Northeastern Workforce Development Board (NWDB)

2017 Strategic Plan

Appendix I – Economic and Workforce Data

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Prepared for:

Northeastern Workforce Development Board

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ECONOMIC DEVELOPMENT

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Introduction

The following is a data appendix to the strategic plan for the Northeastern Workforce Development Board (NWDB). This data appendix includes data on socio-economic indicators, employment, wages, establishments, and occupations within the region which impacts or relates to workforce development. Data is summarized for the NWDB as a whole which includes the counties of: Aroostook, Hancock, Penobscot, Piscataquis, and Washington.

This data is meant to provide context for development of the NWDB Strategic Plan and help identify opportunities, challenges and issues for the development of goals, strategies, and actions.

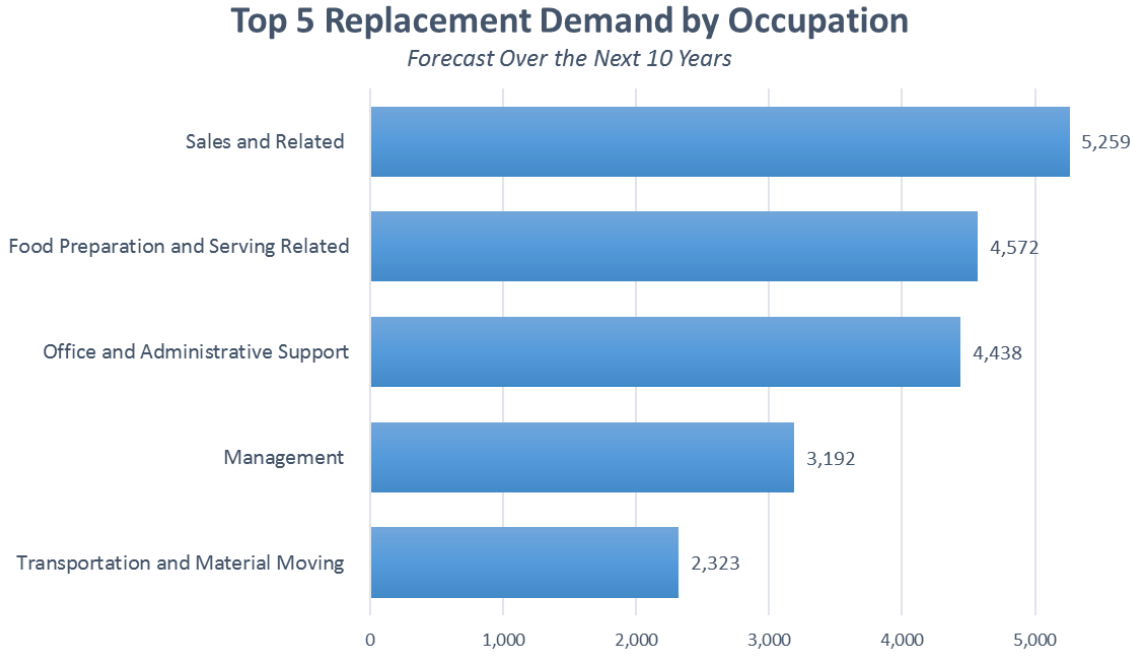
Data for this overview was provided by the Eastern Maine Development Corporation (EMDC) through their newly acquired JobsEQ subscription with Chmura Economics and Analytics.

An executive summary is provided that addresses the question: what this data means for workforce development in the NWDB region? along with a summary of key findings.

Executive Summary

Based on the analysis of data, key findings by topic area are summarized below along with resulting strategy guidance. So, what does this mean for workforce development in the NWDB region?

Replacement Demand will drive workforce demand over the next ten years and as a result will be an important focus of regional workforce strategies – while there we be some growth resulting from industry growth in healthcare and some sub-industry subsectors, workforce demand will be driven largely by the demand for replacement workers (workers retiring or otherwise leaving the workforce). It is projected that replacement demand will drive the need for 37,454 positions with the highest occupations being Sales and Related (5,259 jobs); Food Preparation and Serving Related (4,572 jobs); Office and Administrative Support (4,438 jobs); Management (3,192 jobs); Healthcare Practitioner and Technician (2,293); Transportation and Material Moving (2,323 jobs); and Education, Training, and Library (2,040 jobs). Regional workforce strategies should include information, programs, and services to support industry and interested job applicants in filling this replacement demand.



Source: JobsEQ

Key Industries for future workforce demand in the region based on a combination of existing employment, projected employment, replacement demand, and industry concentration are:

- Healthcare and Social Assistance
- Retail Trade
- Educational Services
- Accommodation and Food Services
- Manufacturing
- Construction
- Agriculture, Forestry, Fishing, and Hunting

The NDWDB will target Manufacturing, Healthcare, and Information Technology as priority industries for support with Construction and Hospitality (including accommodation and food services) also being identified as important in-demand industries. Based on the data analysis, NDWB and its partners will also continue to track and provide information, programs, and services at some level for Educational Services and Agriculture, Forestry, Fishing, and Hunting.

Additionally**, IT jobs are spread across multiple industries, not just within IT companies. The skills associated with IT are critical for future industry and workforce support as well as growth across the Region. Therefore, the region should continue to include IT Industry and Workforce within its targeted priorities.**

Most businesses in the region are small with 82% having fewer than 10 employees and a mere 1% having 100 or more employees. Additionally, there is an estimated 11,633 self-employed persons in the region, which represents 8% of total jobs, making self-employment a group among the top five industry sector groupings in terms of size. Therefore, **regional workforce strategies will include partnerships and collaborations for provision of technical assistance, information, programs, and services to support small business and entrepreneur creation and sustainability.**

In addressing these issues, based on the data the following are opportunities and challenges:

Opportunities

- Replacement demand driving workforce needs
- Healthcare industry and occupations projected to increase
- High levels of self-employment - outreach and engagement with industry must include means to include small businesses and entrepreneurs along with the typical, larger employers
- Higher education assets spread throughout the region meeting demands of many occupations
- Higher than average percent of population with associate degrees making the region well suited for middle skill jobs
- Underemployed population who can advance into higher skill, higher wage jobs through additional workforce, education and training services

Challenges

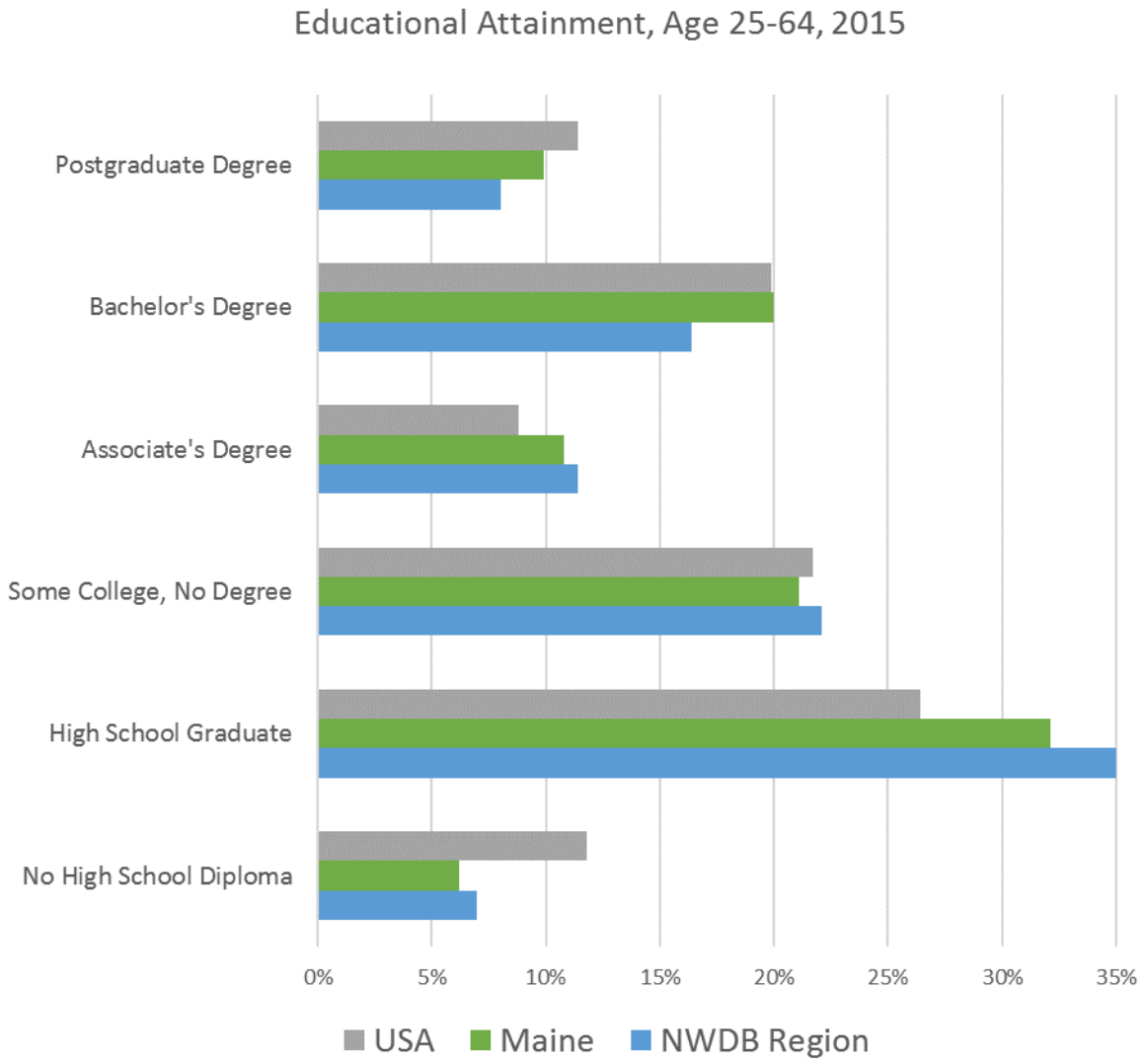
- Declining population, which is slightly older and with less wealthy than the US as a whole
- Lower higher education attainment rates of existing population for bachelor degrees or more
- Lower labor force participation rates than US as a whole

- Low projected job growth resulting from industry growth
- Industries with highest average wages tend to be those without significant levels of employment in the region

The following are key findings summarized by topic area from the data analysis.

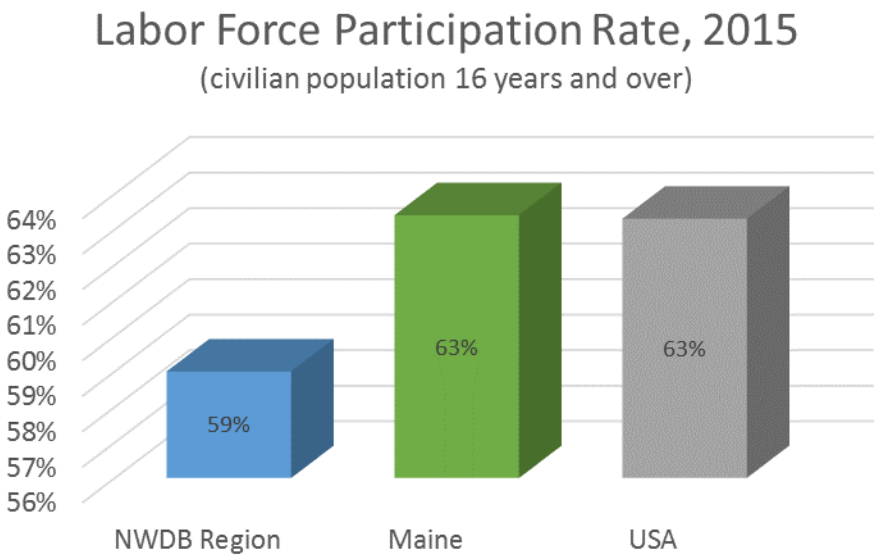
Summary Key Findings: Socio-Demographics and Labor

- The population in the NWDB region in 2015 was nearly 325,000 and has declined at an average annual rate of about 0.1% from 2005 to 2015 while Maine has experienced a slight annual growth.
- Population trends by age, as well as population trends by race/ethnicity within the NWDB region are very comparable to the trends occurring within Maine. The population of the NWDB region and Maine are older and less ethnically/racially diverse.
- Within the NWDB region, 24% of people between the ages of 25 and 64 have a Bachelor's Degree or higher, which is lower than the 30% in Maine and 31% in the US. However, 11% within the NWDB region have an Associate's Degree which is similar to Maine, but higher than the US at 9%. This makes the Region best able to support businesses and occupations demanding middle skill jobs (those requiring more than a high school diploma but less than a 4 year degree).



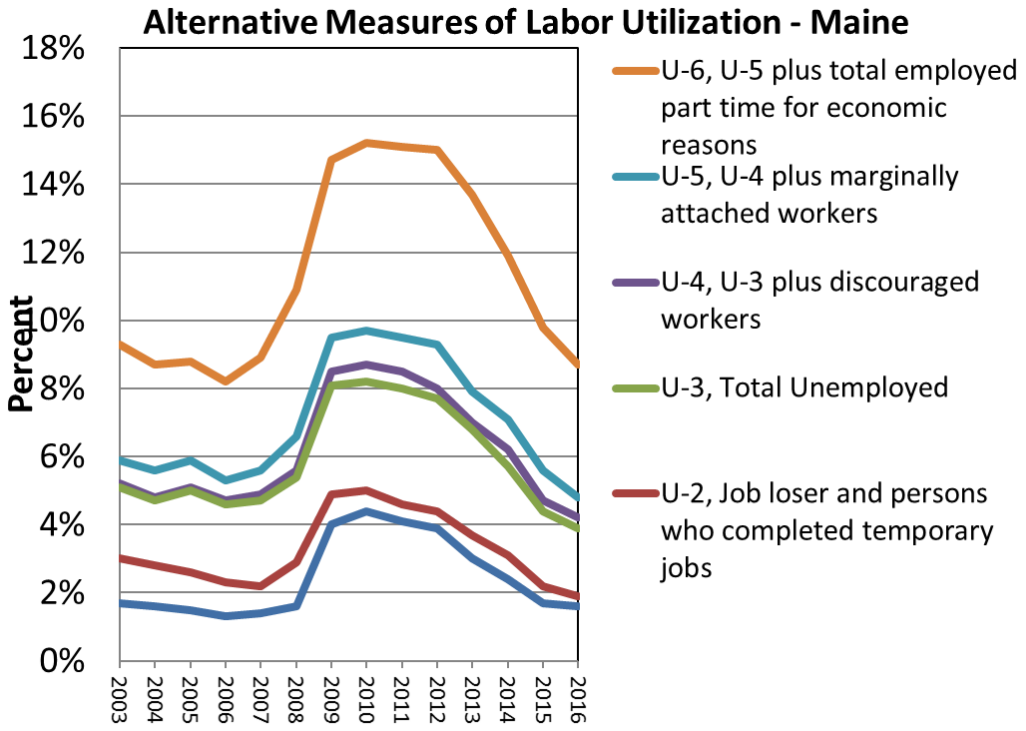
Source: JobsEQ, ACS 2011-2015

- The unemployment rate for the NWDB region was 5.2% as of November 2016, which was slightly higher than the national rate of 5.0%. Within the NWDB region the civilian labor force is estimated at nearly 162,000 with a 59% labor force participation rate. The participation rate in the NWDB is 4 percentage points lower than that of Maine and the US, both of which have a participation rate of 63%.



Source: JobsEQ, Census 2010, ACS 2011-2015

- Adding to the workforce challenge is the number of unemployed who would like a job but are not actively seeking due to becoming discouraged, those working part-time that would prefer full-time employment, and those that are underemployed. As reported in the State of Maine -2016-2020 Unified Plan, "The unemployment rate is one of six measures of labor underutilization. It includes jobless people actively seeking and available for work. The broadest measure of underutilization, known as U-6, adds discouraged and other marginally attached workers who want a job but are not looking and those working part-time who prefer full-time work to the job seeking unemployed. Though the most commonly reported unemployment rates have returned to pre-recession levels, U-6 remains more elevated, a full two percentage points higher than in 2007. Additionally, even the U-6 number doesn't fully capture underemployment, those in full-time positions who would prefer a position where they could utilize more skills for higher wages.



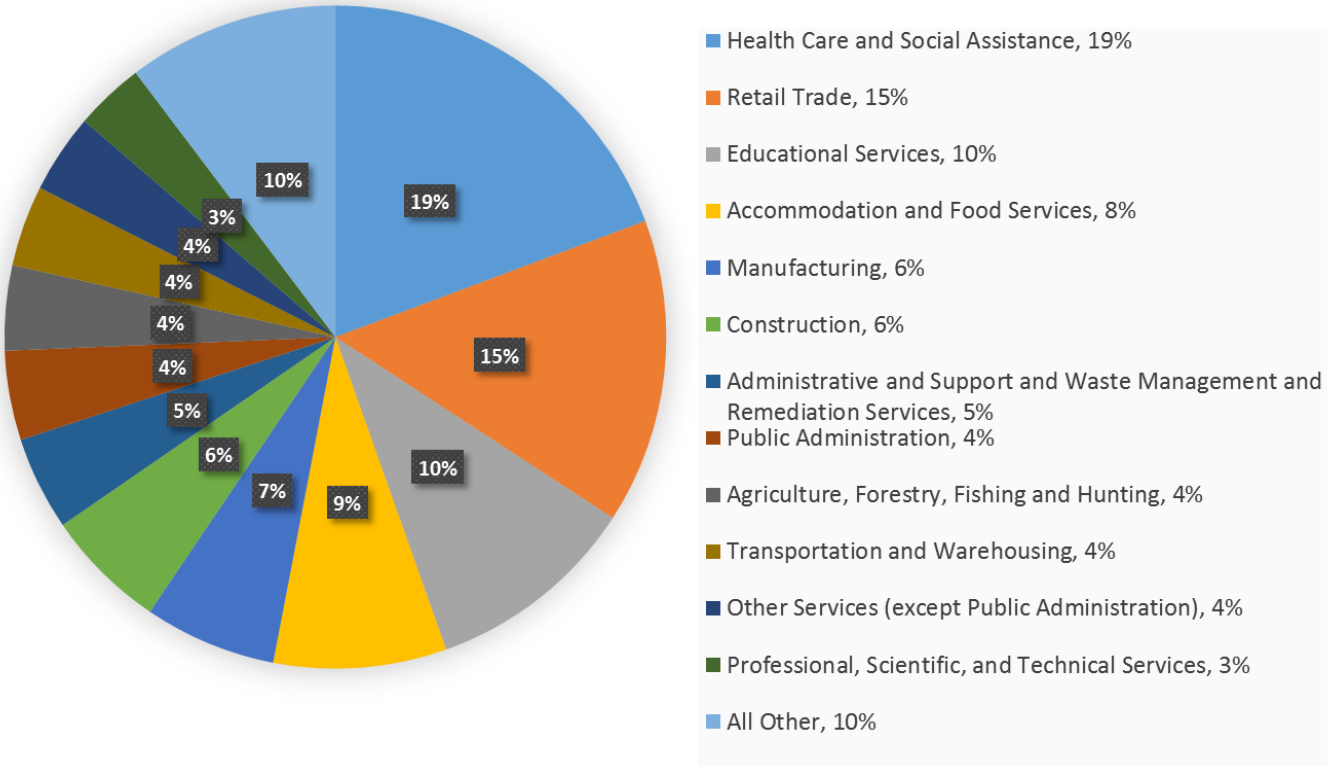
Source: US Dept. of Labor, Bureau of Labor Statistics as reported in State of Maine -2016-2020 Unified Plan -Workforce Innovation and Opportunity Act

- The median household income in the NWDB region is $42,144, lower than that of both Maine and the US, at $49,000 and $54,000, respectively. Both the percentage of people below the poverty level as well as the percentage of households receiving food stamps are higher in the NWDB region than in Maine and the US. Having a poverty rate of 17%, compared to 14% in Maine and 16% in the US, and the percentage of households receiving food stamps at 20%, 3 percentage points higher than that of Maine at 17% and 7 percentage points higher than the US at 13%.

