

# REGIONAL INDUSTRY FOCUS REPORT

Economy Overview, Cluster Overview,  
Industry Detail, Occupations Detail, Focus  
Occupations, and Training Programs



*Sponsored by:*

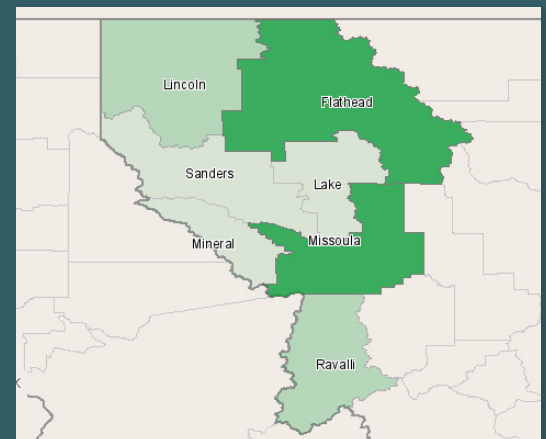
Montana Department of Labor & Industry for  
Montana's Region 1 RIG



REGION:  
*Western Montana RIG*

FOCUS CLUSTER:  
*Timber*

TIMEFRAME:  
*2007–2014*



# EXECUTIVE SUMMARY

Over the past two years the Western Montana economy has seen precipitous shifts in employment. Between 2007 and March 2009, employment dropped three percent. The most recent unemployment figures indicate that 10.1 percent of the regional workforce is unemployed. Due to dropping demand for timber products and limitations on timber harvesting, the timber cluster (which makes up more than one third of the manufacturing base in the region) has seen a decline of over 1,300 jobs—equivalent to a 20 percent loss in employment.

The high concentration of Western Montana's timber cluster means that although the region is profitable in times of economic progress, it is vulnerable during times of economic decline. Despite recent employment declines, the regional timber cluster has retained a location quotient score of 4.1. In other words, Western Montana employs more than four times the number of individuals in these industries than the national average. The highly integrated nature of Montana's timber cluster makes the cluster more stable and robust than other timber producing areas. Western Montana maintains timber industries at nearly every point of the supply chain, from extraction (logging) to production, and features industries such as sawmills and prefabricated buildings, residual product fabrication, and paperboard, particleboard and wood pellet manufacturing. This diversity means that when individual industries in this supply chain decline other industries are still able to support the regional economy.

Currently, the economic downturn is so intensive and widespread that consumption is declining for almost all consumer products, from homes to paper to products that normally utilize paper and paperboard for packaging. A second benefit of the region's integrated cluster is that not all production is committed to the same type of wood product. When the economy improves, demand will rise at varying rates for the wood products produced in Western Montana. This will allow revenue to reenter throughout the recovery period, and as long as the necessary materials remain affordable, each industry will recover in time.

The region's timber cluster employs roughly 5,400 workers across thirty different industries. The cluster's largest industries include logging, sawmills, softwood veneer and plywood manufacturing, and paperboard mills. All but three of the cluster's

industries have experienced decline in the past two and a half years. According to projections from EMSI and the Montana Department of Labor, recent decline in timber employment is anticipated to continue over the next five years. These agencies project a loss of an additional 590 jobs, or 10 percent of employment from 2009 to 2014.

Even as overall job count is declining, it is important to note that many jobs are still available in timber industries. Several industries added employment between 2007 and March 2009. These industries include softwood veneer and plywood manufacturing (62 jobs), engineered wood member manufacturing (63 jobs), and timber tract operations (10 jobs). Also, the Federal government's increasing emphasis on forest conservation will create new job opportunities within the public sector over the next five years, particularly for forest and conservation technicians (202 projected openings) and conservation scientists (30 projected openings).

Beyond traditional timber industries, local scientists and business people are exploring new technologies that could create job opportunities in emerging industries such as carbon sequestration, reforestation, and energy production through woody biomass. These new industries will offer an unknown number of employment opportunities in the future.

Another noteworthy source of employment will come from the increasing retirement of older workers within traditional timber industries. For example, among the six focus occupations examined in this report (see page 15), roughly 370 replacement job openings are projected over the next five years. If the remaining timber occupations are included the number is much higher.

Western Montana is heavily reliant on the timber industry, which means that the region is successful in times of economic growth and susceptible in times of recession. Regional stakeholders should consider possible ways of diversifying the region's economic base to cushion the region against market volatility. On a more positive note, with the abundance of lumber, the wood product infrastructure, and the advent of new opportunities in forestry, Western Montana stands to remain at the forefront of the industry at the end of the recession.

# INTRODUCTION

## Contents

<i>Data &amp; Metric Definitions</i> .....	1
<i>Unemployment Overview</i> .....	2
<i>Economy Overview: Recent Trends</i> .....	3
<i>Economy Overview: Projections</i> .....	4
<i>Cluster Summary</i> .....	5
<i>Cluster Detail</i> .....	7
<i>Occupations Overview</i> .....	13
<i>Focus Occupations</i> .....	15
<i>Focus Occupation Programs</i> .....	16
<i>About EMSI and the Data</i> .....	19

## Region: Western Montana

Counties: Flathead, MT (30029), Lake, MT (30047), Lincoln, MT (30053), Mineral, MT (30061), Missoula, MT (30063), Ravalli, MT (30081), Sanders, MT (30089)

## Timeframe: 2007–2014



## Report Goals

This report was produced by Economic Modeling Specialists Inc. (EMSI) using a proprietary, integrated database built from 70 state and federal sources. It was developed in partnership with Workforce Strategy Center to provide a data-driven, occupation-focused overview of a regional industry cluster. The goal of the report is to assist regional planners in their understanding of the region's labor market within a particular cluster. Knowledge of the local situation is strongly recommended to interpret and apply all the data correctly.

## Report Outline

### Unemployment Overview

The first section provides an overview of the unemployment rates for the region benchmarked against the state and nation. This section also includes estimates of unemployment by industry.

### Top Level Industries

The second section provides an overview of the region's 2-digit NAICS sectors. In addition, the region's industries are benchmarked against the state.

### Industry Overview

The third section provides an overview of the industry cluster or sector selected for this report. This section includes a cluster summary, employment figures, five-year projections, staffing patterns, declining industries, shift share analysis, and location quotient analysis.

### Occupation Overview

The fourth section presents the occupations most critical to the cluster. These occupations are selected based on projected growth, total employment, average earnings per worker, and educational level. This section also provides information on training programs for the selected occupations.

# DATA & METRIC DEFINITIONS

## Unemployment

**Unemployment:** Percentage of individuals in the workforce who are unemployed and who desire to be working.

**Non-Seasonally Adjusted:** Unemployment rates that are not modified to account for seasonal employment changes such as holidays, weather, the opening and closing of schools, and other recurring events.

## Industry Data

**NAICS Code & Description:** The standard numerical code and name of industries. These codes are used in all state and federal industry data collection.

**Jobs:** Total number of full- and part-time jobs in the industry, including both payroll workers and proprietors, as well as estimates of nondisclosable (or “suppressed”) numbers in published data. For future years, this number is a projection based on historical trends and published state and federal ten-year projections.

**Change:** Change in total jobs over the given timeframe.

**Percent Change:** Total change divided by start year jobs.

**EPW (Earnings Per Worker):** Total industry earnings (earnings of all businesses in the industry) in the most recent published data year, divided by the number of jobs in the industry. This is *not* equivalent to the industry’s “average worker wages.” For worker wages, see “Hourly Earnings.”

## Industry Shift Share

**Industrial Mix Effect:** The number of jobs expected to be added or removed from a regional industry if it has followed the national industry-specific job growth rate.

**National Growth Effect:** The number of jobs expected to be added to the industry based on total national economic job growth.

**Expected Change:** The sum of the industrial mix and national growth effects.

**Competitive Effect:** The industry’s change in jobs over the given timeframe minus the expected change. This indicates how industry growth at the regional level compares to expected industry growth using national trends. A positive competitive effect is associated with a rising location quotient.

## Industry Location Quotient

**Location Quotient (LQ):** The relative concentration of the industry in the region, or, a measure of the region’s specialization in the industry. LQ is defined as the percent share (in terms of jobs) of an industry in the regional economy, divided by the percent share of the same industry in the national economy. High-LQ industries tend to be export-oriented; that is, they are specialties of the region which bring money into the regional economy rather than circulating money that is already present.

**% Change in LQ:** This indicates whether an industry is increasing or decreasing its concentration in the regional economy relative to the national economy. It is defined as the difference between the end year and start year LQ, divided by the start year LQ.

## Occupation Data

**SOC Code & Title:** The standard numerical code and occupation title used in state and federal data collection.

**Jobs:** Total number of jobs in the occupation. In future years, this number is a projection based on both historical trends and on state and federal ten-year projections.

**Change:** Total change in jobs over the given timeframe.

**Percent Change:** Total change divided by start year jobs.

**Hourly Earnings:** The median hourly earnings of all regional workers in the occupation (who may be employed both in and outside the cluster).

**Education:** The most common education level held by workers in the occupation, based on national survey data published by the Federal Bureau of Labor Statistics. Most occupations have a range of education and training levels.

