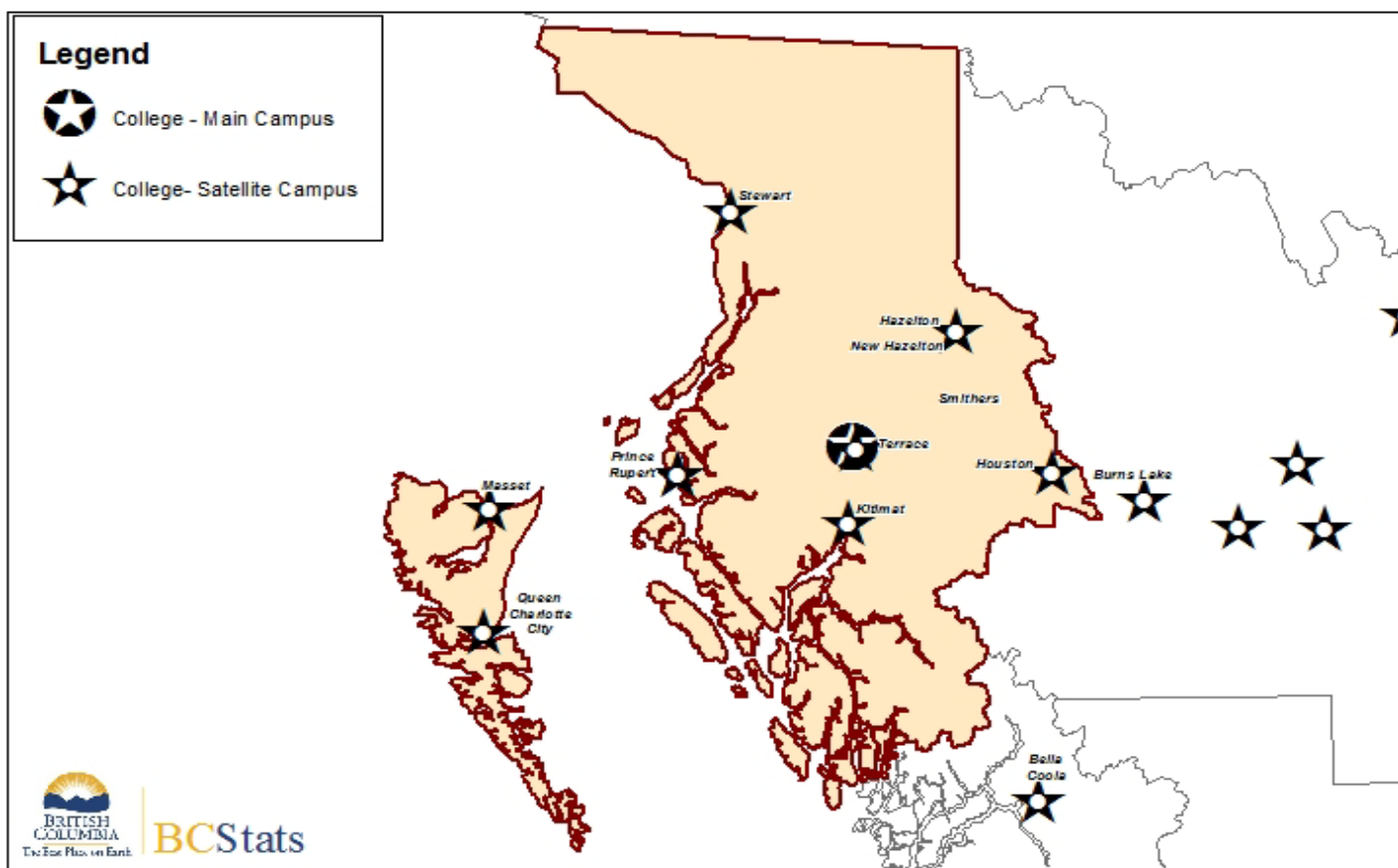


# INDUSTRY AND OCCUPATION PROJECTIONS: 2008 to 2013

## Northwest College Region



Geographic Location of Population				
Major Cities	Population <u>2006 Census</u>	% of <u>Region</u>	Land <u>Area</u> <i>Sq Km</i>	Population <u>Density</u> <i>Persons per Sq Km</i>
Prince Rupert, C	12,815	17.8	54.9	233.4
Terrace, C	11,320	15.7	41.5	272.6
Kitimat, DM	8,987	12.5	242.6	37.0
Smithers, T	5,217	7.2	15.7	332.5
Houston, DM	3,163	4.4	72.8	43.4
Telkwa, VL	1,295	1.8	6.6	197.4
Queen Charlotte, VL	948	1.3	37.3	25.4
Masset, VL	940	1.3	19.5	48.3
New Hazelton, DM	627	0.9	25.6	24.5
Port Edward, DM	577	0.8	168.1	3.4
Stewart, DM	496	0.7	571.5	0.9
Port Clements, VL	440	0.6	13.6	32.4
Hazelton, VL	293	0.4	2.9	102.8
Rest of region	25,030	34.7	100,974.8	0.2
<b>Total Region</b>	<b>72,148</b>	<b>100.0</b>	<b>102,247.3</b>	<b>0.7</b>
<b>Region as % of BC</b>	<b>1.8</b>		<b>11.1</b>	
<b>Youth age 15-29</b>	<b>13,245</b>			
<b>Youth in Region as % of BC</b>	<b>1.7</b>			

## **Note to Users**

**All assumptions relating to employment are based on past conditions, modified wherever possible to take into consideration future changes. The resulting employment projections are not necessarily what will be, but rather what could be, given the realization of these conditions. It is certainly possible that unforeseen changes in factors such as economic development, government policy, or land use and zoning will affect future employment. Consequently, the projections should only be regarded as one possible scenario on the future size and distribution of the workforce.**

It is important for users to understand that the same set of industries and occupations are reported for each of the 12 College Regions, regardless of the importance of these industries to any particular regional economy. Some of these industries, while significant to the province overall, may have a very small presence in a particular region. For example, the Beverage Manufacturing industry could show up as the highest growth rate for each region of the province because the wine industry is expected to grow, but this would mean the Okanagan College Region would gain hundreds of jobs while the Northwest would gain 5 to 10 jobs at the most. For this reason, growth rates should be viewed in the context of the size of the occupational or industry grouping to clarify the number of jobs being created or lost and the potential impact the change would have on the local economy.

For information on the Regional Districts contained in the College Regions, see [Appendix 3: REGIONAL DISTRICT TO COLLEGE REGION CONVERSION FOR REPM](#).

The December 2008 version of the Major Projects Inventory was used in the development of the employment projections for the 2008-2013 version of the REPM. A full listing of all the Major Projects under construction or at the proposal stage can be found at [http://www.bcstats.gov.bc.ca/pubs/pr\\_mproj.asp](http://www.bcstats.gov.bc.ca/pubs/pr_mproj.asp)

## **Regional Employment Projection Model (REPM)**

### **Contents**

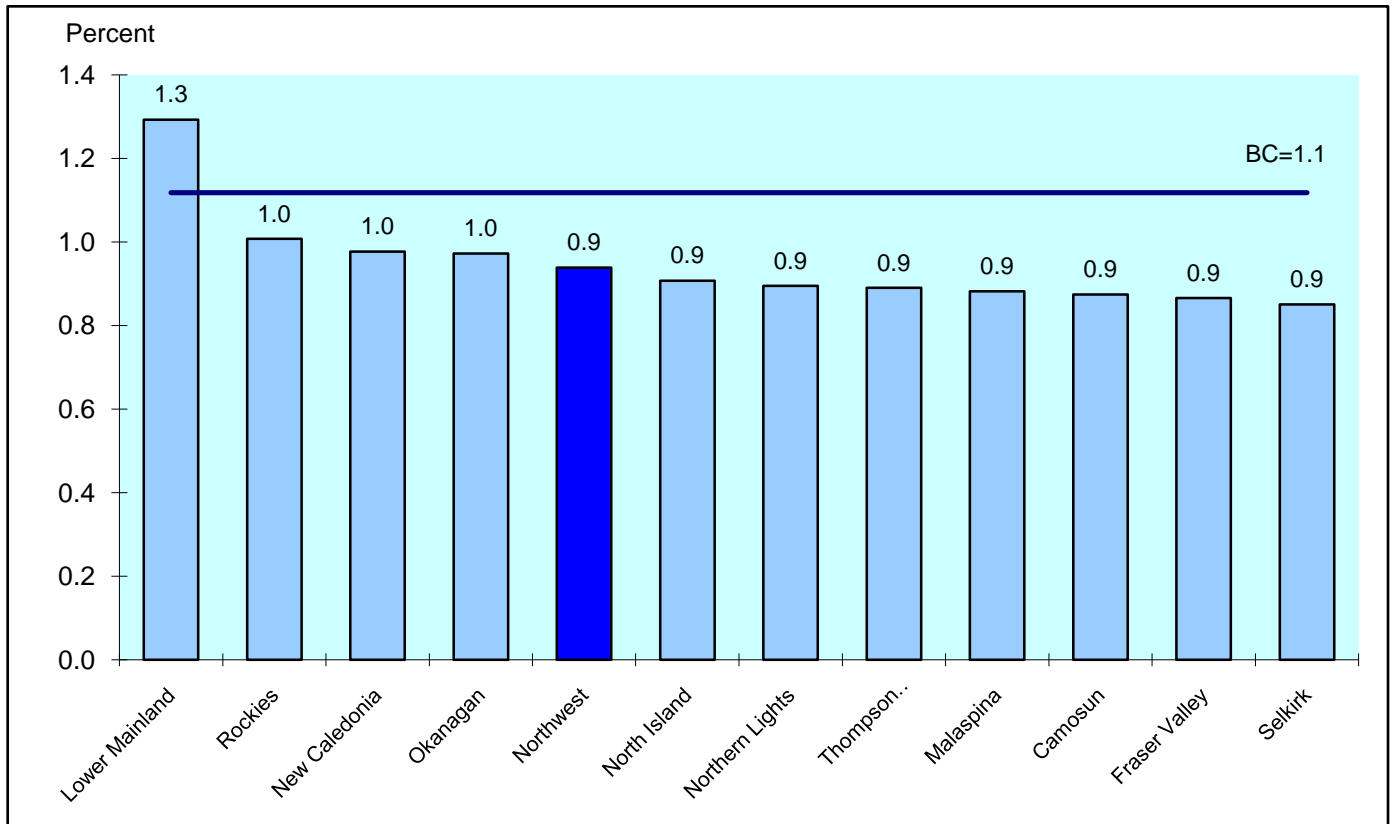
1. Projected Annual Growth in Employment Demand by College Region
2. Projected Annual Growth in Employment Demand. Comparison between Industries
3. Industrial Structure Compared with BC. Percent Share of Employment by Industry
4. Projected Annual Growth in Employment Demand. Comparison between Occupations
5. Occupational Structure Compared with BC. Percent Share of Employment by Occupation
6. Projected Annual Growth Rates in Occupational Demand, 2-digit occupation

### **Appendices**

1. Summary of the Methodology for the BC REPM
2. COPS Industry Conversion for REPM
3. Regional District to College Region Conversion for REPM
4. Projected Annual Growth Rates in Occupational Demand (3-digit)
5. Projected Annual Growth Rates in Occupational Demand (4-digit)

Funding for this project was made possible through the Labour Market Information initiative under the Canada-British Columbia Labour Market Agreement (LMA), which is administered for B.C. by the Ministry of Advanced Education and Labour Market Development.