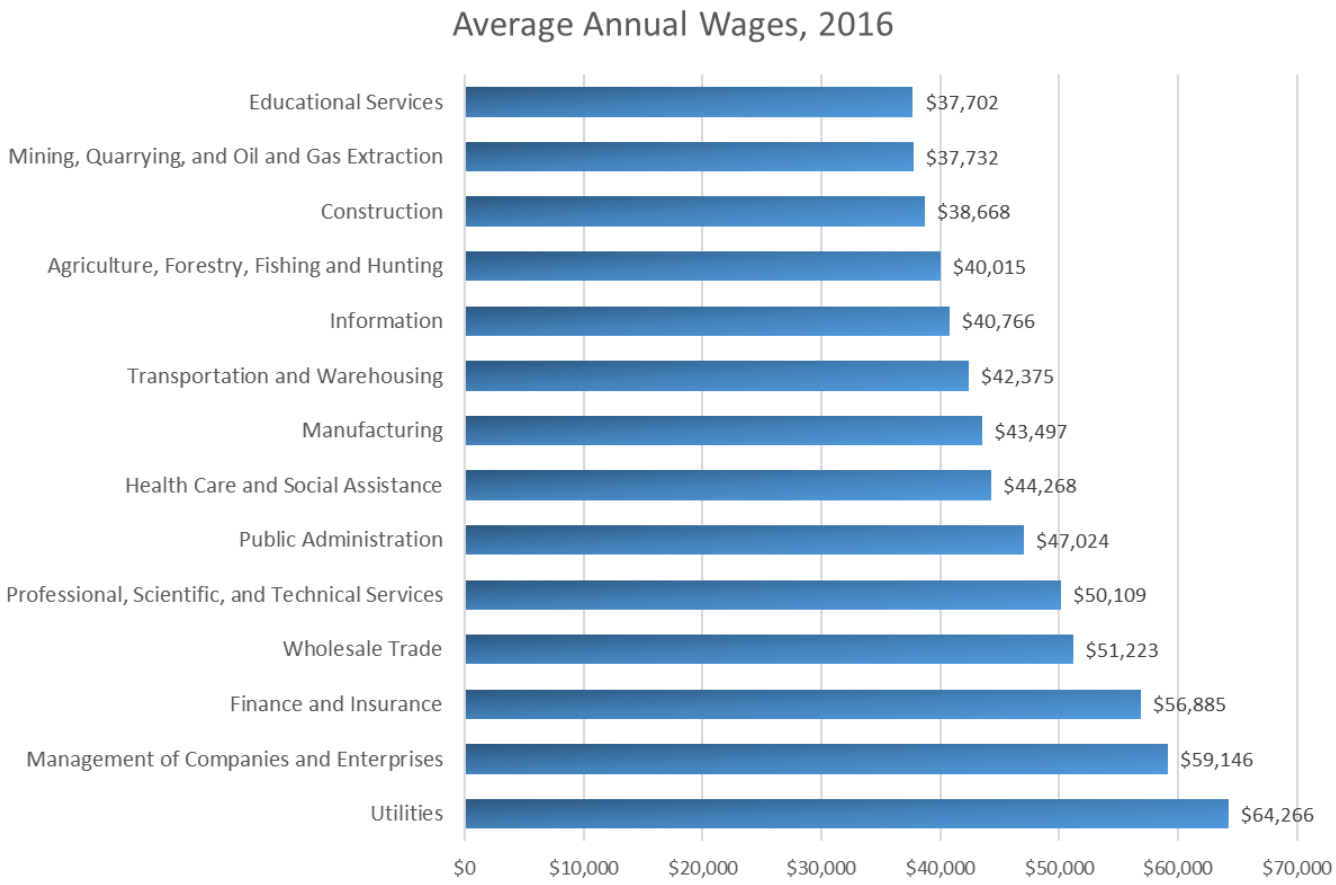
Summary Key Findings: Employment and Establishments

- In 2016 there were a total of 146,348 jobs in the NWDB region. In the past five years, the region has experienced a 1% decrease in employment while Maine as a whole experienced a slight increase (1%) and the nation experienced an increase of 2%.
- Over the next ten years the NWDB region is projected to experience a 1% annual decrease in total employment. However, there will still be a need for workforce development resulting from replacement demand (demand resulting from retirements and persons leaving the workforce) which will create the need to fill 34,636 jobs over the course of the next ten years.
- Health Care and Social Assistance, along with Retail Trade are the two largest industries within the NWDB region, providing over 28,000 jobs and nearly 22,000 jobs, respectively. Health Care and Social Assistance is projected to grow at an average annual growth rate of 1% which is the only major industry class projected to grow. Other industries that represent considerable portions of jobs in the region include: Educational Services (15,198 jobs), Accommodation and Food Services (12,365 jobs) Manufacturing (9,446 jobs), and Construction (8,701 jobs).

Jobs by Industry Sector, 2016



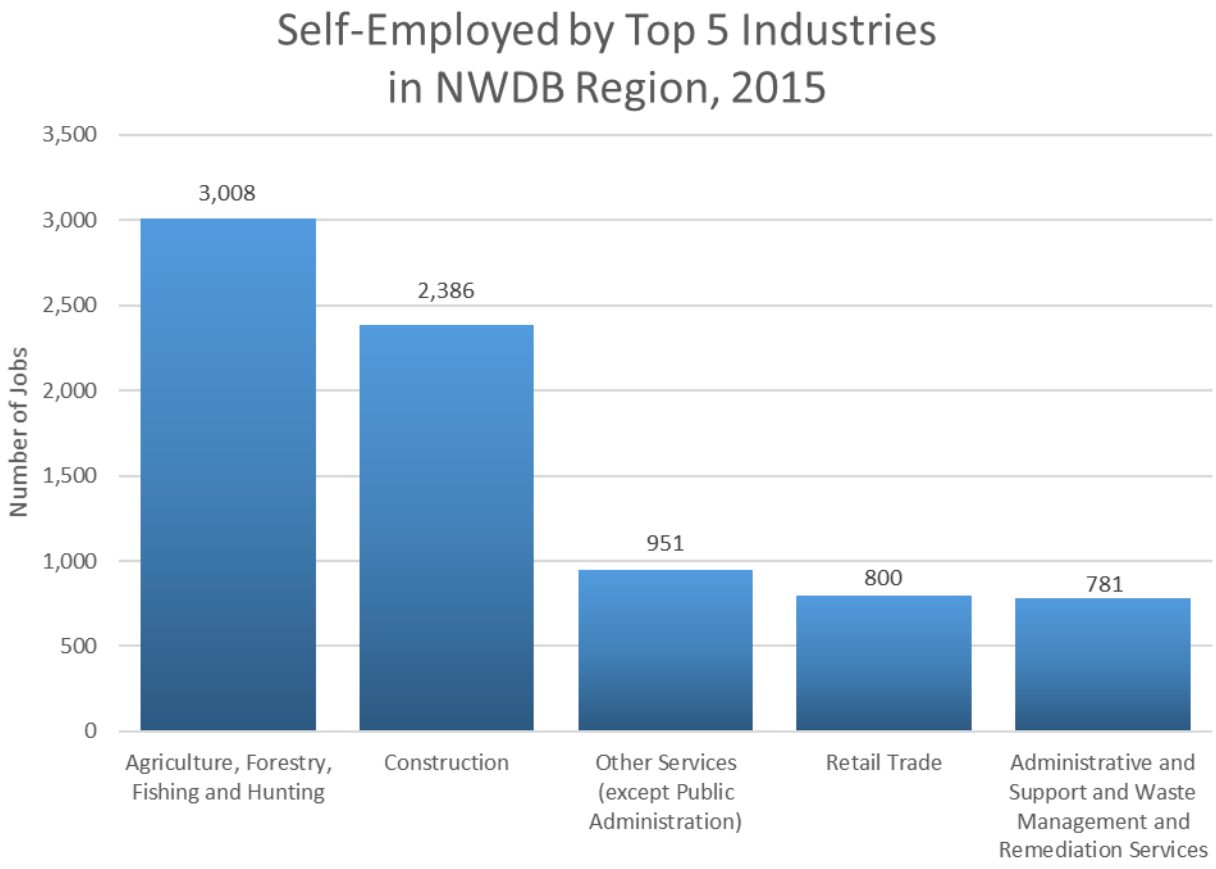
- Retail, though the second largest sector is both projected to decline by more jobs than any other sector except manufacturing, and pays lower than average annual wages. It is therefore not a strong sector to target. Additionally, the sector nationally is experiencing recent and projected future transformations including digital technologies and reduction of big box, brick and mortar stores making it susceptible to further employment declines.
- Both Health Care and Social Assistance, along with Retail Trade industries have a location quotient (LQ- measure of the degree to which a region has a concentration in an industry) of 1.37 showing these industries are slightly more concentrated in the NWDB region compared to the United States. Note: a LQ of 1.0 indicates equal concentration to the US as a whole, with greater numbers indicating a higher concentration and lower numbers indicating a lower concentration. Other industries in which the NWDB region exhibits a greater than average concentration (above average LQ) include Agriculture, Forestry, Fishing, and Hunting (2.81); Education Services (1.26); Utilities (1.12); and Construction (1.08). Of these, three industries have a considerable number of jobs in the region including Agriculture, Forestry, Fishing, and Hunting with 6,056 jobs; Education Services with 15,198 jobs; and Construction with 8,701 jobs.



- In 2016 wages for all industries averaged $37,195. Utilities had the highest average wages ($64,266; followed by Management of Companies and Enterprises ($59,146); Finance and Insurance ($56,885); Wholesale Trade ($51,226); and Professional, Scientific, and Technical Services ($50,109).
- The total number of establishments for all industries within the NWDB region is just over 11,400. The Retail Trade industry, unsurprisingly, has the highest number of establishments in the region at just over 1,500. Industries closely following in terms of number of establishments are Construction with nearly 1,200, Other Services (except Public Administration) with 1,100, and Health Care and Social Assistance with just over 1,000. Mining, Quarrying, and Oil and Gas Extraction has the least number of establishments at 8.
- There were nearly 20,100 business establishments in the NWDB region in 2015. Business establishments having between 2 and 9 employees make up the large majority at 66%, followed by business establishments with one employee making up 16%. Only 1% of business establishments employed 100 or more workers.
- The NWDB region has an estimated 11,633 total self-employed persons, which represents 8% of total jobs. These persons earn an average $32,600 annually[1]. Within the entire NWDB region the industry with the most self-employed persons are in Agriculture, Forestry, Fishing and Hunting with 3,000 self-employed,

[1] Note: The data on self-employment reported here is based on different data than used above. The data here includes all self-employed persons not part of business establishments. This includes independent whereas the data above included business establishments employing .

which is about 49% of total jobs in the industry. Closely following is the Construction industry with nearly 2,400 self-employed or about 28% of total jobs.



Source: JobsEQ

Summary Key Findings: Occupations

- In terms of occupations, of the region's 146,248 jobs, Office and Administrative Support have the highest number of jobs with 20,400. This is followed by Sales and Related with 16,000; Food Preparation and Serving with 12,000; Healthcare Practitioner and Technical with 10,837; Education, Training and Library with 9,981; Transportation and Material Moving with 9,926; and Management with 9,097.
- Growth in occupations due to industry growth (new jobs) in the next ten years is projected to be driven by healthcare occupations and to occur with the occupations of Healthcare Support (457 jobs); Healthcare Practitioner and Technical (352 jobs); Personal Care (222 jobs); Community and Social Services (118). Construction is projected to grow by 40 jobs. These are the only major occupations projected to grow new jobs due to industry growth.
- However, it is projected that replacement demand will drive the need for 37,454 positions with the highest being Sales and Related (5,259 jobs); Food Preparation and Serving (4,572 jobs); Office and Administrative Support (4,438 jobs); Management (3,192 jobs); Healthcare Practitioner and Technician (2,293); Transportation and Material Moving (2,323 jobs); and Education, Training, and Library (2,040 jobs).

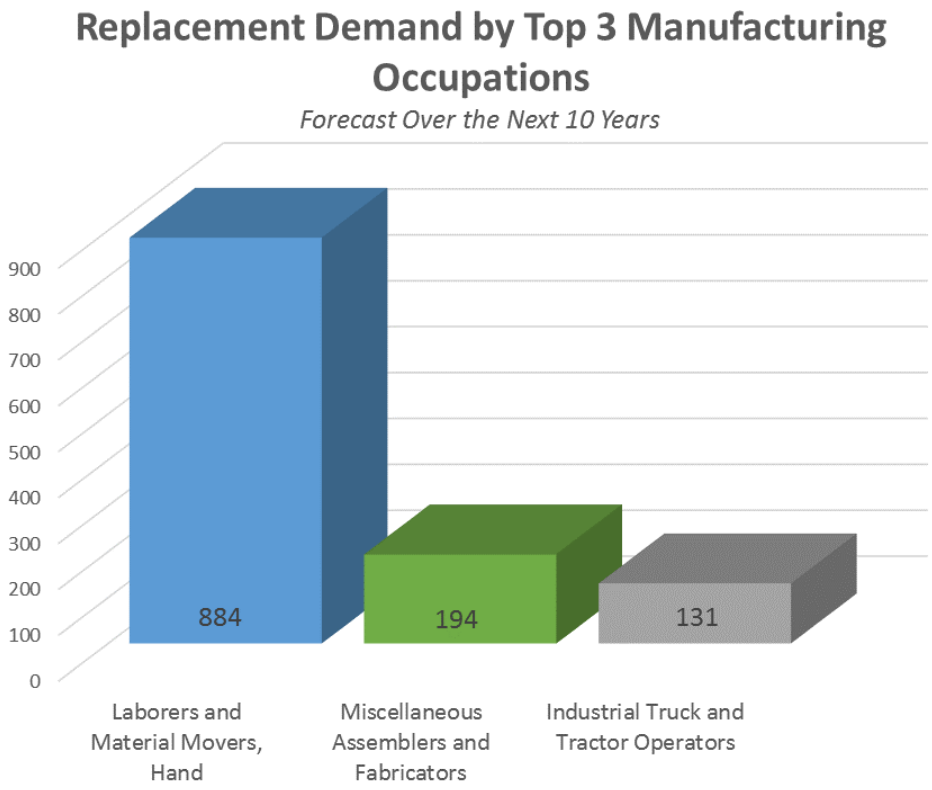
- At the more detailed 4-digit SOC occupation level Personal Care Aids, has the most jobs with 2,370 followed by Therapists (851 jobs) and EMT/Paramedics (429 jobs). All of them are projected to grow over the next ten years.
- Of the top 25 in-demand occupations, 10 require entry-level education that corresponds to a postsecondary program within the NWDB region. Of particular note is that ONLY seven of the top 25 in-demand occupations require no education beyond high school. Available postsecondary programs within the region distributing certificates, 4 year degrees, and postgraduate degrees, for these specific occupations, include University of Maine at Fort Kent and at Presque Isle, Husson University, Northern and Eastern Maine Community College. Many of the in-demand occupations are typically filled by persons with middle-skills (more than a high school diploma but less than a 4-year degree).

Targeted Industry Sectors

The region has targeted three primary industry areas for detailed workforce strategy focus. They are Manufacturing, Healthcare, and Information Technology.

Manufacturing

- The Manufacturing industry sector has nearly 9,500 jobs within the region, representing 6.5% of the region's 146,000 total jobs.
- The Manufacturing industry sector has shown decline over the past 5 years shedding nearly 1,500 jobs, which is an average annual rate of decline of 3% and is projected to decline over the next 10 years at an average annual rate of -2%. The loss of jobs over the past five years has been dominated by a loss of 1,132 jobs within Paper Mills.
- Despite the projected decline of total employment, workforce development to fill jobs created for replacement demand due to persons retiring or otherwise leaving the workforce. Over the next ten years its replacement demand for manufacturing jobs is projected at 1,986 jobs.



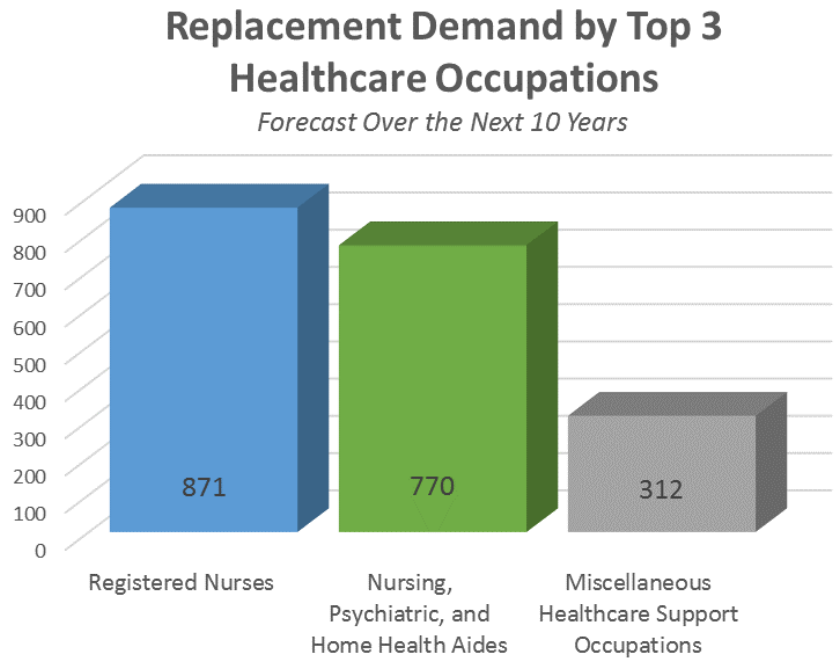
Source: JobsEQ

- Within the Manufacturing industry sector, the highest number of jobs can be found in Paper Mills with over 800 jobs, followed by Frozen Food Manufacturing at nearly 800, then Ship and Boat Building as well as Sawmills and Wood Preservation, at 676 and 590 jobs, respectively. All of these industries are projected to decline over the next 10 years at an average annual rate between 1% and 4%. Medical Equipment and Supplies Manufacturing is at 474 jobs and projected to need another 107 jobs to meet replacement demand over the next ten years.
- The average annual wage for workers in this specific sector are nearly $43,000, higher than the average annual wages of $37,000 for all industries in the region.
- The top occupation within the Manufacturing industry sector is Laborers and Material Movers and Handlers with 2,972 jobs followed by Miscellaneous Assemblers and Fabricators with 881 jobs; Industrial Truck and Tractor Operators 474 jobs; and Industrial Machinery Installation, Maintenance, and Repair 474 Jobs. Each is projected to contribute significantly to projected demand for replacement workers.
- Of the top 10 occupations within this sector, 3 of them require entry-level education which corresponds to a postsecondary program within the NWDB region.

Healthcare

- The Healthcare industry sector has over 28,000 jobs within the NWDB region, representing 19.3% of the 146,000 total jobs across all industries in the Region.
- The Healthcare industry sector has shown growth over the past 5 years adding nearly 600 jobs, which is an average annual growth rate of less than 0.5%. The Healthcare industry is projected to continue growing over the next 10 years at an average annual rate of 1% adding 1,838 jobs. In addition to added jobs from

industry growth, demand for replacement workers is projected to be require an additional 5,551 workers in Healthcare industries over the course of the next ten years.



Source: JobsEQ

- Within the Healthcare industry sector, the highest number of jobs can be found in General Medical and Surgical Hospitals with nearly 9,200 jobs, followed by Nursing Care Facilities, Services for Elderly and Persons with Disabilities, and Office of Physicians at all between 2,500 and 3,000 jobs. The first two of these industries are projected to decline over the next 10 years at an average annual rate between 0% and 1%. Whereas the last two industries are projected to grow at an average annual rate of 1%.
- The average annual wage for workers in this specific sector are nearly $44,000, higher than the average annual wages for all industries in the region being $37,000.
- The top occupations within the Healthcare industry sector are Registered Nurses; Nursing, Psychiatric, and Home Health Aides, and Personal Care Aides, having 4,000, 3,600, and 2,400 jobs, respectively. All three occupations are projected to grow marginally over the next 10 years and contribute to replacement demand.
- Of the top 10 occupations within this sector, 4 of them require entry-level education which corresponds to a postsecondary program within the NWDB region. All four of which require a Bachelor's degree at higher.

Information Technology

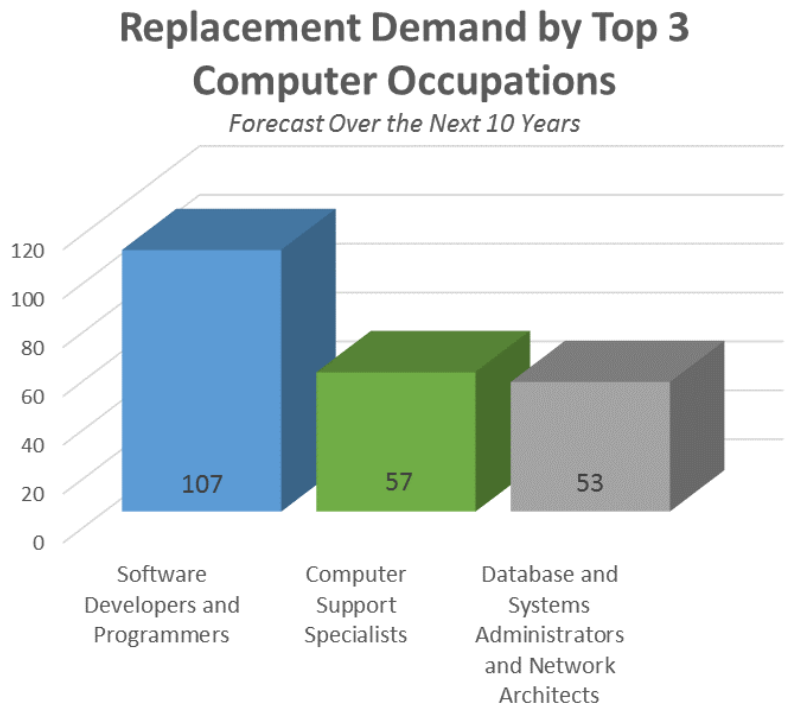
- For employment within IT specific companies:
    - The Information Technology industry sector has just over 500 jobs within the NWDB region, representing less than 1% of the 146,000 total jobs across all industries in the region.
    - The Information Technology industry sector has shown growth over the past 5 years adding 70 jobs, which is an average annual growth rate of 3%. The Information Technology industry is also forecasted to grow over the next 10 years at an average annual rate of 1% adding 43 jobs due to

industry growth. In addition to added jobs from industry growth, demand for replacement workers is projected to be require an additional 100 workers in IT specific industries over the next ten years.