## Programs Data

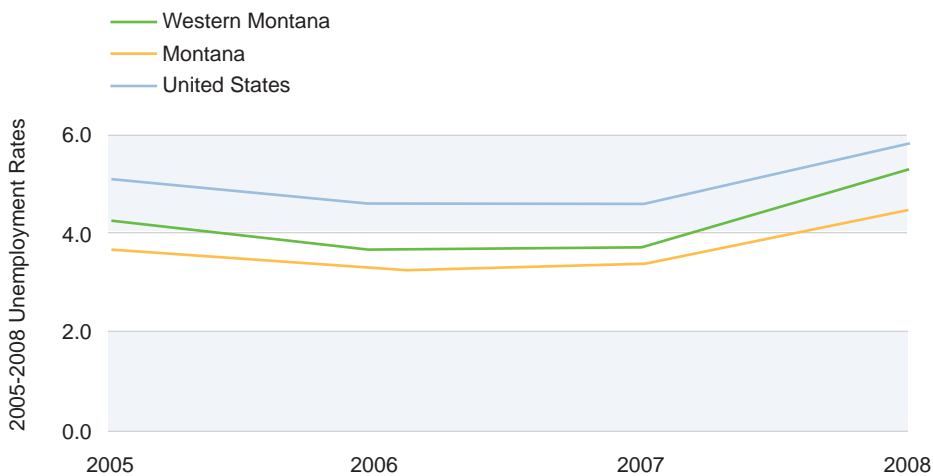
**CIP Code & Title:** The standard program code and title used by the U.S. Department of Education for statistical purposes. In this report, programs are selected based on a national crosswalk that links occupations to programs.

**Completions:** Number of students that completed a given program in the most recent data year. These numbers are reported by individual institutions and come directly from the Federal IPEDS database.

# UNEMPLOYMENT OVERVIEW

The following charts and tables exhibit unemployment information for Western Montana and all of its individual counties between 2005 and 2008. Note that the final column of data in the table is not compatible with the remaining columns and has not been included in the graph.

Also included are unemployment estimates for two industry sectors that are related to the timber industry cluster. These figures are from December 2008.



Region	2005 Unempl.	2006 Unempl.	2007 Unempl.	2008 Unempl.	February 2009 Unempl. <sup>1</sup>
Western Montana	4.3	3.7	3.7	5.3	10.1
Montana	3.7	3.3	3.4	4.5	6
United States	5.1	4.6	4.6	5.8	8.1
Counties					
Missoula	3.4	3	3	4.1	6.9
Ravalli	4.5	4	4	5.5	9.8
Flathead	4.3	3.6	3.5	5.5	12.2
Lake	5	4.6	4.8	6.3	10
Mineral	5.3	4.7	4.4	5.9	12.5
Sanders	6	5	5.9	8.6	17.4
Lincoln	7.6	6.4	6.7	8.8	16.4

<sup>1</sup> The figures in this column represent non-seasonally adjusted unemployment rates for February 2009. Therefore, they cannot be directly compared with unemployment rates from previous years, which are yearly averages. It is also important to understand that unemployment rates in Western Montana are between 1 to 2 points higher in February than at other points in the year.

SOC Code	Description	Regional Unempl. Rate	State Unempl. Rate	National Unempl. Rate
45-0000	Farming, fishing, and forestry occupations	11.6	7.6	30.9
51-0000	Production occupations	6.5	4.7	11.5
<b>All Industries</b>		<b>7.8</b>	<b>5.0</b>	<b>7.2</b>

# ECONOMY OVERVIEW

## RECENT TRENDS

The table below summarizes the broadest sectors in the regional and state economy over the past two years, 2007–2009.

### Region

### State

NAICS Code	Description	2007 Jobs	2009 Jobs	Change	% Change	2008 EPW	State 2007	State 2009	State % Change	State EPW
44-45	Retail trade	24,200	23,300	(840)	(3%)	\$25,600	75,700	74,300	(2%)	\$25,500
90	Government	22,300	22,500	170	1%	\$49,600	90,000	89,400	(1%)	\$51,500
62	Health care and social assistance	20,100	20,800	700	3%	\$39,300	65,000	66,400	2%	\$38,900
23	Construction	18,500	16,100	(2,400)	(13%)	\$38,600	54,800	48,400	(12%)	\$40,600
72	Accommodation and food services	15,400	15,700	370	2%	\$15,800	50,800	52,500	3%	\$15,400
81	Other services, except public administration	10,900	10,600	(280)	(3%)	\$17,600	34,600	34,400	(0%)	\$18,100
54	Professional and technical services	10,300	9,000	(1,260)	(12%)	\$39,300	28,800	25,400	(12%)	\$43,100
53	Real estate and rental and leasing	10,300	10,400	10	0%	\$33,200	33,500	33,900	1%	\$31,400
31-33	Manufacturing	10,200	9,300	(930)	(9%)	\$60,400	23,400	22,300	(5%)	\$58,100
56	Administrative and waste services	10,200	9,900	(280)	(3%)	\$24,700	27,500	26,800	(3%)	\$23,400
11	Agriculture, forestry, fishing and hunting	8,100	7,600	(470)	(6%)	\$24,000	38,700	37,700	(3%)	\$21,700
52	Finance and insurance	6,500	6,300	(180)	(3%)	\$47,000	22,000	21,900	(0%)	\$47,400
71	Arts, entertainment, and recreation	6,000	5,600	(310)	(5%)	\$13,300	21,300	20,700	(3%)	\$14,600
48-49	Transportation and warehousing	6,000	6,200	230	4%	\$54,500	18,700	19,500	4%	\$52,800
42	Wholesale trade	4,600	4,300	(370)	(8%)	\$51,300	18,800	17,700	(6%)	\$50,900
61	Educational services	2,900	2,700	(170)	(6%)	\$19,000	9,300	9,000	(2%)	\$18,900
51	Information	2,700	2,800	110	4%	\$39,600	8,200	8,600	5%	\$42,300
21	Mining	900	800	(40)	(5%)	\$48,400	9,600	9,800	2%	\$92,800
22	Utilities	600	500	(30)	(6%)	\$73,000	3,200	3,100	(3%)	\$123,900
55	Management of companies and enterprises	500	500	(20)	(4%)	\$73,300	1,700	1,800	5%	\$58,200
		<b>191,100</b>	<b>185,100</b>	<b>-5,990</b>	<b>-3%</b>	<b>\$35,000</b>	<b>635,700</b>	<b>623,700</b>	<b>-2%</b>	<b>\$36,500</b>

EPW: Total annual industry earnings per worker.

# ECONOMY OVERVIEW

## PROJECTIONS

The table below projects growth by the broadest sectors in the regional and state economy, 2009–2014.

### Region

### State

NAICS Code	Description	2009 Jobs	2014 Jobs	Change	% Change	EPW	State 2009	State 2014	State % Change	State EPW
44-45	Retail trade	23,300	24,900	1,520	7%	\$25,600	74,300	79,500	7%	\$25,500
90	Government	22,500	23,800	1,340	6%	\$49,600	89,400	94,700	6%	\$51,500
62	Health care and social assistance	20,800	22,800	1,990	10%	\$39,300	66,400	73,200	10%	\$38,900
23	Construction	16,100	17,200	1,100	7%	\$38,600	48,400	52,000	7%	\$40,600
72	Accommodation and food services	15,700	17,100	1,330	8%	\$15,800	52,500	55,700	6%	\$15,400
81	Other services, except public administration	10,600	11,700	1,080	10%	\$17,600	34,400	37,800	10%	\$18,100
54	Professional and technical services	10,400	11,300	960	9%	\$39,300	33,900	36,700	8%	\$43,100
53	Real estate and rental and leasing	9,900	12,200	2,280	23%	\$33,200	26,800	32,200	20%	\$31,400
31-33	Manufacturing	9,300	9,300	40	0%	\$60,400	22,300	22,900	2%	\$58,100
56	Administrative and waste services	9,000	10,900	1,860	21%	\$24,700	25,400	30,800	21%	\$23,400
11	Agriculture, forestry, fishing and hunting	7,600	7,500	0	(2%)	\$24,000	37,700	38,200	1%	\$21,700
52	Finance and insurance	6,300	7,000	680	11%	\$47,000	21,900	23,800	8%	\$47,400
71	Arts, entertainment, and recreation	6,200	6,800	540	9%	\$13,300	19,500	21,700	11%	\$14,600
48-49	Transportation and warehousing	5,600	5,500	0	(2%)	\$54,500	20,700	21,500	4%	\$52,800
42	Wholesale trade	4,300	4,300	90	2%	\$51,300	17,700	18,000	2%	\$50,900
61	Educational services	2,800	3,200	420	15%	\$19,000	8,600	9,500	11%	\$18,900
51	Information	2,700	2,900	180	7%	\$39,600	9,000	10,000	11%	\$42,300
21	Mining	800	1,000	140	17%	\$48,400	9,800	10,400	6%	\$92,800
22	Utilities	500	500	10	2%	\$73,000	3,100	2,900	(5%)	\$123,900
55	Management of companies and enterprises	500	600	50	9%	\$73,300	1,800	2,100	19%	\$58,200
		<b>185,100</b>	<b>200,400</b>	<b>15,330</b>	<b>8%</b>	<b>\$35,000</b>	<b>623,700</b>	<b>673,600</b>	<b>8%</b>	<b>\$36,500</b>

EPW: Total annual industry earnings per worker.

