0.9
24	7241 Electricians (except industrial and power system)	В	-6	16	14	8	328	0.9
25	0111 Financial managers	А	7	22	19	18	324	0.9

(continued)

Table 13 (cont'd)

Top 50 Occupations by Job Openings, N.W.T. Residents, High Case

(number)

	Occupation	NOC skill level	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total
26	1414 Receptionists	С	4	18	20	24	323	0.9
27	0012 Senior government managers and officials	А	-6	19	19	19	304	0.8
28	7513 Taxi and limousine drivers and chauffeurs	С	-30	30	16	16	296	0.8
29	0714 Facility operation and maintenance managers	А	5	22	16	13	276	0.8
30	6622 Store shelf stockers, clerks, and order fillers	D	7	22	18	18	274	0.7
31	1411 General office support workers	С	-14	16	17	17	273	0.7
32	4164 Social policy researchers, consultants, and program officers	А	-1	21	15	12	271	0.7
33	7321 Automotive service technicians, truck and bus mechanics, and mechanical repairers	В	11	20	16	19	270	0.7
34	1431 Accounting and related clerks	С	-11	21	14	13	261	0.7
35	0632 Accommodation service managers	А	24	15	15	19	254	0.7
36	0013 Senior managers—financial, communications, and other business services	A	19	16	16	18	251	0.7
37	3413 Nurse aides, orderlies, and patient service associates	С	8	15	12	16	245	0.7
38	0016 Senior managers—construction, transportation, production, and utilities	A	-4	14	13	9	236	0.6
39	0811 Managers in natural resources production and fishing	А	9	22	14	14	231	0.6
40	7312 Heavy duty equipment mechanics	В	5	17	11	13	230	0.6
41	6211 Retail sales supervisors	В	9	18	12	16	230	0.6
42	0112 Human resources managers	А	3	17	12	13	227	0.6
43	4154 Professional occupations in religion	А	17	14	14	16	226	0.6
44	6711 Food counter attendants, kitchen helpers, and related support occupations	D	32	18	17	9	225	0.6
45	0014 Senior managers—health, education, social and community services, and membership organizations	А	18	16	13	11	222	0.6
46	0423 Managers in social, community, and correctional services	А	6	16	12	11	220	0.6
47	4112 Lawyers and Quebec notaries	А	11	15	14	10	219	0.6
48	0631 Restaurant and food service managers	А	26	14	12	12	215	0.6
49	0731 Managers in transportation	А	-14	18	13	11	212	0.6
50	4311 Police officers (except commissioned)	В	-19	14	11	11	207	0.6
	Share of Top 50 Job Opening Occupations Total Job Openings fr	om 2015	to 2030					57.9

f = forecast

Note: Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training.

Top 50 Occupations by Expansion Demand

Table 14

Top 50 Occupations by Expansion Demand, N.W.T. Residents, Base Case

(number)

	Occupation	NOC skill level	2015–20f	2021–25f	2026–30f	2015–30f (total)
1	3012 Registered nurses and registered psychiatric nurses	А	67	10	-12	66
2	6733 Janitors, caretakers, and building superintendents	D	78	4	-17	65
3	6611 Cashiers	D	16	41	6	63
4	4214 Early childhood educators and assistants	В	49	10	1	60
5	0621 Retail and wholesale trade managers	А	96	-20	-21	55
6	6421 Retail salespersons	С	25	14	9	48
7	6731 Light duty cleaners	D	47	-4	4	47
8	4212 Social and community service workers	В	33	4	8	45
9	3413 Nurse aides, orderlies, and patient service associates	С	29	4	6	39
10	6622 Store shelf stockers, clerks, and order fillers	D	19	3	4	27
11	1414 Receptionists	С	19	-5	11	25
12	4412 Home support workers, housekeepers, and related occupations	С	15	3	5	24
13	3233 Licensed practical nurses	В	9	6	9	24
14	0013 Senior managers—financial, communications, and other business services	А	16	3	4	23
15	4154 Professional occupations in religion	А	11	3	4	18
16	3112 General practitioners and family physicians	А	9	4	4	17
17	7521 Heavy equipment operators (except crane)	С	93	-32	-44	17
18	0311 Managers in health care	А	6	4	6	16
19	0012 Senior government managers and officials	А	8	5	2	15
20	3111 Specialist physicians	А	8	3	3	14
21	0433 Commissioned officers of the Canadian Forces	А	5	4	5	14
22	4152 Social workers	А	11	4	-1	13
23	4411 Home child care providers	С	19	-3	-4	12
24	0632 Accommodation service managers	А	9	-2	5	12
25	3113 Dentists	А	6	3	2	11

(continued)

Table 14 (cont'd)

Top 50 Occupations by Expansion Demand, N.W.T. Residents, Base Case

(number)

	Occupation	NOC skill level	2015–20f	2021–25f	2026–30f	2015–30f (total)
26	4021 College and other vocational instructors	А	24	-3	-10	11
27	6235 Financial sales representatives	В	10	1	0	11
28	6211 Retail sales supervisors	В	17	-7	1	11
29	0011 Legislators	А	-2	4	7	10
30	2212 Geological and mineral technologists and technicians	В	17	-2	-6	9
31	1451 Library assistants and clerks	С	9	0	0	9
32	6521 Travel counsellors	С	9	0	0	9
33	1241 Administrative assistants	В	46	-19	-19	8
34	1431 Accounting and related clerks	С	26	-8	-10	8
35	6231 Insurance agents and brokers	В	7	1	0	8
36	1311 Accounting technicians and bookkeepers	В	32	-10	-14	8
37	1221 Administrative officers	В	68	-25	-35	8
38	2113 Geoscientists and oceanographers	А	7	1	0	7
39	7612 Other trades helpers and labourers	D	4	2	1	7
40	1422 Data entry clerks	С	4	2	2	7
41	3215 Medical radiation technologists	В	5	1	1	7
42	2153 Urban and land use planners	А	5	1	1	7
43	7294 Painters and decorators (except interior decorators)	В	13	-3	-3	7
44	6621 Service station attendants	D	10	1	-5	7
45	3211 Medical laboratory technologists	В	4	1	1	6
46	1222 Executive assistants	В	9	-3	0	6
47	0014 Senior managers—health, education, social and community services, and membership organizations	A	16	-1	-9	6
48	1121 Human resources professionals	А	11	1	-6	6
49	3132 Dietitians and nutritionists	А	4	1	1	6
50	6741 Dry cleaning, laundry, and related occupations	D	4	1	1	6
	Total Expansion Demand from Top 50 Expansion Demand Occupations					965

f = forecast

Note: Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training.

Top 50 Occupations by Expansion Demand, N.W.T. Residents, Medium Case (number)

	Occupation	NOC skill level	2015–20f	2021–25f	2026–30f	2015–30f (total)
1	0621 Retail and wholesale trade managers	А	173	20	29	222
2	6611 Cashiers	D	69	78	55	203
3	6421 Retail salespersons	С	79	47	57	182
4	6733 Janitors, caretakers, and building superintendents	D	105	16	7	128
5	7521 Heavy equipment operators (except crane)	С	136	1	-16	121
6	6731 Light duty cleaners	D	62	6	38	107
7	3012 Registered nurses and registered psychiatric nurses	А	99	10	-10	99
8	6622 Store shelf stockers, clerks, and order fillers	D	43	18	25	86
9	4214 Early childhood educators and assistants	В	73	10	3	86
10	7511 Transport truck drivers	С	103	-7	-14	81
11	1221 Administrative officers	В	105	-6	-25	73
12	4212 Social and community service workers	В	55	4	11	70
13	3413 Nurse aides, orderlies, and patient service associates	С	46	4	8	58
14	8231 Underground production and development miners	В	74	-26	9	57
15	1241 Administrative assistants	В	73	-11	-13	50
16	1414 Receptionists	С	33	0	14	47
17	1521 Shippers and receivers	С	26	3	18	46
18	6211 Retail sales supervisors	В	33	0	13	46
19	1431 Accounting and related clerks	С	42	-3	2	40
20	7611 Construction trades helpers and labourers	D	109	9	-78	40
21	7271 Carpenters	В	118	3	-83	39
22	2271 Air pilots, flight engineers, and flying instructors	В	60	-33	10	37
23	7321 Automotive service technicians, truck and bus mechanics, and mechanical repairers	В	29	-3	11	36
24	8221 Supervisors, mining and quarrying	В	29	-3	11	36
25	7513 Taxi and limousine drivers and chauffeurs	С	50	-14	-1	36

(continued)

Table 15 (cont'd)

Top 50 Occupations by Expansion Demand, N.W.T. Residents, Medium Case (number)

	Occupation	NOC skill level	2015–20f	2021–25f	2026–30f	2015–30f (total)
26	7242 Industrial electricians	В	21	0	14	35
27	0711 Construction managers	А	99	12	-76	35
28	4412 Home support workers, housekeepers, and related occupations	С	23	3	7	33
29	1311 Accounting technicians and bookkeepers	В	46	-3	-11	32
30	7452 Material handlers	С	28	-10	14	32
31	3233 Licensed practical nurses	В	14	7	10	30
32	2212 Geological and mineral technologists and technicians	В	20	1	9	30
33	1411 General office support workers	С	26	-2	5	29
34	1522 Storekeepers and partspersons	С	17	4	9	29
35	0013 Senior managers—financial, communications, and other business services	А	17	4	7	29
36	8614 Mine labourers	D	23	-10	16	28
37	6621 Service station attendants	D	19	6	1	26
38	7312 Heavy duty equipment mechanics	В	39	-8	-8	23
39	7241 Electricians (except industrial and power system)	В	85	3	-66	23
40	7311 Construction millwrights and industrial mechanics	В	33	-5	-6	22
41	0012 Senior government managers and officials	А	14	5	3	22
42	4154 Professional occupations in religion	А	12	4	6	22
43	3112 General practitioners and family physicians	А	13	4	4	21
44	2113 Geoscientists and oceanographers	А	10	2	9	21
45	0311 Managers in health care	А	10	4	6	21
46	7237 Welders and related machine operators	В	30	-4	-5	20
47	6322 Cooks	В	20	-5	5	20
48	0811 Managers in natural resources production and fishing	А	28	-10	2	20
49	4021 College and other vocational instructors	А	32	-3	-9	20
50	4152 Social workers	А	16	4	-1	20
	Total Expansion Demand from Top 50 Expansion Demand Occupations					2,665

f = forecast

Note: Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training.

Top 50 Occupations by Expansion Demand, N.W.T. Residents, High Case

(number)

	Occupation	NOC skill level	2015–20f	2021–25f	2026–30f	2015–30f (total)
1	0621 Retail and wholesale trade managers	А	181	70	34	285
2	6611 Cashiers	D	74	118	61	254
3	6421 Retail salespersons	С	84	85	63	231
4	7521 Heavy equipment operators (except crane)	С	153	57	-6	204
5	6733 Janitors, caretakers, and building superintendents	D	111	43	9	164
6	6731 Light duty cleaners	D	66	37	44	148
7	7511 Transport truck drivers	С	112	46	-11	147
8	1221 Administrative officers	В	116	24	-21	120
9	8231 Underground production and development miners	В	79	25	10	113
10	3012 Registered nurses and registered psychiatric nurses	А	103	15	-10	109
11	6622 Store shelf stockers, clerks, and order fillers	D	46	34	28	108
12	2271 Air pilots, flight engineers and flying instructors	В	65	14	14	94
13	4214 Early childhood educators and assistants	В	76	14	4	94
14	7611 Construction trades helpers and labourers	D	133	24	-67	89
15	7271 Carpenters	В	143	16	-73	86
16	4212 Social and community service workers	В	59	9	12	79
17	1241 Administrative assistants	В	81	6	-11	76
18	7513 Taxi and limousine drivers and chauffeurs	С	54	21	1	76
19	0711 Construction managers	А	119	23	-69	73
20	1521 Shippers and receivers	С	27	17	20	64
21	3413 Nurse aides, orderlies, and patient service associates	С	48	7	8	64
22	1414 Receptionists	С	38	9	16	63
23	8221 Supervisors, mining and quarrying	В	30	19	12	61
24	7452 Material handlers	С	30	13	16	59
25	6211 Retail sales supervisors	В	34	10	15	59

(continued)

Table 16 (cont'd)

Top 50 Occupations by Expansion Demand, N.W.T. Residents, High Case

(number)

	Occupation	NOC skill level	2015–20f	2021–25f	2026–30f	2015–30f (total)
26	1431 Accounting and related clerks	С	45	10	3	57
27	7242 Industrial electricians	В	22	18	16	56
28	7241 Electricians (except industrial and power system)	В	103	11	-59	55
29	8614 Mine labourers	D	24	11	18	54
30	7321 Automotive service technicians, truck and bus mechanics, and mechanical repairers	В	30	10	12	52
31	1311 Accounting technicians and bookkeepers	В	50	8	-10	48
32	1411 General office support workers	С	31	7	8	46
33	2212 Geological and mineral technologists and technicians	В	21	13	11	45
34	7311 Construction millwrights and industrial mechanics	В	35	14	-6	43
35	7312 Heavy duty equipment mechanics	В	44	3	-5	43
36	0811 Managers in natural resources production and fishing	А	29	11	2	42
37	1522 Storekeepers and partspersons	С	18	14	10	42
38	0016 Senior managers—construction, transportation, production, and utilities	А	48	12	-21	39
39	7237 Welders and related machine operators	В	33	8	-4	37
40	4412 Home support workers, housekeepers, and related occupations	С	24	5	7	36
41	7315 Aircraft mechanics and aircraft inspectors	В	29	7	-2	35
42	6322 Cooks	В	22	6	6	34
43	7251 Plumbers	В	52	4	-22	34
44	6621 Service station attendants	D	19	12	2	33
45	3233 Licensed practical nurses	В	15	8	10	32
46	0013 Senior managers—financial, communications, and other business services	A	17	7	8	32
47	6711 Food counter attendants, kitchen helpers, and related support occupations	D	16	23	-8	32
48	6523 Airline ticket and service agents	С	23	1	7	31
49	2113 Geoscientists and oceanographers	А	11	9	10	30
50	0731 Managers in transportation	А	22	10	-2	29
	Total Expansion Demand from Top 50 Expansion Demand Occupations					3,935

f = forecast

Note: Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training.