- Within the Information Technology industry sector, the highest number of jobs can be found in Computer Systems Design and Related Services businesses with 336 jobs. This industry has grown over the past 5 years adding 17 jobs, an average annual increase of 1%. It is also projected to continue growing over the next 10 years at an average annual growth rate of 1% as well.
- Three of the five industries within this sector are projected to grow an average annual growth rate between 1% and 2%. Software Publishing is projected the most growth at an average annual growth rate of 2%.
- The average annual wage for workers in this specific sector are nearly $54,000, which is much higher than the average annual wages for all industries in the region at $37,000.

Regarding IT Occupations in the Region Across All Industry Sectors:

- There is a total of 1,959 occupations in the region across all industries. Among these the highest number of jobs are Software Developers and Programmers with nearly 650 jobs followed by Computer Support Specialists with 454 jobs, Network Architects with 382 jobs, and Computer and Information Analysts with 301 jobs. Software Developers and Programmers and Computer and Information Analysists are projected to slightly grow over the next ten years in the region while the others are projected to experience a slight decline.
- While overall for all Computer Related Occupations a slight decline in total employment is projected for the region in the next ten years, there will be a demand for replacement workers of 280 jobs.
- Of the Computer Related Occupations, 6 of them require entry-level education which corresponds to a postsecondary program within the NWDB region. Most occupations are held by persons with at least some college and more typically at least a bachelor's degree.



Economic and Workforce Data

Socio-Demographic and Labor Overview

Demographics

- The population in the NWDB region in 2015 was nearly 325,000.
- In the NWDB region the population has declined at an average annual rate of about 0.1% from 2005 to 2015, conversely the population has increased in Maine by a marginal annual rate of 0.1% and has increased in the overall US by about 1%.
- Population trends by age, as well as population trends by race/ethnicity within the NWDB region are very comparable to the trends occurring within Maine. The population of the NWDB region and Maine are older and less ethnically/racially diverse.

Population Distribution by Age, Over Age 18, for NWDB Region, Maine, and USA, 2015

Population by Age						
	Percent			Value		
	NWDB Region	Maine	USA	NWDB Region	Maine	USA
Population				324,535	1,329,328	321,418,820
Population Annual Average Growth	(0%)	0%	1%	(275)	1,054	2,590,222
Median Age				43	43	37
Under 18 Years	20%	21%	24%	64,645	274,533	74,181,467
18 to 24 Years	10%	9%	10%	33,779	116,072	30,672,088
25 to 34 Years	10%	11%	13%	34,514	144,624	41,063,948
35 to 44 Years	12%	13%	13%	39,971	171,376	41,070,606
45 to 54 Years	16%	17%	15%	52,959	218,575	45,006,716
55 to 64 Years	15%	15%	12%	48,903	192,101	36,482,729
65 to 74 Years	9%	9%	7%	29,921	112,651	21,713,429
75 Years, and Over	8%	7%	6%	25,910	98,429	18,554,555

Source: JobsEQ, Census 2010 and 2015 annual average growth rates since 2005

Population by Race / Ethnicity for NWDB Region, Maine, and USA

Race / Ethnicity						
	Percent			Value		
	NWDB Region	Maine	USA	NWDB Region	Maine	USA
White	95%	95%	72%	315,559	1,264,971	223,553,265
Black or African American	1%	1%	13%	2,028	15,707	38,929,319
American Indian and Alaska Native	2%	1%	1%	4,949	8,568	2,932,248
Asian	1%	1%	5%	2,458	13,571	14,674,252
Native Hawaiian and Other Pacific Islander	0%	0%	0%	78	342	540,013
Some Other Race	0%	0%	6%	804	4,261	19,107,368
Two or More Races	1%	2%	3%	4,726	20,941	9,009,073
Hispanic or Latino (of any race)	1%	1%	16%	3,502	16,935	50,477,594

Source: JobsEQ, Census 2010

- The foreign-born population living within the NWDB region as well as in Maine is far lower than that of the US, being 3% in the NWDB region and 4% in Maine, compared to 13% in the US.
- Similarly, the percentage of the population that speak English "less than very well" within the NWDB region and Maine are both only 2%, compared to 9% in the US.
- The percentage of disconnected youth[2] is the same across all three regions at 3%.

Social Overview for NWDB Region, Maine, and USA, 2015

Social Overview						
	Percent			Value		
	NWDB Region	Maine	USA	NWDB Region	Maine	USA
Enrolled in Grade 12 (% of total population)	1%	1%	1%	4,049	16,821	4,451,334
Disconnected Youth*	3%	3%	3%	468	1,654	518,859
Children in Single Parent Families (% of all children)	34%	34%	35%	19,047	83,403	24,408,909
Disabled, Age 18-64	17%	14%	10%	34,756	112,501	19,985,588
Disabled, Age 18-64, Labor Force Participation Rate and Size	36%	38%	41%	12,389	43,253	8,185,456
Foreign Born	3%	4%	13%	10,268	46,563	41,717,420
Speak English Less Than Very Well (population 5 yrs and over)	2%	2%	9%	4,529	20,966	25,410,756

**Disconnected Youth are 16-19 year olds who are (1) not in school, (2) not high school graduates, and (3) either unemployed or not in the labor force.*

Source: JobsEQ, Census 2010, ACS 2011-2015

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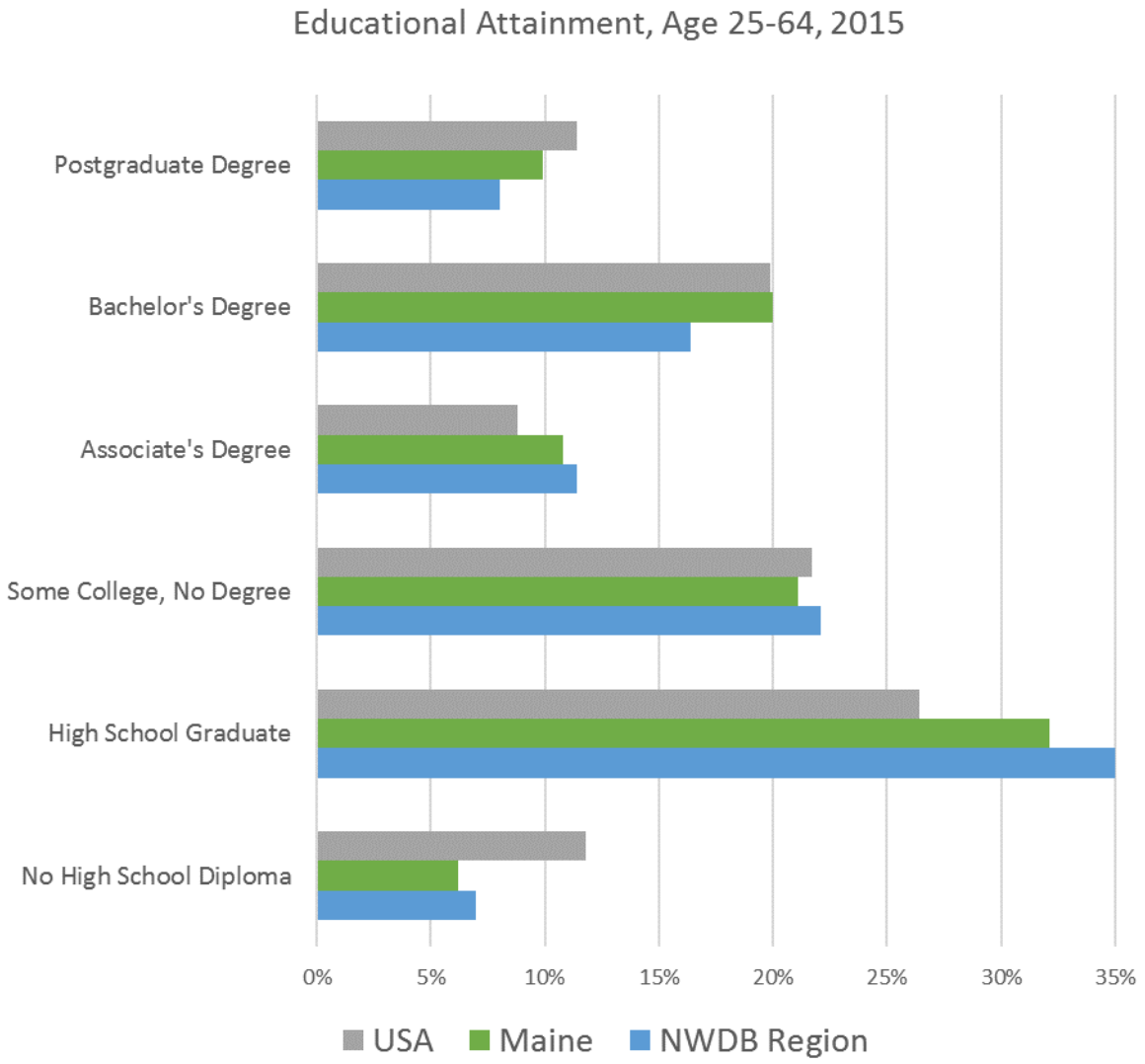
Educational Attainment

- Within the NWDB region, 24% of people between the ages of 25 and 64 have a Bachelor's Degree or higher, this is lower than the 30% in Maine and 31% in the US. There is both a lower percentage of people with a Bachelor's Degree, as well as a Postgraduate Degree. However, 11% within the NWDB region have an associate's degree which is the same as in Maine, but higher than the US at 9%. This makes the region best able to support businesses and occupations demanding middle skill jobs (those requiring more than a high school diploma but less than a 4-year degree).

Educational Attainment for Population Between Ages 25 and 64, for NWDB Region, Maine, and USA, 2015

Educational Attainment, Age 25-64						
	Percent			Value		
	NWDB Region	Maine	USA	NWDB Region	Maine	USA
No High School Diploma	7%	6%	12%	12,210	44,231	19,736,243
High School Graduate	35%	32%	26%	60,786	230,660	43,982,863
Some College, No Degree	22%	21%	22%	38,428	151,742	36,187,232
Associate's Degree	11%	11%	9%	19,846	77,647	14,742,654
Bachelor's Degree	16%	20%	20%	28,470	143,564	33,245,950
Postgraduate Degree	8%	10%	11%	13,976	70,825	18,952,103

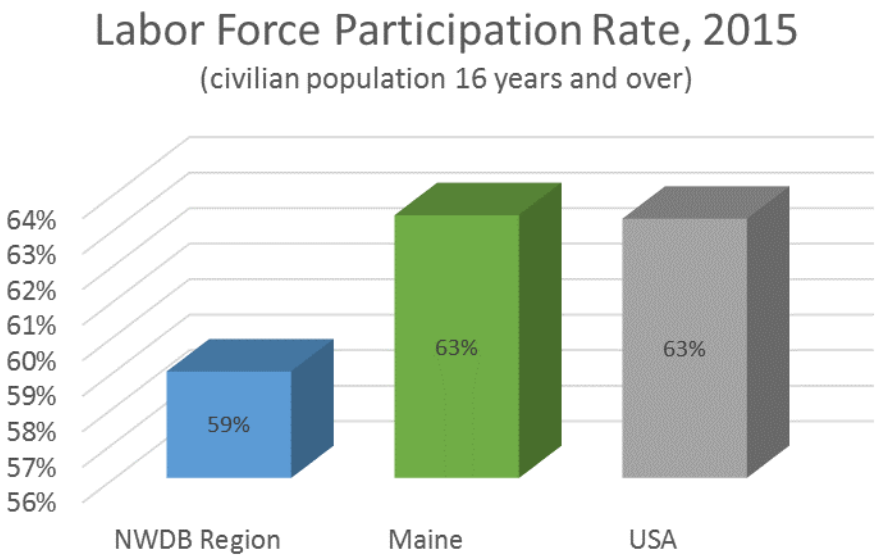
Source: JobsEQ, ACS 2011-2015



Source: JobsEQ, ACS 2011-2015

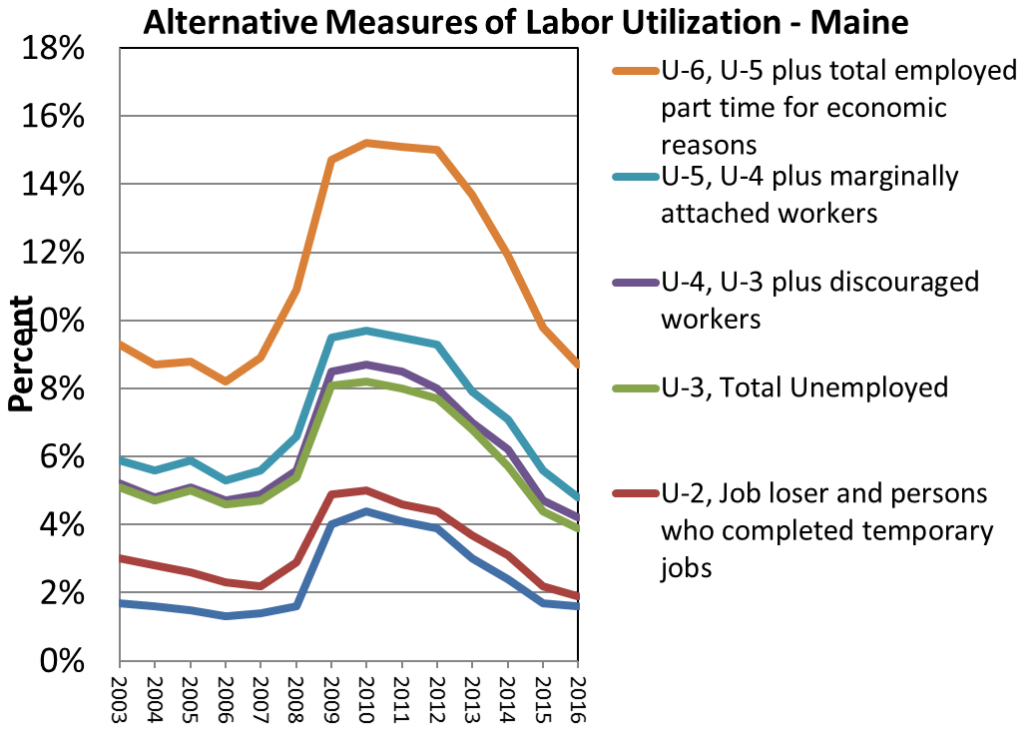
Labor, Income, Housing

- The unemployment rate for the NWDB region was 5.2% as of November 2016, which is higher than the national rate of 5.0%.
- Within the NWDB region the civilian labor force is estimated at nearly 162,000 with a 59% labor force participation rate (the percentage of the population that is either employed or unemployed, either working or actively seeking work). The participation rate in the NWDB is 4 percentage points lower than that of Maine and the US, which both have a participation rate of 63%.



Source: JobsEQ, Census 2010, ACS 2011-2015

- Adding to the workforce challenge is the number of unemployed who would like a job but are not actively seeking due to becoming discouraged and those working part-time that would prefer full-time employment. As reported in the State of Maine -2016-2020 Unified Plan, "The unemployment rate is one of six measures of labor underutilization. It includes jobless people actively seeking and available for work. The broadest measure of underutilization, known as U-6, adds discouraged and other marginally attached workers who want a job but are not looking and those working part-time who prefer full-time work to the job seeking unemployed. Though the most commonly reported unemployment rates have returned to pre-recession levels, U-6 remains more elevated, a full two percentage points higher than in 2007. Additionally, even the U-6 number doesn't fully capture underemployment, those in full-time positions who would prefer a position where they could utilize more skills for higher wages.



Source: US Dept. of Labor, Bureau of Labor Statistics as reported in State of Maine -2016-2020 Unified Plan -Workforce Innovation and Opportunity Act

- Both the percentage of people below the poverty level as well as the percentage of households receiving food stamps are higher in the NWDB region than in Maine and the US. The NWDB region has a poverty rate of 17%, compared to 14% in Maine and 16% in the US. The percentage of households receiving food stamps in the NWDB region is 20%, 3 percentage points higher than that of Maine at 17% and 7 percentage points higher than the US at 13%.
- The median household income in the NWDB region is $42,144, lower than that of both Maine and the US, at $49,000 and $54,000, respectively.
- Commuting to work via public transportation is much lower in the NWDB region and Maine, both at 1%, compared to 5% in the US. Commute times are also lower in the NWDB region only 21 minutes, compared to 24 minutes in Maine and 26 in the US.
- The cost of living in the NWDB region is 3.3% lower than the average cost of living in the USA, and 6.7% lower than the cost of living in Maine, the annual average salary in the NWDB region is $16,000 lower than that of the US and $5,000 lower than in Maine.

Economic Overview for NWDB Region, Maine, and USA, 2015

Economic Overview						
	Percent			Value		
	NWDB Region	Maine	USA	NWDB Region	Maine	USA
Labor Force Participation Rate and Size (civilian population 16 years and over)	59%	63%	63%	161,698	696,184	158,897,824
Armed Forces Labor Force	0%	0%	0%	447	1,729	1,015,464
Veterans, Age 18-64	8%	7%	6%	15,931	61,098	10,750,884
Median Household Income				$42,144	$49,331	$53,889
Per Capita Income				$24,073	$27,655	$28,930
Poverty Level*	17%	14%	16%	54,203	180,278	47,749,043
Households Receiving Food Stamps	20%	17%	13%	28,271	94,459	15,399,651
Mean Commute Time (minutes)				21	24	26
Commute via Public Transportation	1%	1%	5%	688	4,032	7,362,038
Union Membership	12%	11%	11%			

**Of all people*

Source: JobsEQ, Census 2010, ACS 2011-2015

Cost of Living Indicators for NWDB Region, Maine, and USA, 2016

Cost of Living			
	Annual Average Salary	Cost of Living Index (Base US)	US Purchasing Power
NWDB Region	$37,666	96.7	$38,934
Maine	$42,626	103.4	$41,224
USA	$53,758	100.0	$53,758

Note: Data as of 2016q3

Source: JobsEQ

- Median house value within the NWBD region is $134,211, which is substantially lower than that of Maine and the US being $173,800 and $178,600, respectively.
- Renter-occupied housing units as a percentage of all occupied units is marginally higher in the NWDB region at 30% than in Maine at 29%, both of which however are lower than that of the US at 36%.