## Projected Annual Growth in Employment Demand by College Region\*



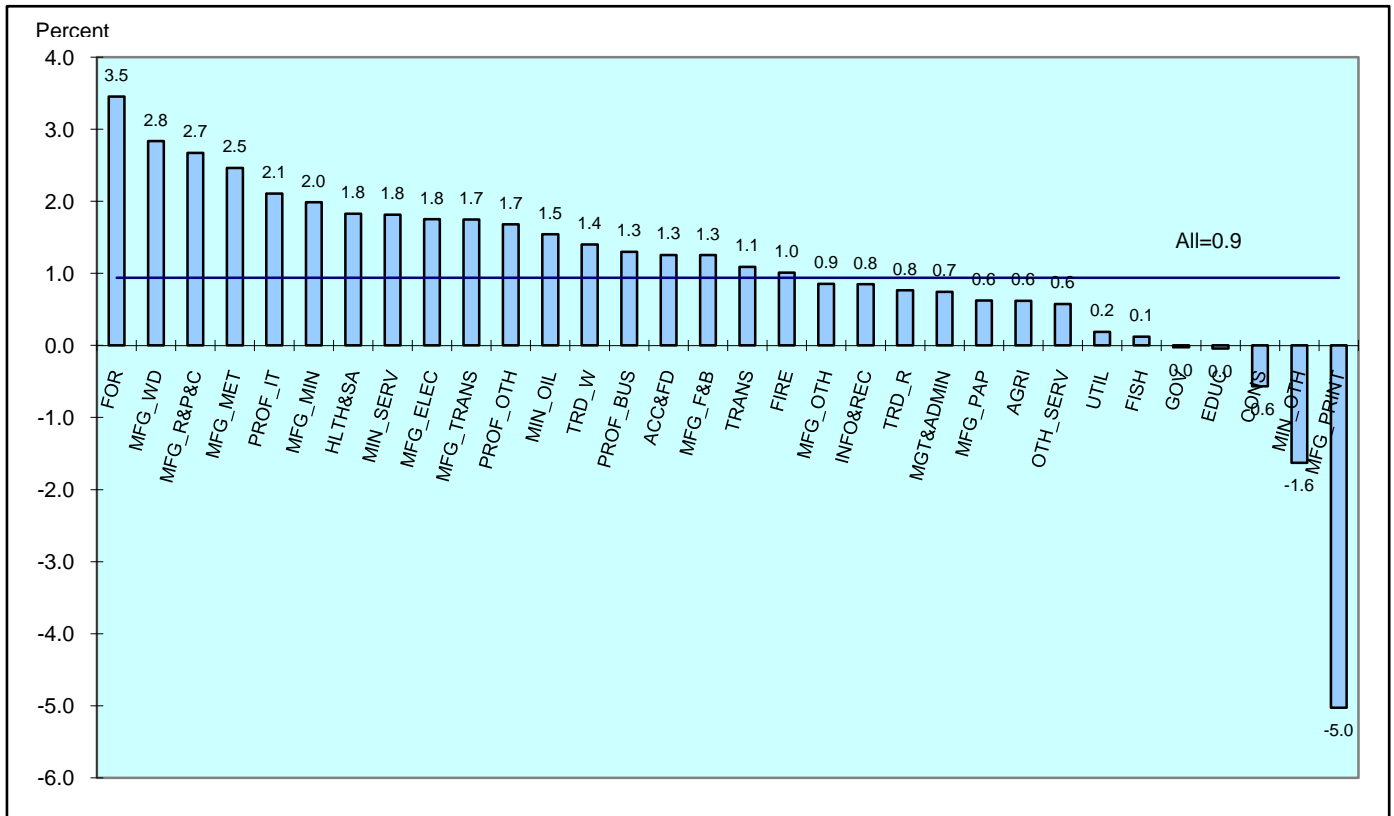
<u>College Region*</u>	<u>Estimated Employment</u>		<u>Avg Annual %</u>
	<u>2008</u>	<u>2013</u>	<u>Chng Over 5</u>
			<u>Years</u>
			<u>2008 to 2013</u>
Camosun	198,090	206,750	0.9
Fraser Valley	135,090	140,940	0.9
Lower Mainland	1,249,300	1,330,070	1.3
Malaspina	111,810	116,750	0.9
New Caledonia	76,330	80,060	1.0
North Island	76,880	80,370	0.9
Northern Lights	44,800	46,810	0.9
<b>Northwest</b>	<b>38,710</b>	<b>40,530</b>	<b>0.9</b>
Okanagan	202,660	212,520	1.0
Rockies	45,290	47,570	1.0
Selkirk	41,410	43,170	0.9
Thompson Rivers	93,310	97,470	0.9
<b>Total</b>	<b>2,313,700</b>	<b>2,443,000</b>	<b>1.1</b>

\* See Appendix 3 for details on the Regional Districts included in the College Regions.

# Northwest College Region

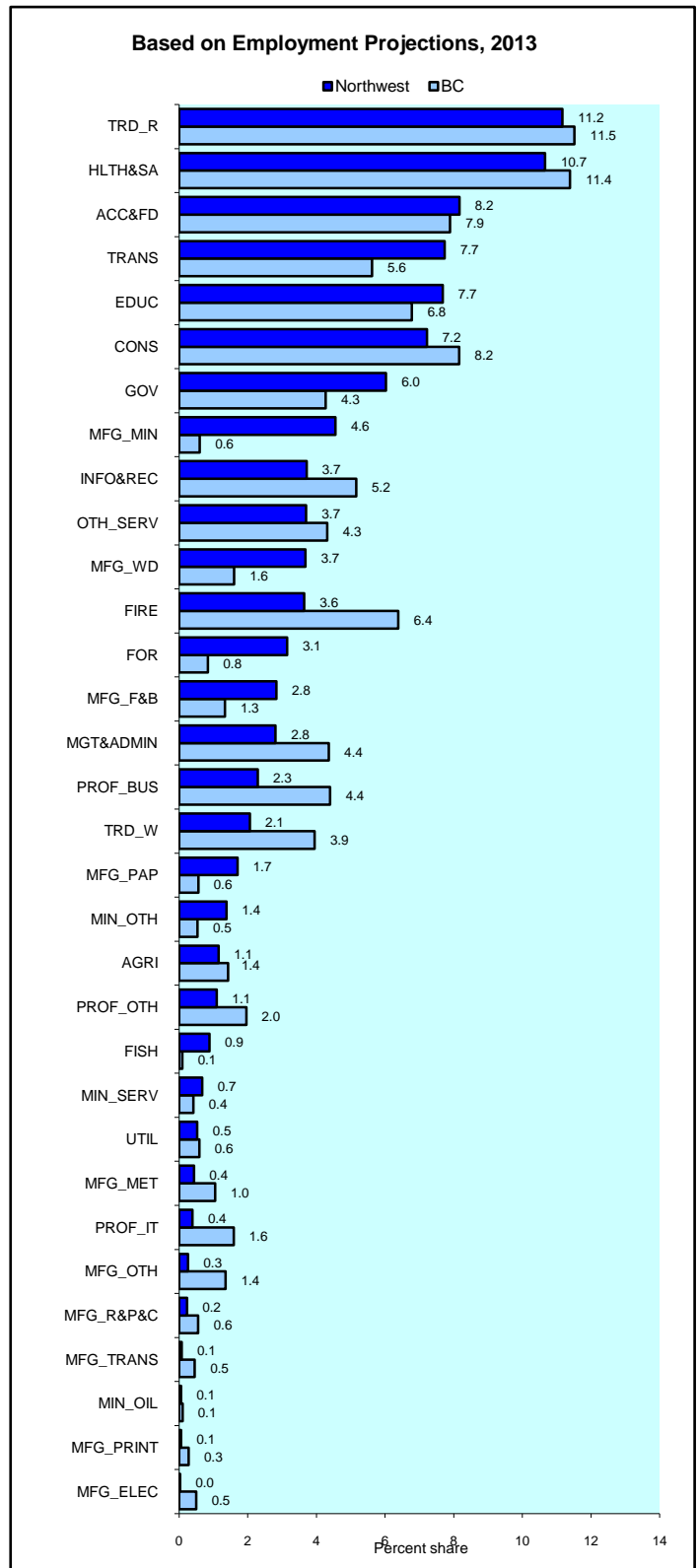
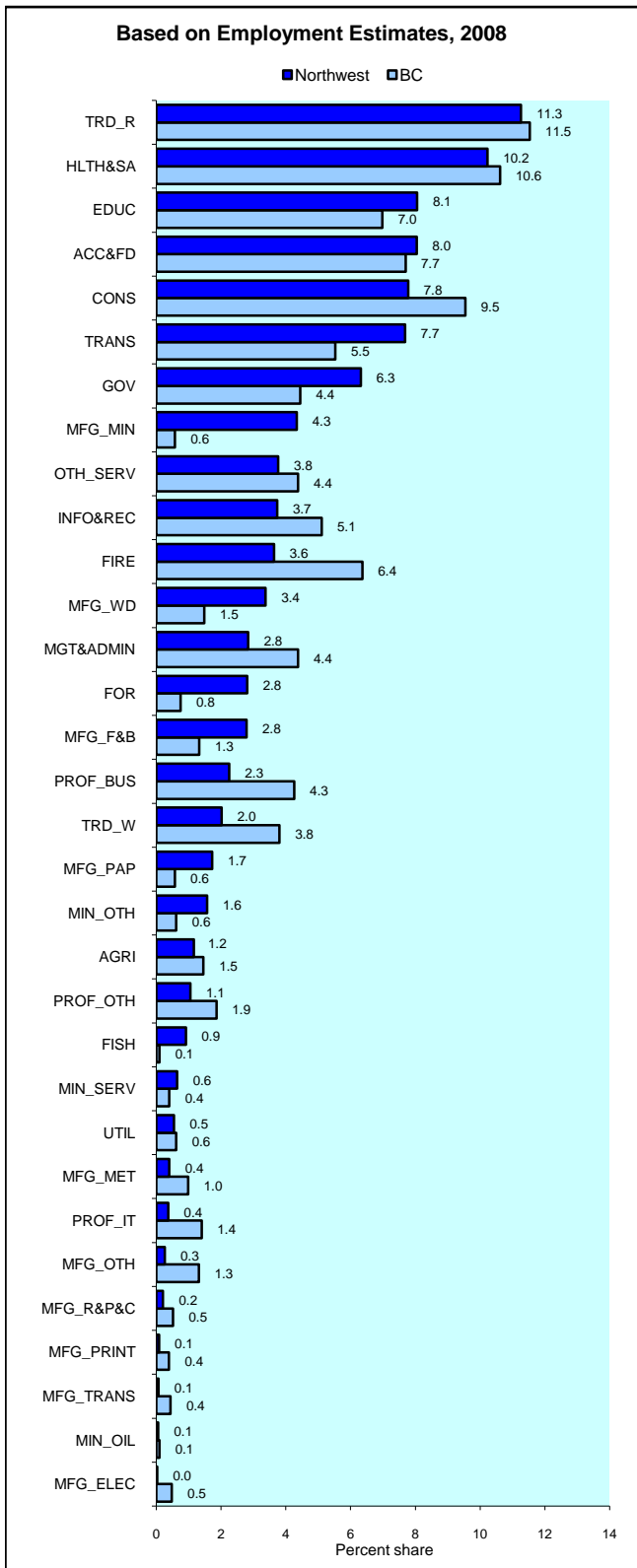
## Projected Annual Growth in Employment Demand

### Comparison Between Industries



	Avg Annual % Chng Over 5 Years				Avg Annual % Chng Over 5 Years		
	Estimated Employment 2008	Estimated Employment 2013	2008 to 2013		Estimated Employment 2008	Estimated Employment 2013	2008 to 2013
<b>Goods Producing Ind</b>				<b>Service Producing Ind.</b>			
Agriculture	450	460	0.6	Trade--Wholesale	780	840	1.4
Forestry	1,090	1,270	3.5	Trade--Retail	4,360	4,520	0.8
Fishing, Hunting, & Trapping	350	360	0.1	Transportation	2,970	3,140	1.1
Oil & Gas	20	20	1.5	Finance, Insurance, R.E.	1,410	1,480	1.0
Mining (non Oil & Gas)	610	560	-1.6	Prof--Bus Services	870	930	1.3
Services to Mining	250	270	1.8	Prof--Computer Systems	140	160	2.1
Utilities	210	210	0.2	Prof--Other Services	410	440	1.7
Construction	3,010	2,930	-0.6	Management/Admin/Other Supp	1,100	1,140	0.7
Mfg--Food & Beverages	1,080	1,150	1.3	Education	3,120	3,110	0.0
Mfg--Wood Products	1,310	1,490	2.8	Health & Social Assist.	3,960	4,320	1.8
Mfg--Paper Products	670	690	0.6	Information, Culture, Rec	1,440	1,510	0.8
Mfg--Printing	30	20	-5.0	Accom & Food Services	3,110	3,310	1.3
Mfg--Rubber, Plas. Chem	80	90	2.7	Services--other	1,460	1,500	0.6
Mfg--Mineral Products	1,680	1,840	2.0	Government	2,440	2,440	0.0
Mfg--Metal Fab & Machinery	160	180	2.5				
Mfg--Comp, Electronic, Elect	10	10	1.8	<b>Total Service Producing</b>	<b>27,580</b>	<b>28,830</b>	<b>0.9</b>
Mfg--Transportation Eq.	30	30	1.7				
Mfg--Other	100	110	0.9	<b>Total, all industries</b>	<b>38,710</b>	<b>40,530</b>	<b>0.9</b>
<b>Total Goods Producing</b>	<b>11,130</b>	<b>11,700</b>	<b>1.0</b>				