Forecast by Occupational Group

Management Occupations

Chart 20

Employment Forecast, "Management Occupations," N.W.T. Residents, 2011–30

(number, 000s)



f = forecast

Source: The Conference Board of Canada.

Chart 21

Replacement Demand Forecast, "Management Occupations," N.W.T. Residents, 2011–30

(number)



Expansion Demand Forecast, "Management Occupations," N.W.T. Residents, 2011–30

(number)



f = forecast

Source: The Conference Board of Canada.

Chart 23

Job Openings Forecast, "Management Occupations," N.W.T. Residents, 2011–30

(number)



Table 17 Total Change, "Management Occupations," N.W.T. Residents, 2015–30 (number)

	Total forecasted expansion demand	Total forecasted	Total forecasted job openings			
		replacement demand	Skill Level A	Skill Level B	Skill Level C	Skill Level D
Base case	100	5,625	5,725	n.a.	n.a.	n.a.
Medium case	527	6,064	6,590	n.a.	n.a.	n.a.
High case	783	6,301	7,084	n.a.	n.a.	n.a.

n.a. = not applicable

Note: The total forecasted job openings may not sum to the total forecasted expansion demand and total forecasted replacement demand due to rounding. Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training. Source: The Conference Board of Canada.

Business, Finance, and Administration Occupations

Chart 24

Employment Forecast, "Business, Finance, and Administration Occupations," N.W.T. Residents, 2011–30

(number, 000s)



Replacement Demand Forecast, "Business, Finance, and Administration Occupations," N.W.T. Residents, 2011–30 (number)



f = forecast Source: The Conference Board of Canada.

Chart 26

Expansion Demand Forecast, "Business, Finance, and Administration Occupations," N.W.T. Residents, 2011–30 (number)



Job Openings Forecast, "Business, Finance, and Administration Occupations," N.W.T. Residents, 2011–30

(number)



f = forecast Source: The Conference Board of Canada.

Table 18

Total Change, "Business, Finance, and Administration Occupations," N.W.T. Residents, 2015–30 (number)

	Total forecasted expansion demand	Total forecasted	Total forecasted job openings			
		replacement demand	Skill Level A	Skill Level B	Skill Level C	Skill Level D
Base case	58	4,684	932	2,667	1,143	n.a.
Medium case	485	4,940	1,023	2,993	1,408	n.a.
High case	752	5,106	1,089	3,207	1,561	n.a.

n.a. = not applicable

Note: The total forecasted job openings may not sum to the total forecasted expansion demand and total forecasted replacement demand due to rounding. Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training. Source: The Conference Board of Canada.

Natural and Applied Sciences Occupations

Chart 28

Employment Forecast, "Natural and Applied Sciences Occupations," N.W.T. Residents, 2011–30

(number, 000s)



f = forecast

Source: The Conference Board of Canada.

Chart 29

Replacement Demand Forecast, "Natural and Applied Sciences Occupations," N.W.T. Residents, 2011–30

(number)



f = forecast Source: The Conference Board of Canada.

Expansion Demand Forecast, "Natural and Applied Sciences Occupations," N.W.T. Residents, 2011–30

(number)



f = forecast Source: The Conference Board of Canada.

Chart 31

Job Openings Forecast, "Natural and Applied Sciences Occupations," N.W.T. Residents, 2011–30 (number)



Total Change, "Natural and Applied Sciences Occupations," N.W.T. Residents, 2015–30 (number)

	Total forecasted expansion demand	Total forecasted replacement demand	Total forecasted job openings			
			Skill Level A	Skill Level B	Skill Level C	Skill Level D
Base case	-47	2,061	937	1,077	n.a.	n.a.
Medium case	160	2,164	1,007	1,317	n.a.	n.a.
High case	311	2,262	1,057	1,516	n.a.	n.a.

n.a. = not applicable

Note: The total forecasted job openings may not sum to the total forecasted expansion demand and total forecasted replacement demand due to rounding. Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training. Source: The Conference Board of Canada.

Health Occupations

Chart 32

Employment Forecast, "Health Occupations," N.W.T. Residents, 2011–30

(number, 000s)



Replacement Demand Forecast, "Health Occupations," N.W.T. Residents, 2011–30

(number)



f = forecast Source: The Conference Board of Canada.

Chart 34

Expansion Demand Forecast, "Health Occupations," N.W.T. Residents, 2011–30

(number)



Job Openings Forecast, "Health Occupations," N.W.T. Residents, 2011–30

(number)



f = forecast Source: The Conference Board of Canada.

Table 20

Total Change, "Health Occupations," N.W.T. Residents, 2015–30 (number)

	Total forecasted expansion demand	Total forecasted	Total forecasted job openings			
		replacement demand	Skill Level A	Skill Level B	Skill Level C	Skill Level D
Base case	216	1,580	1,162	370	263	n.a.
Medium case	325	1,685	1,285	423	302	n.a.
High case	359	1,712	1,320	438	313	n.a.

n.a. = not applicable

Note: The total forecasted job openings may not sum to the total forecasted expansion demand and total forecasted replacement demand due to rounding. Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training. Source: The Conference Board of Canada.

Education, Law, and Social, Community, and Government Service Occupations

Chart 36

Employment Forecast, "Education, Law, and Social, Community, and Government Services" Occupations, N.W.T. Residents, 2011–30 (number, 000s)



f = forecast Source: The Conference Board of Canada.

Chart 37

Replacement Demand Forecast, "Education, Law, and Social, Community, and Government Services Occupations," N.W.T. Residents, 2011–30

(number)



f = forecast

Source: The Conference Board of Canada.

Expansion Demand Forecast, "Education, Law, and Social, Community, and Government Services Occupations," N.W.T. Residents, 2011–30

(number)



f = forecast

Source: The Conference Board of Canada.

Chart 39

Job Openings Forecast, "Education, Law, and Social, Community, and Government Services Occupations," N.W.T. Residents, 2011–30 (number)



f = forecast Source: The Conference Board of Canada.

Total Change, "Education, Law, and Social, Community, and Government Services Occupations," N.W.T. Residents, 2015–30

(number)

	Total forecasted expansion demand	Total forecasted	Total forecasted job openings			
		replacement demand	Skill Level A	Skill Level B	Skill Level C	Skill Level D
Base case	105	5,183	3,534	1,266	488	n.a.
Medium case	299	5,384	3,752	1,390	541	n.a.
High case	386	5,466	3,854	1,436	563	n.a.

n.a. = not applicable

Note: The total forecasted job openings may not sum to the total forecasted expansion demand and total forecasted replacement demand due to rounding. Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training. Source: The Conference Board of Canada.

Occupations in Art, Culture, Recreation, and Sport

Chart 40

Employment Forecast, "Arts, Culture, Recreation, and Sports Occupations," N.W.T. Residents, 2011–30

(number)



Replacement Demand Forecast, "Arts, Culture, Recreation, and Sports Occupations," N.W.T. Residents, 2011–30 (number)



f = forecast Source: The Conference Board of Canada.

Chart 42

Expansion Demand Forecast, "Arts, Culture, Recreation, and Sports Occupations," N.W.T. Residents, 2011–30 (number)



Job Openings Forecast, "Arts, Culture, Recreation, and Sports Occupations," N.W.T. Residents, 2011–30





f = forecast Source: The Conference Board of Canada.

Table 22

Total Change, "Arts, Culture, Recreation, and Sport Occupations," N.W.T. Residents, 2015–30 (number)

	Total forecasted expansion demand	Total forecasted		Total forecasted job openings		
		replacement demand	Skill Level A	Skill Level B	Skill Level C	Skill Level D
Base case	-2	639	343	294	n.a.	n.a.
Medium case	18	651	357	311	n.a.	n.a.
High case	31	660	368	323	n.a.	n.a.

n.a. = not applicable

Note: The total forecasted job openings may not sum to the total forecasted expansion demand and total forecasted replacement demand due to rounding. Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training. Source: The Conference Board of Canada.

Sales and Service Occupations

Chart 44

Employment Forecast, "Sales and Service Occupations," N.W.T. Residents, 2011–30

(number, 000s)



f = forecast Source: The Conference Board of Canada.

Chart 45

Replacement Demand Forecast, "Sales and Service Occupations," N.W.T. Residents, 2011–30

(number)



Expansion Demand Forecast, "Sales and Service Occupations," N.W.T. Residents, 2011–30

(number)



f = forecast

Source: The Conference Board of Canada.

Chart 47

Job Openings Forecast, "Sales and Service Occupations," N.W.T. Residents, 2011–30

(number)



Total Change, "Sales and Service Occupations," N.W.T. Residents, 2015–30 (number)

	Total forecasted expansion demand	Total forecasted	Total forecasted job openings			
		replacement demand	Skill Level A	Skill Level B	Skill Level C	Skill Level D
Base case	217	3,598	n.a.	945	850	2,020
Medium case	921	3,860	n.a.	1,102	1,154	2,525
High case	1,260	3,996	n.a.	1,178	1,306	2,772

n.a. = not applicable

Note: The total forecasted job openings may not sum to the total forecasted expansion demand and total forecasted replacement demand due to rounding. Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training. Source: The Conference Board of Canada.

Trades, Transport and Equipment Operators, and Related Occupations

Chart 48

Employment Forecast, "Trades, Transport and Equipment Operators, and Related Occupations," N.W.T. Residents, 2011–30 (number, 000s)



Replacement Demand Forecast, "Trades, Transport and Equipment Operators, and Related Occupations," N.W.T. Residents, 2011–30 (number)



f = forecast

Source: The Conference Board of Canada.

Chart 50

Expansion Demand Forecast, "Trades, Transport and Equipment Operators, and Related Occupations," N.W.T. Residents, 2011–30 (number)



f = forecast

Job Openings Forecast, "Trades, Transport and Equipment Operators," and Related Occupations," N.W.T. Residents, 2011–30 (number)



f = forecast Source: The Conference Board of Canada.

Table 24

Total Change, "Trades, Transport and Equipment Operators, and Related Occupations," N.W.T. Residents, 2015–30

(number)

	Total forecasted expansion demand	Total forecasted replacement demand	Total forecasted job openings				
			Skill Level A	Skill Level B	Skill Level C	Skill Level D	
Base case	-83	3,771	n.a.	2,312	1,062	313	
Medium case	681	4,284	n.a.	3,030	1,537	399	
High case	1,323	4,646	n.a.	3,590	1,905	473	

n.a. = not applicable

Note: The total forecasted job openings may not sum to the total forecasted expansion demand and total forecasted replacement demand due to rounding. Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training. Source: The Conference Board of Canada.

Natural Resources, Agriculture, and Related Production Occupations

Chart 52

Employment Forecast, "Natural Resources, Agriculture, and Related Production Occupations," N.W.T. Residents, 2011–30 (number)



f = forecast Source: The Conference Board of Canada.

Chart 53

Replacement Demand Forecast, "Natural Resources, Agriculture, and Related Production Occupations," N.W.T. Residents, 2011–30 (number)



f = forecast Source: The Conference Board of Canada.

Expansion Demand Forecast, "Natural Resources, Agriculture, and Related Production Occupations," N.W.T. Residents, 2011–30 (number)



f = forecast Source: The Conference Board of Canada.

Chart 55

Job Openings Forecast, "Natural Resources, Agriculture, and Related Production Occupations," N.W.T. Residents, 2011–30 (number)


Total Change, "Natural Resources, Agriculture, and Related Production Occupations," N.W.T. Residents, 2015–30

(number)

	Total forecasted	Total forecasted	Total forecasted job openings					
	expansion demand	replacement demand	Skill Level A	Skill Level B	Skill Level C	Skill Level D		
Base case	-57	640	n.a.	457	39	87		
Medium case	120	697	n.a.	628	50	139		
High case	248	763	n.a.	773	59	179		

n.a. = not applicable

Note: The total forecasted job openings may not sum to the total forecasted expansion demand and total forecasted replacement demand due to rounding. Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training. Source: The Conference Board of Canada.