Housing Unit Characteristics for NWDB Region, Maine, and USA, 2015

Housing						
	Percent			Value		
	NWDB Region	Maine	USA	NWDB Region	Maine	USA
Total Housing Units				192,489	726,227	133,351,840
Median House Value (of owner-occupied units)				$134,211	$173,800	$178,600
Homeowner Vacancy	3%	2%	2%	2,628	8,062	1,492,691
Rental Vacancy	6%	7%	6%	2,769	11,399	2,949,366
Renter-Occupied Housing Units (% of Occupied Units)	30%	29%	36%	40,984	159,289	42,214,214
Occupied Housing Units with No Vehicle Available (% of Occupied Units)	8%	8%	9%	11,576	42,149	10,628,474

Source: JobsEQ, ACS 2011-2015

Employment by Industry Overview

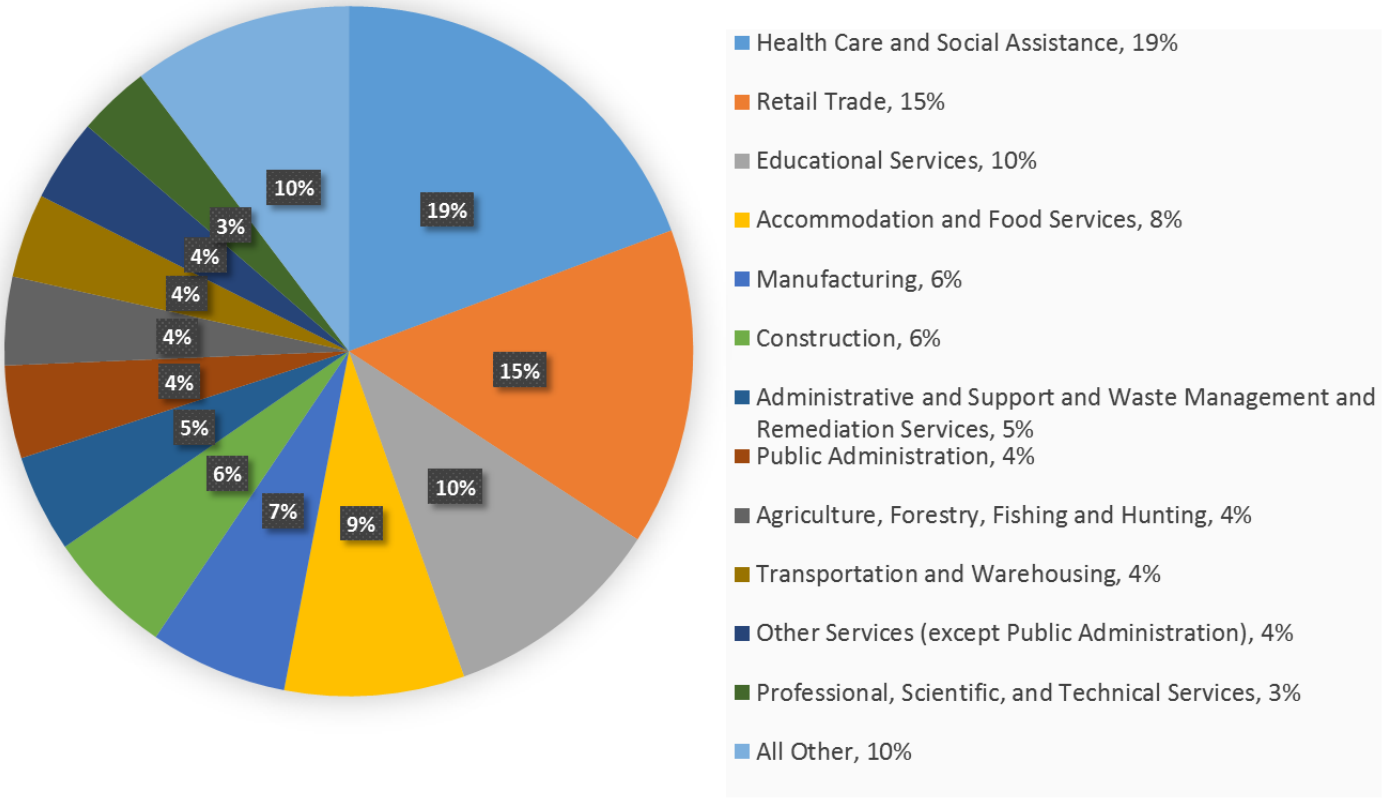
- In 2016 there were a total of 146,348 jobs in the NWDB region. This represented a decrease of 1,254 jobs since 2011, or slightly less than -1%. During this period, Maine as a whole experienced a slight increase in employment (1%) and the nation experienced an increase of 2%.
- Over the next ten years the NWDB region is projected to experience a decrease in total employment at a rate of -1% annually. However, there will still be a need for workforce development and new job entrants as replacement demand (demand resulting from retirements and persons leaving the workforce) will equal 34,636 jobs over the course of the next ten years.
- In terms of the number of jobs by major industry (2-digit NAICS), Health Care and Social Assistance, along with Retail Trade are the two largest industries within the NWDB region, providing over 28,000 jobs and nearly 22,000 jobs, respectively. Of these two industries, Health Care and Social Assistance is projected to grow at an average annual growth rate of 1% which is the only industry projected to grow, while with the Retail Trade is projected to contract at an average annual rate of -1%.
- Retail, though the second largest sector is both projected to decline by more jobs than any other sector except manufacturing, and pays lower than average annual wages. It is therefore not a strong sector to target. Additionally, the sector nationally is experiencing recent and projected future transformations including digital technologies and reduction of big box, brick and mortar stores making it susceptible to further employment declines.
- Other industries that represent considerable portions of jobs in the region include: Educational Services (15,198 jobs), Accommodation and Food Services (12,365 jobs) Manufacturing (9,446 jobs), and Construction (8,701 jobs).
- Healthcare and Social Assistance along with Retail industries both have a location quotient (LQ-measure of the degree to which a region has a concentration in an industry) of 1.37 showing these industries are slightly more concentrated in the NWDB region compared to the United States. Note: a LQ of 1.0 indicates equal concentration to the US as a whole, with greater numbers indicating a higher concentration and lower numbers indicating a lower concentration.
- Other industries in which the NWDB region exhibits a greater than average concentration (above average LQ) include Agriculture, Forestry, Fishing, and Hunting (2.81); Education Services (1.26); Utilities (1.12); and Construction (1.08). Of these, three industries have a considerable number of jobs in the region including Agriculture, Forestry, Fishing, and Hunting with 6,056 jobs; Education Services with 15,198 jobs; and Construction with 8,701 jobs.
- In terms of average annual wages, in 2016 they averaged $37,195. Utilities had the highest average wages ($64,266); followed by Management of Companies and Enterprises ($59,146); Finance and Insurance ($56,885); Wholesale Trade ($51,226); and Professional, Scientific, and Technical Services ($50,109).
- The total number of establishments for all industries within the NWDB region is just over 11,400. The Retail Trade industry, unsurprisingly, has the highest number of establishments in the region at just over 1,500. Industries closely following in terms of number of establishments are Construction with nearly 1,200, Other Services (except Public Administration) with 1,100, and Health Care and Social Assistance with just over 1,000. Mining, Quarrying, and Oil and Gas Extraction has the least number of establishments at 8.

Industry Snapshot in the NWDB Region, 2016, Current, Historical and Forecasted Estimates

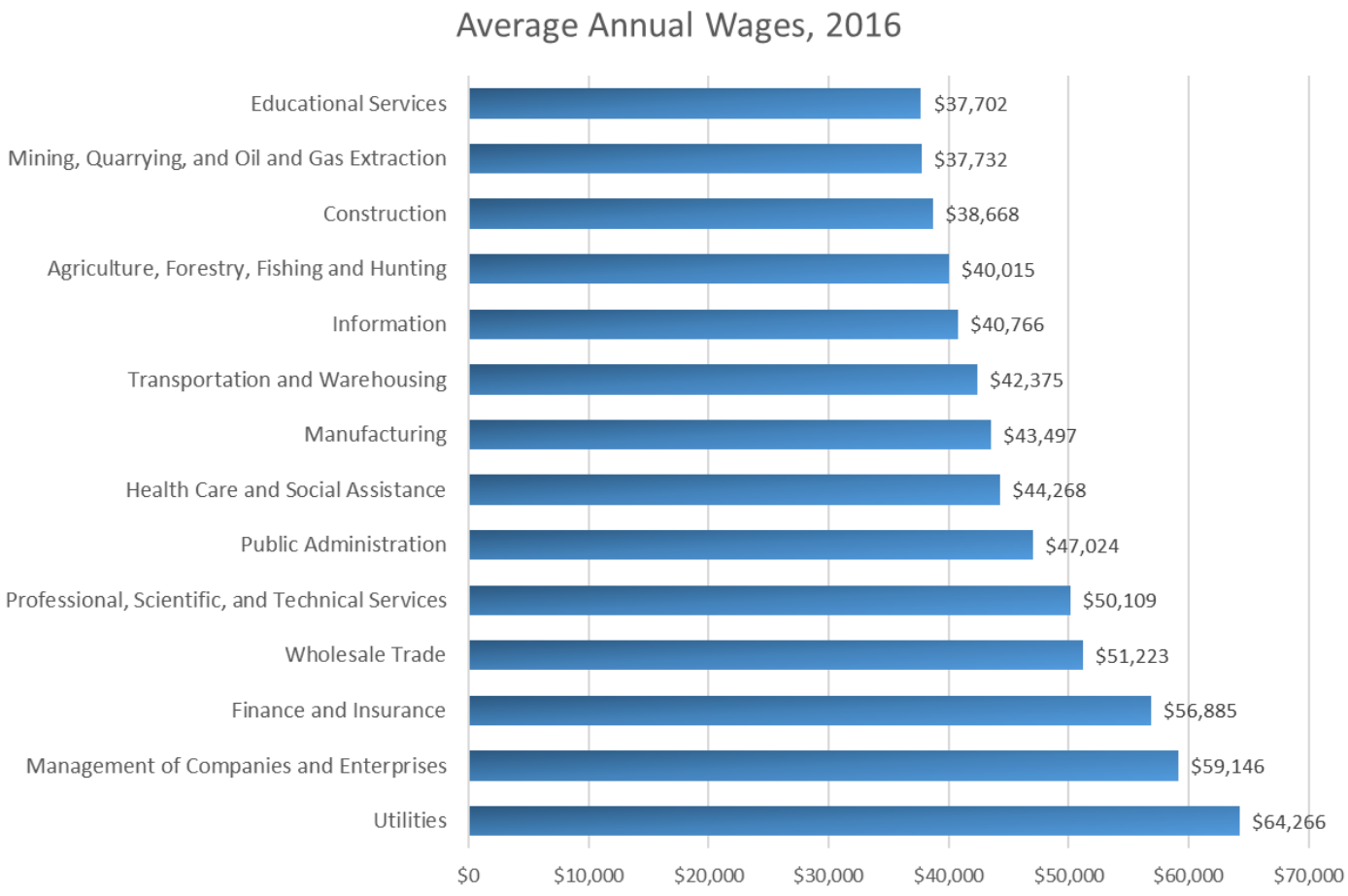
Industry Snapshot in NWDB Region											
		Current			Historical				Forecast		
		Four Quarters Ending with 2016q3			Change over the Last 5 Years	Average Annual % Change in Employment 2011q3-2016q3			Over the Next 10 Years		
NAICS (2-digit)	Industry	Jobs	Avg. Annual Wages	Location Quotient	Jobs	NWDB Region	Maine	USA	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth Percent
11	Agriculture, Forestry, Fishing and Hunting	6,056	$40,015	2.81	202	1%	1%	1%	1,924	(1,138)	(2%)
21	Mining, Quarrying, and Oil and Gas Extraction	22	$37,732	0.03	(5)	(4%)	(1%)	(2%)	5	(2)	(1%)
22	Utilities	881	$64,266	1.12	113	3%	1%	0%	210	(115)	(1%)
23	Construction	8,701	$38,668	1.08	170	0%	1%	3%	1,708	120	0%
31	Manufacturing	9,446	$43,497	0.78	(1,424)	(3%)	0%	1%	1,986	(1,745)	(2%)
42	Wholesale Trade	3,612	$51,223	0.63	2	0%	1%	1%	771	(209)	(1%)
44	Retail Trade	21,772	$26,129	1.37	(687)	(1%)	0%	2%	6,509	(1,341)	(1%)
48	Transportation and Warehousing	5,777	$42,375	0.96	(110)	(0%)	1%	2%	1,406	(736)	(1%)
51	Information	2,070	$40,766	0.70	(229)	(2%)	(2%)	1%	455	(352)	(2%)
52	Finance and Insurance	3,284	$56,885	0.56	(100)	(1%)	(1%)	1%	739	(274)	(1%)
53	Real Estate and Rental and Leasing	1,723	$33,716	0.70	31	0%	1%	2%	367	(144)	(1%)
54	Professional, Scientific, and Technical Services	4,955	$50,109	0.52	(219)	(1%)	1%	3%	1,016	(2)	0%
55	Management of Companies and Enterprises	1,213	$59,146	0.57	(33)	(1%)	5%	3%	247	(87)	(1%)
56	Administrative and Support and Waste Management and Remediation Services	6,691	$32,079	0.70	1,255	4%	3%	3%	1,490	(13)	0%
61	Educational Services	15,198	$37,702	1.26	(1,187)	(2%)	(0%)	0%	3,080	(804)	(1%)
62	Health Care and Social Assistance	28,251	$44,268	1.37	600	0%	1%	2%	5,551	1,838	1%
71	Arts, Entertainment, and Recreation	2,283	$21,380	0.79	(85)	(1%)	1%	2%	682	(57)	(0%)
72	Accommodation and Food Services	12,365	$17,881	0.95	756	1%	2%	3%	4,205	(582)	(1%)
81	Other Services (except Public Administration)	5,668	$25,315	0.87	4	0%	1%	0%	1,375	(320)	(1%)
92	Public Administration	6,376	$47,024	0.91	(311)	(1%)	(1%)	(0%)	1,446	(767)	(1%)
99	Unclassified	3	$28,653	0.01	3	n/a	94%	16%	1	0	(0%)
	Total	146,348	$37,195	1.00	(1,254)	(0%)	1%	2%	34,636	(6,731)	(1%)

Source: JobsEQ

Jobs by Industry Sector, 2016



Source: JobsEQ



Source: JobsEQ

Establishments by Industry within the NWBD Region, 2016

Industry Establishments, Covered Employment		
NAICS (2-digit)	Industry	Establishments
11	Agriculture, Forestry, Fishing and Hunting	569
21	Mining, Quarrying, and Oil and Gas Extraction	8
22	Utilities	91
23	Construction	1,171
31	Manufacturing	416
42	Wholesale Trade	474
44	Retail Trade	1,568
48	Transportation and Warehousing	666
51	Information	177
52	Finance and Insurance	410
53	Real Estate and Rental and Leasing	334
54	Professional, Scientific, and Technical Services	782
55	Management of Companies and Enterprises	58
56	Administrative and Support and Waste Management and Remediation Services	582
61	Educational Services	346
62	Health Care and Social Assistance	1,046
71	Arts, Entertainment, and Recreation	226
72	Accommodation and Food Services	936
81	Other Services (except Public Administration)	1,100
92	Public Administration	446
99	Unclassified	1
	Total	11,407

Most recent estimate, ending with 2016q3

Source: JobsEQ

Employers and Business Size

- Based on available 2015 data on for total number of business establishments there were nearly 20,100 businesses in the NWDB region.
- Businesses having between 2 and 9 employees make up the large majority at nearly 13,700 businesses, or 66% of the total number of businesses. Businesses employing one person and businesses ranging in employee size from 10 to 99 are tied for the second largest portion of business in the region each with an estimated 3,400 businesses or 16% of total business.
- Aroostook, Hancock, Penobscot, Washington and Piscataquis counties all have the largest number of businesses employing 2 to 9 employees, between 65% and 68% across all counties. They all also have between 16% and 19% of businesses employing one person.
- Within the entire NWDB region as well as all respective counties, each follows the trend of have 0% of businesses sized over 500+ employees, and only 1% of business between 100 and 499 employees.
- Overall, the two largest employers by far, within all five counties, are the University of Maine in Penobscot county employing upwards of nearly 10,000 people. Closely following the University of Maine, is the Army National Guard in Aroostook county employing about 7,000 people.

NWDB Region Businesses by Business Size and Self-Employment, 2014-2015

NWDB Region Businesses				
Businesses	2014	% of Total	2015	% of Total
Self Employed	3,857	19%	3,388	16%
2-9 Employees	13,375	64%	13,685	66%
10-99 Employees	3,447	17%	3,368	16%
100-499 Employees	194	1%	190	1%
500+ Employees	25	0%	23	0%
Total	20,898	100%	20,654	100%

Source: ReferenceUSA

Aroostook County Businesses by Business Size and Self-Employment, 2014-2015

Aroostook County Businesses				
Businesses	2014	% of Total	2015	% of Total
Self Employed	746	17%	674	16%
2-9 Employees	2,760	64%	2,768	65%
10-99 Employees	746	17%	732	17%
100-499 Employees	38	1%	37	1%
500+ Employees	8	0%	8	0%
Total	4,298	100%	4,219	100%

Source: ReferenceUSA

Top 10 Employers by Size in Aroostook County

Top 10 Employers by Size - Aroostook County					
Company Name	City	Primary NAICS	Primary NAICS Description	Employee Size Range	Number of Employees
Army National Guard	Houlton	921120	Legislative Bodies	5,000-9,999	7,000
Aroostook Medical Ctr	Presque Isle	622110	General Medical & Surgical Hospitals	500-999	895
Cary Medical Ctr	Caribou	622110	General Medical & Surgical Hospitals	250-499	434
Houlton Regional Hospital	Houlton	622110	General Medical & Surgical Hospitals	250-499	348
Maine School Admin District	Presque Isle	611110	Elementary & Secondary Schools	500-999	500
Mc Cain Foods USA Inc	Easton	311412	Frozen Specialty Food Manufacturing	500-999	800
Northern Maine Medical Ctr	Fort Kent	622110	General Medical & Surgical Hospitals	250-499	406
University Of ME Presque Isle	Presque Isle	611310	Colleges, Universities & Professional Schools	250-499	270
US Defense Dept	Limestone	928110	National Security	250-499	300
Walmart Supercenter	Presque Isle	452210	Department Stores	250-499	330

Source: ReferenceUSA

Hancock County Businesses by Business Size and Self-Employment, 2014-2015

Hancock County Businesses				
Businesses	2014	% of Total	2015	% of Total
Self Employed	844	19%	752	18%
2-9 Employees	2,873	66%	2,908	68%
10-99 Employees	613	14%	597	14%
100-499 Employees	28	1%	28	1%
500+ Employees	3	0%	3	0%
Total	4,361	100%	4,288	100%

Source: ReferenceUSA

Top 10 Employers by Size in Hancock County

Top 10 Employers by Size - Hancock County					
Company Name	City	Primary NAICS	Primary NAICS Description	Employee Size Range	Number of Employees
Jackson Laboratory	Bar Harbor	621511	Medical Laboratories	1,000-4,999	1,400
Maine Coast Memorial Hospital	Ellsworth	622110	General Medical & Surgical Hospitals	500-999	900
Mt Desert Island Hospital	Bar Harbor	622110	General Medical & Surgical Hospitals	250-499	365
Walmart Supercenter	Lamoine	452210	Department Stores	250-499	335
Blue Hill Memorial Hospital	Blue Hill	622110	General Medical & Surgical Hospitals	250-499	259
Hinckley Co	Trenton	336612	Boat Building	250-499	250
Acadia National Park	Bar Harbor	712190	Nature Parks & Other Similar Institutions	100-249	200
Maine Maritime Academy	Castine	611110	Elementary & Secondary Schools	100-249	189
Hannaford Supermarket	Ellsworth	445110	Supermarkets/Other Grocery (Exc Convenience) Strs	100-249	180
Hancock Food Inc	Ellsworth	311421	Fruit & Vegetable Canning	100-249	150

Source: ReferenceUSA

Penobscot County Businesses by Business Size and Self-Employment, 2014-2015

Penobscot County Businesses				
Businesses	2014	% of Total	2015	% of Total
Self Employed	1,718	19%	1,465	16%
2-9 Employees	5,670	62%	6,031	66%
10-99 Employees	1,640	18%	1,605	17%
100-499 Employees	99	1%	98	1%
500+ Employees	13	0%	12	0%
Total	9,140	100%	9,211	100%

Source: ReferenceUSA

Top 10 Employers by Size in Penobscot County

Top 10 Employers by Size - Penobscot County					
Company Name	City	Primary NAICS	Primary NAICS Description	Employee Size Range	Number of Employees
University Of Maine	Orono	611310	Colleges, Universities & Professional Schools	5,000-9,999	8,000
University Of Maine	Bangor	611310	Colleges, Universities & Professional Schools	5,000-9,999	5,000
Eastern Maine Medical Ctr	Bangor	622110	General Medical & Surgical Hospitals	1,000-4,999	3,544
Hollywood Casino Hotel	Bangor	713210	Casinos (Except Casino Hotels)	500-999	925
Community Health & Counseling	Bangor	624190	Other Individual & Family Services	500-999	875
Nexx Linx	Orono	334220	Radio & TV Broadcasting & Wireless Comm Equip Mfg	500-999	702
Bangor Savings Bank	Bangor	522110	Commercial Banking	500-999	560
E M H S	Brewer	621999	All Other Misc Ambulatory Health Care Services	500-999	501
GE Energy	Bangor	333611	Turbine & Turbine Generator Set Units Mfg	500-999	500
St Joseph Hospital	Bangor	622110	General Medical & Surgical Hospitals	500-999	500

Source: ReferenceUSA

Piscataquis County Businesses by Business Size and Self-Employment, 2014-2015

Piscataquis County Businesses				
Businesses	2014	% of Total	2015	% of Total
Self Employed	206	20%	185	19%
2-9 Employees	670	66%	658	67%
10-99 Employees	131	13%	127	13%
100-499 Employees	9	1%	9	1%
500+ Employees	0	0%	0	0%
Total	1,016	100%	979	100%