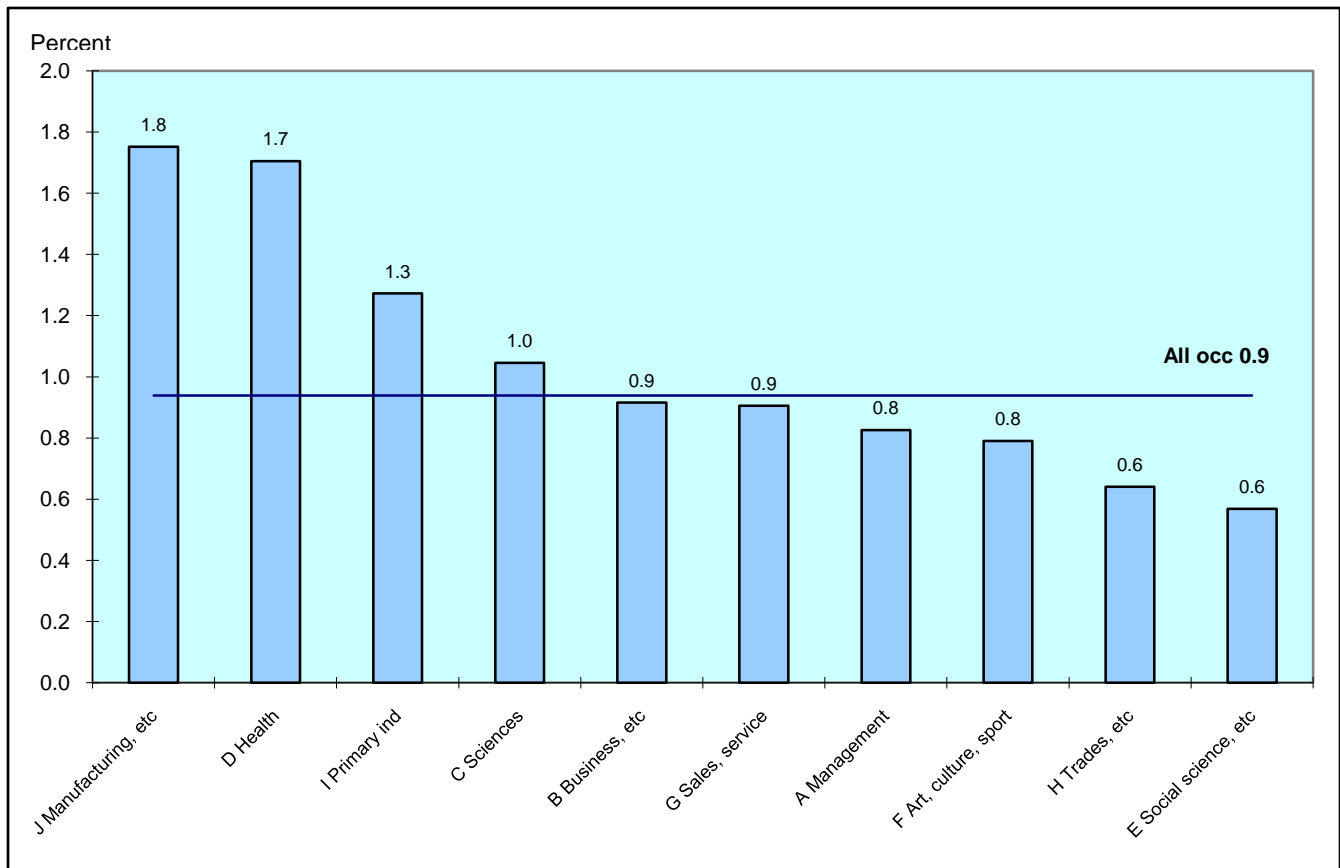
# Northwest College Region Industrial Structure Compared with BC Percent Share of Employment by Industry



# Northwest College Region

## Projected Annual Growth in Employment Demand

### Comparison Between Occupations

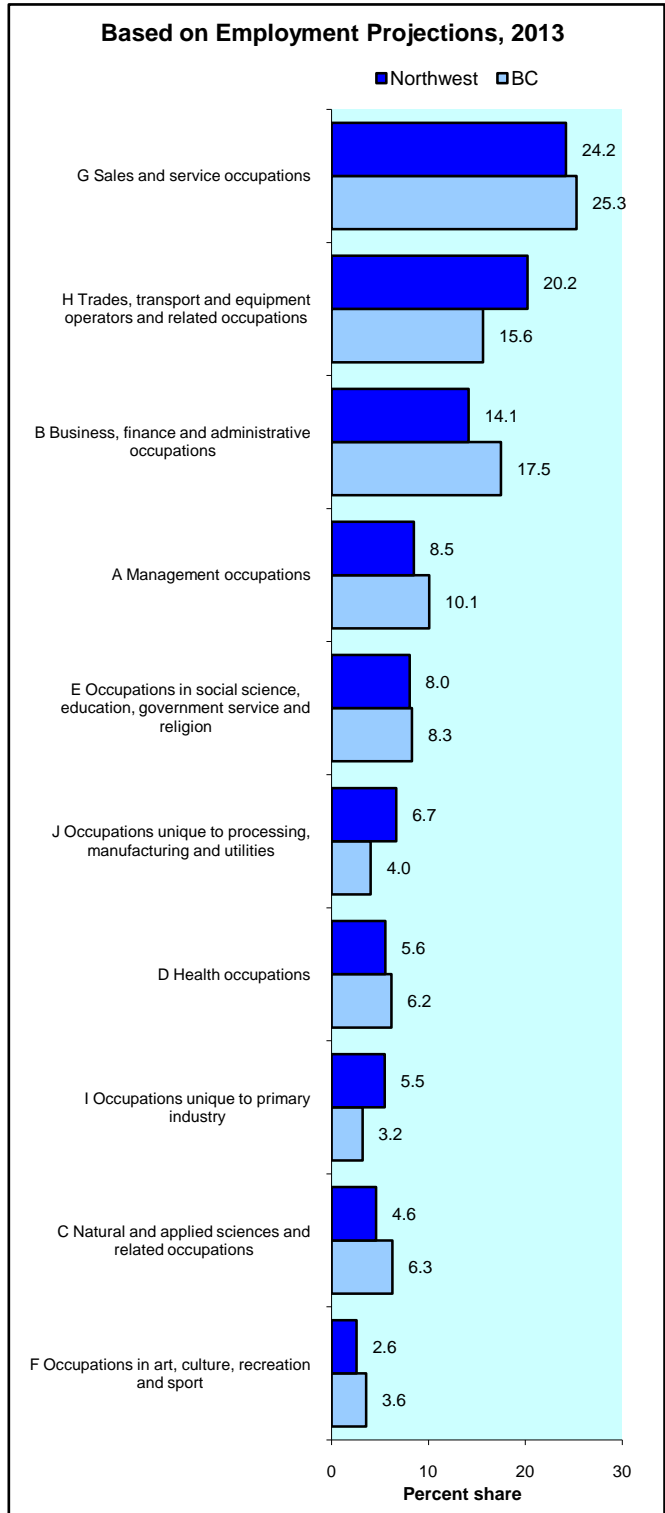
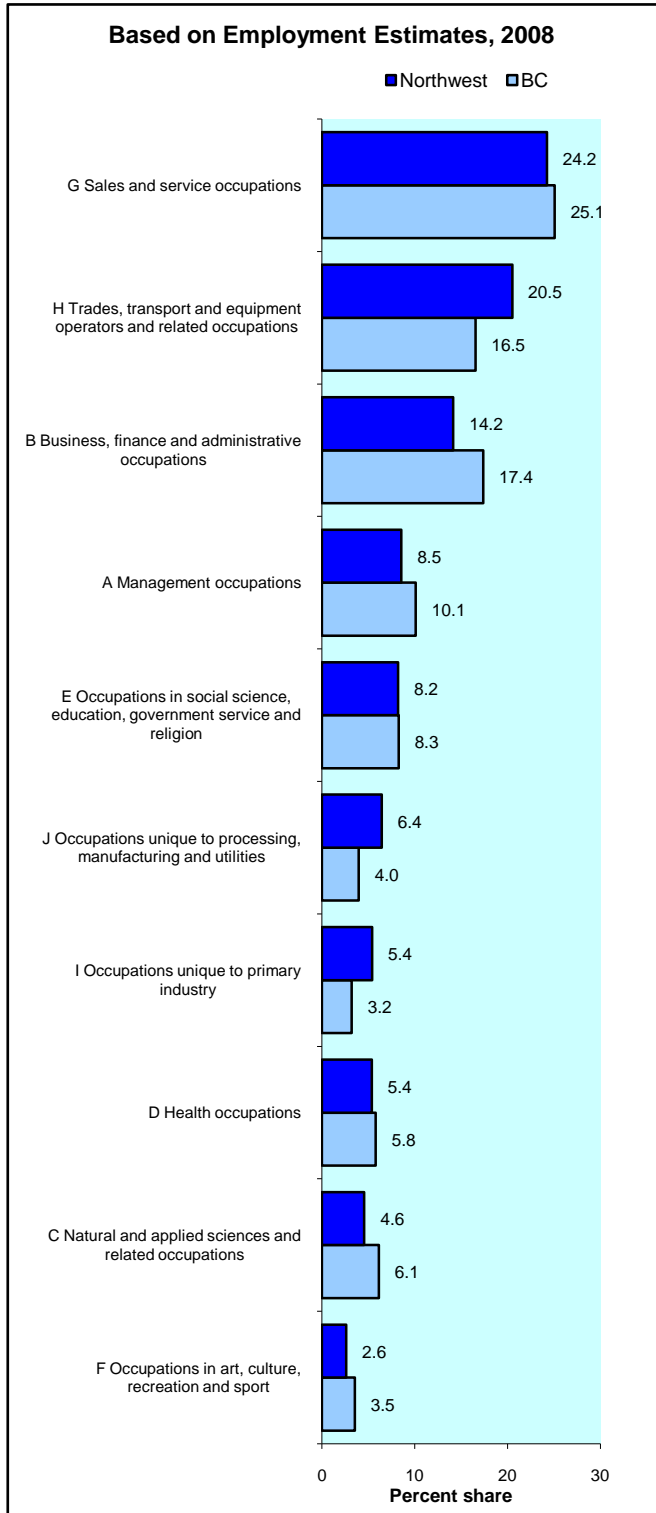


	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
All occupations	38,710	40,530	<b>0.9</b>
A Management occupations	3,310	3,450	<b>0.8</b>
B Business finance and administrative occupations	5,480	5,730	<b>0.9</b>
C Natural and applied sciences and related occupations	1,770	1,860	<b>1.0</b>
D Health occupations	2,080	2,260	<b>1.7</b>
E Occupations in social science, education, government serv, & religion	3,170	3,260	<b>0.6</b>
F Occupations in art culture recreation and sport	1,010	1,050	<b>0.8</b>
G Sales and service occupations	9,380	9,800	<b>0.9</b>
H Trades transport and equipment operators and related occupations	7,940	8,190	<b>0.6</b>
I Occupations unique to primary industry	2,090	2,220	<b>1.3</b>
J Occupations unique to processing manufacturing and utilities	2,490	2,710	<b>1.8</b>

# Northwest College Region

## Occupational Structure Compared with BC

### Percent Share of Employment by Occupation



# Northwest College Region

	Estimated Employment		Avg Annual % Chng Over 5 Years
	<u>2008</u>	<u>2013</u>	<u>2008 to 2013</u>
	All occupations	38,710	40,530
A0 Senior management occupations	280	290	0.8
A1 Specialist managers	530	560	1.0
A2 Managers in retail trade food and accommodation services	1,250	1,310	0.9
A3 Other managers n.e.c.	1,250	1,290	0.6
B0 Professional occupations in business and finance	520	540	1.0
B1 Finance and insurance administration occupations	600	630	1.0
B2 Secretaries	620	640	0.7
B3 Administrative and regulatory occupations	700	730	0.8
B4 Clerical supervisors	150	160	0.9
B5 Clerical occupations	2,890	3,030	0.9
C0 Professional occupations in natural and applied sciences	620	660	1.1
C1 Technical occupations related to natural and applied sciences	1,150	1,210	1.0
D0 Professional occupations in health	330	360	1.6
D1 Nurse supervisors and registered nurses	610	670	1.8
D2 Technical and related occupations in health	500	540	1.7
D3 Assisting occupations in support of health services	630	680	1.7
E0 Judges, lawyers, psychologists, social workers, ministers of religion & policy/program officers	660	690	0.9
E1 Teachers and professors	1,610	1,610	0.0
E2 Paralegals, social services workers & occup. in educ. & religion n.e.c.	900	960	1.3
F0 Professional occupations in art and culture	350	360	0.6
F1 Technical occupations in art, culture, recreation and sport	660	690	0.9
G0 Sales and service supervisors	300	310	1.0
G1 Wholesale, technical, insurance, real estate sales specialists & retail, wholesale and grain buyers	470	500	1.1
G2 Retail salespersons and sales clerks	1,620	1,690	0.8
G3 Cashiers	740	770	0.8
G4 Chefs and cooks	660	700	1.3
G5 Occupations in food and beverage service	650	690	1.2
G6 Occupations in protective services	580	580	0.2
G7 Occup. in travel & accommodation incl. attendants in recreation & sport	400	420	1.0
G8 Childcare and home support workers	810	840	0.7
G9 Sales and service occupations n.e.c.	3,160	3,310	0.9
H0 Contractors and supervisors in trades and transportation	340	340	0.3
H1 Construction trades	1,350	1,340	-0.2
H2 Stationary engineers, power stn operators & electrical trades & telecom.	530	540	0.5
H3 Machinists, metal forming, shaping and erecting occupations	390	410	1.1
H4 Mechanics	1,080	1,130	0.9
H5 Other trades n.e.c.	280	280	0.6
H6 Heavy equipment and crane operators including drillers	570	580	0.2
H7 Transport equipment operators & related workers, excl. labourers	2,140	2,260	1.1
H8 Trades helpers, construction and transport labourers & related	1,260	1,310	0.7
I0 Occupations unique to agriculture, excluding labourers	510	530	0.8

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	<u>2008</u>	<u>2013</u>	<u>2008 to 2013</u>
I1 Occup. unique to forestry ops, mining, oil & gas extraction, fishing excl. labourers	890	960	1.6
I2 Primary production labourers	690	740	1.3
J0 Supervisors in manufacturing	220	240	1.8
J1 Machine operators in manufacturing	1,260	1,360	1.7
J2 Assemblers in manufacturing	170	180	1.9
J3 Labourers in processing, manufacturing and utilities	850	930	1.8

## **Appendix 1**

### **Summary of Methodology for the British Columbia Regional Employment Projection Model (REPM)**

## **Summary of Methodology for the British Columbia Regional Employment Projection Model (REPM)**

### **Overview**

The methodology used in the model is based on previous work on community dependencies carried out by BC Stats. The fundamental premise is that the economy of a region can be represented by income flows that can be classified as “basic” (or driver) and “non-basic” (or induced) depending on the source of the income. Basic income is the result of employment income generated from “basic jobs” plus investment income.