# CLUSTER SUMMARY

## Cluster Definition

### Selected Industries

Timber tract operations (NAICS 113110)  
 Forest nursery and gathering forest products (NAICS 113210)  
 Logging (NAICS 113310)  
 Support activities for forestry (NAICS 115310)  
 Sawmills (NAICS 321113)  
 Wood preservation (NAICS 321114)  
 Hardwood veneer and plywood manufacturing (NAICS 321211)  
 Softwood veneer and plywood manufacturing (NAICS 321212)  
 Engineered wood member manufacturing (NAICS 321213)  
 Truss manufacturing (NAICS 321214)  
 Reconstituted wood product manufacturing (NAICS 321219)  
 Wood window and door manufacturing (NAICS 321911)  
 Cut stock, resawing lumber, and planing (NAICS 321912)  
 Other millwork, including flooring (NAICS 321918)  
 Wood container and pallet manufacturing (NAICS 321920)  
 Prefabricated wood building manufacturing (NAICS 321992)  
 Miscellaneous wood product manufacturing (NAICS 321999)  
 Paperboard mills (NAICS 322130)  
 Corrugated and solid fiber box manufacturing (NAICS 322211)  
 Coated and laminated packaging materials mfg. (NAICS 322221)  
 Sanitary paper product manufacturing (NAICS 322291)  
 Sawmill and woodworking machinery (NAICS 333210)  
 Wood kitchen cabinet and countertop mfg. (NAICS 337110)  
 Upholstered household furniture manufacturing (NAICS 337121)  
 Nonupholstered wood household furniture mfg. (NAICS 337122)  
 Institutional furniture manufacturing (NAICS 337127)  
 Wood office furniture manufacturing (NAICS 337211)  
 Custom architectural woodwork and millwork (NAICS 337212)  
 Showcases, partitions, shelving, and lockers (NAICS 337215)  
 Lumber and wood merchant wholesalers (NAICS 423310)

## Basic Information, Total Cluster

2007 Industry Jobs	6,803
2009 Industry Jobs	5,452
2014 Industry Jobs	4,859
Total Change	-1944
Total % Change	-28.6%
2009 Average Earnings/Worker	\$61,568

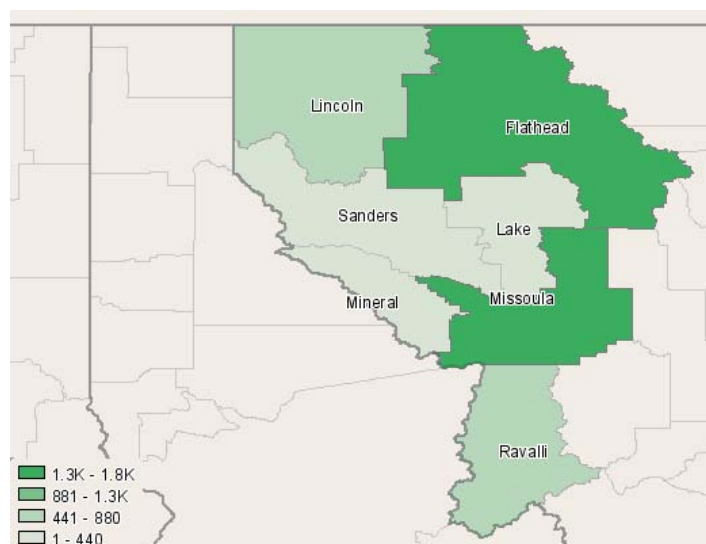
## Economic Indicators, Total Cluster

2007 Location Quotient	4.26
2009 Location Quotient	4.1
2014 Location Quotient	3.61
09-'14 Shift Share: Regional Competitiveness Effect	-554
09-'14 Shift Share: Industrial Mix Effect	-505
09-'14 Shift Share: National Effect	467

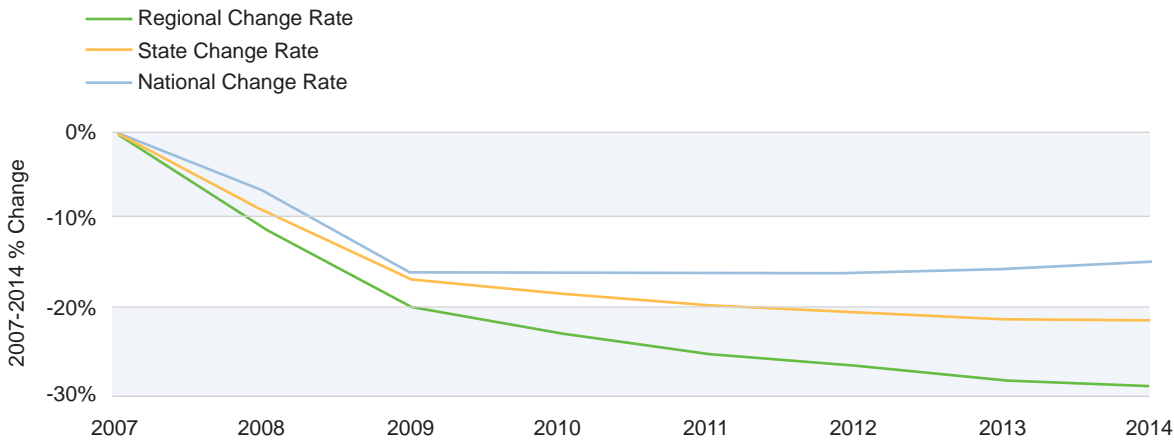
## Cluster Employment by County

County	2007 Jobs	2009 Jobs
Flathead, MT (30029)	2,178	1,767
Missoula, MT (30063)	1,997	1,648
Ravalli, MT (30081)	890	665
Lincoln, MT (30053)	733	545
Lake, MT (30047)	408	335
Sanders, MT (30089)	348	267
Mineral, MT (30061)	248	224

Darker areas on the map represent more cluster jobs in that area while lighter areas represent fewer jobs. Actual job ranges are shown in the map key.



## Total Cluster Growth, Region vs. State and Nation

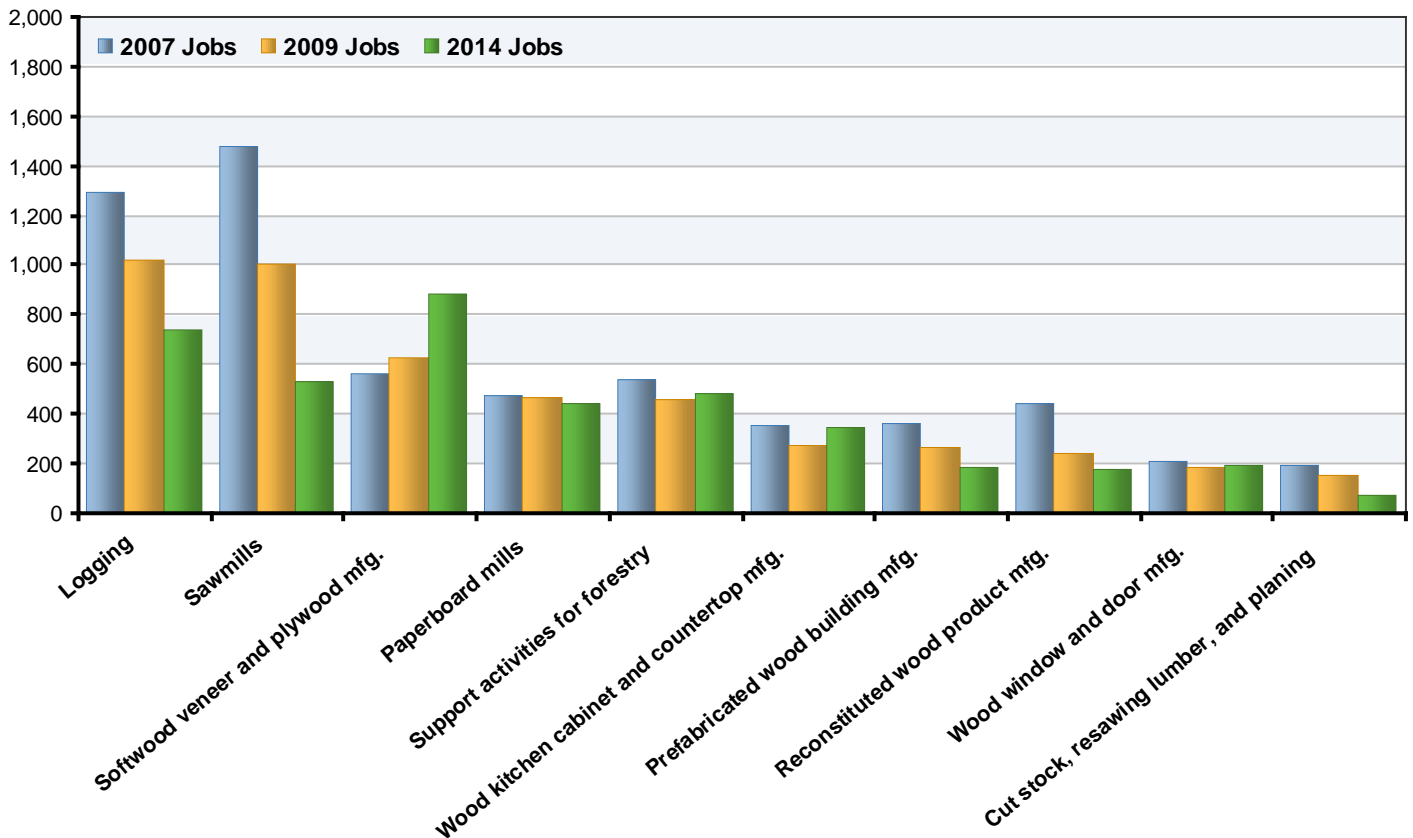


Total	2007 Jobs	2009 Jobs	2014 Jobs	Change	% Change	EPW
Regional	6,803	5,452	4,859	(593)	(11%)	\$61,568
State	10,144	8,462	7,977	(485)	(6%)	\$53,292
National	1,488,772	1,251,920	1,270,832	18,912	2%	\$49,270

EPW: Total annual industry earnings per worker.

## Largest Cluster Industries

These are the largest industries, in terms of employment, for the cluster.