Source: ReferenceUSA

Top 10 Employers by Size in Piscataquis County

Top 10 Employers by Size - Piscataquis County					
Company Name	City	Primary NAICS	Primary NAICS Description	Employee Size Range	Number of Employees
Mayo Regional Hospital	Dover Foxcroft	622110	General Medical & Surgical Hospitals	250-499	449
Hardwood Products Co LP	Guilford	339113	Surgical Appliance & Supplies Manufacturing	250-499	301
True Textiles Inc	Guilford	314999	All Other Miscellaneous Textile Product Mills	250-499	250
Hibbard Nursing Home Inc	Dover Foxcroft	623110	Nursing Care Facilities (Skilled Nursing Fclts)	100-249	150
JSI Store Fixtures Inc	Milo	337215	Showcase, Partition, Shelving & Locker Mfg	100-249	105
Charlotte White Ctr	Dover Foxcroft	622210	Psychiatric & Substance Abuse Hospitals	100-249	101
American Legion	Dover Foxcroft	813410	Civil & Social Organizations	100-249	100
Country Pride Cleaning Svc Inc	Sebec	561720	Janitorial Services	50-99	90
Pleasant River Lumber	Dover Foxcroft	321113	Sawmills	50-99	80
Shaw's Supermarket	Dover Foxcroft	445110	Supermarkets/Other Grocery (Exc Convenience) Strs	50-99	70

Source: ReferenceUSA

Washington County Businesses by Business Size and Self-Employment, 2014-2015

Washington County Businesses				
Businesses	2014	% of Total	2015	% of Total
Self Employed	343	17%	312	16%
2-9 Employees	1,402	67%	1,320	66%
10-99 Employees	317	15%	307	16%
100-499 Employees	20	1%	18	1%
500+ Employees	1	0%	0	0%
Total	2,083	100%	1,957	100%

Source: ReferenceUSA

Top 10 Employers by Size in Washington County

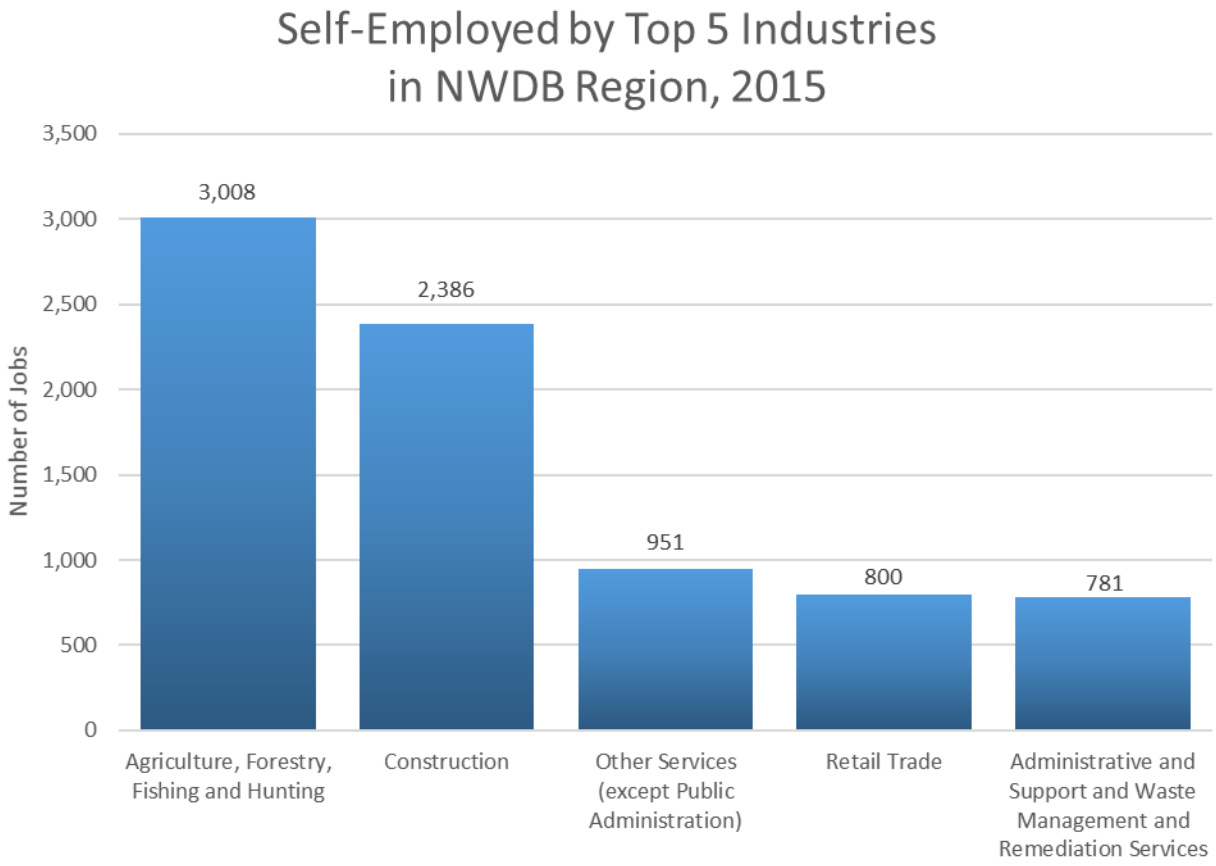
Top 10 Employers by Size - Washington County					
Company Name	City	Primary NAICS	Primary NAICS Description	Employee Size Range	Number of Employees
C & D Corp	Deblois	424480	Fresh Fruit & Vegetable Merchant Wholesalers	250-499	400
Woodland Pulp LLC	Baileyville	322110	Pulp Mills	250-499	300
Worcester Wreath Co	Harrington	339999	All Other Miscellaneous Manufacturing	250-499	300
Down East Community Hospital	Machias	622110	General Medical & Surgical Hospitals	250-499	272
Calais Regional Hospital	Calais	622110	General Medical & Surgical Hospitals	100-249	240
Domtar Inc	Baileyville	322121	Paper (Except Newsprint) Mills	100-249	230
Dore's Evergreen	Perry	453998	All Other Misc Store Retailers (Exc Tobacco Strs)	100-249	200
Dorr Lobster Co Inc	Milbridge	445220	Fish & Seafood Markets	100-249	200
US Naval Communication Unit	Cutler	928110	National Security	100-249	200
US Navy Dept	East Machias	921120	Legislative Bodies	100-249	200

Source: ReferenceUSA

Self-Employed Workers by Industry

- The NWDB region has an estimated 11,633 total self-employed persons, which represents 8% of total jobs. These persons earn an average $32,600 annually.[3]
- Within the entire NWDB region the industry with the most self-employed persons are in Agriculture, Forestry, Fishing and Hunting with 3,000 self-employed, which is about 49% of total jobs in the industry. Closely following is the Construction industry with nearly 2,400 self-employed or about 28% of total jobs.

[3] Note: The data on self-employment reported here is based on different data than used above. The data here includes all self-employed persons not part of business establishments. This includes independent contractors and the self-employed whereas the data above included business establishments employing one person.



Source: JobsEQ

- This trend is similar in Aroostook, Hancock, Piscataquis and Washington County, where the highest number of self-employed lay within the Agriculture, Forestry, Fishing and Hunting industry, followed by the Construction industry.
- The only county deviating from this trend is Penobscot county which has the highest number of self-employed within the Construction industry, then followed by the Agriculture, Forestry, Fishing and Hunting industry.
- Overall, within the NWDB region, Agriculture, Forestry, Fishing and Hunting self-employed have an average annual wage of about $40,300, whereas self-employed within the Construction industry see a much lower average annual wage at $27,600.

Self-Employed Workers by Industry in the NWDB Region, Aroostook County, Hancock County, Penobscot County, Piscataquis County, and Washington County, 2015

Self-Employed Workers by Industry														
		NWDB Region			Aroostook County		Hancock County		Penobscot County		Piscataquis County		Washington County	
NAICS (2-digit)	Industry	Jobs	Avg Ann Wages per Worker	%of Total Emp	Jobs	Avg Ann Wages per Worker	Jobs	Avg Ann Wages per Worker	Jobs	Avg Ann Wages per Worker	Jobs	Avg Ann Wages per Worker	Jobs	Avg Ann Wages per Worker
11	Agriculture, Forestry, Fishing and Hunting	3,008	$40,345	49%	510	$42,654	957	$48,663	506	$20,416	151	$19,181	884	$45,039
21	Mining, Quarrying, and Oil and Gas Extraction	2	$53,184	8%	0	$0	0	$0	1	$120,418	0	$0	0	$0
22	Utilities	8	$14,199	1%	2	$29,786	2	$10,604	3	$4,245	0	$0	0	$0
23	Construction	2,386	$26,579	28%	401	$22,535	741	$28,742	817	$27,955	144	$22,243	283	$24,880
31	Manufacturing	494	$27,883	5%	82	$38,240	170	$24,664	145	$22,474	26	$23,007	71	$36,441
42	Wholesale Trade	121	$32,892	3%	26	$22,990	26	$29,775	48	$38,927	6	$31,985	15	$36,150
44	Retail Trade	800	$31,368	4%	151	$35,558	164	$33,717	357	$31,521	43	$19,526	85	$24,771
48	Transportation and Warehousing	288	$52,028	5%	82	$72,816	46	$28,815	108	$51,505	15	$39,841	38	$41,469
51	Information	107	$26,621	5%	15	$17,388	28	$44,241	48	$21,213	4	$12,573	11	$22,853
52	Finance and Insurance	105	$73,844	3%	21	$53,551	15	$59,941	59	$88,412	5	$68,495	4	$28,170
53	Real Estate and Rental and Leasing	352	$40,693	20%	53	$40,108	110	$30,168	152	$49,966	15	$36,956	23	$33,439
54	Professional, Scientific, and Technical Services	732	$37,403	15%	99	$35,334	199	$41,766	335	$36,736	30	$32,086	70	$33,342
55	Management of Companies and Enterprises	0	$0	0%	0	$0	0	$0	0	$0	0	$0	0	$0
56	Administrative and Support and Waste Management and Remediation Services	781	$20,819	12%	123	$24,300	267	$18,502	254	$21,828	40	$23,424	97	$19,029
61	Educational Services	201	$19,564	1%	26	$12,763	55	$21,506	90	$20,040	8	$19,991	21	$20,579
62	Health Care and Social Assistance	665	$37,919	2%	127	$33,343	157	$38,004	302	$40,750	26	$39,833	54	$31,606
71	Arts, Entertainment, and Recreation	362	$23,154	16%	43	$24,825	131	$24,722	137	$20,768	14	$15,664	37	$27,240
72	Accommodation and Food Services	270	$30,906	2%	42	$32,104	86	$28,053	85	$36,674	15	$29,188	43	$24,661
81	Other Services (except Public Administration)	951	$22,845	17%	206	$23,495	201	$20,800	395	$24,353	44	$23,204	104	$19,633
92	Public Administration	0	$0	0%	0	$0	0	$0	0	$0	0	$0	0	$0
99	Unclassified	0	$0	0%	0	$0	0	$0	0	$0	0	$0	0	$0
	Total	11,633	$32,583	8%	2,008	$33,719	3,355	$34,396	3,843	$30,356	587.63	$23,979	1,840	$35,437

Note: Data as of 2015

Source: JobsEQ

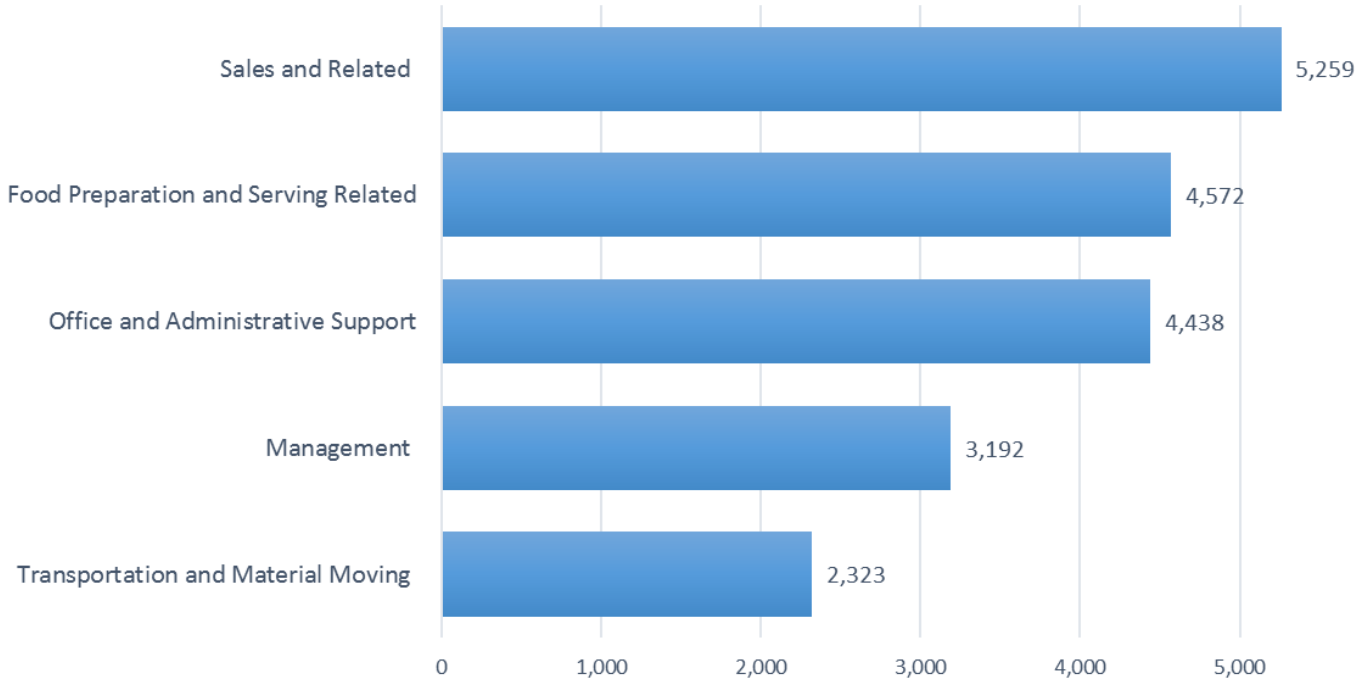
Occupation Overview

To get an overview of the occupations within the NWDB region we first analyzed them in terms of 2-digit Standard Occupation Codes (SOC) in order to provide a high-level summary.

- Office and Administrative Support Occupations have the highest number of jobs within the NWDB region, at nearly 20,400. This is followed by Sales and Related Occupations with 16,000, Food Preparation and Serving Related Occupations at over 12,000 jobs. However, over the past five years, both Office and Administrative Support Occupations as well as Sales and Related Occupations have both shed jobs, nearly 100 and 350, respectively, both however a marginal percentage decline. Average annual wages within these three occupations are between $22,700 and $32,700.
- Although Food Preparation and Serving Related Occupations has over 12,000 jobs, it is also the occupation with one of the highest unemployment rate at 7%, leaving nearly 1,000 people unemployed.
- Transportation and Material Moving Occupations also have an unemployment rate of 7%. This occupation has shed over 100 jobs in the past 5 years and is projected to continue declining over the next 10 years at an average annual rate of -1%.
- The unemployment rate is also high in Production Occupations at 6%. About 7 other occupations show an unemployment rate of 5%.
- Although Legal Occupations employ the least number of people, only about 700, it is the occupation with the lower unemployment rate at 1% leaving an estimated 10 people unemployed. Legal Occupations also have a fairly high average annual wage at just over $68,000. However, this occupation is projected to shed about 36 jobs in the next ten years.
- Similar to the Health Care and Social Assistance Industry, Healthcare Support Occupations are also projected to increase of the next 10 years by an average annual growth percentage of 1%. This is the only occupation with an average annual growth rate projected to be more than 0.5% within the NWDB region.
- Future workforce demand in the region will be driven by the need to fill replacement jobs (demand resulting from retirements and persons leaving the workforce). The largest amount of this demand in the next ten years will be for occupations of Sales and Related (5,259); Food Preparation and Service (4,572); Office and Administrative Support (4,438); and Management Occupations (3,192).

Top 5 Replacement Demand by Occupation

Forecast Over the Next 10 Years



Source: JobsEQ

Occupation Snapshot within the NWDB Region, 2016, Current, Historical and Forecasted Estimates

Occupation Snapshot in NWDB Region														
		Current					Historical				Forecast			
		Four Quarters Ending with 2016q3				2016q3	Change over the Last 5 Years	Average Annual % Change in Employment 2011q3-2016q3			Over the Next 10 Years			
SOC (2-digit)	Occupations	Jobs	Avg. Annual Wages	Location Quotient	Unemp	Unemp Rate	Jobs	NWDB Region	Maine	USA	Current Online Job Ads	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth Percent
11-0000	Management Occupations	9,097	$80,800	1.03	167	2%	(44)	(0%)	1%	2%	210	3,192	(703)	(1%)
13-0000	Business and Financial Operations Occupations	4,908	$58,700	0.69	170	3%	(101)	(0%)	1%	2%	177	1,037	(197)	(0%)
15-0000	Computer and Mathematical Occupations	2,044	$68,400	0.51	68	3%	(50)	(1%)	2%	3%	84	298	(15)	(0%)
17-0000	Architecture and Engineering Occupations	1,557	$72,300	0.64	30	2%	(84)	(1%)	1%	1%	19	375	(106)	(1%)
19-0000	Life, Physical, and Social Science Occupations	1,344	$66,800	1.15	22	2%	(65)	(1%)	0%	1%	57	410	(25)	(0%)
21-0000	Community and Social Service Occupations	2,844	$43,300	1.22	88	3%	162	1%	1%	2%	520	614	118	0%
23-0000	Legal Occupations	731	$68,200	0.63	10	1%	(55)	(1%)	(0%)	0%	4	139	(36)	(1%)
25-0000	Education, Training, and Library Occupations	9,981	$46,600	1.21	517	5%	(647)	(1%)	(0%)	1%	140	2,040	(400)	(0%)
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	1,942	$38,400	0.76	80	4%	(113)	(1%)	(1%)	1%	101	664	(180)	(1%)
29-0000	Healthcare Practitioners and Technical Occupations	10,837	$72,800	1.31	188	2%	106	0%	1%	2%	1,021	2,293	352	0%
31-0000	Healthcare Support Occupations	5,484	$27,000	1.28	287	5%	(60)	(0%)	1%	2%	195	1,163	475	1%
33-0000	Protective Service Occupations	2,351	$33,400	0.83	91	4%	(43)	(0%)	(0%)	1%	56	524	(159)	(1%)
35-0000	Food Preparation and Serving Related Occupations	12,231	$22,700	0.97	911	7%	255	0%	1%	3%	444	4,572	(521)	(0%)
37-0000	Building and Grounds Cleaning and Maintenance Occupations	6,058	$25,200	1.14	335	5%	383	1%	2%	1%	185	1,353	(206)	(0%)
39-0000	Personal Care and Service Occupations	6,094	$23,500	1.05	286	5%	223	1%	1%	2%	164	1,512	222	0%
41-0000	Sales and Related Occupations	16,030	$29,900	1.05	877	5%	(342)	(0%)	0%	2%	1,024	5,259	(948)	(1%)
43-0000	Office and Administrative Support Occupations	20,360	$32,700	0.92	937	4%	(88)	(0%)	1%	2%	637	4,438	(1,664)	(1%)
45-0000	Farming, Fishing, and Forestry Occupations	2,801	$32,100	2.93	150	5%	114	1%	1%	2%	4	813	(540)	(2%)
47-0000	Construction and Extraction Occupations	6,710	$38,500	1.03	359	5%	12	0%	1%	2%	65	1,233	40	0%
49-0000	Installation, Maintenance, and Repair Occupations	5,992	$40,300	1.07	228	4%	(66)	(0%)	1%	2%	186	1,445	(352)	(1%)
51-0000	Production Occupations	7,026	$33,300	0.78	473	6%	(640)	(2%)	1%	2%	86	1,757	(1,055)	(2%)
53-0000	Transportation and Material Moving Occupations	9,926	$32,400	1.00	697	7%	(111)	(0%)	1%	2%	202	2,323	(836)	(1%)
	Total	146,348	$40,200	1.00			(1,254)	(0%)	1%	2%	5,581	37,454	(6,736)	(1%)

Source: JobsEQ

Taking a closer look into occupations within the NWDB region, in the following tables present data within the more detailed 4-digit and 5-digit SOC codes.

- The 4-digit SOC occupation with the most jobs in the region is Personal Care Aids, with nearly 2,400 workers. This occupation has grown of the past 5 years adding about 250 jobs. It is also projected to continue growing of the next 10 years at an average annual growth percentage of 1%. Other occupations with the most jobs in the region include Therapists (851) and EMT/Paramedics (429).