Included among basic jobs are those that are financed from resources emanating from outside the region. These jobs are labelled as “direct jobs” and are found in industries that export their product internationally, nationally or to other regions within B.C. Typically, export industries are in the goods producing sector, e.g., the primary and manufacturing industries. However, with globalization, certain industries in the service producing sector are increasingly exporting their products; examples of this would be port facilities (categorized in the Water Transport industry), the Financial and Insurance industries, and High Technology Business Service industries (such as Engineering), etc. As well, the metropolitan regions provide retail and wholesale trade services to the outlying regions of B.C. and many local economies provide tourism services such as accommodation, food, and recreation services to residents from other regions (both inside and outside the province).

Another less obvious component of direct jobs are those in the public sector. Education, health and government jobs are generated through tax revenues from the Federal or Provincial governments so those industries rely on general tax revenues coming from outside the region<sup>1</sup>.

The other component of basic jobs is classified as “indirect jobs”. The model calculates indirect employment effects from employment changes in direct jobs. For example, when direct jobs are created in a local sawmill, indirect jobs will be created in the “upstream” industries that supply goods and services that go into the production of lumber such as the logging industry, the equipment manufacturing industry, etc., and in the “downstream” industries that get the lumber to market such as the transportation industry, and the wholesale trade industry, etc. The model calculates these indirect jobs using multipliers based on inter-industry linkages from the British Columbia Input-Output Model. The sum of the direct jobs and the indirect jobs are labelled basic jobs. The wages and salaries earned from these basic jobs are the major component of basic income.

The other component of basic income is principally investment income and transfer payments which are assumed to come from outside the local community. Private pensions comprise a large percent of investment income, while Canada Pension Plan and Old Age Security payments form a large percent of transfer payments. Therefore, the growth in the senior population is used as an indicator of changes in this non-salary/non-wage component of basic income.

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<sup>1</sup> For the purpose of the model, tax payments are treated as an income flow-out of the regional economy and are deducted from total income so are not connected with any particular industry.

Up to this point, the model has calculated the number of basic jobs by industry and the total basic income of the local region. The next step is to calculate the number of jobs created as a result of the expenditure of this basic income by the local population on household goods and services such as retail trades, restaurants, transportation, residential construction, etc. These induced jobs are called “non-basic jobs” and are calculated using a multiplier based on an income to non-basic jobs ratio derived from the British Columbia Input-Output Model. The final result is a count of the number of non-basic jobs by industry which is then added to the basic jobs to derive total jobs by industry by region.

The final component of the model is to convert the industry employment levels into occupation employment levels. To this end, fixed occupation-to-industry ratios, based on the 2006 Census of Canada data, are applied. Three different ratio structures are used: one for the Vancouver Census Metropolitan Area, one for the Victoria Census Metropolitan Area, and one for the “Rest of Province”.

## **Data Sources**

The current version of the model is benchmarked to the 2006 Census employment by Regional District (RD), and estimates are projected forward to the most up-to-date annual employment data from the Labour Force Survey (LFS). The growth rates for the direct industries from the LFS at the provincial level are used to project growth down to the RD level and then the sub-provincial growth rates are refined using standard variables that indicate differential growth between the regions. The population estimates and projections produced by BC Stats are an important data source for this purpose. For example, the employment growth in the education sector is largely dictated by the projected K-12 and post-secondary population growth in the relevant age groups. Government Services industry grows in line with the total population growth as does the social assistance industry. Employment in the health sector is primarily governed by the growth in the total population and, in particular, by the growth in the seniors’ population. The industries that have components in the tourism sector are differentiated according to the sub-provincial growth rates in tax revenues derived from room rentals. A further important determining factor of sub-region direct employment growth in the private sector is the major projects underway in the timeframe.

The output from the model is benchmarked to the LFS industry employment numbers at the B.C. level, as well as to the LFS regional employment numbers for the Development Regions and the Victoria and Vancouver Census Metropolitan Areas.

Once the model is updated to the most current employment levels, then the forecast is produced for five years out. The industrial employment projections from the Canadian Occupational Projection System (COPS) are now used as the source data for the industrial growth, benchmarked to the British Columbia Ministry of Finance’s employment growth rate projections for the goods producing sector and the service producing sector. These growth rates are used in determining both the growth rates in the direct employment and as a benchmark to reconcile the industrial employment generated by the model. The allocation of the provincial growth pattern forecast among the regions is done the same way as the estimates. Population forecasts by Regional District and the information on planned capital projects from the BC Major Projects Inventory are used as the drivers. The one exception is there are no forecasts available

for Room Tax Revenue so, for the tourism industries, the new completed major projects in the food and accommodation sector are integrated into the model.

Currently, there is a demand for economic forecasts by occupation at the College Region level. College Regions are aggregations of sub-sets of Regional Districts. Occupational forecasts are produced at the College Region and the provincial level only. The accompanying appendices contain a conversion table which outlines which Regional District belongs to which College Region.

## **Updating**

The intent is to update the Regional Employment Projection Model annually, based on another year of LFS data plus a new COPS forecast. The multiplier coefficients used to calculate indirect employment, non-basic employment, and occupational employment are to be updated every five years when regional updated Census data becomes available. At that time, the Regional District employment data by industry will also be re-benchmarked.

The model is only as good as the input data assumptions. Reliance on good quality data from COPS is very important. Users of the data who perceive any problems with the assumptions in the model or question the quality of any of the data series we are using, should contact Cathy Stock, Director, Labour and Social Statistics, at (250) 953-3703 or [Cathy.Stock@gov.bc.ca](mailto:Cathy.Stock@gov.bc.ca).

July 2009

## Appendix 2

### REPM INDUSTRY

### COPS INDUSTRY

ACC&FD	31 Accommodation and food services
AGRIC	1 Agriculture
BEVMFG	9 Food and Beverage Products
BUS_HI	25 Computer System Design Services
BUS_HI	24 Professional Business Services
BUS_HI	26 Other Professional Services
BUS_LO	27 Management, Administrative and Other Support
BUS_LO	24 Professional Business Services
BUS_LO	26 Other Professional Services
COMMUNICA	30 Information, culture and recreation
CONSTRUCT	8 Construction
EDUCATION	28 Educational Services
FIRE	23 Finance, Insurance, Real Estate and Leasing
FISHING	3 Fishing, Hunting and Trapping
FISHMFG	9 Food and Beverage Products
FOODMFG	9 Food and Beverage Products
FORESTLOG	2 Forestry and Logging with support activities
GOVT	33 Public administration
HEALTH	29 Health Care and Social Assistance
MINING	5 Mining (except Oil and Gas)
MINING	6 Support Activities for Mining and Oil & Gas Extraction
MINMFG	14 Manufactured Mineral Products
OTHMFG	12 Printing and Related Support Activities
OTHMFG	13 Rubber, Plastics and Chemicals
OTHMFG	14 Manufactured Mineral Products
OTHMFG	15 Metal Fabrication and Machinery (excluding electrical)
OTHMFG	16 Computer, Electronic and Electrical Products
OTHMFG	17 Transportation Equipment Manufacturing
OTHMFG	18 Other Manufacturing
OTHSERV	29 Health Care and Social Assistance
OTHSERV	32 Other services
PAPERPULP	11 Paper Manufacturing
PETROL	4 Oil and Gas Extraction
PETROL	6 Support Activities for Mining and Oil and Gas Extraction
PETROLMFG	19 Other Manufacturing
RETAIL	21 Retail Trade
TRANOTHER	22 Transportation and Warehousing
TRANRAIL	22 Transportation and Warehousing
TRANTRUCK	22 Transportation and Warehousing
TRANWATER	22 Transportation and Warehousing
UTILITIES	7 Utilities
WDOTHER	10 Wood Product Manufacturing
WDSAWMILLS	10 Wood Product Manufacturing
WHOLESALE	20 Wholesale Trade

### Appendix 3

#### REGIONAL DISTRICT TO COLLEGE REGION CONVERSION FOR REPM

COLLEGE REGION REGIONAL	REGIONAL DISTRICT #	REGIONAL DISTRICT NAME	% of REGIONAL DISTRICT
CAMOSUN	17	Capital	100
FRASER VALLEY	9	Fraser Valley	100
LOWER MAINLAND	15	Greater Vancouver	100
LOWER MAINLAND	29	Sunshine Coast	100
LOWER MAINLAND	31	Squamish Lillooet	87
MALASPINA	19	Cowichan Valley	100
MALASPINA	21	Nanaimo	100
MALASPINA	27	Powell River	100
NEW CALEDONIA	41	Cariboo	37
NEW CALEDONIA	51	Bulkley Nechako	61
NEW CALEDONIA	53	Fraser-Fort George	100
NORTH ISLAND	23	Alberni-Clayoquot	100
NORTH ISLAND	25	Comox Strathcona	100
NORTH ISLAND	43	Mount Waddington	100
NORTH ISLAND	45	Central Coast	100
NORTHERN LIGHTS	49	Kitimat Stikine	2
NORTHERN LIGHTS	55	Peace River	100
NORTHERN LIGHTS	57	Stikine	100
NORTHERN LIGHTS	59	Northern Rockies	100
NORTHWEST	47	Skeena-Queen Charlotte	100
NORTHWEST	49	Kitimat Stikine	98
NORTHWEST	51	Bulkley Nechako	39
OKANAGAN	7	Okanagan- Similkameen	100
OKANAGAN	35	Central Okanagan	100
OKANAGAN	37	North Okanagan	100
OKANAGAN	39	Columbia Shushwap	85
ROCKIES	1	East Kootenay	100
ROCKIES	3	Central Kootenays	20
ROCKIES	39	Columbia Shushwap	15
SELKIRK	3	Central Kootenay	80
SELKIRK	5	Kootenay Boundary	100
THOMPSON RIVERS	31	Squamish Lillooet	13
THOMPSON RIVERS	33	Thompson Nicola	100
THOMPSON RIVERS	41	Cariboo	63