# CLUSTER DETAIL

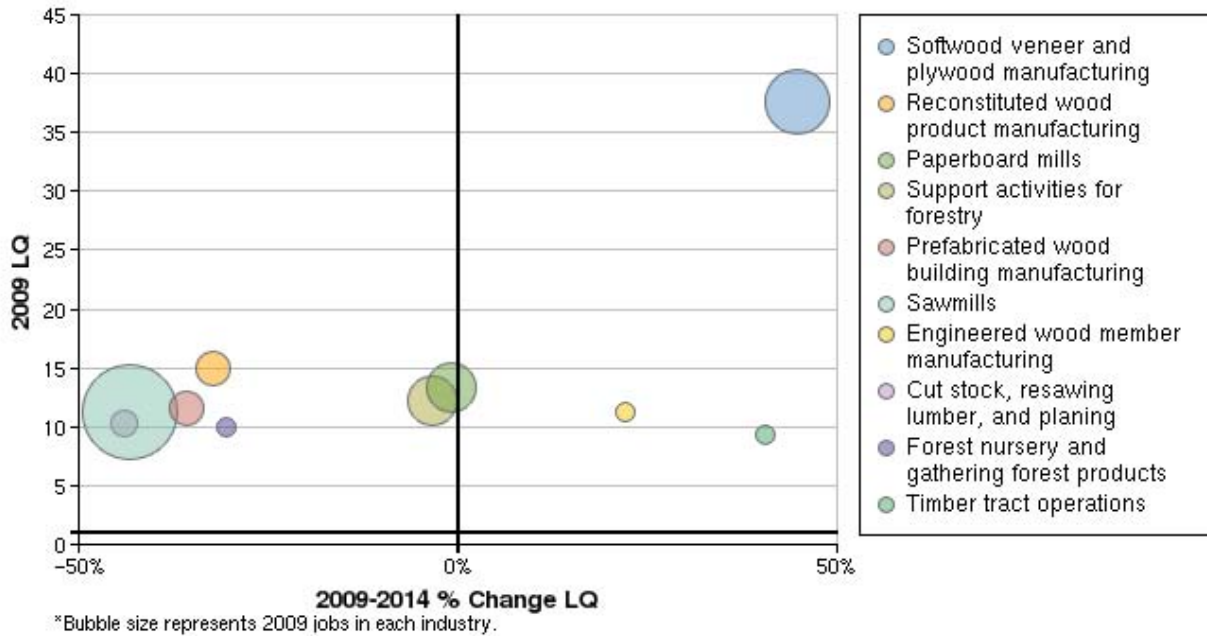
## Detailed Cluster Data (Sorted by Total Employment)

This table contains employment data for 2007, 2009, and 2014. The earnings per worker (EPW) are displayed for the latest year, 2009, along with the number of industry establishments for the most recent year available, 2008. The industries in gray are charted on the previous page.

NAICS Code	Description	2007 Jobs	2009 Jobs	2014 Jobs	2009 EPW*	2008 Establ.
113310	Logging	1,290	1,021	736	\$39,265	168
321113	Sawmills	1,479	1,002	531	\$46,988	32
321212	Softwood veneer and plywood mfg.	565	627	884	\$70,083	5
322130	Paperboard mills	471	467	444	\$187,673	1
115310	Support activities for forestry	541	454	481	\$40,197	85
337110	Wood kitchen cabinet and countertop mfg.	355	274	346	\$33,958	41
321992	Prefabricated wood building mfg.	360	264	186	\$56,698	17
321219	Reconstituted wood product mfg.	441	244	180	\$78,852	4
321911	Wood window and door mfg.	212	183	189	\$31,314	11
321912	Cut stock, resawing lumber, and planing	194	154	76	\$70,160	13
321214	Truss mfg.	144	117	174	\$32,745	9
423310	Lumber and wood merchant wholesalers	150	104	59	\$68,956	23
337122	Nonupholstered wood household furniture mfg.	97	79	87	\$26,923	20
321213	Engineered wood member mfg.	12	75	93	\$43,693	3
113110	Timber tract operations	63	73	101	\$136,804	6
321999	Miscellaneous wood product mfg.	74	69	73	\$21,655	8
113210	Forest nursery and gathering forest products	84	59	43	\$73,118	4
337127	Institutional furniture mfg.	56	48	37	\$34,500	2
321918	Other millwork, including flooring	40	35	55	\$21,083	2
321114	Wood preservation	32	28	18	\$63,531	1
321920	Wood container and pallet mfg.	32	28	33	\$21,108	2
337215	Showcases, partitions, shelving, and lockers	33	23	14	\$46,878	3
321211	Hardwood veneer and plywood mfg.	77	13	10	\$12,661	0
322211	Corrugated and solid fiber box mfg.	0	<10	<10	--	--
333210	Sawmill and woodworking machinery	<10	<10	<10	--	--
322221	Coated and laminated packaging materials mfg.	0	0	0	--	--
322291	Sanitary paper product mfg.	0	0	0	--	0
337121	Upholstered household furniture mfg.	0	0	0	--	0
337211	Wood office furniture mfg.	0	0	0	--	0
337212	Custom architectural woodwork and millwork	0	0	0	--	0
<b>Total</b>		<b>6,803</b>	<b>5,452</b>	<b>4,859</b>	<b>\$61,568</b>	<b>464</b>

\* Industries with a significant number of highly paid workers in the region could cause the industry earnings per worker to be higher than expected.  
EPW: Total annual industry earnings per worker.

## Cluster Industries with Highest Regional Concentration



Location quotient (LQ), or “industry concentration,” is a way of quantifying how concentrated an industry is in a region or state. For example, if an industry is responsible for 0.5% of national jobs but 1.5% of regional jobs, then it has an LQ of 3 in the region. By showing regional “specialties,” this metric highlights exporting sectors that bring money into the region (and thus form the base for other dependent industries).

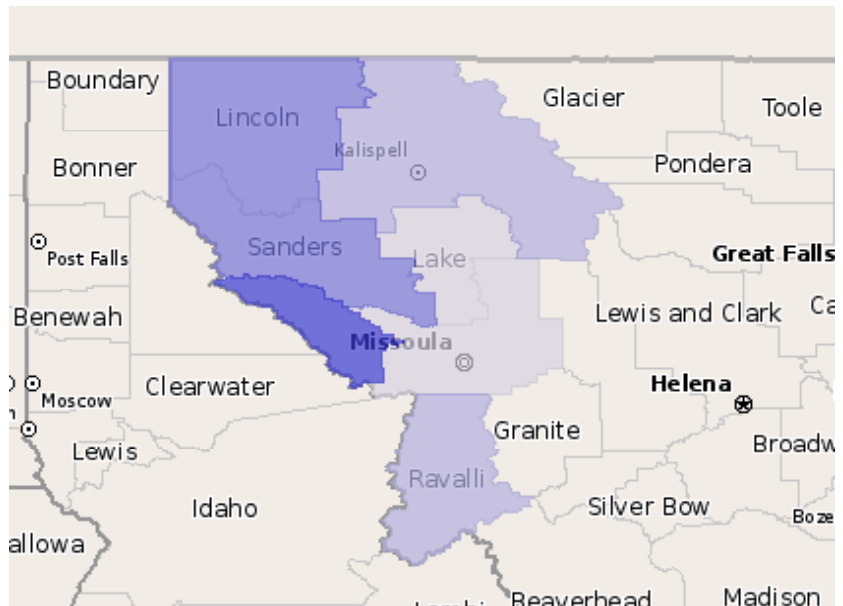
The bubble graph conveys three separate pieces of information. An industry’s position on the vertical axis represents its current LQ, while its position on the horizontal axis indicates its percent change in LQ over the given time period. The size of the bubble corresponds to the size of the industry in terms of jobs.

- + LQ of 1.0 indicates that the region’s industry concentration is similar to national industry concentration.
- + LQ below 1.0 indicates that the region’s industry concentration is below the national average.
- + LQ above 1.0 indicates that the regional economy is “concentrated” in that industry.
- + LQ above 1.2 (or 20% greater than the national average) indicates that the regional economy is “specialized” in that industry.

## Total Regional Cluster Concentration (Location Quotient) by County

The table and map below show cluster location quotient (LQ) by county. On the map, darker shades indicate higher LQ while lighter shades indicate lower LQ; actual ranges are indicated by the map key.

County	2009 Location Quotient
Mineral, MT (30061)	14.84
Lincoln, MT (30053)	8.30
Sanders, MT (30089)	6.58
Ravalli, MT (30081)	4.63
Flathead, MT (30029)	4.08
Lake, MT (30047)	3.36
Missoula, MT (30063)	3.09



## Concentrations (Location Quotients) of Cluster Industries

This table displays location quotients (LQ) for 2009, and projected LQs for 2014.