- All top 25 in-demand occupations show between 1% and 2% average annual growth percentages over the next ten years (with the exception of Wind Turbine Service Technicians being an outlier at 5% because the occupation is very small).
- Of the top 25 in-demand occupations, 10 require entry-level education that corresponds to a postsecondary program within the NWDB region. Of particular note is that ONLY seven of the top 25 in-demand occupations require no education beyond high school. Many of the in-demand occupations are typically filled by persons with middle-skills (more than a high school diploma but less than a 4 year degree).
- Available postsecondary programs within the region distributing certificates, 4 year degrees, and postgraduate degrees, for these specific occupations, include University of Maine at Fort Kent and at Presque Isle, Husson University, Northern and Eastern Maine Community College.

Top 25 In-Demand Occupations within the NWDB Region, 2016 Current, Historical, and Forecasted Estimates

Top 25 In-Demand Occupations in NWDB Region														
		Current					Historical				Forecast			
		Four Quarters Ending with 2016q3				2016q3	Change over the Last 5 Years	Average Annual % Change in Employment 2011q3-2016q3			Over the Next 10 Years			
SOC (4-digit)	Occupations	Jobs	Avg. Annual Wages	Location Quotient	Unemp	Unemp Rate	Jobs	NWDB Region	Maine	USA	Current Online Job Ads	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth Percent
49-9080	Wind Turbine Service Technicians	4	$48,200	0.97	0	n/a	0	(0%)	0%	1%	1	1	3	5%
53-3010	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	37	$26,500	1.85	4	10%	4	2%	3%	2%	3	6	10	2%
31-9010	Massage Therapists	131	$38,500	0.79	2	2%	(7)	(1%)	0%	2%	1	21	32	2%
31-2010	Occupational Therapy Assistants and Aides	54	$43,300	1.27	1	2%	0	0%	1%	3%	6	16	12	2%
31-2020	Physical Therapist Assistants and Aides	156	$40,100	1.19	6	4%	8	1%	2%	3%	23	44	36	2%
29-2040	Emergency Medical Technicians and Paramedics	429	$30,100	1.88	9	2%	31	2%	2%	1%	9	71	92	2%
15-2040	Statisticians	25	$65,800	0.90	0	n/a	(1)	(1%)	0%	2%	1	5	5	2%
29-1170	Nurse Practitioners	150	$96,500	1.16	1	1%	3	0%	1%	2%	73	38	28	2%
15-2030	Operations Research Analysts	48	$64,600	0.56	1	3%	(2)	(1%)	1%	2%	0	10	8	2%
17-2030	Biomedical Engineers	25	$80,700	1.17	0	n/a	(2)	(1%)	0%	1%	0	7	4	1%
29-1040	Optometrists	45	$120,300	1.12	0	n/a	(1)	(1%)	1%	2%	8	21	7	1%
29-1070	Physician Assistants	104	$100,800	1.10	1	1%	2	1%	1%	2%	20	23	16	1%
29-1180	Audiologists	13	$81,400	1.01	0	n/a	1	1%	1%	2%	5	3	2	1%
47-2020	Brickmasons, Blockmasons, and Stonemasons	119	$40,200	1.24	6	5%	17	3%	1%	2%	4	12	17	1%
47-2230	Solar Photovoltaic Installers	5	$33,500	0.81	0	n/a	0	1%	1%	4%	3	1	1	1%
29-2080	Opticians, Dispensing	82	$36,400	1.09	2	2%	1	0%	2%	3%	4	24	10	1%
39-9020	Personal Care Aides	2,370	$22,000	1.35	108	5%	253	2%	1%	6%	21	254	298	1%
47-2130	Insulation Workers	61	$38,100	1.08	4	5%	8	3%	(1%)	3%	0	19	7	1%
47-2170	Reinforcing Iron and Rebar Workers	15	$45,300	0.73	1	6%	1	1%	1%	5%	0	3	2	1%
15-2020	Mathematicians	4	$87,800	1.20	0	n/a	0	(1%)	0%	1%	0	1	0	1%
19-3030	Clinical Counseling and School Psychologists	221	$92,900	1.33	1	1%	0	0%	1%	1%	12	69	23	1%
29-1010	Chiropractors	42	$77,200	0.94	0	n/a	2	1%	(0%)	1%	0	11	4	1%
29-1020	Dentists	140	$158,200	0.95	0	n/a	9	1%	1%	2%	5	37	13	1%
29-1120	Therapists	851	$65,800	1.29	8	1%	(3)	(0%)	1%	2%	74	197	77	1%
27-3090	Miscellaneous Media and Communication Workers	67	$43,000	0.71	3	4%	(4)	(1%)	(0%)	2%	7	12	6	1%

Source: JobsEQ

Top 25 Occupations within the NWDB Region, 2016, by Educational Attainment and Entry-Level Education

Top 25 Occupations by Educational Attainment									
SOC (5-digit)	Occupation	Less than High School Diploma	High School Diploma or Equivalent	Some College, No Degree	Associate's Degree	Bachelor's Degree	Master's Degree	Doctoral or Professional Degree	Typical Entry-Level Education
53-3011	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	9%	42%	29%	9%	9%	2%	0%	High school diploma or equivalent
29-1181	Audiologists	0%	3%	3%	3%	8%	33%	50%	Doctoral or professional degree
17-2031	Biomedical Engineers	0%	2%	4%	12%	53%	21%	8%	Bachelor's degree
47-2021	Brickmasons and Blockmasons	34%	42%	16%	4%	3%	0%	0%	High school diploma or equivalent
29-1011	Chiropractors	1%	1%	2%	0%	5%	2%	89%	Doctoral or professional degree
19-3031	Clinical, Counseling and School Psychologists	0%	0%	0%	0%	6%	44%	49%	Doctoral or professional degree
29-1021	Dentists	0%	0%	0%	0%	2%	2%	96%	Doctoral or professional degree
29-2041	Emergency Medical Technicians and Paramedics	1%	14%	47%	21%	15%	2%	0%	Postsecondary non-degree award
47-2131	Insulation Workers, Floor, Ceiling and Wall	28%	40%	23%	6%	3%	1%	1%	Less than high school
31-9011	Massage Therapists	2%	17%	37%	17%	21%	4%	2%	Postsecondary non-degree award
15-2021	Mathematicians	0%	0%	5%	3%	30%	43%	19%	Master's degree
27-3099	Media and Communication Workers All Other	3%	11%	22%	14%	31%	14%	5%	High school diploma or equivalent
29-1171	Nurse Practitioners	0%	1%	1%	1%	6%	78%	14%	Master's degree
29-1122	Occupational Therapists	0%	0%	1%	8%	44%	42%	5%	Master's degree
31-2011	Occupational Therapy Assistants	1%	2%	9%	76%	11%	0%	0%	Associate's degree
15-2031	Operations Research Analyst	1%	5%	17%	7%	41%	26%	4%	Bachelor's degree
29-2081	Opticians, Dispensing	2%	28%	37%	20%	12%	0%	0%	High school diploma or equivalent
29-1041	Optometrists	0%	0%	0%	0%	2%	2%	95%	Doctoral or professional degree
39-9021	Personal Care Aides	17%	35%	27%	8%	10%	2%	1%	Less than high school
31-2021	Physical Therapist Assistants	1%	8%	17%	54%	17%	3%	1%	Associate's degree
29-1071	Physician Assistants	1%	5%	8%	12%	26%	37%	12%	Master's degree
47-2171	Reinforcing Iron and Rebar Workers	34%	42%	16%	4%	3%	0%	0%	High school diploma or equivalent
47-2231	Solar Photovoltaic Installers	21%	44%	22%	6%	5%	1%	0%	High school diploma or equivalent
15-2041	Statisticians	0%	0%	5%	3%	30%	43%	19%	Master's degree
49-9081	Wind Turbine Service Technicians	14%	41%	25%	10%	9%	1%	0%	Some college, no degree

Note: Occupations highlighted in grey indicate the presence of regional postsecondary programs
Figues are rounded

Source: JobsEQ

Regional Postsecondary Programs within the NWDB Region, 2014-2015 Annual Awards, by corresponding Top 25 Occupations

NWDB Regional Postsecondary Program Annual Awards				
Occupation	Title/School	Certificates and 2yr Degrees	4yr Degrees	Postgraduate Degrees
Audiologists	University of Maine		27	14
Biomedical Engineers	University of Maine		28	
Clinical, Counseling and School Psychologists	Husson University		50	
	University of Maine		101	6
	University of Maine at Presque Isle		13	
Emergency Medical Technicians and Paramedics	Eastern Maine Community College	6		
	Northern Maine Community College	4		
Mathematicians	University of Maine at Presque Isle		2	
	University of Maine at Fort Kent		1	
	University of Maine		12	7
Media and Communications All Other	Husson University		6	
	University of Maine		36	
Nurse Practitioners	Husson University			7
Occupational Therapists	Husson University			35
Physical Therapists Assistants	University of Maine at Presque Isle	7		
Statisticians	University of Maine at Presque Isle		2	
	University of Maine at Fort Kent		1	
	University of Maine		12	7

Note: dates as of the 2014-2015 academic year

Blank boxes indicate "zero", these have been left blank for ease of reading the table

Source: JobsEQ

Educational Attainment

- The total number of postgraduate degrees awarded from all colleges within the region is was nearly 4,700 in 2015.
- Bachelor's degrees were the most commonly awarded at over 2,800, followed by Associate's degrees at about 800.
- The University of Maine awarded the most Bachelor's degrees, at about 1,600. University of Maine also awarded the most Master's degrees, 326, out of the 525 total. Husson University awarded the most Doctorate degrees at 97 out of the total 166. The remained 69 Doctoral degrees were awarded by the University of Maine.
- The occupation which was awarded the highest number of awards was Education, Training, and Library Occupations with over 3,500 awards, 1,900 of which came from the University of Maine. Management Occupations received the second highest number of awards at just over 2,000, again 1,150 of them coming from the University of Maine.
- Occupations with the least number of corresponding awards include Legal Occupations with 12, Building and Grounds Cleaning and Maintenance Occupations with 7 and Sales and Related Occupations with 2.

Total Awards by Award Level for Various Colleges within the NWBD Region, 2015

Total Awards by Award Level												
Award Level	College of the Atlantic	Beal College	Eastern Maine Community College	University of Maine at Fort Kent	University of Maine at Machias	University of Maine	Maine Maritime Academy	University of Maine at Presque Isle	Northern Maine Community College	Washington County Community College	Husson University	Total per Award Level
Certificate		10	77		12				35	96	4	234
Associate's		125	351	38	9		3	31	183	61	32	833
Bachelor's	80			152	91	1,651	213	148			522	2,857
Post-Baccalaureate						41					3	44
Master's	2					326	9				188	525
Post-Master's						32					3	35
Doctorate						69					97	166
Total per School	82	135	428	190	112	2,119	225	179	218	157	849	4,694

Estimates are from 2015

Source: JobsEQ

All Awards, including Certificates, Bachelor's degrees, Associate's degrees, Master's degrees, and Doctoral degrees, from Various College, Organized by Occupations, within the NWDB Region, 2015

All Awards by Occupation											
SOC (2-digit)	Occupations	Beal College	Eastern Maine Community College	University of Maine at Fort Kent	University of Maine at Machias	University of Maine	Maine Maritime Academy	University of Maine at Presque Isle	Northern Maine Community College	Washington County Community College	Husson University
11-0000	Management Occupations	31	73	49	57	1,149	163	65	25	22	428
13-0000	Business and Financial Operations Occupations	10	53	20	3	290		25	40	14	261
15-0000	Computer and Mathematical Occupations		26	8		51		2	7		14
17-0000	Architecture and Engineering Occupations		28		3	335	123		6	5	
19-0000	Life, Physical, and Social Science Occupations			24	37	708	10	25			94
21-0000	Community and Social Service Occupations	14			2	195		27		13	56
23-0000	Legal Occupations										12
25-0000	Education, Training, and Library Occupations	38	178	175	109	1,917	141	156	79	22	694
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations		11	2	13	256		15			92
29-0000	Healthcare Practitioners and Technical Occupations	5	58	79		138		17	45		228
31-0000	Healthcare Support Occupations	51	66					13	19	23	
33-0000	Protective Service Occupations	24	2	24		22		17			66
35-0000	Food Preparation and Serving Related Occupations		17							5	
37-0000	Building and Grounds Cleaning and Maintenance Occupations					7					
39-0000	Personal Care and Service Occupations				11	60		5		2	11
41-0000	Sales and Related Occupations										2
43-0000	Office and Administrative Support Occupations	12	46	5	7	40		3	11	10	2
45-0000	Farming, Fishing, and Forestry Occupations					48				10	
47-0000	Construction and Extraction Occupations		29						27	24	
49-0000	Installation, Maintenance, and Repair Occupations		63			31			48	55	
51-0000	Production Occupations	22	43			31			33	7	
53-0000	Transportation and Material Moving Occupations						52			10	
	Total	135	428	190	112	2,119	225	179	218	157	849

Note: All awards include certificates, Associate's degrees, Bachelor's degrees, Master's degrees, and Doctoral degrees
College of the Atlantic also contributed 82 total awards however data regarding awards by SOC code were unavailable
Estimates are from 2015
Source: JobsEQ

Associate's degrees Awarded by Occupation for Various Colleges within the NWDB Region, 2015

Associate's degrees by Occupation										
SOC (2-digit)	Occupations	Beal College	Eastern Maine Community College	University of Maine at Fort Kent	University of Maine at Machias	Maine Maritime Academy	University of Maine at Presque Isle	Northern Maine Community College	Washington County Community College	Husson University
11-0000	Management Occupations	31	69	3	2			24	22	18
13-0000	Operations Occupations	10	52					37	9	21
15-0000	Computer and Mathematical Occupations		22	3				7		2
17-0000	Architecture and Engineering Occupations		25					5		
19-0000	Life, Physical, and Social Science Occupations			8						
21-0000	Community and Social Service Occupations	4							13	
23-0000	Legal Occupations									4
25-0000	Education, Training, and Library Occupations	38	176	23	9		23	75	21	28
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations		9				1			
29-0000	Technical Occupations	5	57				6	42		
31-0000	Healthcare Support Occupations	51	48				13	19	7	
33-0000	Protective Service Occupations	24	2	18			6			5
35-0000	Food Preparation and Serving Related Occupations		13							
39-0000	Personal Care and Service Occupations								2	
43-0000	Office and Administrative Support Occupations	12	27	3				10		
47-0000	Construction and Extraction Occupations		6					22		
49-0000	Installation, Maintenance, and Repair Occupations		39					38	4	
51-0000	Production Occupations	22	26					14		
53-0000	Transportation and Material Moving Occupations					3				
	Total	125	351	38	9	3	31	183	61	32

Note: 2-digit SOC codes with zero awards were not included in the table
Estimates are from 2015
Source: JobsEQ

Bachelor's degrees Awarded by Occupation for Various Colleges within the NWDB Region, 2015

Bachelor's degrees by Occupation							
SOC (2-digit)	Occupations	University of Maine at Fort Kent	University of Maine at Machias	University of Maine	Maine Maritime Academy	University of Maine at Presque Isle	Husson University
11-0000	Management Occupations	46	47	943	163	65	271
13-0000	Business and Financial Operations Occupations	20		272		25	128
15-0000	Computer and Mathematical Occupations	5		36		2	12
17-0000	Architecture and Engineering Occupations			299	123		
19-0000	Life, Physical, and Social Science Occupations	16	37	564	10	25	82
21-0000	Community and Social Service Occupations			136		27	50
23-0000	Legal Occupations						6
25-0000	Education, Training, and Library Occupations	152	90	1,532	141	133	393
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	2	13	218		14	92
29-0000	Healthcare Practitioners and Technical Occupations	79		117		11	89
31-0000	Healthcare Support Occupations						
33-0000	Protective Service Occupations	6		18		11	56
37-0000	Building and Grounds Cleaning and Maintenance Occupations			7			
39-0000	Personal Care and Service Occupations		11	52		5	11
41-0000	Sales and Related Occupations						
43-0000	Office and Administrative Support Occupations	2	7	31		3	2
45-0000	Farming, Fishing, and Forestry Occupations			31			
49-0000	Installation, Maintenance, and Repair Occupations			31			
51-0000	Production Occupations			31			
53-0000	Transportation and Material Moving Occupations				49		
	Total	152	91	1,651	213	148	522

Note: 2-digit SOC codes with zero awards were not included in the table
College of the Atlantic also contributed 80 Bachelor's degrees however data regarding awards by SOC code were unavailable
Estimates are from 2015
Source: JobsEQ

Advanced degrees Awarded by Occupation for Various Colleges within the NWDB Region, 2015

Advanced degrees by Occupation			
SOC (2-digit)	Occupations	University of Maine	Husson University
11-0000	Management Occupations	189	139
13-0000	Business and Financial Operations Occupations	17	110
15-0000	Computer and Mathematical Occupations	15	
17-0000	Architecture and Engineering Occupations	34	
19-0000	Life, Physical, and Social Science Occupations	136	12
21-0000	Community and Social Service Occupations	56	6
25-0000	Education, Training, and Library Occupations	334	267
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	36	
29-0000	Healthcare Practitioners and Technical Occupations	21	138
33-0000	Protective Service Occupations	4	5
39-0000	Personal Care and Service Occupations	8	
43-0000	Office and Administrative Support Occupations	9	
45-0000	Farming, Fishing, and Forestry Occupations	17	
	Total	395	285

Note: 2-digit SOC codes with zero awards were not included in the table

Advanced degrees include both Master's degrees and Doctoral degrees

College of the Atlantic also contributed 2 Master's degrees, and Maine Maritime Academy contributed 9, however data regarding awards by SOC code were unavailable

Estimates are from 2015

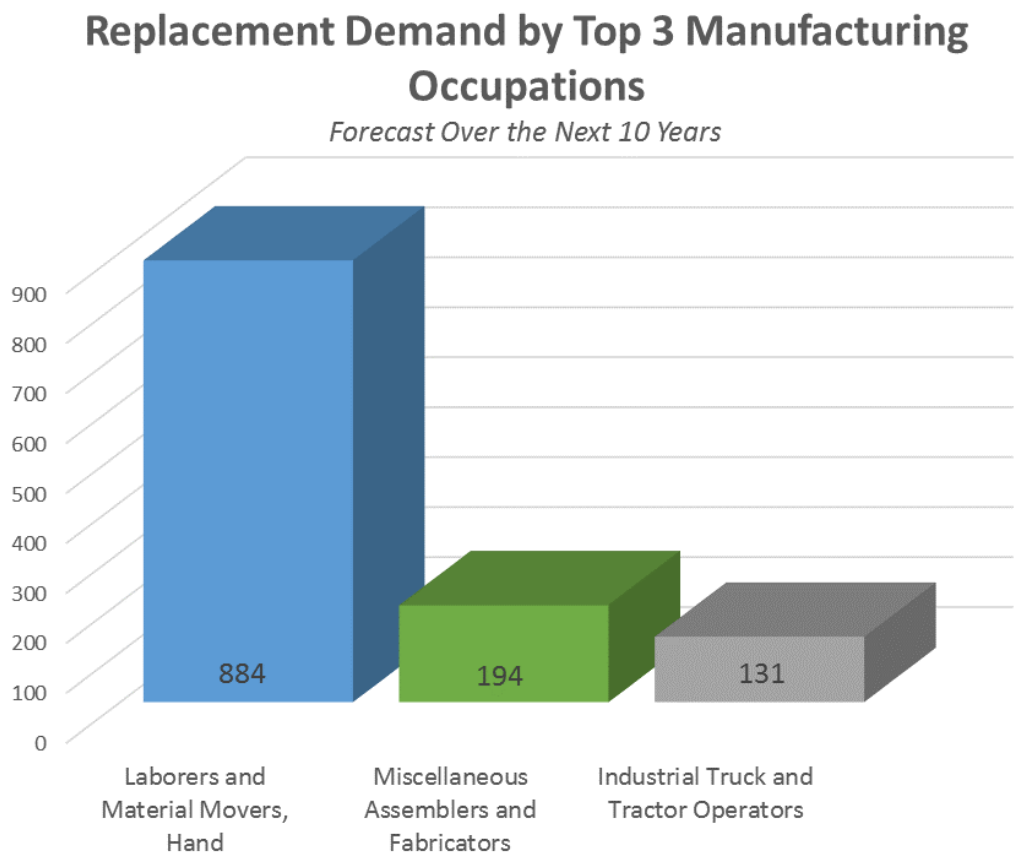
Source: JobsEQ

Targeted Industry Sector Overview

The region has target three industry areas for detailed workforce strategy focus. They are Manufacturing, Healthcare, and Information Technology.