Prepared by: BC Stats

## **Appendix 4**

### **Projected Annual Growth Rates in Occupational Demand (3-digit)**

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	<u>2008</u>	<u>2013</u>	<u>2008 to 2013</u>
All occupations	38,710	40,530	0.9
A01 Legislators and senior management	280	290	0.8
A11 Administrative services managers	210	220	0.9
A12 Managers in engineering, architecture, science and information systems	50	50	1.0
A13 Sales, marketing and advertising managers	170	180	1.3
A14 Facility operation and maintenance managers	90	100	0.8
A21 Managers in retail trade	840	870	0.8
A22 Managers in food service and accommodation	420	440	1.2
A30 Managers in financial and business services	220	230	1.0
A31 Managers in communication (except broadcasting)	20	20	1.0
A32 Managers in health, education, social and community services	220	220	0.5
A33 Managers in public administration	20	30	0.3
A34 Managers in art, culture, recreation and sport	50	60	0.8
A35 Managers in protective service	50	50	0.0
A36 Managers in other services	70	70	0.7
A37 Managers in construction and transportation	320	320	0.0
A38 Managers in primary production (except agriculture)	80	90	1.2
A39 Managers in manufacturing and utilities	190	200	1.4
B01 Auditors, accountants and investment professionals	390	410	1.0
B02 Human resources and business service professionals	130	140	1.1
B11 Finance and insurance administrative occupations	600	630	1.0
B21 Secretaries, recorders and transcriptionists	620	650	0.7
B31 Administrative and regulatory occupations	700	730	0.8
B41 Clerical supervisors	150	160	0.9
B51 Clerical occupations, general office skills	990	1,040	1.0
B52 Office equipment operators	80	90	0.8
B53 Finance and insurance clerks	510	530	1.0
B54 Administrative support clerks	210	220	0.8
B55 Library, correspondence and related information clerks	390	410	0.6
B56 Mail and message distribution occupations	280	290	1.0
B57 Recording, scheduling and distributing occupations	430	460	1.1
C01 Physical science professionals	40	40	0.7
C02 Life science professionals	170	180	1.5
C03 Civil, mechanical, electrical and chemical engineers	130	140	0.9
C04 Other engineers	60	60	0.7
C05 Architects, urban planners and land surveyors	60	70	0.7
C06 Mathematicians, statisticians and actuaries	0	0	1.7
C07 Computer and information systems professionals	160	170	1.3
C11 Technical occupations in physical sciences	100	100	0.8
C12 Technical occupations in life sciences	270	280	1.3
C13 Technical occupations in civil, mechanical and industrial engineering	70	70	0.8
C14 Technical occupations in electronics and electrical engineering	180	190	0.8
C15 Technical occupations in architecture, drafting, surveying and mapping	100	100	1.3
C16 Other technical inspectors and regulatory officers	110	120	0.7
C17 Transportation officers and controllers	200	210	1.1
C18 Technical occupations in computer and information systems	120	130	1.0
D01 Physicians, dentists and veterinarians	180	190	1.8

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	<u>2008</u>	<u>2013</u>	<u>2008 to 2013</u>
D02 Optometrists, chiropractors and other health diagnosing and treating professionals	20	30	1.8
D03 Pharmacists, dietitians and nutritionists	60	60	1.1
D04 Therapy and assessment professionals	80	80	1.6
D11 Nurse supervisors and registered nurses	610	670	1.8
D21 Medical technologists and technicians (except dental health)	160	180	1.8
D22 Technical occupations in dental health care	40	50	1.8
D23 Other technical occupations in health care (except dental)	290	320	1.6
D31 Assisting occupations in support of health services	630	680	1.7
E01 Judges, lawyers and Quebec notaries	70	70	1.1
E02 Psychologists, social workers, counsellors, clergy and probation officers	330	340	1.0
E03 Policy and program officers, researchers and consultants	260	270	0.7
E11 University professors and assistants	140	140	0.0
E12 College and other vocational instructors	240	240	0.2
E13 Secondary and elementary school teachers and educational counsellors	1,230	1,230	0.0
E21 Paralegals, social services workers and occupations in education and religion, n.e.c.	900	960	1.3
F01 Librarians, archivists, conservators and curators	30	30	0.8
F02 Writing, translating and public relations professionals	130	130	0.8
F03 Creative and performing artists	200	200	0.4
F11 Technical occupations in libraries, archives, museums and art galleries	50	50	0.5
F12 Photographers, graphic arts technicians and technical and co-ordinating occupations in motion pictures, broadcasting and the performing arts	70	80	1.1
F13 Announcers and other performers	20	20	0.9
F14 Creative designers and craftspersons	230	240	1.2
F15 Athletes, coaches, referees and related occupations	290	300	0.7
G01 Sales and service supervisors	300	310	1.0
G11 Sales representatives, wholesale trade	210	220	1.2
G12 Technical sales specialists, wholesale trade	50	50	1.4
G13 Insurance and real estate sales occupations and buyers	210	220	1.0
G21 Retail salespersons and sales clerks	1,620	1,690	0.8
G31 Cashiers	740	770	0.8
G41 Chefs and cooks	660	700	1.3
G51 Occupations in food and beverage service	650	690	1.2
G61 Police officers and firefighters	240	240	0.0
G62 Other occupations in protective service	210	210	0.1
G63 Security guards and related occupations	120	130	0.9
G71 Occupations in travel and accommodation	190	200	1.1
G72 Tour and recreational guides and casino occupations	100	110	0.8
G73 Other occupations in travel, accommodation, amusement and recreation	110	110	0.9
G81 Child care and home support workers	810	840	0.7
G91 Technical occupations in personal service	160	160	0.6
G92 Other occupations in personal service	110	110	0.7
G93 Cleaners	1,270	1,330	0.9
G94 Butchers and bakers, retail and wholesale	170	180	1.0
G96 Food counter attendants, kitchen helpers and related occupations	840	890	1.2
G97 Other sales and related occupations	520	540	0.8
G98 Other elemental service occupations	90	90	0.9

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	<u>2008</u>	<u>2013</u>	<u>2008 to 2013</u>
H01 Contractors and supervisors, trades and related workers	310	310	0.2
H02 Supervisors, railway and motor transportation occupations	30	30	1.0
H11 Plumbers, pipefitters and gas fitters	210	210	0.0
H12 Carpenters and cabinetmakers	610	610	-0.3
H13 Masonry and plastering trades	220	220	-0.2
H14 Other construction trades	320	320	-0.2
H21 Electrical trades and telecommunications occupations	440	450	0.3
H22 Stationary engineers and power station and system operators	90	90	1.1
H31 Machinists and related occupations	60	60	1.7
H32 Metal forming, shaping and erecting trades	330	350	1.0
H41 Machinery and transportation equipment mechanics (except motor vehicle)	650	690	1.1
H42 Automotive service technicians	370	380	0.7
H43 Other mechanics	60	60	0.7
H51 Upholsterers, tailors, shoe repairers, jewellers and related occupations	30	40	0.7
H52 Printing press operators, commercial divers and other trades and related occupations, n.e.c.	70	80	1.2
H53 Other installers, repairers and servicers	170	170	0.3
H61 Heavy equipment operators	500	500	0.1
H62 Crane operators, drillers and blasters	70	70	0.8
H71 Motor vehicle and transit drivers	1,920	2,030	1.1
H72 Train crew operating occupations	80	90	1.1
H73 Other transport equipment operators and related workers	140	150	1.1
H81 Longshore workers and material handlers	570	610	1.5
H82 Trades helpers and labourers	600	600	0.0
H83 Public works and other labourers, n.e.c.	100	100	0.5
I01 Contractors, operators and supervisors in agriculture, horticulture and aquaculture	280	290	0.7
I02 Agriculture and horticulture workers	230	240	0.9
I11 Supervisors, logging and forestry	60	70	3.2
I12 Supervisors, mining, oil and gas	60	60	-0.7
I13 Underground miners, oil and gas drillers and related workers	80	80	-0.1
I14 Mine service workers and operators in oil and gas drilling	40	50	0.8
I15 Logging machinery operators	200	240	3.3
I16 Logging and forestry workers	180	210	2.7
I17 Fishing vessel masters and skippers and fishermen/women	210	210	0.2
I18 Other fishing and trapping occupations	50	50	0.2
I21 Primary production labourers	690	730	1.3
J01 Supervisors, processing occupations	210	220	1.8
J02 Supervisors, assembly and fabrication	10	10	2.0
J11 Central control and process operators in manufacturing and processing	180	190	1.3
J12 Machine operators and related workers in metal and mineral products processing	230	250	1.8
J13 Machine operators and related workers in chemical, plastic and rubber processing	40	50	1.0
J14 Machine operators and related workers in pulp and paper production and wood processing	370	410	2.3
J15 Machine operators and related workers in textile processing	10	10	0.9

# *Northwest College Region*

## **Projected Annual Growth Rates in Occupational Demand**

	Estimated Employment		Avg Annual % Chng Over 5 Years
	<u>2008</u>	<u>2013</u>	<u>2008 to 2013</u>
J16 Machine operators and related workers in fabric, fur and leather products manufacturing	20	20	0.9
J17 Machine operators and related workers in food, beverage and tobacco processing	300	320	1.2
J18 Printing machine operators and related occupations	40	40	0.0
J19 Machining, metalworking, woodworking and related machine operators	70	80	2.1
J21 Mechanical, electrical and electronics assemblers	20	20	1.4
J22 Other assembly and related occupations	150	160	2.0
J31 Labourers in processing, manufacturing and utilities	850	930	1.8

## **Appendix 5**

### **Projected Annual Growth Rates in Occupational Demand (4-digit)**

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
All occupations	38,710	40,530	0.9
A Management occupations	3,310	3,450	0.8
A0 Senior management occupations	280	290	0.8
A01 Legislators and senior management	280	290	0.8
A011 Legislators	40	40	0.0
A012 Senior government managers and officials	40	40	0.0
A013 Senior managers - Financial, communications and other business services	40	40	1.3
A014 Senior managers - Health, education, social and community services and membership organizations	30	40	0.9
A015 Senior managers - Trade, broadcasting and other services, n.e.c.	40	40	1.0
A016 Senior managers - Goods production, utilities, transportation and construction	80	90	1.1
A1 Specialist managers	530	560	1.0
A11 Administrative services managers	210	220	0.9
A111 Financial managers	80	90	0.9
A112 Human resources managers	50	50	0.9
A113 Purchasing managers	10	10	0.9
A114 Other administrative services managers	70	70	0.8
A12 Managers in engineering, architecture, science and information systems	50	50	1.0
A121 Engineering managers	20	20	0.9
A122 Computer and information systems managers	30	30	1.0
A123 Architecture and science managers	10	10	1.0
A13 Sales, marketing and advertising managers	170	180	1.3
A131 Sales, marketing and advertising managers	170	190	1.3
A14 Facility operation and maintenance managers	90	100	0.8
A141 Facility operation and maintenance managers	90	100	0.8
A2 Managers in retail trade, food and accommodation services	1,250	1,310	0.9
A21 Managers in retail trade	840	870	0.8
A211 Retail trade managers	840	870	0.8
A22 Managers in food service and accommodation	420	440	1.2
A221 Restaurant and food service managers	250	270	1.2
A222 Accommodation service managers	160	170	1.2
A3 Other managers, n.e.c.	1,250	1,290	0.6
A30 Managers in financial and business services	220	230	1.0
A301 Insurance, real estate and financial brokerage managers	120	130	1.0
A302 Banking, credit and other investment managers	80	90	1.0
A303 Other business services managers	10	10	0.9
A31 Managers in communication (except broadcasting)	20	20	1.0
A311 Telecommunication carriers managers	10	10	1.0
A312 Postal and courier services managers	10	10	1.1
A32 Managers in health, education, social and community services	220	220	0.5
A321 Managers in health care	40	40	1.7
A322 Administrators - Post-secondary education and vocational training	30	30	0.0
A323 School principals and administrators of elementary and secondary education	110	110	0.0
A324 Managers in social, community and correctional services	40	40	1.2
A33 Managers in public administration	20	30	0.3

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
A331 Government managers - Health and social policy development and program administration	10	10	0.6
A332 Government managers - Economic analysis, policy development and program administration	10	10	0.1
A333 Government managers - Education policy development and program administration	-	-	-
A334 Other managers in public administration	10	10	0.1
A34 Managers in art, culture, recreation and sport	50	60	0.8
A341 Library, archive, museum and art gallery managers	10	10	0.7
A342 Managers - Publishing, motion pictures, broadcasting and performing arts	10	10	0.8
A343 Recreation, sports and fitness program and service directors	30	30	0.7
A35 Managers in protective service	50	50	0.0
A351 Commissioned police officers	-	-	-
A352 Fire chiefs and senior firefighting officers	10	10	0.1
A353 Commissioned officers, armed forces	40	40	0.0
A36 Managers in other services	70	70	0.7
A361 Other services managers	70	70	0.7
A37 Managers in construction and transportation	320	320	0.0
A371 Construction managers	170	170	-0.2
A372 Residential home builders and renovators	90	80	-0.4
A373 Transportation managers	60	70	1.0
A38 Managers in primary production (except agriculture)	80	90	1.2
A381 Primary production managers (except agriculture)	80	90	1.2
A39 Managers in manufacturing and utilities	190	200	1.4
A391 Manufacturing managers	160	180	1.6
A392 Utilities managers	20	20	0.4
B Business, finance and administrative occupations	5,480	5,730	0.9
B0 Professional occupations in business and finance	520	540	1.0
B01 Auditors, accountants and investment professionals	390	410	1.0
B011 Financial auditors and accountants	250	260	1.1
B012 Financial and investment analysts	20	20	0.9
B013 Securities agents, investment dealers and brokers	20	20	1.0
B014 Other financial officers	90	100	1.0
B02 Human resources and business service professionals	130	140	1.1
B021 Specialists in human resources	60	60	0.8
B022 Professional occupations in business services to management	70	80	1.3
B1 Finance and insurance administration occupations	600	630	1.0
B11 Finance and insurance administrative occupations	600	630	1.0
B111 Bookkeepers	470	490	1.0
B112 Loan officers	50	60	1.0
B113 Insurance adjusters and claims examiners	30	40	0.9
B114 Insurance underwriters	10	10	0.9
B115 Assessors, valuers and appraisers	30	30	0.5
B116 Customs, ship and other brokers	-	10	-
B2 Secretaries	620	640	0.7
B21 Secretaries, recorders and transcriptionists	620	650	0.7
B211 Secretaries (except legal and medical)	530	550	0.7