Occupations in Manufacturing and Utilities

Chart 56

Employment Forecast, "Manufacturing, and Utilities Occupations," N.W.T. Residents, 2011–30



f = forecast Source: The Conference Board of Canada.

Chart 57

Replacement Demand Forecast, "Manufacturing and Utilities Occupations," N.W.T. Residents, 2011–30

(number)



f = forecast Source: The Conference Board of Canada.

Chart 58

Expansion Demand Forecast, "Manufacturing and Utilities Occupations," N.W.T. Residents, 2011–30 (number)



f = forecast Source: The Conference Board of Canada.

Chart 59

Job Openings Forecast, "Manufacturing and Utilities Occupations," N.W.T. Residents, 2011–30 (number)



f = forecast Source: The Conference Board of Canada.

Table 26

Total Change, "Manufacturing and Utilities Occupations," N.W.T. Residents, 2015–30 (number)

	Total forecasted	Total forecasted	Total forecasted job openings				
	expansion demand	replacement demand	Skill Level A	Skill Level B	Skill Level C	Skill Level D	
Base case	-23	269	n.a.	173	25	48	
Medium case	21	284	n.a.	216	25	63	
High case	52	301	n.a.	250	26	77	

n.a. = not applicable

Note: The total forecasted job openings may not sum to the total forecasted expansion demand and total forecasted replacement demand due to rounding. Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training. Source: The Conference Board of Canada.

Rotational Workers

Table 27

Employment by NOC, Rotational Workers

(number)

	2014	2020f	2025f	2020f	2015–30f	2015–30f (per cent
	2014	20201	20251	20301	(average)	share of total)
Base Case						
Management occupations	189	227	210	183	210	10.1
Business, finance, and administration occupations	140	146	146	141	144	7.0
Natural and applied sciences and related occupations	178	212	202	180	198	9.6
Health occupations	143	164	167	165	162	7.8
Occupations in education, law, and social, community, and government services	95	104	102	95	101	4.9
Sales and service occupations	106	114	107	98	108	5.2
Trades, transport and equipment operators, and related occupations	708	906	826	696	821	39.5
Natural resources, agriculture, and related production occupations	286	376	333	269	331	15.9
Occupations in manufacturing and utilities	97	106	97	89	99	4.7
Medium Case						
Management occupations	189	249	248	238	237	9.9
Business, finance, and administration occupations	140	149	151	153	149	6.2
Natural and applied sciences and related occupations	178	221	218	236	215	9.0
Health occupations	143	175	180	186	174	7.2
Occupations in education, law, and social, community, and government services	95	107	106	104	104	4.4
Sales and service occupations	106	119	115	117	115	4.8
Trades, transport and equipment operators, and related occupations	708	978	960	970	928	38.7
Natural resources, agriculture, and related production occupations	286	396	371	406	370	15.5
Occupations in manufacturing and utilities	97	110	102	98	103	4.3

Table 27 (cont'd)

Employment by NOC, Rotational Workers

(number)

	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total)
High Case						
Management occupations	189	256	285	277	258	9.9
Business, finance, and administration occupations	140	150	157	160	153	5.8
Natural and applied sciences and related occupations	178	224	255	275	235	9.0
Health occupations	143	177	189	196	179	6.9
Occupations in education, law, and social, community, and government services	95	108	110	108	107	4.1
Sales and service occupations	106	120	128	131	122	4.7
Trades, transport and equipment operators, and related occupations	708	1,006	1,153	1,181	1,035	39.6
Natural resources, agriculture, and related production occupations	286	403	465	505	419	16.0
Occupations in manufacturing and utilities	97	111	107	103	106	4.1

f = forecast

Source: The Conference Board of Canada.

Table 28

Job Openings by NOC, Rotational Workers

(number)

	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total)
Base Case						
Management occupations	17	37	27	21	396	10.3
Business, finance, and administration occupations	12	18	17	15	257	6.6
Natural and applied sciences, and related occupations	14	36	26	20	354	9.2
Health occupations	4	22	20	19	304	7.9
Occupations in education, law, and social, community, and government services	10	14	12	11	190	4.9
Sales and service occupations	9	16	13	11	189	4.9
Trades, transport and equipment operators, and related occupations	59	161	105	73	1,443	37.4
Natural resources, agriculture, and related production occupations	31	73	43	29	560	14.5
Occupations in manufacturing and utilities	2	14	9	10	168	4.3

Table 28 (cont'd)

Job Openings by NOC, Rotational Workers (number)

	2014	2020f	2025f	2030f	2015–30f (average)	2015–30f (per cent share of total)
Medium Case					(2101290)	
Management occupations	17	45	31	30	503	10.4
Business, finance, and administration occupations	12	19	18	17	277	5.7
Natural and applied sciences, and related occupations	14	40	30	29	440	9.1
Health occupations	4	24	21	22	345	7.1
Occupations in education, law, and social, community, and government services	10	15	13	12	206	4.2
Sales and service occupations	9	18	15	14	221	4.6
Trades, transport and equipment operators, and related occupations	59	186	123	120	1,906	39.3
Natural resources, agriculture, and related production occupations	31	83	53	51	766	15.8
Occupations in manufacturing and utilities	2	15	10	12	185	3.8
High Case						
Management occupations	17	43	36	33	583	10.3
Business, finance, and administration occupations	12	19	19	17	290	5.1
Natural and applied sciences, and related occupations	14	39	33	35	515	9.1
Health occupations	4	24	22	23	364	6.4
Occupations in education, law, and social, community, and government services	10	15	13	13	214	3.8
Sales and service occupations	9	17	16	16	247	4.4
Trades, transport and equipment operators, and related occupations	59	179	143	139	2,305	40.7
Natural resources, agriculture, and related production occupations	31	83	59	64	951	16.8
Occupations in manufacturing and utilities	2	15	10	12	195	3.4

f = forecast

Source: The Conference Board of Canada.

Expansion Demand by NOC, Rotational Workers

(number)

	2015–20f	2021–25f	2026–30f	Total 2015–30f
Base Case				
Management occupations	38	-17	-27	-6
Business, finance, and administration occupations	6	0	-5	2
Natural and applied sciences, and related occupations	35	-11	-22	2
Health occupations	20	3	-2	22
Occupations in education, law, and social, community, and government services	9	-2	-7	0
Sales and service occupations	8	-7	-9	-8
Trades, transport and equipment operators, and related occupations	198	-79	-131	-13
Natural resources, agriculture, and related production occupations	90	-43	-63	-17
Occupations in manufacturing and utilities	9	-9	-8	-8
Medium Case				
Management occupations	59	-1	-10	49
Business, finance, and administration occupations	9	2	2	14
Natural and applied sciences, and related occupations	43	-2	17	58
Health occupations	31	5	6	43
Occupations in education, law, and social, community, and government services	12	-1	-2	8
Sales and service occupations	12	-3	2	11
Trades, transport and equipment operators, and related occupations	270	-18	10	262
Natural resources, agriculture, and related production occupations	110	-25	35	120
Occupations in manufacturing and utilities	13	-8	-4	1

Table 29 (cont'd)

Expansion Demand by NOC, Rotational Workers

(number)

	2015–20f	2021–25f	2026–30f	Total 2015–30f
High Case				
Management occupations	67	29	-8	88
Business, finance, and administration occupations	10	7	2	20
Natural and applied sciences, and related occupations	46	31	21	98
Health occupations	34	12	7	52
Occupations in education, law, and social, community, and government services	12	3	-2	13
Sales and service occupations	14	8	3	24
Trades, transport and equipment operators and related occupations	298	147	28	473
Natural resources, agriculture, and related production occupations	117	62	40	219
Occupations in manufacturing and utilities	14	-5	-4	6

Note: Individual expansion demand years may not sum to total expansion demand due to rounding. Source: The Conference Board of Canada.

Total Forecasted Job Openings by NOC Skill Level, Rotational Workers, 2015–30

(number)

	Case	Skill level A	Skill level B	Skill level C	Skill level D
Management occupations	Base	396	n.a.	n.a.	n.a.
	Medium	503	n.a.	n.a.	n.a.
	High	583	n.a.	n.a.	n.a.
Business, finance, and administration occupations	Base	57	59	140	n.a.
	Medium	61	63	153	n.a.
	High	64	65	160	n.a.
Natural and applied sciences and related occupations	Base	153	201	n.a.	n.a.
	Medium	188	251	n.a.	n.a.
	High	219	295	n.a.	n.a.
Health occupations	Base	274	30	0	n.a.
	Medium	313	32	0	n.a.
	High	331	33	0	n.a.
Occupations in education, law, and social, community, and government services	Base	127	25	39	n.a.
	Medium	135	27	43	n.a.
	High	141	28	46	n.a.
Sales and service occupations	Base	n.a.	100	59	30
	Medium	n.a.	111	79	32
	High	n.a.	117	97	33
Trades, transport and equipment operators, and related	Base	n.a.	1,251	192	0
occupations	Medium	n.a.	1,658	248	0
	High	n.a.	2,006	299	0
Natural resources, agriculture, and related production	Base	n.a.	502	0	58
occupations	Medium	n.a.	703	0	63
	High	n.a.	886	0	65
Occupations in manufacturing and utilities	Base	n.a.	128	20	20
	Medium	n.a.	142	21	21
	High	n.a.	151	22	22

n.a. = not applicable

Note: Skill Level A occupations usually require university education, Skill Level B occupations usually require college or vocational education or apprenticeship training, Skill Level C occupations usually require secondary school and/or occupation-specific training, and Skill Level D occupations usually require on-the-job training.

Source: The Conference Board of Canada.

List of Occupations by Grouping

Table 31

List of "Management Occupations"

Management Occupations 0011 Legislators 0421 Administrators—post-secondary education and vocational training 0012 Senior government managers and officials 0422 School principals and administrators of elementary and secondary education 0013 Senior managers-financial, communications, and other business services 0423 Managers in social, community, and correctional services 0014 Senior managers-health, education, social, and community services and 0431 Commissioned police officers membership organizations 0015 Senior managers-trade, broadcasting, and other services, n.e.c. 0432 Fire chiefs and senior firefighting officers 0016 Senior managers-construction, transportation, production, and utilities 0433 Commissioned officers of the Canadian Forces 0111 Financial managers 0511 Library, archive, museum, and art gallery managers 0112 Human resources managers 0512 Managers—publishing, motion pictures, broadcasting, and performing arts 0113 Purchasing managers 0513 Recreation, sports, and fitness program and service directors 0114 Other administrative services managers 0601 Corporate sales managers 0121 Insurance, real estate, and financial brokerage managers 0621 Retail and wholesale trade managers 0122 Banking, credit, and other investment managers 0631 Restaurant and food service managers 0124 Advertising, marketing, and public relations managers 0632 Accommodation service managers 0125 Other business services managers 0651 Managers in customer and personal services, n.e.c. 0131 Telecommunication carriers managers 0711 Construction managers 0132 Postal and courier services managers 0712 Home building and renovation managers 0211 Engineering managers 0714 Facility operation and maintenance managers 0212 Architecture and science managers 0731 Managers in transportation 0213 Computer and information systems managers 0811 Managers in natural resources production and fishing 0311 Managers in health care 0821 Managers in agriculture 0822 Managers in horticulture 0411 Government managers—health and social policy development, and program administration 0412 Government managers—economic analysis, policy development, and 0823 Managers in aquaculture program administration 0413 Government managers—education policy development and program 0911 Manufacturing managers administration 0414 Other managers in public administration 0912 Utilities managers

Note: While all occupations in the above list fall under management occupations, not all occupations saw employment during the forecasted time period. Source: Employment and Social Development Canada.