■ = Specialized (LQ > 1.2) ■ = Concentrated (1.0 < LQ < 1.2) ■ = Below national concentration (LQ < 1.0)

NAICS Code	Description	2009 Jobs	2009 LQ	2014 LQ
321212	Softwood veneer and plywood manufacturing	627	37.58	54.36
321219	Reconstituted wood product manufacturing	244	15.00	10.16
322130	Paperboard mills	467	13.40	13.28
115310	Support activities for forestry	454	12.17	11.75
321992	Prefabricated wood building manufacturing	264	11.58	7.44
321113	Sawmills	1,002	11.28	6.40
321213	Engineered wood member manufacturing	75	11.19	13.66
321912	Cut stock, resawing lumber, and planing	154	10.27	5.75
113210	Forest nursery and gathering forest products	59	10.00	6.93
113110	Timber tract operations	73	9.37	13.17
113310	Logging	1,021	8.44	6.57
321214	Truss manufacturing	117	3.25	4.09
321999	Miscellaneous wood product manufacturing	69	2.98	3.62
321911	Wood window and door manufacturing	183	2.74	2.51
321114	Wood preservation	28	2.71	1.69
337127	Institutional furniture manufacturing	48	2.12	1.65
337110	Wood kitchen cabinet and countertop mfg.	274	1.77	1.99
337122	Nonupholstered wood household furniture mfg.	79	1.63	2.87
423310	Lumber and wood merchant wholesalers	104	0.79	0.42
321918	Other millwork, including flooring	35	0.66	0.96
321211	Hardwood veneer and plywood manufacturing	13	0.65	0.49
321920	Wood container and pallet manufacturing	28	0.48	0.51
337215	Showcases, partitions, shelving, and lockers	23	0.41	0.29
322211	Corrugated and solid fiber box manufacturing	<10	--	--
333210	Sawmill and woodworking machinery	<10	--	--
<b>Total</b>		<b>5,452</b>	<b>4.1</b>	<b>3.61</b>

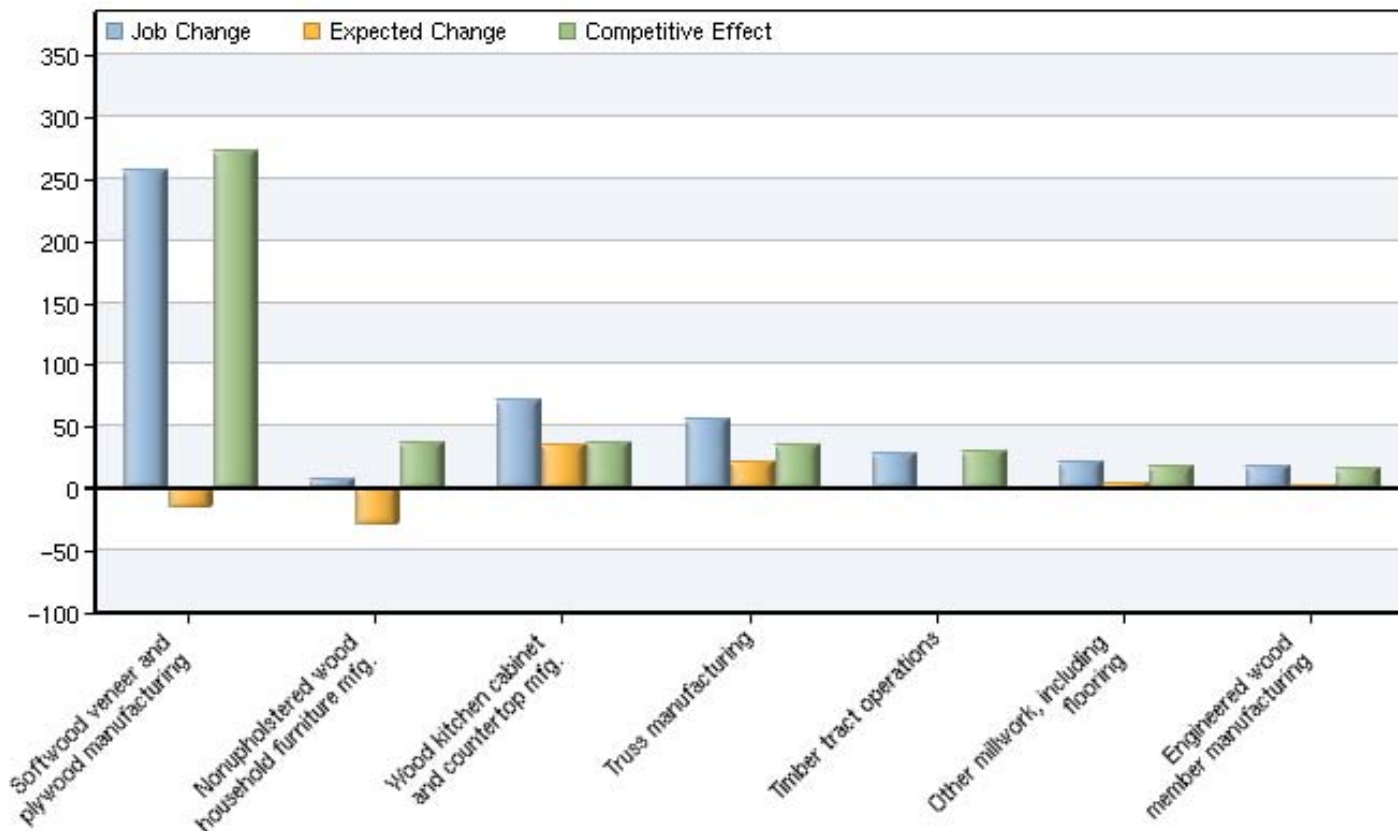
## Projected Regional Competitiveness (Shift Share), 2009–2014

Regional competitiveness or “shift share” isolates growth (projected to occur over the next ten years) that can be attributed to regional causes rather than simply to national economic or industry trends. The figure below is a simplified shift share graph that shows the “competitive effect” (green bar) for each industry sector, which is job growth beyond what would be expected according to national trends. It shows how much these industries are growing beyond (or in spite of) national trends. Local knowledge should be employed to discover why these industries are outperforming national trends and thus reveal the region’s competitive advantages.

The competitive effect is total regional industry “job change” (actual and/or projected, depending on the timeframe used) minus the “expected change,” which is the sum of (1) the “national growth effect” (growth that might be expected due to growth trends in the national economy as a whole) and (2) the “industrial mix effect” (growth that might be expected because of growth in that specific industry at a national level).

The competitive effect might exceed actual job growth because the national growth and industrial mix effect may be negative. In this case, the competitive effect includes regional jobs “saved” that would have been lost if the industry had followed national trends. Also, a strong industry may be growing rapidly but show a low competitiveness effect simply because the same industry is also growing rapidly at the national level.

A positive competitive effect is associated with a rising location quotient (see previous pages).



## Regional Competitiveness (Shift Share) of Cluster Industries

This table provides detailed shift share calculations for all cluster industries. See previous page for column definitions.

■ = Positive competitive effect ■ = Zero or negative competitive effect

NAICS Code	Description	Job Change	Ind Mix Effect	Nat Growth Effect	Expected Change	Competitive Effect
321212	Softwood veneer and plywood manufacturing	257	(68)	54	(14)	271
337122	Nonupholstered wood household furniture mfg.	8	(36)	7	(29)	37
337110	Wood kitchen cabinet and countertop mfg.	72	11	23	35	37
321214	Truss manufacturing	57	11	10	21	35
113110	Timber tract operations	28	(7)	6	(1)	29
321918	Other millwork, including flooring	20	0	3	3	17
321213	Engineered wood member manufacturing	18	(5)	6	1	17
321999	Miscellaneous wood product manufacturing	4	(14)	6	(8)	13
321920	Wood container and pallet manufacturing	5	1	2	3	2
322211	Corrugated and solid fiber box manufacturing	0	(0)	0	(0)	0
337121	Upholstered household furniture manufacturing	0	(0)	0	(0)	0
337211	Wood office furniture manufacturing	0	0	0	0	0
337212	Custom architectural woodwork and millwork	0	0	0	0	0
322221	Coated and laminated packaging materials mfg.	0	0	0	0	0
322291	Sanitary paper product manufacturing	0	0	0	0	0
333210	Sawmill and woodworking machinery	(3)	(3)	1	(2)	(1)
321211	Hardwood veneer and plywood manufacturing	(3)	(0)	1	1	(3)
322130	Paperboard mills	(23)	(57)	40	(17)	(5)
337215	Showcases, partitions, shelving, and lockers	(9)	(5)	2	(3)	(6)
337127	Institutional furniture manufacturing	(11)	(5)	4	(1)	(11)
321114	Wood preservation	(10)	(1)	2	1	(11)
321911	Wood window and door manufacturing	6	9	16	24	(18)
115310	Support activities for forestry	27	6	39	45	(18)
113210	Forest nursery and gathering forest products	(16)	(1)	5	4	(19)
423310	Lumber and wood merchant wholesalers	(45)	(4)	9	5	(51)
321912	Cut stock, resawing lumber, and planing	(78)	(30)	13	(17)	(60)
321219	Reconstituted wood product manufacturing	(64)	1	21	22	(86)
321992	Prefabricated wood building manufacturing	(78)	3	23	26	(104)
113310	Logging	(285)	(162)	87	(74)	(211)
321113	Sawmills	(471)	(149)	86	(63)	(407)
<b>Total</b>		<b>-594</b>	<b>-505</b>	<b>467</b>	<b>-38</b>	<b>-554</b>