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
B212 Legal secretaries	50	60	1.1
B213 Medical secretaries	10	20	1.7
B214 Court recorders and medical transcriptionists	20	30	1.3
B3 Administrative and regulatory occupations	700	730	0.8
B31 Administrative and regulatory occupations	700	730	0.8
B311 Administrative officers	410	430	0.9
B312 Executive assistants	40	40	0.5
B313 Personnel and recruitment officers	20	20	0.6
B314 Property administrators	100	100	0.9
B315 Purchasing agents and officers	50	50	0.9
B316 Conference and event planners	20	20	0.8
B317 Court officers and justices of the peace	10	10	0.0
B318 Immigration, employment insurance and revenue officers	50	50	0.0
B4 Clerical supervisors	150	160	0.9
B41 Clerical supervisors	150	160	0.9
B411 Supervisors, general office and administrative support clerks	20	20	0.8
B412 Supervisors, finance and insurance clerks	30	30	0.8
B413 Supervisors, library, correspondence and related information clerks	30	30	0.6
B414 Supervisors, mail and message distribution occupations	30	30	1.1
B415 Supervisors, recording, distributing and scheduling occupations	40	40	1.1
B5 Clerical occupations	2,890	3030	0.9
B51 Clerical occupations, general office skills	990	1040	1.0
B511 General office clerks	530	560	0.8
B513 Records management and filing clerks	50	50	1.0
B514 Receptionists and switchboard operators	410	430	1.3
B52 Office equipment operators	80	90	0.8
B522 Data entry clerks	60	60	0.8
B523 Desktop publishing operators and related occupations	10	10	0.3
B524 Telephone operators	20	20	0.8
B53 Finance and insurance clerks	510	530	1.0
B531 Accounting and related clerks	230	240	0.9
B532 Payroll clerks	60	70	1.0
B533 Customer service representatives - Financial services	180	180	1.0
B534 Banking, insurance and other financial clerks	40	40	1.0
B535 Collectors	10	10	0.7
B54 Administrative support clerks	210	220	0.8
B541 Administrative clerks	180	190	0.9
B542 Personnel clerks	20	20	0.8
B543 Court clerks	10	10	0.0
B55 Library, correspondence and related information clerks	390	410	0.6
B551 Library clerks	30	30	0.7
B552 Correspondence, publication and related clerks	10	10	0.7
B553 Customer service, information and related clerks	260	270	0.8
B554 Survey interviewers and statistical clerks	90	100	0.2
B56 Mail and message distribution occupations	280	290	1.0
B561 Mail, postal and related clerks	80	90	1.1
B562 Letter carriers	90	90	1.1

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
B563 Couriers, messengers and door-to-door distributors	100	110	0.9
B57 Recording, scheduling and distributing occupations	430	460	1.1
B571 Shippers and receivers	160	170	1.3
B572 Storekeepers and parts clerks	80	90	1.0
B573 Production clerks	20	30	1.2
B574 Purchasing and inventory clerks	70	70	1.0
B575 Dispatchers and radio operators	90	100	0.8
B576 Transportation route and crew schedulers	10	10	1.0
C Natural and applied sciences and related occupations	1,770	1860	1.0
C0 Professional occupations in natural and applied sciences	620	660	1.1
C01 Physical science professionals	40	40	0.7
C011 Physicists and astronomers	-	-	-
C012 Chemists	10	10	1.4
C013 Geologists, geochemists and geophysicists	20	20	0.7
C014 Meteorologists	-	-	-
C015 Other professional occupations in physical sciences	10	10	0.0
C02 Life science professionals	170	180	1.5
C021 Biologists and related scientists	50	50	0.5
C022 Forestry professionals	100	110	2.1
C023 Agricultural representatives, consultants and specialists	10	10	0.6
C03 Civil, mechanical, electrical and chemical engineers	130	140	0.9
C031 Civil engineers	70	80	0.8
C032 Mechanical engineers	30	40	1.2
C033 Electrical and electronics engineers	20	20	1.0
C034 Chemical engineers	10	10	0.7
C04 Other engineers	60	60	0.7
C041 Industrial and manufacturing engineers	10	20	1.1
C042 Metallurgical and materials engineers	-	-	-
C043 Mining engineers	10	10	-0.8
C044 Geological engineers	10	10	1.1
C045 Petroleum engineers	10	10	1.0
C046 Aerospace engineers	-	-	-
C047 Computer engineers (except software engineers)	10	10	1.2
C048 Other professional engineers, n.e.c.	-	10	-
C05 Architects, urban planners and land surveyors	60	70	0.7
C051 Architects	10	10	0.9
C052 Landscape architects	-	-	-
C053 Urban and land use planners	20	20	0.3
C054 Land surveyors	30	30	0.9
C06 Mathematicians, statisticians and actuaries	-	-	-
C061 Mathematicians, statisticians and actuaries	-	-	-
C07 Computer and information systems professionals	160	170	1.3
C071 Information systems analysts and consultants	60	70	1.2
C072 Database analysts and data administrators	10	10	1.1
C073 Software engineers and designers	10	10	1.5
C074 Computer programmers and interactive media developers	50	50	1.4
C075 Web designers and developers	30	30	1.5

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
C1 Technical occupations related to natural and applied sciences	1,150	1,210	1.0
C11 Technical occupations in physical sciences	100	100	0.8
C111 Chemical technologists and technicians	50	50	0.8
C112 Geological and mineral technologists and technicians	50	50	0.7
C113 Meteorological technicians	-	-	-
C12 Technical occupations in life sciences	270	280	1.3
C121 Biological technologists and technicians	40	50	0.6
C122 Agricultural and fish products inspectors	10	10	0.4
C123 Forestry technologists and technicians	140	150	2.0
C124 Conservation and fishery officers	40	40	0.2
C125 Landscape and horticultural technicians and specialists	30	30	0.8
C13 Technical occupations in civil, mechanical and industrial engineering	70	70	0.8
C131 Civil engineering technologists and technicians	20	20	0.8
C132 Mechanical engineering technologists and technicians	10	10	0.8
C133 Industrial engineering and manufacturing technologists and technicians	10	10	1.5
C134 Construction estimators	20	20	0.3
C14 Technical occupations in electronics and electrical engineering	180	190	0.8
C141 Electrical and electronics engineering technologists and technicians	30	30	0.6
C142 Electronic service technicians (household and business equipment)	100	100	0.8
C143 Industrial instrument technicians and mechanics	40	40	1.2
C144 Aircraft instrument, electrical and avionics mechanics, technicians and inspectors	20	20	0.8
C15 Technical occupations in architecture, drafting, surveying and mapping	100	100	1.3
C151 Architectural technologists and technicians	10	10	1.0
C152 Industrial designers	10	10	1.5
C153 Drafting technologists and technicians	50	50	1.3
C154 Land survey technologists and technicians	10	10	0.8
C155 Mapping and related technologists and technicians	30	30	1.5
C16 Other technical inspectors and regulatory officers	110	120	0.7
C161 Non-destructive testers and inspectors	10	10	1.2
C162 Engineering inspectors and regulatory officers	10	10	0.7
C163 Inspectors in public and environmental health and occupational health and safety	60	60	0.9
C164 Construction inspectors	40	50	0.3
C17 Transportation officers and controllers	200	210	1.1
C171 Air pilots, flight engineers and flying instructors	90	100	1.1
C172 Air traffic control and related occupations	20	20	1.0
C173 Deck officers, water transport	60	60	1.1
C174 Engineer officers, water transport	20	20	1.0
C175 Railway traffic controllers and marine traffic regulators	-	-	-
C18 Technical occupations in computer and information systems	120	130	1.0
C181 Computer network technicians	50	50	0.9
C182 User support technicians	70	70	1.1
C183 Systems testing technicians	-	-	-
D Health occupations	2,080	2,260	1.7
D0 Professional occupations in health	330	360	1.6
D01 Physicians, dentists and veterinarians	180	190	1.8

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
D011 Specialist physicians	40	50	1.8
D012 General practitioners and family physicians	80	90	1.8
D013 Dentists	30	40	1.8
D014 Veterinarians	20	20	1.6
D02 Optometrists, chiropractors and other health diagnosing and treating professionals	20	30	1.8
D021 Optometrists	10	10	1.8
D022 Chiropractors	10	10	1.8
D023 Other professional occupations in health diagnosing and treating	-	-	-
D03 Pharmacists, dietitians and nutritionists	60	60	1.1
D031 Pharmacists	40	40	0.9
D032 Dietitians and nutritionists	10	20	1.8
D04 Therapy and assessment professionals	80	80	1.6
D041 Audiologists and speech-language pathologists	20	20	1.0
D042 Physiotherapists	30	40	1.8
D043 Occupational therapists	20	20	1.8
D044 Other professional occupations in therapy and assessment	10	10	1.6
D1 Nurse supervisors and registered nurses	610	670	1.8
D11 Nurse supervisors and registered nurses	610	670	1.8
D111 Head nurses and supervisors	20	20	1.8
D112 Registered nurses	600	650	1.8
D2 Technical and related occupations in health	500	540	1.7
D21 Medical technologists and technicians (except dental health)	160	180	1.8
D211 Medical laboratory technologists and pathologists' assistants	40	40	1.8
D212 Medical laboratory technicians	40	40	1.8
D213 Veterinary and animal health technologists and technicians	30	30	1.7
D214 Respiratory therapists, clinical perfusionists and cardio-pulmonary technologists	10	10	1.8
D215 Medical radiation technologists	40	40	1.8
D216 Medical sonographers	10	10	1.8
D217 Cardiology technologists	-	10	-
D218 Electroencephalographic and other diagnostic technologists, n.e.c.	-	-	-
D219 Other medical technologists and technicians (except dental health)	-	-	-
D22 Technical occupations in dental health care	40	50	1.8
D221 Denturists	-	-	-
D222 Dental hygienists and dental therapists	30	40	1.8
D223 Dental technologists, technicians and laboratory bench workers	10	10	1.6
D23 Other technical occupations in health care (except dental)	290	320	1.6
D231 Opticians	10	20	1.3
D232 Midwives and practitioners of natural healing	20	20	1.7
D233 Licensed practical nurses	100	110	1.8
D234 Ambulance attendants and other paramedical occupations	110	120	1.6
D235 Other technical occupations in therapy and assessment	50	50	1.3
D3 Assisting occupations in support of health services	630	680	1.7
D31 Assisting occupations in support of health services	630	680	1.7
D311 Dental assistants	100	110	1.8
D312 Nurse aides, orderlies and patient service associates	410	450	1.8
D313 Other assisting occupations in support of health services	110	120	1.3
E Occupations in social science, education, government service and religion	3,170	3,260	0.6

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
E0 Judges, lawyers, psychologists, social workers, ministers of religion, and policy and program officers	660	690	0.9
E01 Judges, lawyers and Quebec notaries	70	70	1.1
E011 Judges	-	-	-
E012 Lawyers and Quebec notaries	70	70	1.2
E02 Psychologists, social workers, counsellors, clergy and probation officers	330	340	1.0
E021 Psychologists	20	30	1.1
E022 Social workers	120	130	1.1
E023 Family, marriage and other related counsellors	80	90	1.5
E024 Ministers of religion	70	80	0.6
E025 Probation and parole officers and related occupations	20	20	0.1
E03 Policy and program officers, researchers and consultants	260	270	0.7
E031 Natural and applied science policy researchers, consultants and program officers	30	30	0.8
E032 Economists and economic policy researchers and analysts	10	10	0.5
E033 Business development officers and marketing researchers and consultants	50	50	1.0
E034 Social policy researchers, consultants and program officers	40	40	0.6
E035 Education policy researchers, consultants and program officers	30	30	0.0
E036 Recreation, sports and fitness program supervisors and consultants	40	40	0.9
E037 Program officers unique to government	30	30	0.0
E038 Other professional occupations in social science, n.e.c.	10	10	1.1
E039 Health policy researchers, consultants and program officers	30	30	1.2
E1 Teachers and professors	1,610	1,610	0.0
E11 University professors and assistants	140	140	0.0
E111 University professors	90	90	0.0
E112 Post-secondary teaching and research assistants	60	60	0.0
E12 College and other vocational instructors	240	240	0.2
E121 College and other vocational instructors	240	240	0.2
E13 Secondary and elementary school teachers and educational counsellors	1,230	1,230	0.0
E131 Secondary school teachers	440	440	0.0
E132 Elementary school and kindergarten teachers	740	730	0.0
E133 Educational counsellors	60	60	0.0
E2 Paralegals, social services workers and occupations in education and religion, n.e.c.	900	960	1.3
E21 Paralegals, social services workers and occupations in education and religion, n.e.c.	900	960	1.3
E211 Paralegal and related occupations	50	50	1.1
E212 Community and social service workers	340	360	1.4
E213 Employment counsellors	40	40	0.8
E214 Instructors and teachers of persons with disabilities	10	10	0.5
E215 Other instructors	60	60	0.1
E216 Other religious occupations	10	10	0.6
E217 Early childhood educators and assistants	380	420	1.7
F Occupations in art, culture, recreation and sport	1,010	1,050	0.8
F0 Professional occupations in art and culture	350	360	0.6
F01 Librarians, archivists, conservators and curators	30	30	0.8
F011 Librarians	20	20	0.8
F012 Conservators and curators	10	10	0.8