Table 32 List of "Business, Finance, and Administration Occupations"

Business, Finance, and Administration Occupations

1111 Financial auditors and accountants	1311 Accounting technicians and bookkeepers
1112 Financial and investment analysts	1312 Insurance adjusters and claims examiners
1113 Securities agents, investment dealers, and brokers	1313 Insurance underwriters
1114 Other financial officers	1314 Assessors, valuators, and appraisers
1121 Human resources professionals	1315 Customs, ship and other brokers
1122 Professional occupations in business management consulting	1411 General office support workers
1123 Professional occupations in advertising, marketing, and public relations	1414 Receptionists
1211 Supervisors, general office and administrative support workers	1415 Personnel clerks
1212 Supervisors, finance and insurance office workers	1416 Court clerks
1213 Supervisors, library, correspondence and related information workers	1422 Data entry clerks
1214 Supervisors, mail and message distribution occupations	1423 Desktop publishing operators and related occupations
1215 Supervisors, supply chain, tracking, and scheduling coordination occupations	1431 Accounting and related clerks
1221 Administrative officers	1432 Payroll clerks
1222 Executive assistants	1434 Banking, insurance, and other financial clerks
1223 Human resources and recruitment officers	1435 Collectors
1224 Property administrators	1451 Library assistants and clerks
1225 Purchasing agents and officers	1452 Correspondence, publication, and regulatory clerks
1226 Conference and event planners	1454 Survey interviewers and statistical clerks
1227 Court officers and justices of the peace	1511 Mail, postal and related workers
1228 Employment insurance, immigration, border services, and revenue officers	1512 Letter carriers
1241 Administrative assistants	1513 Couriers, messengers, and door-to-door distributors
1242 Legal administrative assistants	1521 Shippers and receivers
1243 Medical administrative assistants	1522 Storekeepers and partspersons
1251 Court reporters, medical transcriptionists, and related occupations	1523 Production logistics coordinators
1252 Health information management occupations	1524 Purchasing and inventory control workers
1253 Records management technicians	1525 Dispatchers
1254 Statistical officers and related research support occupations	1526 Transportation route and crew schedulers

Note: While all occupations in the above list fall under business, finance, and administration occupations, not all occupations saw employment during the forecasted time period.

Source: Employment and Social Development Canada.

Table 33 List of "Natural and Applied Sciences and Related Occupations"

Natural and Applied Sciences and Related Occupations

2111 Physicists and astronomers	2212 Geological and mineral technologists and technicians
2112 Chemists	2221 Biological technologists and technicians
2113 Geoscientists and oceanographers	2222 Agricultural and fish products inspectors
2114 Meteorologists and climatologists	2223 Forestry technologists and technicians
2115 Other professional occupations in physical sciences	2224 Conservation and fishery officers
2121 Biologists and related scientists	2225 Landscape and horticulture technicians and specialists
2122 Forestry professionals	2231 Civil engineering technologists and technicians
2123 Agricultural representatives, consultants, and specialists	2232 Mechanical engineering technologists and technicians
2131 Civil engineers	2233 Industrial engineering and manufacturing technologists and technicians
2132 Mechanical engineers	2234 Construction estimators
2133 Electrical and electronics engineers	2241 Electrical and electronics engineering technologists and technicians
2134 Chemical engineers	2242 Electronic service technicians (household and business equipment)
2141 Industrial and manufacturing engineers	2243 Industrial instrument technicians and mechanics
2142 Metallurgical and materials engineers	2244 Aircraft instrument, electrical and avionics mechanics, technicians, and inspectors
2143 Mining engineers	2251 Architectural technologists and technicians
2144 Geological engineers	2252 Industrial designers
2145 Petroleum engineers	2253 Drafting technologists and technicians
2146 Aerospace engineers	2254 Land survey technologists and technicians
2147 Computer engineers (except software engineers and designers)	2255 Technical occupations in geomatics and meteorology
2148 Other professional engineers, n.e.c.	2261 Non-destructive testers and inspection technicians
2151 Architects	2262 Engineering inspectors and regulatory officers
2152 Landscape architects	2263 Inspectors in public and environmental health, and occupational health and safety
2153 Urban and land use planners	2264 Construction inspectors
2154 Land surveyors	2271 Air pilots, flight engineers and flying instructors
2161 Mathematicians, statisticians, and actuaries	2272 Air traffic controllers and related occupations
2171 Information systems analysts and consultants	2273 Deck officers, water transport
2172 Database analysts and data administrators	2274 Engineer officers, water transport

Table 33 (cont'd)

List of "Natural and Applied Sciences and Related Occupations"

Natural and Applied Sciences and Related Occupations

2173 Software engineers and designers	2275 Railway traffic controllers and marine traffic regulators
2174 Computer programmers and interactive media developers	2281 Computer network technicians
2175 Web designers and developers	2282 User support technicians
2211 Chemical technologists and technicians	2283 Information systems testing technicians

Note: While all occupations in the above list fall under natural and applied sciences occupations, not all occupations saw employment during the forecasted time period.

Source: Employment and Social Development Canada.

Table 34

List of "Health Occupations"

Health Occupations

3011 Nursing coordinators and supervisors	3213 Animal health technologists and veterinary technicians
3012 Registered nurses and registered psychiatric nurses	3214 Respiratory therapists, clinical perfusionists, and cardiopulmonary technologists
3111 Specialist physicians	3215 Medical radiation technologists
3112 General practitioners and family physicians	3216 Medical sonographers
3113 Dentists	3217 Cardiology technologists and electrophysiological diagnostic technologists, n.e.c.
3114 Veterinarians	3219 Other medical technologists and technicians (except dental health)
3121 Optometrists	3221 Denturists
3122 Chiropractors	3222 Dental hygienists and dental therapists
3124 Allied primary health practitioners	3223 Dental technologists, technicians, and laboratory assistants
3125 Other professional occupations in health diagnosing and treating	3231 Opticians
3131 Pharmacists	3232 Practitioners of natural healing
3132 Dietitians and nutritionists	3233 Licensed practical nurses
3141 Audiologists and speech-language pathologists	3234 Paramedical occupations
3142 Physiotherapists	3236 Massage therapists
3143 Occupational therapists	3237 Other technical occupations in therapy and assessment
3144 Other professional occupations in therapy and assessment	3411 Dental assistants
3211 Medical laboratory technologists	3413 Nurse aides, orderlies, and patient service associates
3212 Medical laboratory technicians and pathologists' assistants	3414 Other assisting occupations in support of health services

Note: While all occupations in the above list fall under health occupations, not all occupations saw employment during the forecasted time period. Source: Employment and Social Development Canada.

List of "Education, Law, and Social, Community, and Government Services Occupations"

Occupations in Education, Law, and Social, Community, and Government Services

4011 University professors and lecturers	4166 Education policy researchers, consultants, and program officers
4012 Post-secondary teaching and research assistants	4167 Recreation, sports and fitness policy researchers, consultants, nd program officers
4021 College and other vocational instructors	4168 Program officers unique to government
4031 Secondary school teachers	4169 Other professional occupations in social science, n.e.c.
4032 Elementary school and kindergarten teachers	4211 Paralegal and related occupations
4033 Educational counsellors	4212 Social and community service workers
4111 Judges	4214 Early childhood educators and assistants
4112 Lawyers and Quebec notaries	4215 Instructors of persons with disabilities
4151 Psychologists	4216 Other instructors
4152 Social workers	4217 Other religious occupations
4153 Family, marriage, and other related counsellors	4311 Police officers (except commissioned)
4154 Professional occupations in religion	4312 Firefighters
4155 Probation and parole officers and related occupations	4313 Non-commissioned ranks of the Canadian Forces
4156 Employment counsellors	4411 Home child care providers
4161 Natural and applied science policy researchers, consultants, and program officers	4412 Home support workers, housekeepers, and related occupations
4162 Economists and economic policy researchers and analysts	4413 Elementary and secondary school teacher assistants
4163 Business development officers and marketing researchers and consultants	4421 Sheriffs and bailiffs
4164 Social policy researchers, consultants, and program officers	4422 Correctional service officers
4165 Health policy researchers, consultants, and program officers	4423 By-law enforcement and other regulatory officers, n.e.c.

Note: While all occupations in the above list fall under education, law, and social, community, and government services occupations, not all occupations saw employment during the forecasted time period.

Source: Employment and Social Development Canada.

Table 36List of "Arts, Culture, Recreation, and Sports Occupations"

Arts, Culture, Recreation and Sports Occupations

5111 Librarians	5223 Graphic arts technicians
5112 Conservators and curators	5224 Broadcast technicians
5113 Archivists	5225 Audio and video recording technicians
5121 Authors and writers	5226 Other technical and coordinating occupations in motion pictures, broadcasting, and the performing arts
5122 Editors	5227 Support occupations in motion pictures, broadcasting, photography, and the performing arts
5123 Journalists	5231 Announcers and other broadcasters
5125 Translators, terminologists, and interpreters	5232 Other performers, n.e.c.
5131 Producers, directors, choreographers, and related occupations	5241 Graphic designers and illustrators
5132 Conductors, composers, and arrangers	5242 Interior designers and interior decorators
5133 Musicians and singers	5243 Theatre, fashion, exhibit, and other creative designers
5134 Dancers	5244 Artisans and craftspersons
5135 Actors and comedians	5245 Patternmakers-textile, leather, and fur products
5136 Painters, sculptors, and other visual artists	5251 Athletes
5211 Library and public archive technicians	5252 Coaches
5212 Technical occupations related to museums and art galleries	5253 Sports officials and referees
5221 Photographers	5254 Program leaders and instructors in recreation, sport, and fitness
5222 Film and video camera operators	

Note: While all occupations in the above list fall under art, culture, recreation, and sports occupations, not all occupations saw employment during the forecasted time period.

Source: Employment and Social Development Canada.

List of "Sales and Service Occupations"

Sales and Service Occupations	
6211 Retail sales supervisors	6521 Travel counsellors
6221 Technical sales specialists—wholesale trade	6522 Pursers and flight attendants
6222 Retail and wholesale buyers	6523 Airline ticket and service agents
6231 Insurance agents and brokers	6524 Ground and water transport ticket agents, cargo service representatives, and related clerks
6232 Real estate agents and salespersons	6525 Hotel front desk clerks
6235 Financial sales representatives	6531 Tour and travel guides
6311 Food service supervisors	6532 Outdoor sport and recreational guides
6312 Executive housekeepers	6533 Casino occupations
6313 Accommodation, travel, tourism, and related services supervisors	6541 Security guards and related security service occupations
6314 Customer and information services supervisors	6551 Customer services representatives—financial institutions
6315 Cleaning supervisors	6552 Other customer and information services representatives
6316 Other services supervisors	6561 Image, social, and other personal consultants
6321 Chefs	6562 Estheticians, electrologists, and related occupations
6322 Cooks	6563 Pet groomers and animal care workers
6331 Butchers, meat cutters, and fishmongers-retail and wholesale	6564 Other personal service occupations
6332 Bakers	6611 Cashiers
6341 Hairstylists and barbers	6621 Service station attendants
6342 Tailors, dressmakers, furriers and milliners	6622 Store shelf stockers, clerks, and order fillers
6343 Shoe repairers and shoemakers	6623 Other sales related occupations
6344 Jewellers, jewellery and watch repairers, and related occupations	6711 Food counter attendants, kitchen helpers, and related support occupations
6345 Upholsterers	6721 Support occupations in accommodation, travel, and facilities set-up services
6346 Funeral directors and embalmers	6722 Operators and attendants in amusement, recreation, and sport
6411 Sales and account representatives—wholesale trade (non-technical)	6731 Light duty cleaners
6421 Retail salespersons	6732 Specialized cleaners
6511 Maîtres d'hôtel and hosts/hostesses	6733 Janitors, caretakers, and building superintendents
6512 Bartenders	6741 Dry cleaning, laundry and related occupations
6513 Food and beverage servers	6742 Other service support occupations, n.e.c.

Note: While all occupations in the above list fall under sales and service occupations, not all occupations saw employment during the forecasted time period. Source: Employment and Social Development Canada.

Table 38List of "Trades, Transport and Equipment Operators, and Related Occupations"

Trades, Transport and Equipment Operators, and Related Occupations

7201 Contractors and supervisors, machining, metal forming, shaping, and erecting trades and related occupations	7313 Refrigeration and air conditioning mechanics						
7202 Contractors and supervisors, electrical trades, and telecommunications occupations	7314 Railway carmen/women						
7203 Contractors and supervisors, pipefitting trades	7315 Aircraft mechanics and aircraft inspectors						
7204 Contractors and supervisors, carpentry trades	7316 Machine fitters						
7205 Contractors and supervisors, other construction trades, installers, repairers, and servicers	7318 Elevator constructors and mechanics						
7231 Machinists and machining and tooling inspectors	7321 Automotive service technicians, truck and bus mechanics, and mechanical repairers						
7232 Tool and die makers	7322 Motor vehicle body repairers						
7233 Sheet metal workers	7331 Oil and solid fuel heating mechanics						
7234 Boilermakers	7332 Appliance servicers and repairers						
7235 Structural metal and platework fabricators and fitters	7333 Electrical mechanics						
7236 Ironworkers	7334 Motorcycle, all-terrain vehicle, and other related mechanics						
7237 Welders and related machine operators	7335 Other small engine and small equipment repairers						
7241 Electricians (except industrial and power system)	7361 Railway and yard locomotive engineers						
7242 Industrial electricians	7362 Railway conductors and brakemen/women						
7243 Power system electricians	7371 Crane operators						
7244 Electrical power line and cable workers	7372 Drillers and blasters—surface mining, quarrying, and construction						
7245 Telecommunications line and cable workers	7373 Water well drillers						
7246 Telecommunications installation and repair workers	7381 Printing press operators						
7247 Cable television service and maintenance technicians	7384 Other trades and related occupations, n.e.c.						
7251 Plumbers	7441 Residential and commercial installers and servicers						
7252 Steamfitters, pipefitters, and sprinkler system installers	7442 Waterworks and gas maintenance workers						
7253 Gas fitters	7444 Pest controllers and fumigators						
7271 Carpenters	7445 Other repairers and servicers						
7272 Cabinetmakers	7451 Longshore workers						
7281 Bricklayers	7452 Material handlers						
7282 Concrete finishers	7511 Transport truck drivers						
7283 Tilesetters	7512 Bus drivers, subway operators, and other transit operators						

Table 38 (cont'd)

List of "Trades, Transport and Equipment Operators, and Related Occupations"

Trades, Transport and Equipment Operators, and Related Occupations

7284 Plasterers, drywall installers, and finishers and lathers	7513 Taxi and limousine drivers and chauffeurs							
7291 Roofers and shinglers	7514 Delivery and courier service drivers							
7292 Glaziers	7521 Heavy equipment operators (except crane)							
7293 Insulators	7522 Public works maintenance equipment operators and related workers							
7294 Painters and decorators (except interior decorators)	7531 Railway yard and track maintenance workers							
7295 Floor covering installers	7532 Water transport deck and engine room crew							
7301 Contractors and supervisors, mechanic trades	7533 Boat and cable ferry operators and related occupations							
7302 Contractors and supervisors, heavy equipment operator crews	7534 Air transport ramp attendants							
7303 Supervisors, printing and related occupations	7535 Other automotive mechanical installers and servicers							
7304 Supervisors, railway transport operations	7611 Construction trades helpers and labourers							
7305 Supervisors, motor transport and other ground transit operators	7612 Other trades helpers and labourers							
7311 Construction millwrights and industrial mechanics	7621 Public works and maintenance labourers							
7312 Heavy duty equipment mechanics	7622 Railway and motor transport labourers							

Note: While all occupations in the above list fall under trades, transport and equipment operators, and related occupations, not all occupations saw employment during the forecasted time period.