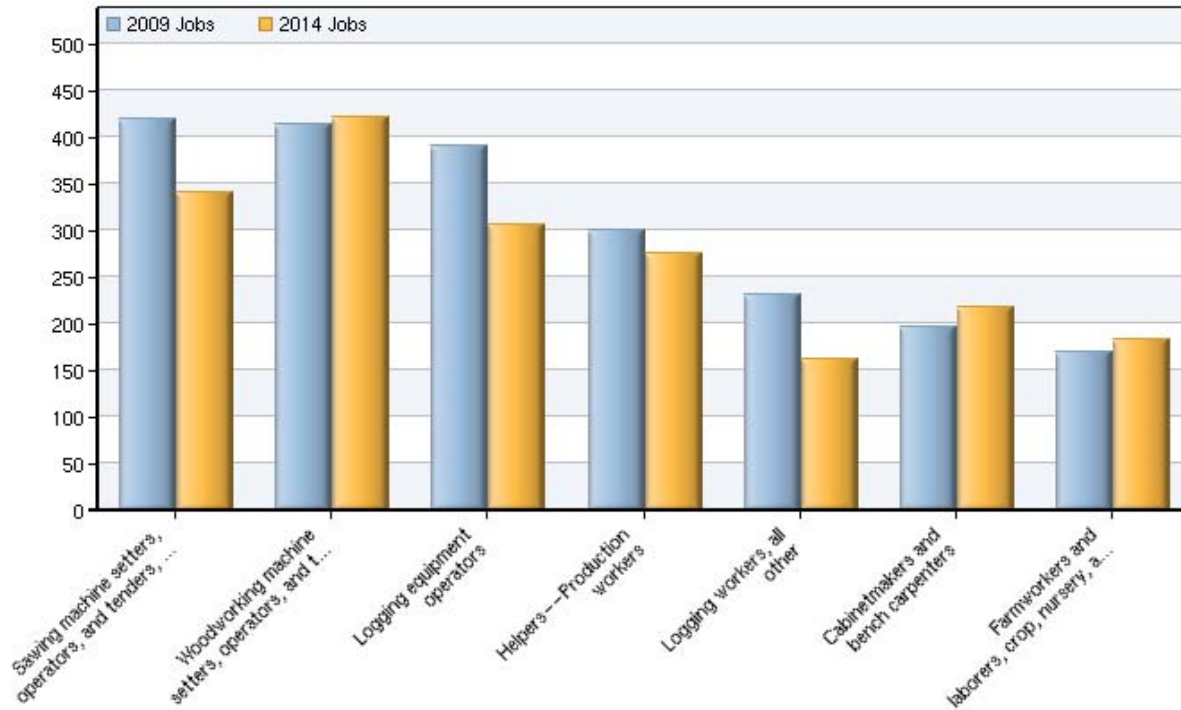
## Declining Industries in the Cluster

These are the industries projected to experience employment decline over the next five years (organized by job change). Included in this analysis are current and projected regional jobs, change, and average industry earnings per worker. Job change and earnings are not shown for industries with fewer than ten regional jobs.

NAICS Code	Description	2009 Jobs	2014 Jobs	Change	% Change	EPW
321113	Sawmills	1,002	531	(471)	(47%)	\$46,988
113310	Logging	1,021	736	(285)	(28%)	\$39,265
321992	Prefabricated wood building manufacturing	264	186	(78)	(30%)	\$56,698
321912	Cut stock, resawing lumber, and planing	154	76	(78)	(51%)	\$70,160
321219	Reconstituted wood product manufacturing	244	180	(64)	(26%)	\$78,852
423310	Lumber and wood merchant wholesalers	104	59	(45)	(43%)	\$68,956
322130	Paperboard mills	467	444	(23)	(5%)	\$187,673
113210	Forest nursery and gathering forest products	59	43	(16)	(27%)	\$73,118
337127	Institutional furniture manufacturing	48	37	(11)	(23%)	\$34,500
321114	Wood preservation	28	18	(10)	(36%)	\$63,531
337215	Showcases, partitions, shelving, and lockers	23	14	(9)	(39%)	\$46,878
321211	Hardwood veneer and plywood manufacturing	13	10	(3)	(23%)	\$12,661
321214	Truss manufacturing	134	132	(2)	(1%)	\$33,978
337127	Institutional furniture manufacturing	57	56	(1)	(2%)	\$26,383
		<b>3,426</b>	<b>2,334</b>	<b>-1,092</b>	<b>-32%</b>	<b>\$68,850</b>

EPW: Total annual industry earnings per worker.

# OCCUPATIONS OVERVIEW



## Largest Occupations in Cluster

The following 50 occupations are the largest, by employment, within the cluster. The table includes current and projected employment (in cluster only), job change, % change, median earnings per worker (both cluster and non-cluster), and base-level education (according to BLS).

Note: Occupations in gray appear in the bar chart.

**ST OJT:** Short-term on-the-job training  
**MT OJT:** Moderate-term on-the-job training  
**LT OJT:** Long-term on-the-job training  
**Exp. in field:** Work experience in a related field  
**PS award:** Postsecondary vocational award  
**Deg. + exp.:** Degree plus work experience  
**Prof.:** First professional degree

SOC Code	Description	2009 Jobs	2014 Jobs	Growth	% Growth	Hourly Earnings	Education Level
51-7041	Sawing machine setters, operators, and tenders, wood	420	339	(81)	(19%)	\$14.80	MT OJT
51-7042	Woodworking machine setters, operators, and tenders, except sawing	414	420	6	1%	\$12.91	MT OJT
45-4022	Logging equipment operators	391	307	(84)	(22%)	\$17.01	MT OJT
51-9198	Helpers--Production workers	300	275	(25)	(8%)	\$10.68	ST OJT
45-4029	Logging workers, all other	230	161	(69)	(30%)	\$13.80	MT OJT
51-7011	Cabinetmakers and bench carpenters	197	217	20	10%	\$12.90	LT OJT
45-2092	Farmworkers and laborers, crop, nursery, and greenhouse	170	183	13	7%	\$11.64	ST OJT
51-2092	Team assemblers	170	174	4	2%	\$10.34	MT OJT
45-4023	Log graders and scalers	161	101	(60)	(37%)	\$15.91	MT OJT
47-2031	Carpenters	145	148	3	2%	\$14.61	LT OJT
53-7062	Laborers and freight, stock, and material movers, hand	138	105	(33)	(24%)	\$10.24	ST OJT
53-3032	Truck drivers, heavy and tractor-trailer	124	105	(19)	(16%)	\$16.13	MT OJT
11-9199	Managers, all other	121	113	(8)	(7%)	\$11.00	Exp. in field
45-1099	Supervisors, farming, fishing, and forestry workers	121	85	(36)	(30%)	\$17.59	Exp. in field

## Largest Occupations in Cluster (Continued)

SOC Code	Description	2009 Jobs	2014 Jobs	Growth	% Growth	Hourly Earnings	Education Level
51-1011	First-line supervisors/managers of production and operating workers	112	104	(8)	(7%)	\$20.36	Exp. in field
45-4021	Fallers	107	65	(42)	(39%)	\$14.76	MT OJT
19-1032	Foresters	93	70	(23)	(25%)	\$22.45	Bachelor's
53-7051	Industrial truck and tractor operators	93	75	(18)	(19%)	\$14.38	ST OJT
43-3031	Bookkeeping, accounting, and auditing clerks	90	79	(11)	(13%)	\$12.28	MT OJT
49-9044	Millwrights	88	84	(4)	(4%)	\$18.89	LT OJT
53-7063	Machine feeders and offbearers	81	73	(8)	(10%)	\$15.44	ST OJT
49-9041	Industrial machinery mechanics	67	66	(1)	(1%)	\$24.21	LT OJT
51-9061	Inspectors, testers, sorters, samplers, and weighers	57	50	(7)	(14%)	\$15.66	MT OJT
43-6014	Secretaries, except legal, medical, and executive	54	46	(8)	(15%)	\$10.91	MT OJT
41-4012	Sales representatives, wholesale and manufacturing, except technical and scientific products	53	46	(7)	(13%)	\$17.56	MT OJT
49-9042	Maintenance and repair workers, general	53	48	(5)	(9%)	\$14.00	MT OJT
11-1021	General and operations managers	52	43	(9)	(16%)	\$27.86	Deg. + exp.
47-2111	Electricians	46	46	0	(1%)	\$20.20	LT OJT
51-8021	Stationary engineers and boiler operators	43	39	(4)	(9%)	\$21.89	LT OJT
45-2093	Farmworkers, farm and ranch animals	39	42	3	9%	\$9.00	ST OJT
11-1011	Chief executives	37	33	(4)	(11%)	\$15.53	Deg. + exp.
39-2021	Nonfarm animal caretakers	35	37	2	5%	\$7.46	ST OJT
39-2011	Animal trainers	34	36	2	6%	\$7.57	MT OJT
43-6011	Executive secretaries and administrative assistants	32	30	(2)	(8%)	\$14.21	MT OJT
51-9041	Extruding, forming, pressing, and compacting machine setters, operators, and tenders	30	33	3	10%	\$11.44	MT OJT
53-3033	Truck drivers, light or delivery services	30	25	(5)	(17%)	\$11.35	ST OJT
43-9061	Office clerks, general	28	25	(3)	(12%)	\$11.10	ST OJT
45-4011	Forest and conservation workers	28	31	3	12%	\$16.10	MT OJT
37-2011	Janitors and cleaners, except maids and housekeeping cleaners	27	24	(3)	(13%)	\$9.84	ST OJT
43-5071	Shipping, receiving, and traffic clerks	26	23	(3)	(12%)	\$11.39	ST OJT
51-2099	Assemblers and fabricators, all other	25	24	(1)	(3%)	\$11.03	MT OJT
51-9032	Cutting and slicing machine setters, operators, and tenders	25	27	2	8%	\$14.52	MT OJT
11-9012	Farmers and ranchers	23	25	2	6%	\$6.97	LT OJT
51-9199	Production workers, all other	21	20	(1)	(5%)	\$12.96	MT OJT
11-3051	Industrial production managers	20	18	(2)	(9%)	\$32.29	Exp. in field
53-7011	Conveyor operators and tenders	20	16	(4)	(19%)	\$17.90	ST OJT
19-1031	Conservation scientists	19	20	1	3%	\$24.37	Bachelor's
51-7099	Woodworkers, all other	19	17	(2)	(12%)	\$10.90	MT OJT
11-9011	Farm, ranch, and other agricultural managers	17	20	3	14%	\$8.75	Deg. + exp.
13-1023	Purchasing agents, except wholesale, retail, and farm products	17	15	(2)	(15%)	\$17.35	Exp. in field

Hourly earnings are the median for workers in the occupation.