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
F013 Archivists	-	-	-
F02 Writing, translating and public relations professionals	130	130	0.8
F021 Authors and writers	40	50	0.8
F022 Editors	20	20	0.9
F023 Journalists	20	20	0.7
F024 Professional occupations in public relations and communications	30	40	0.8
F025 Translators, terminologists and interpreters	10	10	0.6
F03 Creative and performing artists	200	200	0.4
F031 Producers, directors, choreographers and related occupations	20	20	0.8
F032 Conductors, composers and arrangers	-	-	-
F033 Musicians and singers	80	80	0.2
F034 Dancers	20	20	0.0
F035 Actors and comedians	10	10	0.8
F036 Painters, sculptors and other visual artists	60	70	0.8
F1 Technical occupations in art, culture, recreation and sport	660	690	0.9
F11 Technical occupations in libraries, archives, museums and art galleries	50	50	0.5
F111 Library and archive technicians and assistants	30	30	0.4
F112 Technical occupations related to museums and art galleries	10	10	0.8
F12 Photographers, graphic arts technicians and technical and co-ordinating occupations in motion pictures, broadcasting and the performing arts	70	80	1.1
F121 Photographers	30	30	1.5
F122 Film and video camera operators	10	10	0.9
F123 Graphic arts technicians	-	-	-
F124 Broadcast technicians	10	10	0.6
F125 Audio and video recording technicians	10	10	0.7
F126 Other technical and co-ordinating occupations in motion pictures, broadcasting and the performing arts	10	10	0.8
F127 Support occupations in motion pictures, broadcasting and the performing arts	10	10	0.8
F13 Announcers and other performers	20	20	0.9
F131 Announcers and other broadcasters	20	20	0.9
F132 Other performers	-	-	-
F14 Creative designers and craftspersons	230	240	1.2
F141 Graphic designers and illustrators	60	60	0.7
F142 Interior designers	20	30	1.1
F143 Theatre, fashion, exhibit and other creative designers	10	10	1.0
F144 Artisans and craftspersons	140	150	1.5
F145 Patternmakers - Textile, leather and fur products	-	-	-
F15 Athletes, coaches, referees and related occupations	290	300	0.7
F151 Athletes	10	10	0.8
F152 Coaches	30	30	0.3
F153 Sports officials and referees	20	30	0.8
F154 Program leaders and instructors in recreation, sport and fitness	220	230	0.7
G Sales and service occupations	9,380	9,800	0.9
G0 Sales and service supervisors	300	310	1.0
G01 Sales and service supervisors	300	310	1.0
G011 Retail trade supervisors	150	160	0.8
G012 Food service supervisors	90	90	1.2

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
G013 Executive housekeepers	20	20	1.2
G014 Dry cleaning and laundry supervisors	-	-	-
G015 Cleaning supervisors	20	20	0.7
G016 Other service supervisors	20	20	1.0
G1 Wholesale, technical, insurance, real estate sales specialists, and retail, wholesale and grain buyers	470	500	1.1
G11 Sales representatives, wholesale trade	210	220	1.2
G111 Sales representatives, wholesale trade (non-technical)	210	220	1.2
G12 Technical sales specialists, wholesale trade	50	50	1.4
G121 Technical sales specialists, wholesale trade	50	50	1.4
G13 Insurance and real estate sales occupations and buyers	210	220	1.0
G131 Insurance agents and brokers	90	100	1.0
G132 Real estate agents and salespersons	80	90	0.9
G133 Retail and wholesale buyers	40	40	1.1
G134 Grain elevator operators	-	-	-
G2 Retail salespersons and sales clerks	1,620	1,690	0.8
G21 Retail salespersons and sales clerks	1,620	1,690	0.8
G211 Retail salespersons and sales clerks	1,620	1,690	0.8
G3 Cashiers	740	770	0.8
G31 Cashiers	740	770	0.8
G311 Cashiers	740	770	0.8
G4 Chefs and cooks	660	700	1.3
G41 Chefs and cooks	660	700	1.3
G411 Chefs	100	110	1.2
G412 Cooks	560	590	1.3
G5 Occupations in food and beverage service	650	690	1.2
G51 Occupations in food and beverage service	650	690	1.2
G511 Maitres d'hôtel and hosts/hostesses	50	60	1.2
G512 Bartenders	100	100	1.2
G513 Food and beverage servers	500	530	1.3
G6 Occupations in protective services	580	580	0.2
G61 Police officers and firefighters	240	240	0.0
G611 Police officers (except commissioned)	170	170	0.0
G612 Firefighters	70	70	0.1
G62 Other occupations in protective service	210	210	0.1
G621 Sheriffs and bailiffs	10	10	0.4
G622 Correctional service officers	80	80	0.0
G623 By-law enforcement and other regulatory officers, n.e.c.	30	30	0.2
G624 Other ranks, armed forces	70	70	0.0
G625 Other protective service occupations	20	20	0.6
G63 Security guards and related occupations	120	130	0.9
G631 Security guards and related occupations	120	130	0.9
G7 Occupations in travel and accommodation, including attendants in recreation and sport	400	420	1.0
G71 Occupations in travel and accommodation	190	200	1.1
G711 Travel counsellors	40	40	0.8
G712 Pursers and flight attendants	10	10	1.1
G713 Airline sales and service agents	30	30	1.1

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
G714 Ticket agents, cargo service representatives and related clerks (except airline)	10	10	1.1
G715 Hotel front desk clerks	90	100	1.3
G72 Tour and recreational guides and casino occupations	100	110	0.8
G721 Tour and travel guides	30	30	0.8
G722 Outdoor sport and recreational guides	40	50	0.8
G723 Casino occupations	30	30	0.9
G73 Other occupations in travel, accommodation, amusement and recreation	110	110	0.9
G731 Operators and attendants in amusement, recreation and sport	90	100	0.8
G732 Other attendants in accommodation and travel	10	10	1.1
G8 Child care and home support workers	810	840	0.7
G81 Child care and home support workers	810	840	0.7
G811 Visiting homemakers, housekeepers and related occupations	260	280	1.6
G812 Elementary and secondary school teacher assistants	380	380	0.0
G814 Babysitters, nannies and parents' helpers	170	180	1.0
G9 Sales and service occupations, n.e.c.	3,160	3,310	0.9
G91 Technical occupations in personal service	160	160	0.6
G911 Hairstylists and barbers	150	160	0.6
G912 Funeral directors and embalmers	10	10	0.6
G92 Other occupations in personal service	110	110	0.7
G921 Image, social and other personal consultants	10	10	0.7
G922 Estheticians, electrologists and related occupations	60	60	0.6
G923 Pet groomers and animal care workers	40	40	0.7
G924 Other personal service occupations	-	-	-
G93 Cleaners	1,270	1,330	0.9
G931 Light duty cleaners	490	520	1.1
G932 Specialized cleaners	110	120	0.8
G933 Janitors, caretakers and building superintendents	670	690	0.7
G94 Butchers and bakers, retail and wholesale	170	180	1.0
G941 Butchers, meat cutters and fishmongers, retail and wholesale	60	60	0.8
G942 Bakers	120	120	1.1
G96 Food counter attendants, kitchen helpers and related occupations	840	890	1.2
G961 Food counter attendants, kitchen helpers and related occupations	840	890	1.2
G97 Other sales and related occupations	520	540	0.8
G971 Service station attendants	110	110	0.8
G972 Grocery clerks and store shelf stockers	330	350	0.8
G973 Other elemental sales occupations	80	80	0.9
G98 Other elemental service occupations	90	90	0.9
G981 Dry cleaning and laundry occupations	40	50	1.1
G982 Ironing, pressing and finishing occupations	10	10	0.7
G983 Other elemental service occupations	40	40	0.8
H Trades, transport and equipment operators and related occupations	7,940	8,190	0.6
H0 Contractors and supervisors in trades and transportation	340	340	0.3
H01 Contractors and supervisors, trades and related workers	310	310	0.2
H011 Supervisors, machinists and related occupations	10	10	1.4
H012 Contractors and supervisors, electrical trades and telecommunications occupations	30	30	-0.1

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
H013 Contractors and supervisors, pipefitting trades	10	10	-0.1
H014 Contractors and supervisors, metal forming, shaping and erecting trades	20	20	1.0
H015 Contractors and supervisors, carpentry trades	40	40	-0.2
H016 Contractors and supervisors, mechanic trades	40	50	0.9
H017 Contractors and supervisors, heavy construction equipment crews	80	80	0.3
H018 Supervisors, printing and related occupations	-	-	-
H019 Contractors and supervisors, other construction trades, installers, repairers and servicers	70	70	-0.2
H02 Supervisors, railway and motor transportation occupations	30	30	1.0
H021 Supervisors, railway transport operations	10	10	1.1
H022 Supervisors, motor transport and other ground transit operators	20	20	1.0
H1 Construction trades	1,350	1,340	-0.2
H11 Plumbers, pipefitters and gas fitters	210	210	0.0
H111 Plumbers	110	110	-0.3
H112 Steamfitters, pipefitters and sprinkler system installers	80	80	0.6
H113 Gas fitters	20	20	-0.2
H12 Carpenters and cabinetmakers	610	610	-0.3
H121 Carpenters	580	570	-0.3
H122 Cabinetmakers	30	30	0.6
H13 Masonry and plastering trades	220	220	-0.2
H131 Bricklayers	40	40	0.2
H132 Concrete finishers	40	50	0.4
H133 Tilesetters	20	20	-0.5
H134 Plasterers, drywall installers and finishers and lathers	100	100	-0.5
H14 Other construction trades	320	320	-0.2
H141 Roofers and shinglers	70	70	-0.5
H142 Glaziers	40	40	0.9
H143 Insulators	20	20	-0.1
H144 Painters and decorators	140	140	-0.4
H145 Floor covering installers	50	50	-0.2
H2 Stationary engineers, power station operators and electrical trades and telecommunications occupations	530	540	0.5
H21 Electrical trades and telecommunications occupations	440	450	0.3
H211 Electricians (except industrial and power system)	180	180	-0.4
H212 Industrial electricians	150	150	1.2
H213 Power system electricians	10	10	0.2
H214 Electrical power line and cable workers	30	30	0.1
H215 Telecommunications line and cable workers	20	20	0.7
H216 Telecommunications installation and repair workers	40	40	0.9
H217 Cable television service and maintenance technicians	10	10	0.8
H22 Stationary engineers and power station and system operators	90	90	1.1
H221 Stationary engineers and auxiliary equipment operators	80	90	1.1
H222 Power systems and power station operators	10	10	0.3
H3 Machinists, metal forming, shaping and erecting occupations	390	410	1.1
H31 Machinists and related occupations	60	60	1.7
H311 Machinists and machining and tooling inspectors	50	60	1.7
H312 Tool and die makers	-	-	-
H32 Metal forming, shaping and erecting trades	330	350	1.0