Source: Employment and Social Development Canada.

Table 39 List of "Natural Resources, Agriculture, and Related Production Occupations"

Natural Resources, Agriculture, and Related Production Occupations

8211 Supervisors, logging and forestry	8421 Chain saw and skidder operators
8221 Supervisors, mining and quarrying	8422 Silviculture and forestry workers
8222 Contractors and supervisors, oil and gas drilling and services	8431 General farm workers
8231 Underground production and development miners	8432 Nursery and greenhouse workers
8232 Oil and gas well drillers, servicers, testers, and related workers	8441 Fishing vessel deckhands
8241 Logging machinery operators	8442 Trappers and hunters
8252 Agricultural service contractors, farm supervisors, and specialized livestock workers	8611 Harvesting labourers
8255 Contractors and supervisors, landscaping, grounds maintenance, and horticulture services	8612 Landscaping and grounds maintenance labourers
8261 Fishing masters and officers	8613 Aquaculture and marine harvest labourers
8262 Fishermen/women	8614 Mine labourers
8411 Underground mine service and support workers	8615 Oil and gas drilling, servicing, and related labourers
8412 Oil and gas well drilling and related workers, and services operators	8616 Logging and forestry labourers

Note: While all occupations in the above list fall under natural resources, agriculture, and related production occupations, not all occupations saw employment during the forecasted time period.

Source: Employment and Social Development Canada.

Table 40List of "Manufacturing and Utilities Occupations"

Occupations in Manufacturing and Utilities

9211 Supervisors, mineral and metal processing	9442 Weavers, knitters, and other fabric-making occupations
9212 Supervisors, petroleum, gas and chemical processing, and utilities	9445 Fabric, fur, and leather cutters
9213 Supervisors, food, beverage, and associated products processing	9446 Industrial sewing machine operators
9214 Supervisors, plastic and rubber products manufacturing	9447 Inspectors and graders, textile, fabric, fur, and leather products manufacturing
9215 Supervisors, forest products processing	9461 Process control and machine operators, food, beverage, and associated products processing
9217 Supervisors, textile, fabric, fur, and leather products processing and manufacturing	9462 Industrial butchers and meat cutters, poultry preparers, and related workers
9221 Supervisors, motor vehicle assembling	9463 Fish and seafood plant workers
9222 Supervisors, electronics manufacturing	9465 Testers and graders, food, beverage, and associated products processing
9223 Supervisors, electrical products manufacturing	9471 Plateless printing equipment operators
9224 Supervisors, furniture and fixtures manufacturing	9472 Camera, platemaking, and other prepress occupations
9226 Supervisors, other mechanical and metal products manufacturing	9473 Binding and finishing machine operators
9227 Supervisors, other products manufacturing and assembly	9474 Photographic and film processors
9231 Central control and process operators, mineral and metal processing	9521 Aircraft assemblers and aircraft assembly inspectors
9232 Petroleum, gas, and chemical process operators	9522 Motor vehicle assemblers, inspectors, and testers
9235 Pulping, papermaking, and coating control operators	9523 Electronics assemblers, fabricators, inspectors, and testers
9241 Power engineers and power systems operators	9524 Assemblers and inspectors, electrical appliance, apparatus, and equipment manufacturing
9243 Water and waste treatment plant operators	9525 Assemblers, fabricators and inspectors, industrial electrical motors, and transformers
9411 Machine operators, mineral and metal processing	9526 Mechanical assemblers and inspectors
9412 Foundry workers	9527 Machine operators and inspectors, electrical apparatus manufacturing
9413 Glass forming and finishing machine operators and glass cutters	9531 Boat assemblers and inspectors
9414 Concrete, clay, and stone forming operators	9532 Furniture and fixture assemblers and inspectors
9415 Inspectors and testers, mineral and metal processing	9533 Other wood products assemblers and inspectors
9416 Metalworking and forging machine operators	9534 Furniture finishers and refinishers
9417 Machining tool operators	9535 Plastic products assemblers, finishers, and inspectors
9418 Other metal products machine operators	9536 Industrial painters, coaters, and metal finishing process operators
9421 Chemical plant machine operators	9537 Other products assemblers, finishers, and inspectors

Table 40 (cont'd)

List of "Manufacturing and Utilities Occupations"

Occupations in Manufacturing and Utilities

9423 Rubber processing machine operators and related workers	9612 Labourers in metal fabrication
9431 Sawmill machine operators	9613 Labourers in chemical products processing and utilities
9432 Pulp mill machine operators	9614 Labourers in wood, pulp, and paper processing
9433 Papermaking and finishing machine operators	9615 Labourers in rubber and plastic products manufacturing
9434 Other wood processing machine operators	9616 Labourers in textile processing
9435 Paper converting machine operators	9617 Labourers in food, beverage, and associated products processing
9436 Lumber graders and other wood processing inspectors and graders	9618 Labourers in fish and seafood processing
9437 Woodworking machine operators	9619 Other labourers in processing, manufacturing, and utilities
9441 Textile fibre and yarn, hide and pelt processing machine operators and workers	

Note: While all occupations in the above list fall under manufacturing and utilities occupations, not all occupations saw employment during the forecasted time period.

Source: Employment and Social Development Canada.

Top Occupations by Job Openings, "Skill Level A Management Occupations," N.W.T. Residents, 2015–30

(num	ber)
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		Forecasted job openings											
			Base Medium						High				
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30
1	0621 Retail and wholesale trade managers	491	330	318	1,138	596	423	445	1,464	607	493	481	1,581
2	0711 Construction managers	203	93	75	371	274	161	43	478	300	190	65	555
3	0111 Financial managers	114	89	82	285	124	95	92	311	127	102	95	324
4	0012 Senior government managers and officials	99	88	90	277	108	91	95	294	111	95	98	304
5	0632 Accommodation service managers	88	69	81	238	90	71	87	247	90	75	89	254
6	0714 Facility operation and maintenance managers	108	73	55	237	115	78	66	259	117	89	70	276
7	0013 Senior managers financial, communications, and other business services	85	70	77	233	86	72	84	243	87	77	87	251
8	0014 Senior managers-health, education, social and community services, and membership organizations	89	63	51	202	95	66	55	216	96	69	57	222
9	0423 Managers in social, community, and correctional services	86	61	51	198	95	64	55	214	96	67	56	220
10	0631 Restaurant and food service managers	85	60	53	198	87	62	58	207	88	67	60	215
11	0112 Human resources managers	87	57	51	195	93	61	59	213	95	69	63	227
12	0011 Legislators	58	57	67	182	63	60	70	193	65	62	72	199
13	0016 Senior managers—construction, transportation, production, and utilities	82	36	32	150	110	63	25	198	120	79	36	236
14	0811 Managers in natural resources production and fishing	83	38	21	142	88	46	55	189	89	75	67	231
15	0433 Commissioned officers of the Canadian Forces	50	44	47	141	55	45	50	150	57	48	51	155
16	0731 Managers in transportation	73	39	27	139	81	47	49	177	84	70	58	212
17	0122 Banking, credit, and other investment managers	60	38	35	133	62	39	41	142	62	44	43	149
18	0422 School principals and administrators of elementary and secondary education	55	38	34	127	59	39	36	135	60	41	37	137
19	0712 Home building and renovation managers	59	26	18	103	81	48	6	135	90	56	12	159
20	0114 Other administrative services managers	36	32	32	101	40	33	34	107	42	35	35	111
21	0912 Utilities managers	45	25	20	89	47	28	33	108	47	39	37	123
22	0311 Managers in health care	30	26	30	87	35	28	33	96	36	29	33	98
23	0124 Advertising, marketing, and public relations managers	36	26	16	78	37	27	18	82	37	28	19	84
24	0213 Computer and information systems managers	28	24	17	70	31	25	18	75	32	26	19	77
25	0131 Telecommunication carriers managers	25	18	17	60	26	18	18	62	26	19	19	64

Table 41 (cont'd)

Top Occupations by Job Openings, "Skill Level A Management Occupations," N.W.T. Residents, 2015–30 (number)

		Forecasted job openings											
		Base					Mec	lium		High			
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026-30	2015–30
26	0412 Government managers—economic analysis, policy development, and program administration	22	17	15	54	24	18	16	58	25	19	16	60
27	0015 Senior managers-trade, broadcasting, and other services, n.e.c.	16	16	20	53	20	20	27	66	20	22	28	71
28	0651 Managers in customer and personal services, n.e.c.	14	15	19	48	15	16	20	51	15	17	21	53
29	0411 Government managers—health and social policy development, and program administration	18	15	14	47	20	16	15	51	21	17	15	52
30	0414 Other managers in public administration	14	15	17	46	16	15	18	49	16	16	19	51
31	0512 Managers—publishing, motion pictures, broadcasting, and performing arts	23	13	7	43	24	13	8	44	24	14	8	45
32	0911 Manufacturing managers	15	12	11	38	16	12	11	39	16	13	11	39
33	0601 Corporate sales managers	16	11	11	37	19	14	15	49	20	17	16	53
34	0511 Library, archive, museum, and art gallery managers	11	9	9	29	11	9	9	29	11	9	9	30
35	0121 Insurance, real estate, and financial brokerage managers	9	9	11	29	9	9	13	31	9	10	13	33
36	0513 Recreation, sports and fitness program and service directors	8	9	11	27	8	9	12	29	8	10	12	30
37	0421 Administrators—post-secondary education and vocational training	14	8	4	26	15	8	5	27	15	8	5	28
38	0125 Other business services managers	8	6	6	20	8	6	7	21	8	6	7	21
39	0212 Architecture and science managers	7	6	6	19	7	6	6	20	7	6	6	20
40	0113 Purchasing managers	5	6	8	19	5	6	8	19	5	6	8	19
41	0413 Government managers—education policy development and program administration	5	5	5	15	6	5	5	16	6	5	5	16
	Total job openings for all Skill Level A "Management Occupations" from 2015 to 2030				5,725				6,590				7,084

Note: Skill Level A management occupations are characterized as having a high level of responsibility, accountability, and subject matter expertise. Expertise can either be acquired through formal education or extensive subject matter expertise. While there are several more types of Skill Level A management occupations, only the occupations in the above table saw employment during the 2015–30 forecasts.

Source: Employment and Social Development Canada.