Manufacturing

- The Manufacturing industry sector has nearly 9,500 jobs within the NWDB region, representing 6.5% of the region's 146,000 total jobs.
- The average annual wage for workers in this specific sector are nearly $43,000, higher than the average annual wages of $37,000 for all industries in the region.
- The Manufacturing industry sector has shown decline over the past 5 years shedding nearly 1,500 jobs, which is an average annual rate of decline of 3%. The Manufacturing industry is also projected to decline over the next 10 years at an average annual rate of -2%. The loss of jobs over the past five years has been dominated by a loss of 1,132 jobs within Paper Mills.
- Despite the projected decline of total employment, workforce development to fill jobs created for replacement demand due to persons retiring or otherwise leaving the workforce. Over the next ten years replacement demand for manufacturing jobs is projected at 1,986 jobs.



Source: JobsEQ

- Within the Manufacturing industry sector, the highest number of jobs can be found in Paper Mills with over 800 jobs, followed by Frozen Food Manufacturing at nearly 800, then Ship and Boat Building as well as Sawmills and Wood Preservation, at 676 and 590 jobs, respectively. All of these industries are projected to decline over the next 10 years at an average annual rate between 1% and 4%. Outside of forest products food, and ship/boat building related, medical equipment and supplies manufacturing is at 474 jobs and projected to need another 107 jobs to meet replacement demand over the next ten years.
- The top occupation within the Manufacturing industry sector is Hand Laborers and Material Movers with just under 3,000 jobs and average annual wages at $25,000. This occupation has grown over the past 5 years but is projected to decline marginally over the next 10 years. The next largest occupation is Miscellaneous Assemblers and Fabricators with nearly 900 jobs having an average annual wage of nearly $29,000. This occupation has also shown growth of the past 5 years, but is projected to decline marginally over the following 10 years at an average annual rate of less than 1%.
- Of the top 10 occupations within this sector, 3 of them require entry-level education which corresponds to a postsecondary program within the NWDB region.

Manufacturing Industry Snapshot within the NWDB Region, Current, Historical and Forecasted Estimates, 2016

Top 10 Manufacturing Industry Snapshot in NWDB Region											
		Current			Historical				Forecast		
		Four Quarters Ending with 2016q3			Change over the Last 5 Years	Average Annual % Change in Employment 2011q3-2016q3			Over the Next 10 Years		
NAICS (5-digit)	Industry	Jobs	Avg. Annual Wages	Location Quotient	Jobs	NWDB Region	Maine	USA	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth Percent
32212	Paper Mills	827	$63,300	13.54	(1,132)	(16%)	(10%)	(3%)	155	(275)	(4%)
31141	Frozen Food Manufacturing	781	$35,094	8.98	(71)	(2%)	(2%)	0%	174	(126)	(2%)
33661	Ship and Boat Building	676	$42,520	4.10	(134)	(4%)	3%	2%	144	(65)	(1%)
32111	Sawmills and Wood Preservation	590	$42,003	6.34	45	2%	2%	2%	126	(83)	(2%)
32121	Veneer, Plywood, and Engineered Wood Product Manufacturing	510	$47,822	6.82	118	5%	5%	4%	88	(90)	(2%)
33911	Medical Equipment and Supplies Manufacturing	474	$46,332	1.60	(91)	(3%)	(4%)	0%	107	(47)	(1%)
32199	All Other Wood Product Manufacturing	430	$35,453	6.51	52	3%	1%	4%	74	(59)	(2%)
32211	Pulp Mills	391	$58,490	72.27	(28)	(1%)	(1%)	(1%)	74	(121)	(4%)
33361	Engine, Turbine, and Power Transmission Equipment Manufacturing	366	$63,740	3.82	(2)	(0%)	1%	1%	80	(29)	(1%)
31171	Seafood Product Preparation and Packaging	363	$27,329	9.74	34	2%	1%	0%	78	(63)	(2%)
	NWDB Manufacturing	9,446	$43,497	0.78	(1,424)	(3%)	0%	1%		(1,745)	(2%)
	Total - All Industries	146,348	$37,195	1.00	(1,254)	(0%)	1%	2%	34,636	(6,731)	(1%)

Source: JobsEQ

Manufacturing Industry Occupations within the NWDB Region, Current, Historical and Forecasted Estimates, 2016

Top 10 Manufacturing Occupation Snapshot in NWDB Region														
		Current					Historical				Forecast			
		Four Quarters Ending with 2016q3			2016q3		Change over the Last 5	Average Annual % Change in Employment 2011q3-2016q3			Over the Next 10 Years			
SOC (4-digit)	Occupation	Jobs	Avg. Annual Wages	Location Quotient	Unemp	Unemp Rate	Jobs	NWDB Region	Maine	USA	Current Online Job Ads	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth %
49-9040	Industrial Machinery Installation, Repair, and Maintenance Workers	474	$46,200	1.06	14	3%	(106)	(4%)	(1%)	1%	6	106	(12)	(0%)
51-2090	Miscellaneous Assemblers and Fabricators	881	$28,900	0.63	83	8%	12	0%	2%	3%	3	194	(108)	(1%)
51-3090	Miscellaneous Food Processing Workers	286	$27,500	1.28	19	6%	(4)	(0%)	0%	2%	0	70	(32)	(1%)
51-4010	Computer Control Programmers and Operators	60	$41,300	0.36	3	5%	(2)	(1%)	0%	2%	2	18	2	0%
51-4040	Machinists	194	$40,400	0.51	8	4%	(12)	(1%)	1%	2%	0	54	(4)	(0%)
51-4120	Welding, Soldering, and Brazing Workers	268	$33,500	0.60	21	7%	(17)	(1%)	2%	2%	2	84	(24)	(1%)
51-7040	Woodworking Machine Setters, Operators, and Tenders	395	$28,800	3.22	32	8%	41	2%	2%	3%	1	100	(63)	(2%)
51-9110	Packaging and Filling Machine Operators and Tenders	333	$28,600	0.87	36	9%	(24)	(1%)	1%	2%	1	114	(47)	(2%)
53-7050	Industrial Truck and Tractor Operators	474	$30,100	0.87	31	6%	(23)	(1%)	1%	3%	3	131	(58)	(1%)
53-7060	Laborers and Material Movers, Hand	2,972	$24,800	0.82	338	10%	38	0%	1%	3%	34	884	(260)	(1%)
	Total - All Occupations	146,348	$40,200	1.00			(1,254)	(0%)	1%	2%	5,939	37,454	(6,736)	(1%)

Source: JobsEQ

Top 10 Occupations within the Manufacturing Industry by Educational Attainment and Wages within NWDB Region, 2016

Top 10 Manufacuring Occupations by Educational Attainment and Wages									
Occupation	Mean Annual Wage in NWDB Region	Less than High School Diploma	High School Diploma or Equivalent	Some College, No Degree	Associate's Degree	Bachelor's Degree	Master's Degree	Doctoral or Professional Degree	Typical Entry-Level Education
Fiberglass Laminators and Fabricators	$31,200	19%	46%	23%	6%	5%	1%	0%	High school diploma or equivalent
Industrial Machinery Mechanics	$46,600	11%	41%	29%	13%	5%	1%	0%	High school diploma or equivalent
Laborers and Freight Stock and Material Movers	$26,000	20%	48%	21%	5%	5%	1%	0%	Less than high school
Sawing Machine Setters Operators and Tenders Wood	$26,600	37%	45%	13%	3%	2%	0%	0%	High school diploma or equivalent
Computer Controlled Machine Tool Operators Metal and Plastic	$40,300	8%	41%	31%	12%	6%	1%	0%	High school diploma or equivalent
Food Processing Worker All Other	$22,200	30%	47%	16%	3%	3%	0%	0%	Less than high school
Industrial Truck and Tractor Operators	$30,100	23%	51%	20%	5%	2%	0%	0%	Less than high school
Machinists	$40,400	10%	78%	28%	11%	3%	0%	0%	High school diploma or equivalent
Packaging and Filing Machine Operators and Tenders	$28,600	35%	42%	15%	4%	4%	0%	0%	High school diploma or equivalent
Welders, Cutters, Solderers and Brazers	$33,100	21%	48%	22%	6%	2%	0%	0%	High school diploma or equivalent

Note: Occupations highlighted in grey indicate the presence of regional postsecondary programs

Source: JobsEQ

Regional Postsecondary Program Awards by Top 10 Occupations in Manufacturing with Corresponding Programs within the NWDB Region, 2014-2015 Academic Year

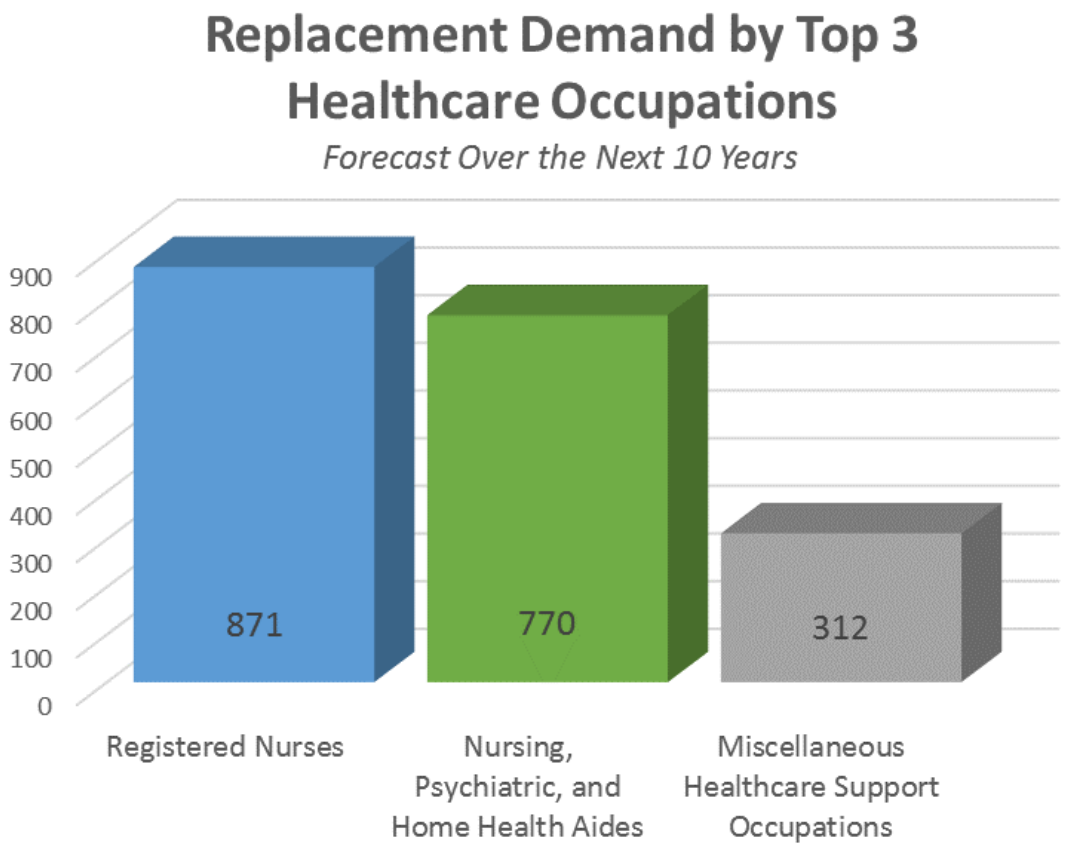
Manufacturing NWDB Regional Postsecondary Program Annual Awards		
Occupation	Title/School	Certificates and 2yr Degrees
Sawing Machine Setters Operators and Tenders Wood	Eastern Maine Community College	6
Machinists	Northern Maine Community College	12
Welders, Cutters, Solderers and Brazers	Beal College	22
	Eastern Maine Community College	31
	Northern Maine Community College	7
	Washington County Community College	7

Note: dates as of the 2014-2015 academic year

Source: JobsEQ

Healthcare

- The Healthcare industry sector has over 28,000 jobs within the NWDB region, representing 19.3% of the 146,000 total jobs across all industries in the region.
- The average annual wage for workers in this specific sector are nearly $44,000, higher than the average annual wages for all industries in the region being $37,000.
- The Healthcare industry sector has shown growth over the past 5 years adding nearly 600 jobs, which is an average annual growth rate of less than 0.5%. The Healthcare industry is projected to continue growing over the next 10 years at an average annual rate of 1% adding 1,838 jobs. This trend is contrary to jobs in all industries as a whole within the region which are projected to continue declining at an average annual rate of -1%. In addition to added jobs from industry growth, demand for replacement workers is projected to be require an additional 5,551 workers in Healthcare industries over the course of the next ten years.



Source: JobsEQ

- Within the Healthcare industry sector, the highest number of jobs can be found in General Medical and Surgical Hospitals with nearly 9,200 jobs, followed by Nursing Care Facilities, Services for Elderly and Persons with Disabilities, and Office of Physicians at all between 2,500 and 3,000 jobs. The first two of these industries are projected to decline over the next 10 years at an average annual rate between 0% and 1%. Whereas the last two industries are projected to grow at an average annual rate of 1%.
- The top occupations within the Healthcare industry sector are Registered Nurses, Nursing Psychiatric and Home Health Aides, and Personal Care Aides, having 4,000, 3,600, and 2,400 jobs, respectively. Two of the

three occupations have grown over the past 5 years, and all three occupations are projected to grow marginally over the next 10 years between 0% and 1%.

- Of the top 10 occupations within this sector, 4 of them require entry-level education which corresponds to a postsecondary program within the NWDB region. All four of which require a Bachelor's degree at higher.

Healthcare Industry Snapshot within the NWDB Region, Current, Historical and Forecasted Estimates, 2016

Healthcare Industry Snapshot in NWDB Region											
		Current			Historical				Forecast		
		Four Quarters Ending with 2016q3			Change over the Last 5 Years	Average Annual % Change in Employment 2011q3-2016q3			Over the Next 10 Years		
NAICS (5-digit)	Industry	Jobs	Avg. Annual Wages	Location Quotient	Jobs	NWDB Region	Maine	USA	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth Percent
62111	Offices of Physicians	2,503	$72,953	0.99	12	0%	(1%)	2%	506	258	1%
62121	Offices of Dentists	921	$46,022	1.03	106	3%	1%	2%	192	66	1%
62131	Offices of Chiropractors	141	$34,405	1.04	12	2%	0%	2%	28	10	1%
62132	Offices of Optometrists	182	$36,693	1.39	(9)	(1%)	2%	3%	39	35	2%
62133	Offices of Mental Health Practitioners (except Physicians)	164	$41,723	1.32	(12)	(2%)	2%	4%	36	46	3%
62134	Offices of Physical, Occupational and Speech Therapists, and Audiologists	361	$41,816	0.96	87	6%	4%	4%	85	166	4%
62139	Offices of All Other Health Practitioners	150	$42,349	0.73	(18)	(2%)	1%	4%	36	75	4%
62141	Family Planning Centers	40	$23,298	1.83	29	29%	8%	1%	9	16	3%
62142	Outpatient Mental Health and Substance Abuse Centers	657	$26,127	2.74	243	10%	4%	4%	136	137	2%
62149	Other Outpatient Care Centers	153	$47,346	0.26	45	7%	4%	7%	34	59	3%
62151	Medical and Diagnostic Laboratories	317	$44,434	1.22	(43)	(3%)	(0%)	3%	71	68	2%
62161	Home Health Care Services	874	$28,242	0.61	(220)	(4%)	3%	3%	162	423	4%
62191	Ambulance Services	443	$26,588	2.42	41	2%	3%	2%	111	137	3%
62199	All Other Ambulatory Health Care Services	129	$57,540	1.01	70	17%	(6%)	3%	32	35	2%
62211	General Medical and Surgical Hospitals	9,198	$61,298	1.66	403	1%	2%	1%	1,680	(507)	(1%)
62221	Psychiatric and Substance Abuse Hospitals	479	$47,851	2.08	294	21%	21%	0%	96	47	1%
62231	Specialty (except Psychiatric and Substance Abuse) Hospitals	376	$63,859	1.51	(336)	(12%)	(9%)	1%	76	67	2%
62311	Nursing Care Facilities (Skilled Nursing Facilities)	3,068	$27,765	1.87	(335)	(2%)	(2%)	(0%)	598	(76)	(0%)
62321	Residential Intellectual and Developmental Disability Facilities	761	$24,094	1.61	93	3%	1%	0%	142	88	1%
62322	Residential Mental Health and Substance Abuse Facilities	286	$27,533	1.28	146	15%	6%	3%	57	83	3%
62331	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	1,325	$22,896	1.53	(315)	(4%)	(1%)	3%	303	488	3%
62399	Other Residential Care Facilities	330	$27,708	1.92	11	1%	(4%)	0%	74	(27)	(1%)
62411	Child and Youth Services	472	$33,962	2.04	(64)	(3%)	(2%)	2%	78	13	0%
62412	Services for the Elderly and Persons with Disabilities	2,539	$20,356	1.62	545	5%	2%	16%	426	185	1%
62419	Other Individual and Family Services	943	$35,122	1.80	(118)	(2%)	(1%)	1%	156	34	0%
62421	Community Food Services	12	$26,468	0.33	2	5%	5%	3%	3	(1)	(1%)
62422	Community Housing Services	118	$30,532	1.17	(8)	(1%)	(3%)	3%	26	(5)	(0%)
62423	Emergency and Other Relief Services	6	$37,186	0.24	(2)	(5%)	(2%)	(1%)	1	0	(0%)
62431	Vocational Rehabilitation Services	233	$21,407	0.67	0	0%	(4%)	0%	44	(45)	(2%)
62441	Child Day Care Services	1,071	$21,274	0.97	(58)	(1%)	1%	0%	303	(35)	(0%)
	NWDB Healthcare	28,251	$44,268	1.37	600	0%	1%	2%		1,838	1%
	Total - All Industries	146,348	$37,195	1.00	(1,254)	(0%)	1%	2%	34,636	(6,731)	(1%)

Source: JobsEQ

Healthcare Industry Occupations within the NWDB Region, Current, Historical and Forecasted Estimates, 2016

Healthcare Occupation Snapshot in NWDB Region														
		Current					Historical				Forecast			
		Four Quarters Ending with 2016q3			2016q3		Change over the Last 5 Years	Average Annual % Change in Employment 2011q3-2016q3			Over the Next 10 Years			
SOC (5-digit)	Occupation	Jobs	Avg. Annual Wages	Location Quotient	Unemp	Unemp Rate	Jobs	NWDB Region	Maine	USA	Current Online Job Ads	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth %
21-1010	Counselors	947	$45,700	$1	26	3%	90	2%	1%	2%	112	205	61	1%
21-1020	Social Workers	846	$49,300	$1	24	3%	44	1%	1%	2%	307	204	39	1%
29-1060	Physicians and Surgeons	802	$215,800	$1	4	1%	3	0%	0%	1%	107	224	16	0%
29-1120	Therapists	851	$65,800	$1	8	1%	(3)	(0%)	1%	2%	74	197	77	1%
29-1140	Registered Nurses	3,951	$64,900	$1	48	1%	50	0%	2%	2%	376	871	60	0%
29-2060	Licensed Practical and Licensed Vocational Nurses	961	$42,800	$1	52	5%	(51)	(1%)	(0%)	1%	25	238	9	0%
31-1010	Nursing, Psychiatric, and Home Health Aides	3,625	$24,200	$1	228	6%	(130)	(1%)	0%	2%	82	770	315	1%
31-9090	Miscellaneous Healthcare Support Occupations	1,517	$31,500	$1	50	3%	68	1%	1%	2%	116	312	79	1%
39-9020	Personal Care Aides	2,370	$22,000	$1	108	5%	253	2%	1%	6%	21	254	298	1%
43-4170	Receptionists and Information Clerks	941	$27,500	$1	54	6%	24	1%	1%	2%	9	245	8	0%
	Total - All Occupations	146,348	$40,200	$1			(1,254)	(0%)	1%	2%	5,939	37,454	(6,736)	(1%)

Source: JobsEQ

Top 10 Occupations within the Healthcare Industry by Educational Attainment and Wages within NWDB Region, 2016