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
H321 Sheet metal workers	40	40	0.2
H322 Boilermakers	10	10	1.1
H323 Structural metal and platework fabricators and fitters	40	40	1.6
H324 Ironworkers	30	30	0.6
H325 Blacksmiths and die setters	-	-	-
H326 Welders and related machine operators	210	220	1.0
H4 Mechanics	1,080	1,130	0.9
H41 Machinery and transportation equipment mechanics (except motor vehicle)	650	690	1.1
H411 Construction millwrights and industrial mechanics (except textile)	330	350	1.4
H412 Heavy-duty equipment mechanics	210	220	0.8
H413 Refrigeration and air conditioning mechanics	30	30	-0.1
H414 Railway carmen/women	10	10	1.2
H415 Aircraft mechanics and aircraft inspectors	50	60	1.0
H416 Machine fitters	-	-	-
H417 Textile machinery mechanics and repairers	-	-	-
H418 Elevator constructors and mechanics	-	-	-
H42 Automotive service technicians	370	380	0.7
H421 Automotive service technicians, truck and bus mechanics and mechanical repairers	310	320	0.8
H422 Motor vehicle body repairers	60	60	0.7
H43 Other mechanics	60	60	0.7
H431 Oil and solid fuel heating mechanics	-	-	-
H432 Electric appliance servicers and repairers	20	20	0.5
H433 Electrical mechanics	10	10	0.6
H434 Motorcycle and other related mechanics	10	10	0.8
H435 Other small engine and equipment mechanics	20	30	0.8
H5 Other trades, n.e.c.	280	280	0.6
H51 Upholsterers, tailors, shoe repairers, jewellers and related occupations	30	40	0.7
H511 Upholsterers	10	10	0.7
H512 Tailors, dressmakers, furriers and milliners	20	20	0.6
H513 Shoe repairers and shoemakers	-	-	-
H514 Jewellers, watch repairers and related occupations	10	10	0.9
H52 Printing press operators, commercial divers and other trades and related occupations, n.e.c.	70	80	1.2
H521 Printing press operators	10	10	-0.9
H522 Commercial divers	10	10	0.5
H523 Other trades and related occupations	50	60	1.8
H53 Other installers, repairers and servicers	170	170	0.3
H531 Residential and commercial installers and servicers	90	90	0.0
H532 Waterworks and gas maintenance workers	10	10	0.3
H533 Automotive mechanical installers and servicers	40	40	0.7
H534 Pest controllers and fumigators	-	-	-
H535 Other repairers and servicers	30	30	0.9
H6 Heavy equipment and crane operators, including drillers	570	580	0.2
H61 Heavy equipment operators	500	500	0.1
H611 Heavy equipment operators (except crane)	460	460	0.0
H612 Public works maintenance equipment operators	40	50	0.8
H62 Crane operators, drillers and blasters	70	70	0.8

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
H621 Crane operators	50	50	1.1
H622 Drillers and blasters - Surface mining, quarrying and construction	20	20	0.2
H623 Water well drillers	10	10	-0.3
H7 Transportation equipment operators and related workers, excluding labourers	2,140	2,260	1.1
H71 Motor vehicle and transit drivers	1,920	2,030	1.1
H711 Truck drivers	1,390	1,470	1.2
H712 Bus drivers and subway and other transit operators	180	190	0.9
H713 Taxi and limousine drivers and chauffeurs	100	110	1.1
H714 Delivery and courier service drivers	240	260	1.1
H72 Train crew operating occupations	80	90	1.1
H721 Railway and yard locomotive engineers	40	40	1.1
H722 Railway conductors and brakemen/women	50	50	1.1
H73 Other transport equipment operators and related workers	140	150	1.1
H731 Railway yard workers	10	10	1.3
H732 Railway track maintenance workers	30	30	1.1
H733 Deck crew, water transport	60	60	1.0
H734 Engine room crew, water transport	-	-	-
H735 Lock and cable ferry operators and related occupations	20	20	1.0
H736 Boat operators	10	10	1.5
H737 Air transport ramp attendants	10	10	1.1
H8 Trades helpers, construction and transportation labourers and related occupations	1,260	1,310	0.7
H81 Longshore workers and material handlers	570	610	1.5
H811 Longshore workers	40	40	1.0
H812 Material handlers	530	570	1.5
H82 Trades helpers and labourers	600	600	0.0
H821 Construction trades helpers and labourers	570	570	0.0
H822 Other trades helpers and labourers	30	30	0.9
H83 Public works and other labourers, n.e.c.	100	100	0.5
H831 Public works and maintenance labourers	80	80	0.3
H832 Railway and motor transport labourers	20	20	1.0
I Occupations unique to primary industry	2,090	2,220	1.3
I0 Occupations unique to agriculture, excluding labourers	510	530	0.8
I01 Contractors, operators and supervisors in agriculture, horticulture and aquaculture	280	290	0.7
I011 Farmers and farm managers	190	200	0.7
I012 Agricultural and related service contractors and managers	-	-	-
I013 Farm supervisors and specialized livestock workers	10	10	0.6
I014 Nursery and greenhouse operators and managers	10	10	1.4
I015 Landscaping and grounds maintenance contractors and managers	30	30	0.8
I016 Supervisors, landscape and horticulture	20	20	0.7
I017 Aquaculture operators and managers	10	10	0.4
I02 Agriculture and horticulture workers	230	240	0.9
I021 General farm workers	160	170	0.8
I022 Nursery and greenhouse workers	70	70	1.1
I1 Occupations unique to forestry operations, mining, oil and gas extraction and fishing, excluding labourers	890	960	1.6
I11 Supervisors, logging and forestry	60	70	3.2
I111 Supervisors, logging and forestry	60	70	3.1

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
I12 Supervisors, mining, oil and gas	60	60	-0.7
I121 Supervisors, mining and quarrying	50	50	-1.3
I122 Supervisors, oil and gas drilling and service	20	20	1.7
I13 Underground miners, oil and gas drillers and related workers	80	80	-0.1
I131 Underground production and development miners	60	60	-0.8
I132 Oil and gas well drillers, servicers, testers and related workers	20	20	1.6
I14 Mine service workers and operators in oil and gas drilling	40	50	0.8
I141 Underground mine service and support workers	20	20	-0.5
I142 Oil and gas well drilling workers and services operators	20	30	1.7
I15 Logging machinery operators	200	240	3.3
I151 Logging machinery operators	200	240	3.3
I16 Logging and forestry workers	180	210	2.7
I161 Chain saw and skidder operators	130	150	3.2
I162 Silviculture and forestry workers	60	60	1.9
I17 Fishing vessel masters and skippers and fishermen/women	210	210	0.2
I171 Fishing masters and officers	20	20	0.2
I172 Fishing vessel skippers and fishermen/women	190	190	0.2
I18 Other fishing and trapping occupations	50	50	0.2
I181 Fishing vessel deckhands	50	50	0.2
I182 Trappers and hunters	-	-	-
I2 Primary production labourers	690	740	1.3
I21 Primary production labourers	690	730	1.3
I211 Harvesting labourers	30	30	0.7
I212 Landscaping and grounds maintenance labourers	390	400	0.7
I213 Aquaculture and marine harvest labourers	40	40	0.3
I214 Mine labourers	30	30	-1.1
I215 Oil and gas drilling, servicing and related labourers	40	40	1.6
I216 Logging and forestry labourers	170	190	3.1
J Occupations unique to processing, manufacturing and utilities	2,490	2,710	1.8
J0 Supervisors in manufacturing	220	240	1.8
J01 Supervisors, processing occupations	210	220	1.8
J011 Supervisors, mineral and metal processing	60	70	2.0
J012 Supervisors, petroleum, gas and chemical processing and utilities	20	30	1.2
J013 Supervisors, food, beverage and tobacco processing	20	20	1.2
J014 Supervisors, plastic and rubber products manufacturing	-	-	-
J015 Supervisors, forest products processing	90	100	1.9
J016 Supervisors, textile processing	-	-	-
J02 Supervisors, assembly and fabrication	10	10	2.0
J021 Supervisors, motor vehicle assembling	-	-	-
J022 Supervisors, electronics manufacturing	-	-	-
J023 Supervisors, electrical products manufacturing	-	-	-
J024 Supervisors, furniture and fixtures manufacturing	-	-	-
J025 Supervisors, fabric, fur and leather products manufacturing	-	-	-
J026 Supervisors, other mechanical and metal products manufacturing	-	-	-
J027 Supervisors, other products manufacturing and assembly	-	-	-
J1 Machine operators in manufacturing	1,260	1,360	1.7
J11 Central control and process operators in manufacturing and processing	180	190	1.3

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
J111 Central control and process operators, mineral and metal processing	100	110	1.7
J112 Petroleum, gas and chemical process operators	20	30	1.5
J113 Pulping control operators	20	20	0.7
J114 Papermaking and coating control operators	40	40	0.6
J12 Machine operators and related workers in metal and mineral products processing	230	250	1.8
J121 Machine operators, mineral and metal processing	90	90	1.6
J122 Foundry workers	20	20	2.0
J123 Glass forming and finishing machine operators and glass cutters	40	40	2.0
J124 Concrete, clay and stone forming operators	50	60	1.9
J125 Inspectors and testers, mineral and metal processing	30	40	1.8
J13 Machine operators and related workers in chemical, plastic and rubber processing	40	50	1.0
J131 Chemical plant machine operators	-	-	-
J132 Plastics processing machine operators	10	10	2.2
J133 Rubber processing machine operators and related workers	-	-	-
J134 Water and waste plant operators	30	30	0.3
J14 Machine operators and related workers in pulp and paper production and wood processing	370	410	2.3
J141 Sawmill machine operators	160	180	2.8
J142 Pulp mill machine operators	60	60	0.7
J143 Papermaking and finishing machine operators	20	20	0.8
J144 Other wood processing machine operators	50	60	2.6
J145 Paper converting machine operators	10	10	1.0
J146 Lumber graders and other wood processing inspectors and graders	70	80	2.7
J15 Machine operators and related workers in textile processing	10	10	0.9
J151 Textile fibre and yarn preparation machine operators	-	-	-
J152 Weavers, knitters and other fabric-making occupations	-	-	-
J153 Textile dyeing and finishing machine operators	-	-	-
J154 Textile inspectors, graders and samplers	-	-	-
J16 Machine operators and related workers in fabric, fur and leather products manufacturing	20	20	0.9
J161 Sewing machine operators	10	10	0.9
J162 Fabric, fur and leather cutters	-	-	-
J163 Hide and pelt processing workers	-	-	-
J164 Inspectors and testers, fabric, fur and leather products manufacturing	-	-	-
J17 Machine operators and related workers in food, beverage and tobacco processing	300	320	1.2
J171 Process control and machine operators, food and beverage processing	130	140	1.2
J172 Industrial butchers and meat cutters, poultry preparers and related workers	40	40	1.2
J173 Fish plant workers	110	120	1.3
J174 Tobacco processing machine operators	-	-	-
J175 Testers and graders, food and beverage processing	20	20	1.1
J18 Printing machine operators and related occupations	40	40	0.0
J181 Printing machine operators	10	10	-0.5
J182 Camera, platemaking and other pre-press occupations	-	-	-
J183 Binding and finishing machine operators	-	-	-
J184 Photographic and film processors	20	20	0.8
J19 Machining, metalworking, woodworking and related machine operators	70	80	2.1
J191 Machining tool operators	10	10	1.6
J192 Forging machine operators	-	-	-

# Northwest College Region

## Projected Annual Growth Rates in Occupational Demand

	Estimated Employment		Avg Annual % Chng Over 5 Years
	2008	2013	2008 to 2013
J193 Woodworking machine operators	40	50	2.3
J194 Metalworking machine operators	20	20	1.9
J196 Other metal products machine operators	-	-	-
J197 Other products machine operators	-	-	-
J2 Assemblers in manufacturing	170	180	1.9
J21 Mechanical, electrical and electronics assemblers	20	20	1.4
J211 Aircraft assemblers and aircraft assembly inspectors	-	-	-
J212 Motor vehicle assemblers, inspectors and testers	10	10	1.0
J213 Electronics assemblers, fabricators, inspectors and testers	-	-	-
J214 Assemblers and inspectors, electrical appliance, apparatus and equipment manufacturing	-	-	-
J215 Assemblers, fabricators and inspectors, industrial electrical motors and transformers	-	-	-
J216 Mechanical assemblers and inspectors	10	10	1.9
J217 Machine operators and inspectors, electrical apparatus manufacturing	-	-	-
J22 Other assembly and related occupations	150	160	2.0
J221 Boat assemblers and inspectors	10	10	1.2
J222 Furniture and fixture assemblers and inspectors	30	30	1.6
J223 Other wood products assemblers and inspectors	60	70	2.7
J224 Furniture finishers and refinishers	10	10	1.0
J225 Plastic products assemblers, finishers and inspectors	10	10	2.3
J226 Painters and coaters, industrial	20	20	1.4
J227 Plating, metal spraying and related operators	-	-	-
J228 Other assemblers and inspectors	10	10	1.7
J3 Labourers in processing, manufacturing and utilities	850	930	1.8
J31 Labourers in processing, manufacturing and utilities	850	930	1.8
J311 Labourers in mineral and metal processing	130	140	1.9
J312 Labourers in metal fabrication	20	30	2.0
J313 Labourers in chemical products processing and utilities	20	20	1.7
J314 Labourers in wood, pulp and paper processing	360	400	2.3
J315 Labourers in rubber and plastic products manufacturing	10	10	2.6
J316 Labourers in textile processing	-	-	-
J317 Labourers in food, beverage and tobacco processing	180	190	1.2
J318 Labourers in fish processing	70	70	1.1
J319 Other labourers in processing, manufacturing and utilities	60	60	1.2