Top Occupations by Job Openings, "Skill Level A Management Occupations," Rotational Workers, 2015–30 (number)

							Forecasted j	job openings					
			Ba	ase			Mec	lium			Hi	gh	
Position	Occupation	2015–20	2021–25	2026-30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026-30	2015–30
1	0811 Managers in natural resources production and fishing	73	35	19	127	79	43	51	173	81	71	64	216
2	0621 Retail and wholesale trade managers	23	16	14	53	29	21	22	72	29	25	25	79
3	0711 Construction managers	21	9	7	36	28	17	4	49	31	21	7	59
4	0714 Facility operation and maintenance managers	13	10	8	31	14	11	9	33	14	11	9	35
5	0016 Senior manager-construction, transportation, production, and utilities	13	6	5	23	17	11	3	31	19	13	5	38
6	0712 Home building and renovation managers	13	6	4	22	18	11	2	30	19	13	4	36
7	0632 Accommodation service managers	5	4	5	13	5	4	5	14	5	4	5	15
8	0011 Legislators	4	4	4	12	4	4	5	13	4	4	5	14
9	0012 Senior government managers and officials	4	4	4	12	5	4	4	13	5	4	4	14
10	0423 Managers in social, community, and correctional services	4	3	2	10	4	3	3	10	4	3	3	11
11	0433 Commissioned officers of the Canadian Forces	4	3	3	10	4	3	3	10	4	3	4	11
12	0731 Managers in transportation	4	3	3	10	4	3	3	10	4	3	3	11
13	0112 Human resources managers	4	3	2	9	4	3	3	9	4	3	3	10
14	0015 Senior managers-trade, broadcasting, and other services, n.e.c.	3	3	3	9	4	3	5	12	4	4	5	14
15	0113 Purchasing managers	2	2	3	7	2	2	3	7	2	2	3	7
16	0513 Recreation, sports and fitness program, and service directors	2	2	3	7	2	2	3	7	2	2	3	7
17	0651 Managers in customer and personal services, n.e.c.	2	2	3	7	2	2	3	7	2	2	3	7
	Total job openings for all Skill Level A "Management Occupations" from 2015 to 2030				396				503				583

Note: Skill Level A management occupations are characterized as having a high level of responsibility, and subject matter expertise. Expertise can either be acquired through formal education or extensive subject matter expertise. While there are several more types of these occupations, only the occupations in the above table saw employment during the 2015–30 forecast. Source: Employment and Social Development Canada.

Top Occupations by Job Openings, "Skill Level A Professional Occupations," N.W.T. Residents, 2015–30 (number)

							Forecasted j	ob openings					
			Ba	ise			Mec	lium			Hi	gh	
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30
1	4032 Elementary school and kindergarten teachers	357	223	197	777	386	232	207	824	391	241	211	843
2	3012 Registered nurses and registered psychiatric nurses	308	229	203	740	353	243	220	816	358	254	225	837
3	4031 Secondary school teachers	255	172	150	577	274	179	157	610	278	186	160	623
4	4021 College and other vocational instructors	157	117	108	382	169	121	114	404	171	126	116	413
5	1111 Financial auditors and accountants	147	96	68	310	156	105	93	354	159	127	101	386
6	4164 Social policy researchers, consultants, and program officers	110	77	57	244	120	80	62	262	123	85	64	271
7	4154 Professional occupations in religion	75	65	73	213	76	67	77	220	77	69	80	226
8	4112 Lawyers and Quebec notaries	83	67	51	201	88	69	55	212	90	73	57	219
9	2131 Civil engineers	88	59	39	187	93	62	42	197	95	65	44	204
10	4152 Social workers	63	50	45	158	70	53	49	172	71	56	50	177
11	1114 Other financial officers	60	47	45	152	62	49	52	163	63	54	54	171
12	1121 Human resources professionals	62	47	38	146	67	50	48	165	69	58	51	178
13	4165 Health policy researchers, consultants, and program officers	56	49	38	143	62	51	40	154	64	53	42	159
14	2121 Biologists and related scientists	59	45	31	135	64	47	34	144	65	49	35	149
15	1123 Professional occupations in advertising, marketing, and public relations	57	40	37	134	61	42	39	142	62	44	41	147
16	2171 Information systems analysts and consultants	55	40	37	132	61	41	39	141	63	43	40	146
17	1122 Professional occupations in business management consulting	56	38	30	123	58	39	32	129	59	41	33	133
18	4166 Education policy researchers, consultants, and program officers	46	34	32	112	50	36	34	119	51	37	35	122
19	4161 Natural and applied science policy researchers, consultants, and program officers	47	35	30	112	51	36	32	119	53	38	33	123
20	2113 Geoscientists and oceanographers	43	33	33	108	47	36	45	128	48	45	50	143
21	4156 Employment counsellors	49	29	21	99	52	30	23	105	53	31	24	108
22	4153 Family, marriage, and other related counsellors	44	27	24	95	49	29	26	104	50	30	27	107
23	4163 Business development officers and marketing researchers and consultants	39	28	22	89	42	29	24	95	43	31	25	98
24	3112 General practitioners and family physicians	33	27	28	88	37	28	30	96	38	29	31	98
25	5125 Translators, terminologists, and interpreters	40	25	17	81	40	25	19	84	41	27	19	87
26	4168 Program officers unique to government	32	24	21	77	35	25	22	82	36	27	23	85

Table 43 (cont'd)

Top Occupations by Job Openings, "Skill Level A Professional Occupations," N.W.T. Residents, 2015–30 (number)

							Forecasted j	ob openings					
			Ba	ise			Mec	lium			Hi	gh	
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30
27	4033 Educational counsellors	33	22	20	75	35	23	21	79	36	24	21	81
28	5123 Journalists	28	19	19	66	28	20	20	68	28	21	21	71
29	1112 Financial and investment analysts	22	20	23	65	25	21	24	70	26	22	24	72
30	3111 Specialist physicians	25	20	21	65	28	21	23	71	29	22	23	73
31	3131 Pharmacists	24	18	18	61	29	22	23	74	30	24	24	79
32	2153 Urban and land use planners	23	18	18	58	24	18	19	62	25	19	20	64
33	2151 Architects	24	17	16	56	24	17	17	59	24	18	18	61
34	5122 Editors	24	17	16	56	24	17	17	59	24	18	18	61
35	3113 Dentists	20	16	17	52	22	17	18	57	23	17	18	58
36	4155 Probation and parole officers, and related occupations	21	17	13	51	23	18	14	54	24	18	14	56
37	5136 Painters, sculptors, and other visual artists	19	15	16	50	19	16	18	53	20	17	18	55
38	4167 Recreation, sports and fitness policy researchers, consultants, and program officers	22	13	15	50	24	14	16	53	24	15	16	55
39	2132 Mechanical engineers	18	15	15	48	18	15	15	49	18	15	15	49
40	2175 Web designers and developers	18	15	15	48	18	15	15	49	18	15	15	49
41	3132 Dietitians and nutritionists	18	14	15	47	21	15	16	52	21	16	17	54
42	2154 Land surveyors	17	13	12	43	18	13	13	45	18	14	14	46
43	3143 Occupational therapists	14	11	12	37	16	12	13	41	17	13	13	42
44	2143 Mining engineers	18	9	7	34	19	11	16	46	20	18	19	57
45	5111 Librarians	9	10	13	32	10	11	14	34	10	11	14	36
46	2148 Other professional engineers, n.e.c.	11	9	9	29	11	9	9	29	11	9	9	30
47	4162 Economists and economic policy researchers and analysts	6	8	11	25	7	9	11	27	7	9	12	28
48	4151 Psychologists	10	8	8	25	11	8	9	28	11	8	9	28
49	3141 Audiologists and speech-language pathologists	14	5	5	24	16	5	6	27	16	6	6	28
50	2133 Electrical and electronics engineers	7	6	6	19	7	6	6	20	7	6	6	20
	Total job openings for all Skill Level A "Professional Occupations" from 2015 to 2030				6,907				7,425				7,425

Note: Skill Level A professional occupations require a university degree (i.e., a bachelor's, master's, or doctorate). Source: The Conference Board of Canada.

Top Occupations by Job Openings, "Skill Level A Professional Occupations," Rotational Workers, 2015–30 (number)

							Forecasted j	Indication High Indication High 2026-30 2015-30 2015-20 2021-25 2026-30 201 40 128 52 41 42 1 21 75 33 26 22 1 24 71 30 29 30 1 16 52 21 17 17 1 11 34 14 11 11 1 1 10 29 10 10 10 1 1 1 12 36 15 15 15 1 1 12 36 15 15 1 1 1 6 23 10 8 6 2 1								
			Ва	ise			Med	ium			Hi	gh				
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30			
1	3112 General practitioners and family physicians	45	34	34	112	51	37	40	128	52	41	42	135			
2	3012 Registered nurses and registered psychiatric nurses	28	21	17	67	32	23	21	75	33	26	22	80			
3	2143 Mining engineers	27	15	10	51	29	18	24	71	30	29	30	90			
4	3142 Physiotherapists	18	14	13	45	21	15	16	52	21	17	17	54			
5	3131 Pharmacists	12	9	9	30	14	10	11	34	14	11	11	36			
6	2113 Geoscientists and oceanographers	10	8	9	27	10	9	10	29	10	10	10	30			
7	2144 Geological engineers	13	7	5	26	15	9	12	36	15	15	15	45			
8	1122 Professional occupations in business management consulting	10	7	5	22	10	7	6	23	10	8	6	24			
9	4154 Professional occupations in religion	7	7	8	22	8	7	8	23	8	7	9	24			
10	4031 Secondary school teachers	9	7	5	21	9	7	6	22	9	7	6	23			
11	3011 Nursing coordinators and supervisors	6	6	8	20	7	7	9	24	8	8	10	25			
12	4166 Education policy researchers, consultants, and program officers	8	6	6	20	8	7	6	21	8	7	7	22			
13	4164 Social policy researchers, consultants, and program officers	9	6	4	19	9	6	5	21	9	7	5	21			
14	4161 Natural and applied science policy researchers, consultants, and program officers	7	5	4	17	8	6	5	19	8	6	5	19			
15	1123 Professional occupations in advertising, marketing, and public relations	7	5	4	16	7	5	5	18	7	6	5	18			
16	4156 Employment counsellors	5	3	2	11	6	3	3	12	6	4	3	12			
17	2153 Urban and land use planners	4	3	3	11	4	3	4	11	4	4	4	12			
18	2132 Mechanical engineers	4	3	3	10	4	3	3	11	4	3	3	11			
19	2154 Land surveyors	4	3	3	10	4	3	3	11	4	3	3	11			
20	1121 Human resources professionals	4	3	3	10	4	3	3	11	4	4	3	11			
21	2131 Civil engineers	4	3	2	9	4	3	2	10	4	3	2	10			
22	1112 Financial and investment analysts	3	3	3	9	3	3	3	10	4	3	3	10			
23	2121 Biologists and related scientists	4	3	2	9	4	3	2	10	4	3	3	10			
24	4032 Elementary school and kindergarten teachers	4	3	2	9	4	3	3	10	4	3	3	10			
25	4167 Recreation, sports and fitness policy researchers, consultants, and program officers	3	2	2	8	4	2	3	8	4	2	3	9			
	Total job openings for all Skill Level A "Professional Occupations" from 2015 to 2030				611				698				755			

Note: Skill Level A professional occupations require a university degree (i.e., a bachelor's, master's, or doctorate). While there are several more types of these occupations, only the occupations in the above table saw employment during the 2015–30 forecasts. Source: The Conference Board of Canada.

Top Occupations by Job Openings, "Skill Level B College Diploma Occupations," N.W.T. Residents, 2015–30 (number)

							Forecasted j	job openings					
			Ba	ise			Mec	lium			Hi	gh	
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30
1	1221 Administrative officers	322	193	173	688	370	232	205	807	386	277	227	889
2	1241 Administrative assistants	267	172	167	607	303	192	187	682	313	217	199	729
3	4212 Social and community service workers	191	142	146	479	220	149	157	526	225	157	161	543
4	4214 Early childhood educators and assistants	187	135	126	448	219	143	137	499	222	150	140	512
5	1311 Accounting technicians and bookkeepers	178	118	112	408	197	133	123	453	203	149	131	483
6	6322 Cooks	125	84	81	289	133	90	99	323	135	105	105	345
7	2271 Air pilots, flight engineers, and flying instructors	151	46	45	242	171	65	110	346	178	126	136	440
8	8231 Underground production and development miners	159	47	25	232	174	65	96	336	180	128	117	425
9	4311 Police officers (except commissioned)	77	56	50	183	88	57	53	199	91	61	55	207
10	1224 Property administrators	68	48	39	155	70	51	47	168	71	57	49	177
11	6211 Retail sales supervisors	70	38	45	154	90	53	67	210	92	65	73	230
12	1222 Executive assistants	57	38	39	134	64	39	42	145	66	42	43	151
13	1225 Purchasing agents and officers	52	40	35	128	59	42	38	138	60	44	39	143
14	2263 Inspectors in public and environmental health, and occupational health and safety	63	32	25	120	69	36	39	144	71	49	43	163
15	5254 Program leaders and instructors in recreation, sport, and fitness	29	45	37	111	32	47	40	119	33	50	41	124
16	1227 Court officers and justices of the peace	51	34	25	110	56	35	26	117	57	37	27	121
17	8221 Supervisors, mining and quarrying	64	29	16	109	69	36	51	155	70	63	61	195
18	3233 Licensed practical nurses	36	32	37	105	43	34	40	117	44	35	41	120
19	9241 Power engineers and power systems operators	49	23	17	89	52	26	29	107	54	36	31	120
20	1242 Legal administrative assistants	28	26	30	84	31	27	32	90	31	29	33	94
21	2242 Electronic service technicians (household and business equipment)	29	25	28	81	31	26	30	87	31	28	31	90
22	1223 Human resources and recruitment officers	27	30	23	80	32	31	25	87	33	32	26	91
23	2212 Geological and mineral technologists and technicians	39	20	14	73	43	23	34	100	44	39	40	122
24	6315 Cleaning supervisors	32	20	14	66	33	21	17	70	33	23	18	73
25	6235 Financial sales representatives	27	17	17	61	28	18	21	67	28	21	22	71
26	4168 Program officers unique to government	32	24	21	77	35	25	22	82	36	27	23	85