Top 10 Healthcare Occupations by Educational Attainment and Wages									
Occupation	Mean Annual Wage in NWDB Region	Less than High School Diploma	High School Diploma or Equivalent	Some College, No Degree	Associate's Degree	Bachelor's Degree	Master's Degree	Doctoral or Professional Degree	Typical Entry-Level Education
Registered Nurses	$64,900	0%	1%	5%	37%	47%	8%	2%	Bachelor's degree
Healthcare Support Workers All Others	$33,100	9%	40%	28%	10%	11%	2%	0%	High school diploma or equivalent
Licensed Practical and Licensed Vocational Nurses	$42,800	1%	19%	55%	19%	5%	1%	0%	Postsecondary non-degree award
Occupational Therapists	$70,600	0%	0%	1%	8%	44%	42%	5%	Master's degree
Physicicans and Surgeons	$230,200	0%	0%	0%	0%	2%	3%	94%	Doctoral or professional degree
Counselors All Other	$33,200	1%	5%	10%	5%	25%	48%	5%	Master's degree
Home Health Aides	$22,700	12%	35%	32%	10%	8%	2%	2%	Less than high school
Personal Care Aides	$22,000	17%	35%	27%	8%	10%	2%	1%	Less than high school
Receptionists and Information Clerks	$27,500	4%	34%	34%	12%	14%	2%	1%	High school diploma or equivalent
Social Workers All Other		1%	6%	9%	6%	41%	36%	2%	Bachelor's degree

Note: Occupations highlighted in grey indicate the presence of regional postsecondary programs

Source: JobsEQ

Regional Postsecondary Program Awards by Top 10 Occupations in Healthcare Industry with Corresponding Programs within the NWDB Region, 2014-2015 Academic Year

Healthcare NWDB Regional Postsecondary Program Annual Awards				
Occupation	Title/School	Certificates and 2yr Degrees	4yr Degrees	Post-graduate Degrees
Registered Nurses	Eastern Maine Community College	32		
	Husson University		55	
	Northern Maine Community College	29		
	University of Maine		77	7
	Husson University			7
	University of Maine at Fort Kent		79	
Occupational Therapists	Husson University			35
Counselors All Other	Husson University		50	
	University of Maine		115	49
	University of Maine at Presque Isle		27	
Social Workers All Other	Husson University		50	
	University of Maine		136	49
	University of Maine at Presque Isle		27	

Note: dates as of the 2014-2015 academic year

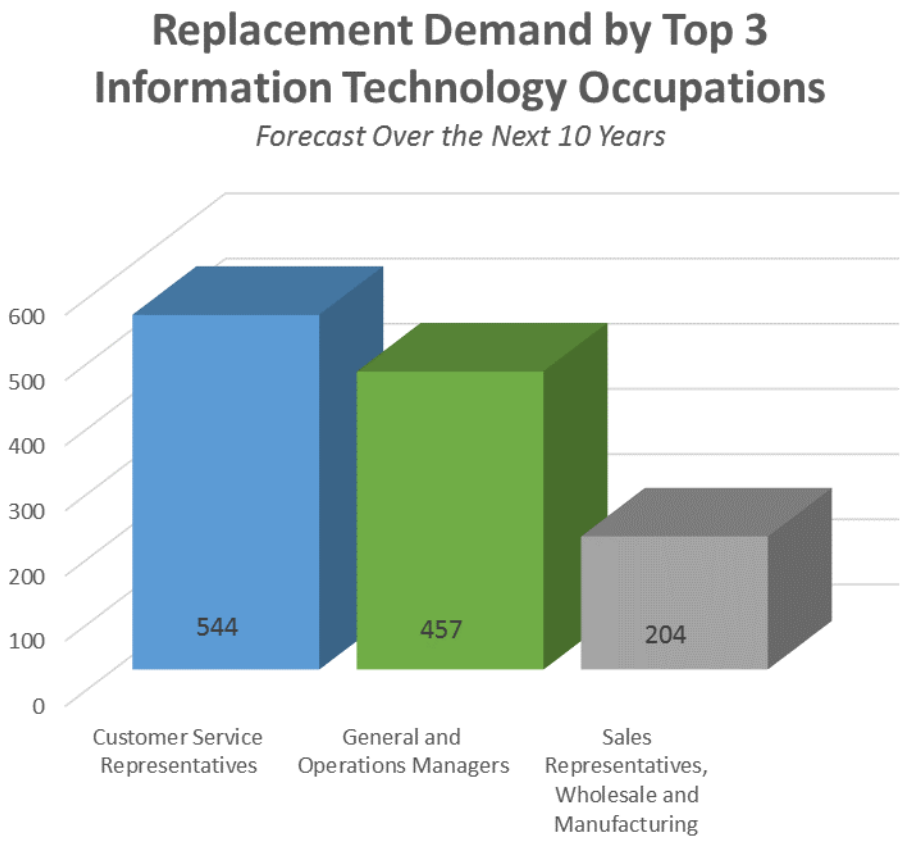
Source: JobsEQ

Information Technology

- For the assessment of Information Technology industry two methodologies are used. First Information Technology is assessed according to employment by IT specific businesses (businesses specifically within IT NAICS codes). This is the same method used for targeted sectors of Manufacturing and Healthcare used previously. However, most IT occupations occur in "non-IT" businesses such computer analysts, administrators, and software developers within healthcare, bio sciences, manufacturing, financial, and insurance businesses. So, we use a second methodology and assess all IT occupations in the region regardless of what business they are employed in using Standard Occupation Codes (SOC). The two methods provide a clearer picture of the supply and demand for the IT related workforce.

Method 1 – Employment by IT Businesses (NAICS based approach)

- The Information Technology industry sector has just over 500 jobs within the NWDB region, representing less than 1% of the 146,000 total jobs across all industries in the region.
- The average annual wage for workers in this specific sector are nearly $54,000, which is much higher than the average annual wages for all industries in the region at $37,000.
- The Information Technology industry sector has shown growth over the past 5 years adding 70 jobs, which is an average annual growth rate of 3%. The Information Technology industry is also forecasted to grow over the next 10 years at an average annual rate of 1% adding 43 jobs due to industry growth. In addition to added jobs from industry growth, demand for replacement workers is projected to be require an additional 100 workers in IT specific industries over the next ten years.
- Within the Information Technology industry sector, the highest number of jobs can be found in Computer Systems Design and Related Services businesses with 336 jobs. This industry has grown over the past 5 years adding 17 jobs, an average annual increase of 1%. It is also projected to continue growing over the next 10 years at an average annual growth rate of 1% as well.
- Three of the five industries within this sector are projected to grow an average annual growth rate between 1% and 2%. Software Publishing is projected the most growth at an average annual growth rate of 2%. Data Processing, Hosting, and Related Services, as well as Graphic Design Services are not projected to grow over the next 10 years, with an average annual growth percent between 0% and -1%.
- The top occupation within the Information Technology industry is Customer Service Representatives with just over 2,100 jobs and average annual wages at $33,000. This occupation has grown over the past 5 years and is projected to continuing growing marginally over the next 10 years. The next largest occupation is General and Operations Managers with nearly 1,800 jobs having an average annual wage of nearly $80,000. This occupation has shown growth of the past 5 years, but is projected to decline marginally over the following 10 years at an average annual rate of less than 0.5%. Note, these occupation numbers exceed the total employment in IT business as they also include jobs in other industries.



Source: JobsEQ

- Of the top 10 occupations within this sector, 7 of them require entry-level education which corresponds to a postsecondary program within the NWDB region.

IT Industry Snapshot within the NWDB Region, Current, Historical and Forecasted Estimates, 2016

IT Industry Snapshot in NWDB Region											
		Current			Historical				Forecast		
		Four Quarters Ending with 2016q3			Change over the Last 5 Years	Average Annual % Change in Employment 2011q3-2016q3			Over the Next 10 Years		
NAICS (5-digit)	Industry	Jobs	Avg. Annual Wages	Location Quotient	Jobs	NWDB Region	Maine	USA	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth Percent
51121	Software Publishers	43	$52,159	0.12	(4)	(2%)	3%	5%	8	7	2%
51821	Data Processing, Hosting, and Related Services	85	$34,719	0.27	55	24%	(2%)	4%	17	(5)	(1%)
51913	Internet Publishing and Broadcasting and Web Search Portals	13	$57,315	0.07	(1)	(2%)	1%	12%	3	1	1%
54143	Graphic Design Services	36	$29,114	0.37	3	2%	3%	1%	10	(1)	(0%)
54151	Computer Systems Design and Related Services	336	$61,465	0.17	17	1%	7%	5%	62	42	1%
	NWDB IT	512	$53,892	0.17	71	3%	5%	5%	n/a	43	1%
	Total - All Industries	146,348	$37,195	1.00	(1,254)	(0%)	1%	2%	34,636	(6,731)	(1%)

IT Industry Snapshot within the NWDB Region, Current, Historical and Forecasted Estimates, 2016

IT Occupation Snapshot in NWDB Region														
		Current					Historical				Forecast			
		Four Quarters Ending with 2016q3			2016q3		Change over the Last 5 Years	Average Annual % Change in Employment 2011q3-2016q3			Over the Next 10 Years			
SOC (5-digit)	Industry	Jobs	Avg. Annual Wages	Location Quotient	Unemp	Unemp Rate	Jobs	NWDB Region	Maine	USA	Current Online Job Ads	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth %
11-1020	General and Operations Managers	1,797	$79,600	0.86	39	2%	22	0%	1%	2%	34	457	(70)	(0%)
11-3020	Computer and Information Systems Managers	183	$99,100	0.53	4	2%	(5)	(1%)	1%	3%	1	22	(1)	(0%)
15-1120	Computer and Information Analysts	301	$84,500	0.47	9	3%	0	0%	2%	3%	19	39	16	1%
15-1130	Software Developers and Programmers	647	$82,200	0.40	19	3%	(32)	(1%)	2%	3%	7	107	5	0%
15-1140	Database and Systems Administrators and Network Architects	382	$66,200	0.60	10	2%	(1)	(0%)	2%	2%	17	53	(21)	(1%)
15-1150	Computer Support Specialists	454	$39,800	0.61	21	4%	(2)	(0%)	2%	2%	40	57	(10)	(0%)
27-1020	Designers	431	$35,300	0.75	17	4%	(33)	(2%)	0%	1%	59	142	(47)	(1%)
41-3090	Miscellaneous Sales Representatives, Services	628	$49,100	0.73	25	4%	17	1%	1%	2%	69	154	(16)	(0%)
41-4010	Sales Representatives, Wholesale and Manufacturing	1,068	$63,500	0.61	41	4%	(9)	(0%)	1%	2%	10	204	(71)	(1%)
43-4050	Customer Service Representatives	2,131	$32,900	0.84	126	6%	43	0%	1%	2%	147	544	16	0%
	Total - All Occupations	146,348	$40,200	1.00			(1,254)	(0%)	1%	2%	5,939	37,454	(6,736)	(1%)

Source: JobsEQ

IT Industry Occupations within the NWDB Region, Current, Historical and Forecasted Estimates, 2016

Top 10 Occupations within the IT Industry by Educational Attainment and Wages within NWDB Region, 2016

Top 10 IT Occupations by Educational Attainment and Wages									
Occupation	Mean Annual Wage in NWDB Region	Less than High School Diploma	High School Diploma or Equivalent	Some College, No Degree	Associate's Degree	Bachelor's Degree	Master's Degree	Doctoral or Professional Degree	Typical Entry-Level Education
Computer Programmers	$65,600	1%	5%	13%	10%	50%	20%	3%	Bachelor's degree
Computer User Support Specialists	$38,600	1%	11%	28%	17%	34%	8%	1%	Some college, no degree
Database Administrators	$60,200	1%	5%	14%	9%	47%	22%	2%	Bachelor's degree
General and Operations Managers	$79,600	2%	15%	24%	8%	35%	14%	3%	Bachelor's degree
Sales Representatives Services All Other	$49,100	2%	16%	26%	8%	39%	7%	1%	High school diploma or equivalent
Computer and Information Systems Managers	$99,100	0%	4%	15%	8%	47%	24%	2%	Bachelor's degree
Computer System Analysts	$86,700	1%	4%	15%	8%	48%	22%	3%	Bachelor's degree
Customer Service Representatives	$32,900	4%	27%	33%	11%	21%	3%	1%	High school diploma or equivalent
Designers All Other	$46,300	2%	10%	18%	13%	47%	9%	1%	Bachelor's degree
Sales Representatives Wholesale and Manufacturing Expcept Technical and Scientific Products	$61,400	3%	17%	23%	8%	41%	7%	1%	High school diploma or equivalent

Note: Occupations highlighted in grey indicate the presence of regional postsecondary programs

Source: JobsEQ

Regional Postsecondary Program Awards by Top 10 Occupations in IT Industry with Corresponding Programs within the NWDB Region, 2014-2015 Academic Year

IT NWDB Regional Postsecondary Program Annual Awards				
Occupation	Title/School	Certificates and 2yr Degrees	4yr Degrees	Post-graduate Degrees
Computer Programmers	Husson University		5	
	University of Maine		15	2
	Eastern Maine Community College	11		
Computer User Support Specialists	Husson University	2	7	
	University of Maine at Fort Kent		4	
	Eastern Maine Community College	1		
Database Administrators	Husson University	2	7	
	University of Maine at Fort Kent	3	4	
	University of Maine			4
General and Operations Managers	Northern Maine Community College	17		
	University of Maine		141	9
	Washington County Community College	9		
	Northern Maine Community College	1		
	University of Maine at Machias	4	13	
	Washington County Community College			
	Husson University		3	
	Maine Maritime Academy		30	
Computer and Information Systems Managers	Husson University	2	7	
	University of Maine at Fort Kent	3	4	
	University of Maine		15	6
	Eastern Maine Community College	13		
	Northern Maine Community College	7		
	Washington County Community College			
Computer Systems Analyts	Husson University	2	7	
	University of Maine at Fort Kent		4	
	University of Maine			4
Sales Representatives Wholesale and Manufacturing Expcept Technical and Scientific Products	Husson University	2		

Note: dates as of the 2014-2015 academic year

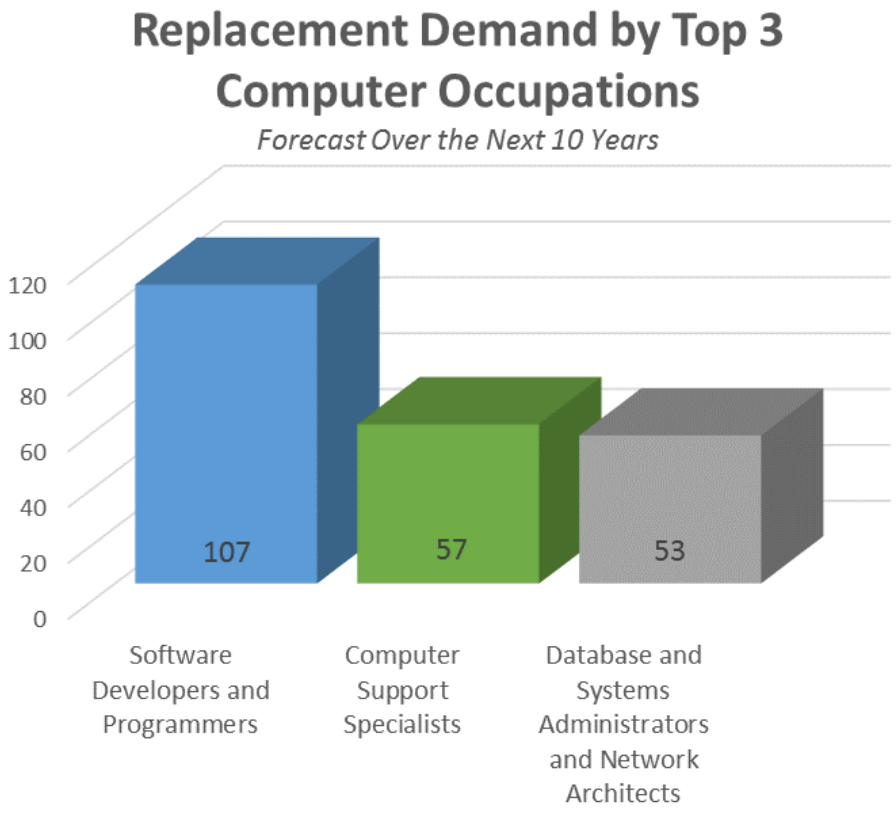
Source: JobsEQ

Method 2 –IT Occupations in The Region Regardless of What Business They Are Employed in Using Standard Occupation Codes (SOC).

- There is a total of 1,959 occupations in the region across all industries. Among these the highest number of jobs are Software Developers and Programmers with nearly 650 jobs followed by Computer Support Specialists with 454 jobs, Network Architects with 382 jobs, and Computer and Information Analysts with 301 jobs. Software Developers and Programmers and Computer and Information Analysts are projected for slight growth over the next ten years in the region while the others are projected to experience a slight decline.
- While overall for all Computer Related Occupations a slight decline in total employment is projected for the region in the next ten years, there will be a demand for replacement workers of 280 jobs.
- Of the Computer Related Occupations, 6 of them require entry-level education which corresponds to a postsecondary program within the NWDB region. Most occupations are held by persons with at least some college and more typically at least a bachelor's degree.

Top Computer Related Occupations within the IT Industry by Educational Attainment and Wages within NWDB Region, 2016

Computer Related Occupation Snapshot in NWDB Region														
		Current					Historical				Forecast			
		Four Quarters Ending with 2016q3			2016q3		Change over the Last 5 Years	Average Annual % Change in Employment 2011q3-2016q3			Over the Next 10 Years			
SOC (5-digit)	Occupation	Jobs	Avg. Annual Wages	Location Quotient	Unemp	Unemp Rate	Jobs	NWDB Region	Maine	USA	Current Online Job Ads	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth %
15-1110	Computer and Information Research Scientists	21	$90,100	0.89	1	5%	(2)	(2%)	1%	2%	2	2	(1)	(1%)
15-1120	Computer and Information Analysts	301	$84,500	0.47	9	3%	0	0%	2%	3%	19	39	16	1%
15-1130	Software Developers and Programmers	647	$82,200	0.40	19	3%	(32)	(1%)	2%	3%	7	107	5	0%
15-1140	Database and Systems Administrators and Network Architects	382	$66,200	0.60	10	2%	(1)	(0%)	2%	2%	17	53	(21)	(1%)
15-1150	Computer Support Specialists	454	$39,800	0.61	21	4%	(2)	(0%)	2%	2%	40	57	(10)	(0%)
15-1190	Miscellaneous Computer Occupations	154	$71,200	0.76	7	4%	(9)	(1%)	1%	1%	11	22	(17)	(1%)
15-1000	**Total Computer Occupations**	**1,959**	**$68,400**	**0.50**	**66**	**3%**	**(46)**	**(1%)**	**2%**	**3%**	**96**	**280**	**(28)**	**(0%)**
	Total - All Occupations	146,348	$40,200	1.00			(1,254)	(0%)	1%	2%	5,939	37,454	(6,736)	(1%)



Source: JobsEQ

Computer Related Occupations within the IT Industry by Educational Attainment and Wages within NWDB Region, 2016

Computer Related Occupations by Educational Attainment and Wages									
Occupation	Mean Annual Wage in NWDB Region	Less than High School Diploma	High School Diploma or Equivalent	Some College, No Degree	Associate's Degree	Bachelor's Degree	Master's Degree	Doctoral or Professional Degree	Typical Entry-Level Education
Computer Occupations All Other	$71,200	1%	8%	22%	15%	39%	14%	1%	Bachelor's degree
Computer Systems Analyts	$86,700	1%	4%	15%	8%	48%	22%	3%	Bachelor's degree
Database Administrators	$60,200	1%	5%	14%	9%	47%	22%	2%	Bachelor's degree
Computer and Information Research Scientists	$90,100	0%	1%	5%	2%	38%	28%	26%	Doctoral or professional degree
Computer Programmers	$65,600	1%	5%	13%	10%	50%	20%	3%	Bachelor's degree
Computer User Support Specialists	$38,600	1%	11%	28%	17%	34%	8%	1%	Some college, no degree

Note: Occupations highlighted in grey indicate the presence of regional postsecondary programs

Source: JobsEQ

Regional Postsecondary Program Awards by Computer Related Occupations in IT Industry with Corresponding Programs within the NWDB Region, 2014-2015 Academic Year

Computer Related NWDB Regional Postsecondary Program Annual Awards				
Occupation	Title/School	Certificates and 2yr Degrees	4yr Degrees	Post-graduate Degrees
Computer Occupations All Other	Husson University	2	7	
	University of Maine at Fort Kent		4	
	University of Maine		15	2
Computer Systems Analyts	Husson University	2	7	
	University of Maine at Fort Kent		4	
	University of Maine			4
Database Administrators	Husson University	2	7	
	University of Maine at Fort Kent	3	4	
	University of Maine			4
Computer and Information Research Scientists	Husson University	2	7	
	University of Maine at Fort Kent		4	
	University of Maine		15	6
	Eastern Maine Community College	1		
Computer Programmers	Husson University		5	
	University of Maine		15	2
	Eastern Maine Community College	11		
Computer User Support Specialists	Husson University	2	7	
	University of Maine at Fort Kent		4	
	Eastern Maine Community College	1		

Note: dates as of the 2014-2015 academic year

Source: JobsEQ

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