## Fastest Changing Occupations

SOC Code	Description	Change
45-4022	Logging equipment operators	(84)
51-7041	Sawing machine setters, operators, and tenders, wood	(81)
45-4029	Logging workers, all other	(69)
45-4023	Log graders and scalers	(60)
45-4021	Fallers	(42)
45-1099	Supervisors, farming, fishing, and forestry workers	(36)
53-7062	Laborers and freight, stock, and material movers, hand	(33)
51-9198	Helpers--Production workers	(25)
19-1032	Foresters	(23)
51-7011	Cabinetmakers and bench carpenters	20

## Fastest Changing Occupations (%)

SOC Code	Description	% Change
13-1022	Wholesale and retail buyers, except farm products	(47%)
53-7033	Loading machine operators, underground mining	(45%)
51-4194	Tool grinders, filers, and sharpeners	(45%)
49-9011	Mechanical door repairers	(45%)
51-2022	Electrical and electronic equipment assemblers	(42%)
41-2021	Counter and rental clerks	(42%)
45-4021	Fallers	(39%)
45-4023	Log graders and scalers	(37%)
53-3031	Driver/sales workers	(33%)
51-9193	Cooling and freezing equipment operators and tenders	(31%)

# FOCUS OCCUPATIONS

## Focus Occupations for the Cluster

The following occupations were selected for further analysis based on (1) size within the cluster, (2) growth, (3) median hourly earnings, and (4) average education level (note that this level is a survey-based average, and does not reflect local need or demand for workers with higher levels of education).

SOC Code	Description	2009 Jobs	2014 Jobs	Change	% Change	Hourly Earnings	Education Level
51-7042	Woodworking machine setters, operators, and tenders, except sawing*	414	420	6	1%	\$12.91	MT OJT
51-7011	Cabinetmakers and bench carpenters*	197	217	20	10%	\$12.90	LT OJT
53-3032	Truck drivers, heavy and tractor-trailer*	124	105	(19)	(16%)	\$16.13	MT OJT
49-9041	Industrial machinery mechanics*	67	66	(1)	(1%)	\$24.21	LT OJT
19-1031	Conservation scientists	19	20	1	3%	\$24.37	Bachelor's
19-4093	Forest and conservation technicians	--	--	--	--	\$14.47	Associate's

Note: Jobs and job change numbers include only jobs in the cluster, not total regional jobs in this occupation. Earnings, however, are for all regional jobs in each occupation, cluster and non-cluster.

\* No corresponding CIP programs found in regional institutions. It will not be included in the Focus Programs section.

## Total Regional Focus Occupation Jobs (Cluster and Non-Cluster)

SOC Code	Description	2009 Jobs	2014 Jobs	Growth	% Growth	Replacement Jobs	% New & Rep.	Hourly Earnings
51-7042	Woodworking machine setters, operators, and tenders, except sawing	429	438	9	2%	53	15%	\$12.91
51-7011	Cabinetmakers and bench carpenters	235	260	25	11%	35	26%	\$12.90
53-3033	Truck drivers, light or delivery services	1,328	1,351	23	2%	118	11%	\$11.35
49-9041	Industrial machinery mechanics	229	251	22	10%	19	18%	\$24.21
19-1031	Conservation scientists	148	165	17	11%	22	26%	\$24.37
19-4093	Forest and conservation technicians	631	707	76	12%	126	32%	\$14.47

Replacement Jobs: Estimated number of job openings over the selected timeframe due to retirement, turnover, and other causes (as opposed to new job openings indicated in the "Change" column).

% New & Rep.: New and replacement jobs as a percentage of total start year jobs. A high percentage indicates a dynamic job market with strong hiring activity, while a low percentage indicates a more static job market.

# FOCUS OCCUPATION PROGRAMS

## Overview of Program Data

In the following pages, the focus occupations will be tied to regional training programs and providers, together with recent completions in each relevant program as reported in the national IPEDS database (<http://nces.ed.gov>). This process converts the initial SOC-coded occupations to O\*NET-coded occupations, which may differ slightly—in particular, O\*NET occupations may be more specific than SOC occupations (see <http://www.onetcenter.org>). Finally, these O\*NET occupations are tied to standard program (CIP) codes using an expanded version of the crosswalk created by the U.S. Department of Education (see <http://nces.ed.gov/pubs2002/cip2000/>).

Not all focus occupations may be included, either because there are no standard programs (CIPs) tied to them, or no relevant programs are offered in the region. Programs which are offered but have zero completions are still included.

Data included are as follows:

**Relevant programs:** The table shows all relevant CIP programs related to the given occupation and total regional completions in each. If the program is not currently offered in the region, the “completions” column will show “Program not in region.”

**Total completions by County:** The table shows total completions in all relevant programs for each county in the region.

**Detailed completions:** Finally, the last table provides detailed completions by program and award level at each regional education/training institution.

## Forest and Conservation Workers and Technicians (0\*NET Code 19-4093.00)

Description: 1) Compile data pertaining to size, content, condition, and other characteristics of forest tracts, under direction of foresters; train and lead forest workers in forest propagation, fire prevention and suppression. May assist conservation scientists in managing, improving, and protecting rangelands and wildlife habitats, and help provide technical assistance regarding the conservation of soil, water, and related natural resources; 2) Under supervision, perform manual labor necessary to develop, maintain, or protect forest, forested areas, and woodlands through such activities as raising and transporting tree seedlings; combating insects, pests, and diseases harmful to trees; and building erosion and water control structures and leaching of forest soil. Includes forester aides, seedling pullers, and tree planters.

### Relevant Occupational Programs (All Degree Levels)

CIP Code	Title	2007 Completions
3.0101	Natural Resources/Conservation, General	51
3.0501	Forestry, General	39
3.0206	Land Use Planning and Management/Development	14
3.9999	Natural Resources and Conservation, Other	4
3.0511	Forest Technology/Technician	3
3.0299	Natural Resources Management and Policy, Other	1
<b>Total</b>		<b>112</b>

### Total Completions by County

County	Completions
Missoula, (30063)	82
Gallatin, (30031)	26
Lake, (30047)	3
Flathead, (30029)	1

### Relevant Programs and Completions by Institution

CIP Code	Title	Institution	Award Level	2007 Completions
3.0501	Forestry, General	The University of Montana	Doctor's degree	4
3.0101	Natural Resources/Conservation, General	The University of Montana	Master's degree	11
3.0206	Land Use Planning and Management/Development	Montana State University	Master's degree	7
3.0501	Forestry, General	The University of Montana	Master's degree	5
3.0101	Natural Resources/Conservation, General	Montana State University	Master's degree	5
3.0501	Forestry, General	The University of Montana	Bachelor's degree	30
3.0101	Natural Resources/Conservation, General	The University of Montana	Bachelor's degree	28
3.0206	Land Use Planning and Management/Development	Montana State University	Bachelor's degree	7
3.0101	Natural Resources/Conservation, General	Montana State University	Bachelor's degree	7
3.0511	Forest Technology/Technician	Salish Kootenai College	Bachelor's degree	2
3.0299	Natural Resources Management and Policy, Other	Flathead Valley Community College	Associate's degree	1
3.0511	Forest Technology/Technician	Salish Kootenai College	Associate's degree	1
3.9999	Natural Resources and Conservation, Other	The University of Montana	Award of at least 1 but less than 2 academic years	4

## Soil and Water Conservationists, Range Managers, and Park Naturalists (O\*NET Codes 19-1031.01, .02, .03)

Description: 1) Plan and develop coordinated practices for soil erosion control, soil and water conservation, and sound land use; 2) Research or study range land management practices to provide sustained production of forage, livestock, and wildlife; 3) Plan, develop, and conduct programs to inform public of historical, natural, and scientific features of national, state, or local park.

### Relevant Occupational Programs (All Degree Levels)

CIP Code	Title	2007 Completions
3.0601	Wildlife and Wildlands Science and Management	60
3.0101	Natural Resources/Conservation, General	51
3.0501	Forestry, General	39
3.0206	Land Use Planning and Management/Development	14
3.9999	Natural Resources and Conservation, Other	4
3.0201	Natural Resources Management and Policy	3
3.0299	Natural Resources Management and Policy, Other	1
<b>Total</b>		<b>172</b>

### Total Completions by County

County	Completions
Missoula, (30063)	134
Gallatin, (30031)	35
Glacier, (30035)	2
Flathead, (30029)	1

### Relevant Programs and Completions by Institution

CIP Code	Title	Institution	Award Level	2006 Completions
3.0501	Forestry, General	The University of Montana	Doctor's degree	4
3.0601	Wildlife and Wildlands Science and Management	Montana State University	Doctor's degree	2
3.0601	Wildlife and Wildlands Science and Management	The University of Montana	Doctor's degree	0
3.0101	Natural Resources/Conservation, General	The University of Montana	Master's degree	11
3.0206	Land Use Planning and Management/Development	Montana State University	Master's degree	7
3.0601	Wildlife and Wildlands Science and Management	The University of Montana	Master's degree	7
3.0601	Wildlife and Wildlands Science and Management	Montana State University	Master's degree	6
3.0101	Natural Resources/Conservation, General	Montana State University	Master's degree	5
3.0501	Forestry, General	The University of Montana	Master's degree	5
3.0201	Natural Resources Management and Policy	The University of Montana	Master's degree	1
3.0601	Wildlife and Wildlands Science and Management	The University of Montana	Bachelor's degree	44
3.0501	Forestry, General	The University of Montana	Bachelor's degree	30
3.0101	Natural Resources/Conservation, General	The University of Montana	Bachelor's degree	28
3.0101	Natural Resources/Conservation, General	Montana State University	Bachelor's degree	7
3.0206	Land Use Planning and Management/Development	Montana State University	Bachelor's degree	7
3.0601	Wildlife and Wildlands Science and Management	Montana State University	Bachelor's degree	1
3.0201	Natural Resources Management and Policy	The University of Montana	Bachelor's degree	0
3.9999	Natural Resources and Conservation, Other	The University of Montana	Award of at least 1 but less than 2 academic years	4
3.0201	Natural Resources Management and Policy	Blackfeet Community College	Associate's degree	2
3.0299	Natural Resources Management and Policy, Other	Flathead Valley Community College	Associate's degree	1

# ABOUT EMSI AND THE DATA

## About EMSI

EMSI provides integrated data, web-based tools, and consulting services to analyze regional economies intelligently in terms of economic base, industry and employment trends, economic impact simulations, industry clusters, regional competitiveness, human capital, labor market supply and demand, and demographics. EMSI's integrated database is based on 70 government sources, making it much more comprehensive, accurate, and detailed than any single source available. In addition, EMSI's web-based suite of analysis tools makes the information easy to access and use. If you would like to learn more about EMSI or its products and services, please visit us online at [www.economicmodeling.com](http://www.economicmodeling.com), or call 1-866-999-3674.