Table 45 (cont'd)

Top Occupations by Job Openings, "Skill Level B College Diploma Occupations," N.W.T. Residents, 2015–30 (number)

							Forecasted	job openings					
			Ba	ise			Med	lium			Hi	gh	
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30
26	5241 Graphic designers and illustrators	21	16	18	55	21	17	20	58	22	19	21	61
27	2224 Conservation and fishery officers	19	18	17	54	21	19	18	58	22	20	19	61
28	3219 Other medical technologists and technicians (except dental health)	21	14	14	49	27	19	20	66	27	23	22	72
29	4312 Firefighters	18	15	16	49	20	15	17	53	21	16	18	55
30	2272 Air traffic controllers and related occupations	33	6	10	49	38	11	26	75	40	26	33	98
31	1215 Supervisors, supply chain, tracking and scheduling coordination occupations	23	14	11	49	26	16	16	58	27	21	18	66
32	3215 Medical radiation technologists	19	14	15	48	22	15	16	53	22	16	17	55
33	2255 Technical occupations in geomatics and meteorology	19	15	13	47	22	17	16	55	23	21	18	62
34	6316 Other services supervisors	18	15	14	47	19	16	15	50	19	18	16	52
35	6321 Chefs	12	15	20	47	13	16	21	50	13	17	22	52
36	2282 User support technicians	22	20	5	47	24	21	5	51	25	22	6	53
37	6341 Hairstylists and barbers	26	12	9	47	26	13	11	49	27	14	11	52
38	8255 Contractors and supervisors, landscaping, grounds maintenance, and horticulture services	19	14	11	45	21	14	12	47	21	15	13	49
39	2244 Aircraft instrument, electrical and avionics mechanics, technicians, and inspectors	21	12	11	45	25	15	22	61	26	24	25	75
40	2281 Computer network technicians	17	12	15	44	19	13	16	48	20	14	16	50
41	2241 Electrical and electronics engineering technologists and technicians	18	14	12	44	20	15	13	47	20	15	13	49
42	6231 Insurance agents and brokers	19	12	12	43	19	13	15	47	19	15	15	50
43	6311 Food service supervisors	11	13	18	42	12	14	19	45	12	15	20	47
44	3211 Medical laboratory technologists	16	12	13	41	19	13	14	45	19	14	14	47
45	2221 Biological technologists and technicians	15	13	10	39	17	14	11	41	17	15	12	43
46	6221 Technical sales specialists—wholesale trade	21	15	3	39	24	18	5	47	24	21	5	50
47	1228 Employment insurance, immigration, border services, and revenue officers	11	12	14	37	13	12	15	40	13	13	15	42
48	2223 Forestry technologists and technicians	13	11	11	35	15	11	12	38	15	12	12	39
49	2231 Civil engineering technologists and technicians	13	10	10	33	14	11	11	36	15	11	11	37
50	2273 Deck officers, water transport	16	10	7	33	17	11	8	36	17	11	8	37
	Total job openings for all Skill Level B "College Diploma Occupations" from 2015 to 2030				7,249				8,381				9,121

Note: Skill Level B college diploma occupations usually require two-to-three years of post-secondary education at a college. Source: The Conference Board of Canada.

Top Occupations by Job Openings, "Skill Level B College Diploma Occupations," Rotational Workers, 2015–30 (number)

							Forecasted j	ob openings				High 2021-25 2026-30 1 163 160 1 121 121 1 32 29 2 20 20 2 21 10 1 22 23 1 16 17 1 9 10 1 9 11 1 9 11 1 9 11 1 9 11 1 9 13 1 16 3 1 16 3 1 16 3 1 17 7 1 18 3 1 14 3 1 4 3 1 4 3 1 3 3 3 3 3 3 15 3 3					
			Ba	ise			Mec	lium			Hi	igh					
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015-30				
1	8231 Underground production and development miners	176	73	44	293	191	93	128	412	196	163	160	519				
2	8221 Supervisors, mining and quarrying	112	60	38	209	121	74	97	292	124	121	121	367				
3	9241 Power engineers and power systems operators	38	27	23	88	42	29	28	99	44	32	29	106				
4	6322 Cooks	24	16	15	55	25	18	18	61	25	20	20	65				
5	2212 Geological and mineral technologists and technicians	21	11	8	40	23	14	20	57	24	24	25	72				
6	9243 Water and waste treatment plant operators	24	9	8	40	24	9	10	43	25	11	10	45				
7	2243 Industrial instrument technicians and mechanics	20	11	7	38	22	13	18	54	22	22	23	67				
8	2271 Air pilots, flight engineers, and flying instructors	17	7	6	30	19	9	13	42	20	16	17	53				
9	2242 Electronic service technicians (household and business equipment)	9	8	9	26	9	8	10	28	9	9	10	29				
10	6321 Chefs	8	8	9	25	9	8	11	28	9	9	11	30				
11	2231 Civil engineering technologists and technicians	8	6	6	20	8	6	7	21	8	7	7	22				
12	4212 Social and community service workers	7	5	5	18	7	6	6	19	8	6	6	20				
13	2224 Conservation and fishery officers	6	6	5	17	7	6	6	18	7	6	6	19				
14	1227 Court officers and justices of the peace	6	4	3	13	6	4	3	13	6	4	3	14				
15	2273 Deck officers, water transport	6	4	3	13	6	4	3	13	6	4	3	14				
16	6315 Cleaning supervisors	5	3	3	11	5	4	3	11	5	4	3	12				
17	1221 Administrative officers	4	3	3	10	4	3	3	11	4	4	3	11				
18	1225 Purchasing agents and officers	4	3	3	10	4	3	3	11	4	4	3	11				
19	1214 Supervisors, mail and message distribution occupations	4	3	3	10	4	3	3	11	4	3	3	11				
20	3211 Medical laboratory technologists	4	3	3	10	4	3	3	11	4	3	3	11				
21	3212 Medical laboratory technicians and pathologists' assistants	4	3	3	10	4	3	3	11	4	3	3	11				
22	3215 Medical radiation technologists	4	3	3	10	4	3	3	11	4	3	3	11				
23	6312 Executive housekeepers	4	3	3	10	4	3	3	11	4	3	3	11				
24	2241 Electrical and electronics engineering technologists and technicians	4	3	3	10	4	3	3	10	4	4	3	11				
25	1224 Property administrators	4	3	3	9	4	3	3	10	4	3	3	10				

Table 46 (cont'd)

Top Occupations by Job Openings, "Skill Level B College Diploma Occupations," Rotational Workers, 2015–30 (number)

							Forecasted	job openings					
			Ba	ise			Мес	lium			Hi	gh	
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30
26	2211 Chemical technologists and technicians	2	1	3	7	2	2	4	8	2	2	4	8
27	4313 Non-commissioned ranks of the Canadian Forces	3	2	2	7	3	2	2	8	3	3	2	8
28	1253 Records management technicians	2	2	3	7	2	2	3	7	2	2	3	7
	Total job openings for all Skill Level B "College Diploma Occupations" from 2015 to 2030				1,046				1,329				1,576

Note: Skill Level B college diploma occupations usually require two-to-three years of post-secondary education at a college. While there are several more types of these occupations, only the occupations in the above table saw employment during the 2015–30 forecasts. Source: The Conference Board of Canada.

Table 47

Top Occupations by Job Openings, "Skill Level B Trades Certificate Occupations," N.W.T. Residents, 2015–30 (number)

							Forecasted j	ob openings					
			Ba	ise			Mec	lium			Hi	gh	
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30
1	7271 Carpenters	217	81	79	378	295	150	37	482	326	179	61	566
2	7241 Electricians (except industrial and power system)	133	40	35	207	187	87	0	274	208	105	15	328
3	7321 Automotive service technicians, truck and bus mechanics, and mechanical repairers	86	49	54	189	104	63	78	246	106	79	84	270
4	7312 Heavy duty equipment mechanics	86	32	34	152	105	48	44	198	112	66	53	230
5	7251 Plumbers	69	19	30	118	102	46	11	159	115	56	22	193
6	7237 Welders and related machine operators	65	27	21	113	77	38	34	150	81	55	41	177
7	7311 Construction millwrights and industrial mechanics	67	25	9	102	76	35	31	143	79	60	39	178
8	7315 Aircraft mechanics and aircraft inspectors	67	18	10	95	75	27	37	139	79	54	45	178
9	7302 Contractors and supervisors, heavy equipment operator crews	54	24	16	94	71	40	9	120	78	49	14	141
10	7202 Contractors and supervisors, electrical trades and telecommunications occupations	62	20	7	89	81	38	-3	115	89	45	0	134
11	7242 Industrial electricians	44	20	14	78	47	26	43	115	48	47	51	147
12	7205 Contractors and supervisors, other construction trades, installers, repairers and servicers	35	14	17	66	52	31	7	90	59	37	13	109
13	7204 Contractors and supervisors, carpentry trades	34	12	10	56	48	25	2	74	53	30	5	89

Table 47 (cont'd)

Top Occupations by Job Openings, "Skill Level B Trades Certificate Occupations," N.W.T. Residents, 2015–30 (number)

							Forecasted	job openings					
			Ba	ase			Мес	dium			H	igh	
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30
14	7331 Oil and solid fuel heating mechanics	33	12	11	55	46	24	3	73	51	29	7	88
15	7246 Telecommunications installation and repair workers	14	17	23	54	15	18	25	58	15	20	26	61
16	7372 Drillers and blasters—surface mining, quarrying, and construction	29	14	9	51	31	17	25	73	32	30	30	92
17	7294 Painters and decorators (except interior decorators)	28	10	9	47	40	21	1	62	44	25	5	75
18	7253 Gas fitters	22	8	7	37	31	16	2	49	34	19	5	58
19	7244 Electrical power line and cable workers	18	10	9	36	19	11	17	47	19	17	19	55
20	7305 Supervisors, motor transport and other ground transit operators	20	7	4	31	22	10	13	45	23	18	16	57
21	7295 Floor covering installers	17	6	5	28	24	13	1	37	27	15	3	45
22	7291 Roofers and shinglers	16	6	5	28	23	12	1	37	26	15	3	44
23	7252 Steamfitters, pipefitters, and sprinkler system installers	16	6	5	28	23	12	1	37	26	15	3	44
24	7335 Other small engine and small equipment repairers	11	7	7	25	11	8	8	26	11	8	8	27
25	7233 Sheet metal workers	13	1	11	25	20	6	8	34	23	8	11	42
26	7301 Contractors and supervisors, mechanic trades	9	7	7	23	9	7	7	23	9	7	7	24
27	7322 Motor vehicle body repairers	10	6	6	22	10	7	7	23	10	7	7	24
28	7316 Machine fitters	10	5	3	18	11	6	9	26	11	10	10	32
29	7203 Contractors and supervisors, pipefitting trades	6	5	5	15	6	5	5	16	6	5	5	16
30	7384 Other trades and related occupations, n.e.c.	6	5	5	15	6	5	5	16	6	5	5	16
31	7245 Telecommunications line and cable workers	4	5	6	15	4	5	7	16	4	5	7	17
32	7272 Cabinetmakers	8	2	0	10	9	3	6	19	9	9	9	28
33	7201 Contractors and supervisors, machining, metal forming, shaping and erecting trades, and related occupations	2	3	4	9	2	3	4	9	2	3	4	10
	Total job openings for all Skill Level B "Trades Certificate Occupations" from 2015 to 2030				2,312				3,030				3,590

Note: Skill Level B trades certificate occupations usually require training in trades and/or apprenticeships. While there are several more types of these occupations, only the occupations in the above table saw employment during the 2015–30 forecasts. Source: The Conference Board of Canada.