## EMSI Data

As a data provider, EMSI gathers and harmonizes data from 70 State and Federal sources, creating in-house a comprehensive and current database that is unsurpassed for its breadth and detail. Industry, workforce, and demographic data are available from state and county levels all the way down to individual ZIP codes, and users can build custom regions from county and ZIP code areas. In addition, by combining dozens of data sources, we can fill gaps in individual sources (such as suppressions and missing proprietors)—yielding a composite database that exploits the strengths of each source. Finally, our database is updated biannually, so our subscribers have access to the most complete and up-to-date information on the market.

## EMSI's StrategicAdvantage™ (SA)

The report was created primarily using the Economic Forecaster and Career Pathways modules, two of four modules within Strategic Advantage™. Economic Forecaster is a powerful, labor market projection tool that allows workforce and economic developers to create detailed industry, occupation and demographic analyses that can be used to better analyze the regional economy and workforce. The Career Pathways module offers data and analysis related to occupational competency (knowledge, skills and ability) requirements, regional human capital, and ways of identifying employment and re-training opportunities for unemployed or dislocated workers.

EMSI's StrategicAdvantage™ web-based analysis suite capitalizes on the company's premium database to produce accessible analysis and reports. The suite includes four main modules—Economic Forecaster, Economic Impact, Career Pathways and Educational Analyst—which each include several analysis tools that allow users to create customizable tables, graphs, and maps with the click of a button.

With EMSI's StrategicAdvantage™, workforce professionals and economic developers can:

- Perform instant analyses with an intuitive web-based interface,
- Understand current and future trends in a regional economy (industries, occupations, demographics) with ten-year projections,
- Create presentation-ready graphs, tables, and maps,
- Learn how to draw the right businesses to a region and maximize return on investment,
- Run impact scenarios of businesses entering, leaving, growing, or shrinking in a region,
- Know the skills embedded in the workforce and required by specific occupations,
- Minimize unemployment and transition workers into high-demand, high-wage occupations, and
- Identify the businesses and workers a region needs to recruit and retain in order to make its economy thrive.

## Selected EMSI Data Sources

CD Light, LLC, d.b.a. ZipInfo.com. ZIPLIST5 Plus Zip Code Data.

———. ZipInfo.com. <http://www.zipinfo.com> (accessed May 2005).

U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

———. Health, United States, 2004.

U.S. Census Bureau.

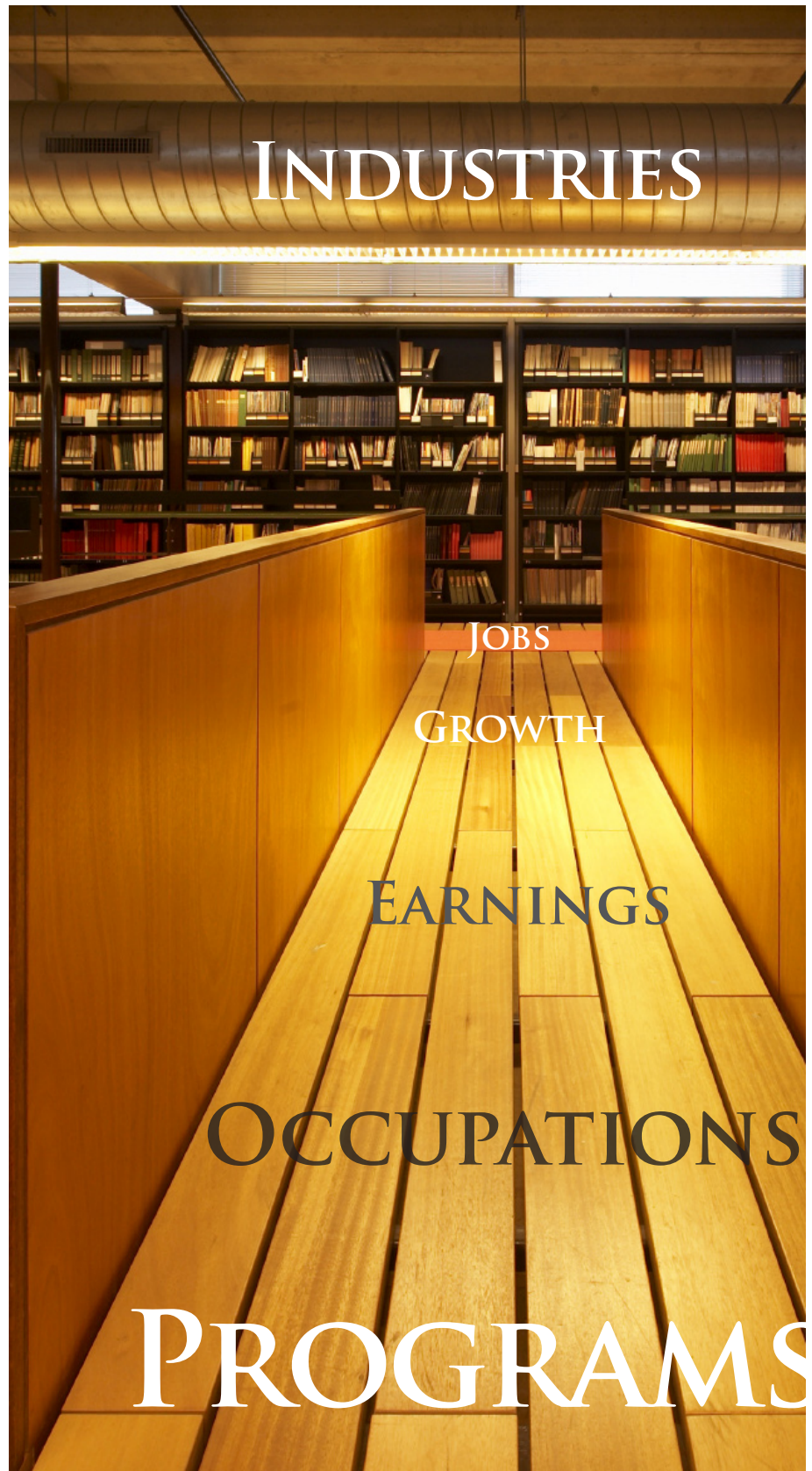
———. County Business Patterns (CBP) Employment Reports.

———. Current State Demographic data.

- . Current County Demographic data.
  - . Decennial Census Reports.
  - . National Population Report.
  - . Nonemployer Statistics Reports.
  - . Projected State Demographic data.
  - . State Population Total Reports.
- U.S. Department of Commerce, Bureau of Economic Analysis.
- . Regional Economic Information Systems (REIS). County Demographic data.
  - . Regional Economic Information Systems (REIS). Employment & Earnings Reports.
  - . State Personal Income Employment and Earnings Reports.
- U.S. Department of Education, National Center for Education Statistics.
- . Integrated Postsecondary Education Data System Institutional Characteristics Survey. <http://nces.ed.gov/Iped/ics.asp> (accessed April 2005).
  - . Integrated Postsecondary Education Data System Faculty Salaries Data. <http://nces.ed.gov/Iped/facultysalaries.asp> (accessed April 2005).
  - . Integrated Postsecondary Education Data System Fall Staff Data. <http://nces.ed.gov/Iped/fallstaff.asp> (accessed April 2005).
- U.S. Department of Labor, Bureau of Labor Statistics.
- . Occupation to CIP (Classification of Instructional Programs).
  - . Public Elementary/Secondary School Universe Survey Data. <http://nces.ed.gov/ccd/pubschuniv.asp> (accessed April 2005).
  - . Characteristics of the Insured Unemployed.
  - . Current Employment Statistics.
  - . Current Year National Occupation Matrix.
  - . Local Area Unemployment Statistics.
  - . National Current Industry data.
  - . National Projected Industry data.
  - . National Replacement Jobs data.
  - . Projected National Occupation Matrix.
  - . Quarterly Census of Employment and Wages. (also known as ES-202 Covered Employment & Wages Data.)
- In addition, EMSI uses labor market data and projections produced by nearly all 50 individual states.

## About This Report

This report was produced by Economic Modeling Specialists Inc. using a proprietary, integrated database built from 70 State and Federal sources. It was developed in partnership with Workforce Strategy Center to provide a data-driven, occupation-focused overview of a regional industry cluster. The goal of the report is to assist regional planners in their understanding of the region's labor market within a particular cluster. Knowledge of the local situation is strongly recommended to interpret all the data correctly.



economicmodeling.com  
1-866-999-3674  
1187 Alturas Dr.  
Moscow, ID 83843