Top Occupations by Job Openings, "Skill Level B Trades Certificate Occupations," Rotational Workers, 2015–30 (number)

							Forecasted	ob openings					
			Ba	ise			Med	lium			Hig	gh	
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026-30	2015–30
1	7311 Construction millwrights and industrial mechanics	129	63	30	222	139	78	90	307	143	131	111	386
2	7242 Industrial electricians	104	58	42	203	113	72	106	291	116	120	133	369
3	7237 Welders and related machine operators	93	45	29	166	101	56	76	233	103	95	95	293
4	7271 Carpenters	84	33	29	146	115	64	19	198	127	80	31	238
5	7312 Heavy duty equipment mechanics	65	28	21	113	70	35	54	159	72	62	67	201
6	7241 Electricians (except industrial and power system)	66	25	20	110	90	48	11	150	100	61	20	181
7	7252 Steamfitters, pipefitters, and sprinkler system installers	31	25	23	79	32	26	26	85	33	28	28	88
8	7302 Contractors and supervisors, heavy equipment operator crews	24	19	15	58	24	20	17	62	25	21	18	64
9	7251 Plumbers	19	15	18	52	20	16	21	57	21	17	21	59
10	7331 Oil and solid fuel heating mechanics	12	9	9	30	12	10	10	32	12	10	10	33
11	7315 Aircraft mechanics and aircraft inspectors	14	5	3	22	15	7	9	31	16	12	11	39
12	7316 Machine fitters	8	6	6	20	8	6	7	21	8	7	7	22
13	7305 Supervisors, motor transport and other ground transit operators	4	3	3	11	4	3	4	11	4	4	4	12
14	7301 Contractors and supervisors, mechanic trades	4	3	3	10	4	3	3	11	4	3	3	11
15	7372 Drillers and blasters—surface mining, quarrying, and construction—	4	3	3	10	4	3	3	11	4	3	3	11
	Total job openings for all Skill Level B "Trades Certificate Occupations" from 2015 to 2030				1,251				1,658				2,006

Note: Skill Level B trades certificate occupations usually require training in trades and/or apprenticeships. While there are several more types of these occupations, only the occupations in the above table saw employment during the 2015–30 forecasts. Source: Employment and Social Development Canada.

Top Occupations by Job Openings, "Skill Level C High School or Job-Specific Training Occupations," N.W.T. Residents, 2015–30 (number)

							Forecasted j	ob openings					
			Ba	se			Mec	lium			Hi	gh	
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30
1	7521 Heavy equipment operators (except crane)	229	87	69	386	282	137	118	538	302	210	149	661
2	6421 Retail salespersons	139	113	109	360	201	161	179	540	206	204	194	604
3	7511 Transport truck drivers	185	71	41	297	222	105	99	426	233	170	120	523
4	1414 Receptionists	104	70	91	264	121	79	99	300	126	91	105	323
5	1411 General office support workers	87	57	66	210	108	67	74	249	115	80	79	273
6	3413 Nurse aides, orderlies, and patient service associates	89	58	60	207	110	61	65	237	112	65	67	245
7	1431 Accounting and related clerks	95	52	46	193	113	60	64	237	117	76	68	261
8	7513 Taxi and limousine drivers and chauffeurs	105	36	22	163	118	50	65	233	123	94	79	296
9	6541 Security guards and related security service occupations	83	36	29	149	90	40	42	172	92	51	45	188
10	4413 Elementary and secondary school teacher assistants	56	30	41	127	65	31	44	140	67	34	44	145
11	4412 Home support workers, housekeepers, and related occupations	46	31	33	110	55	33	36	124	57	35	37	129
12	1521 Shippers and receivers	48	26	31	106	66	39	55	161	68	56	61	185
13	4422 Correctional service officers	48	32	24	104	55	33	26	114	58	35	27	120
14	4411 Home child care providers	52	26	24	101	58	27	27	112	59	30	28	116
15	7452 Material handlers	56	15	16	87	67	24	48	138	70	50	55	175
16	1522 Storekeepers and partspersons	28	15	15	58	40	24	31	95	41	36	34	111
17	6513 Food and beverage servers	20	13	22	55	21	14	25	60	21	17	26	65
18	7514 Delivery and courier service drivers	26	13	14	53	34	19	26	79	35	29	29	93
19	6551 Customer services representatives—financial institutions	24	15	12	52	25	17	18	60	26	21	19	66
20	1432 Payroll clerks	13	17	17	47	16	17	19	52	18	18	19	55
21	4423 By-law enforcement and other regulatory officers, n.e.c.	23	15	8	46	26	16	9	50	27	17	9	53
22	1451 Library assistants and clerks	21	11	10	42	21	12	12	45	21	13	12	47
23	6521 Travel counsellors	20	10	10	40	21	11	12	43	21	13	12	45
24	6552 Other customer and information services representatives	23	8	5	37	28	11	14	53	29	19	15	63
25	1525 Dispatchers	31	2	1	34	41	9	4	54	45	20	7	71

Table 49 (cont'd)

Top Occupations by Job Openings, "Skill Level C High School or Job-Specific Training Occupations," N.W.T. Residents, 2015–30 (number)

		Forecasted job openings												
		Base					Medium				High			
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	
26	6523 Airline ticket and service agents	37	-5	1	33	44	1	23	68	47	22	29	98	
27	3414 Other assisting occupations in support of health services	18	15	-1	32	22	16	0	37	22	17	0	39	
28	6525 Hotel front desk clerks	17	5	9	31	18	6	10	34	18	7	11	37	
29	1524 Purchasing and inventory control workers	11	9	9	30	12	9	10	31	12	10	10	31	
30	1422 Data entry clerks	11	8	9	28	13	9	9	31	14	9	9	32	
31	3411 Dental assistants	12	2	11	24	15	2	12	28	15	2	12	29	
32	6562 Estheticians, electrologists, and related occupations	8	4	11	23	9	4	12	25	9	6	13	27	
33	6512 Bartenders	10	5	6	21	11	6	7	23	11	7	7	25	
34	1452 Correspondence, publication, and regulatory clerks	1	8	12	21	3	8	13	24	3	9	13	26	
35	6411 Sales and account representatives—wholesale trade (non-technical)	5	1	15	21	10	3	21	34	10	6	23	39	
36	6522 Pursers and flight attendants	14	3	1	18	16	5	8	29	17	12	10	39	
37	7534 Air transport ramp attendants	20	-3	0	18	25	0	15	40	27	14	18	59	
38	8411 Underground mine service and support workers	11	4	2	17	12	5	9	27	13	11	11	35	
39	1415 Personnel clerks	6	5	5	17	7	5	6	18	8	6	6	19	
40	1454 Survey interviewers and statistical clerks	6	5	5	17	7	5	6	18	8	6	6	19	
41	7522 Public works maintenance equipment operators and related workers	3	5	7	15	4	6	11	20	4	8	11	24	
42	1434 Banking, insurance, and other financial clerks	6	5	5	15	6	5	5	15	6	5	5	15	
43	1523 Production logistics coordinators	6	5	5	15	6	5	5	15	6	5	5	15	
44	7445 Other repairers and servicers	6	5	5	15	6	5	5	15	6	5	5	15	
45	9411 Machine operators, mineral and metal processing	6	5	5	15	6	5	5	15	6	5	5	15	
46	7535 Other automotive mechanical installers and servicers	2	3	5	11	5	5	8	18	5	7	9	20	
47	1513 Couriers, messengers, and door-to-door distributors	4	3	3	10	4	3	3	10	4	3	3	10	
48	1526 Transportation route and crew schedulers	4	3	3	10	4	3	3	10	4	3	3	10	
49	6532 Outdoor sport and recreational guides	4	3	3	10	4	3	3	10	4	3	3	10	
50	7532 Water transport deck and engine room crew	4	3	3	10	4	3	3	10	4	3	3	10	
	Total Job Openings for all Skill Level C "High School or Job-Specific Training Occupations" from 2015 t	o 2030			3,871					5,733				

Note: Skill Level C high school or job-specific training occupations usually require secondary school or occupation-specific training (up to two years). While there are several more types of these occupations, only the occupations in the above table saw employment during the 2015–30 forecasts. Source: The Conference Board of Canada.

Top Occupations by Job Openings, "Skill Level C High School or Job-Specific Training Occupations," Rotational Workers, 2015–30 (number)

		Forecasted job openings											
		Base				Medium				High			
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026-30	2015–30	2015–20	2021–25	2026–30	2015–30
1	7521 Heavy equipment operators (except crane)	71	39	28	138	76	48	66	190	78	77	83	239
2	1522 Storekeepers and partspersons	23	20	20	63	24	21	23	68	24	23	24	71
3	6522 Pursers and flight attendants	27	13	9	49	31	17	20	68	32	28	25	86
4	7511 Transport truck drivers	17	13	12	42	17	14	13	45	18	15	14	46
5	1454 Survey interviewers and statistical clerks	14	11	11	36	16	12	13	41	16	14	13	44
6	1451 Library assistants and clerks	12	10	9	32	13	10	11	34	13	11	11	35
7	4412 Home support workers, housekeepers, and related occupations	11	8	8	28	13	9	10	32	13	10	10	34
8	9411 Machine operators, mineral and metal processing	8	6	6	20	8	6	7	21	8	7	7	22
9	7513 Taxi and limousine drivers and chauffeurs	5	4	4	12	5	4	4	13	5	4	4	14
10	4423 Bylaw enforcement and other regulatory officers, n.e.c.	5	4	2	11	5	4	3	12	5	4	3	12
11	1526 Transportation route and crew schedulers	4	3	3	10	4	3	3	11	4	3	3	11
12	6532 Outdoor sport and recreational guides	4	3	3	10	4	3	3	11	4	3	3	11
	Total job openings for all Skill Level C "High School or Job-Specific Training Occupations" from 2015 to	2030			450				544				624

Note: Skill Level C high school or job-specific training occupations usually require secondary school or occupation-specific training (up to two years). While there are several more types of these occupations, only the occupations in the above table saw employment during the 2015–30 forecast. Source: Employment and Social Development Canada.
Table 51

Top Occupations by Job Openings, "Skill Level D Less Than High School Occupations," N.W.T. Residents, 2015–30 (number)

		Forecasted job openings												
		Base					Med	lium		High				
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	
1	6733 Janitors, caretakers, and building superintendents	316	227	214	757	350	249	255	853	358	284	269	911	
2	6731 Light duty cleaners	184	123	140	447	203	140	189	532	208	179	208	595	
3	6611 Cashiers	118	133	102	354	179	184	173	536	184	229	188	601	
4	7611 Construction trades helpers and labourers	139	32	34	205	206	90	-12	284	233	114	7	354	
5	6711 Food counter attendants, kitchen helpers, and related support occupations	78	64	33	176	84	70	51	204	86	85	54	225	
6	6622 Store shelf stockers, clerks, and order fillers	69	48	48	165	97	69	80	245	100	88	86	274	
7	7621 Public works and maintenance labourers	20	24	23	68	24	25	25	74	25	26	26	78	
8	6621 Service station attendants	30	19	12	60	40	27	22	88	40	33	24	98	
9	8614 Mine labourers	39	3	3	45	43	8	35	86	45	32	42	118	
10	7612 Other trades helpers and labourers	12	9	9	30	12	9	9	31	12	9	9	31	
11	9619 Other labourers in processing, manufacturing, and utilities	11	9	9	30	12	9	10	31	12	10	10	31	
12	6741 Dry cleaning, laundry, and related occupations	11	8	8	27	13	9	9	31	13	9	9	32	
13	8612 Landscaping and grounds maintenance labourers	7	6	14	26	9	6	15	30	9	7	16	32	
14	6722 Operators and attendants in amusement, recreation, and sport	10	6	5	21	10	6	6	22	10	7	6	23	
15	6732 Specialized cleaners	0	5	7	13	0	5	8	13	0	5	8	13	
16	8615 Oil and gas drilling, servicing and related labourers	8	3	1	12	9	4	6	18	9	8	8	24	
17	9611 Labourers in mineral and metal processing	8	3	1	12	9	4	6	18	9	8	8	24	
18	7622 Railway and motor transport labourers	4	3	3	10	4	3	3	10	4	3	3	10	
19	9614 Labourers in wood, pulp, and paper processing	7	1	-1	6	8	2	5	14	8	7	7	22	
20	8616 Logging and forestry labourers	0	0	4	4	1	0	4	5	1	0	4	5	
	Total job openings for all Skill Level D "Less Than High School Occupations" from 2015 to 2030	2,468				3,126						3,501		

Note: Skill Level D less than high school occupations generally require on-the-job training, including short work demonstrations, and do not necessarily require formal education. While there are several more types of these occupations, only the occupations in the above table saw employment during the 2015–30 forecasts. Source: Employment and Social Development Canada.

Table 52

Top Occupations by Job Openings, "Skill Level D Less Than High School Occupations," Rotational Workers, 2015–30 (number)

		Forecasted job openings											
		Base				Medium				High			
Position	Occupation	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30	2015–20	2021–25	2026–30	2015–30
1	8612 Landscaping and grounds maintenance labourers	15	12	16	43	16	12	18	46	16	13	19	48
2	6742 Other service support occupations, n.e.c.	12	9	9	30	12	10	10	32	12	10	10	33
3	9614 Labourers in wood, pulp, and paper processing	8	6	6	20	8	6	7	21	8	7	7	22
4	8614 Mine labourers	6	4	5	15	6	4	6	16	6	5	6	17
	Total job openings for all Skill Level D "Less Than High School Occupations" from 2015 to 2030:				107				115				120

Note: Skill Level D less than high school occupations generally require on-the-job training, including short work demonstrations, and do not necessarily require formal education. While there are several more types of these occupations, only the occupations in the above table saw employment during the 2015–30 forecasts. Source: Employment and Social Development Canada.

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