IDAHO'S FUTURE

Where the Next Jobs Come From

Fall 2010

IDAHO
DEPARTMENT OF LABOR
C.L. "Butch" Otter, Governor
Roger B. Madsen, Director

Idaho's Future: Where the Next Jobs Come From

Engines of the Next Expansion

C.I. "Butch" Otter, Governor
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CONTENTS

WHERE THE NEXT JOBS COME FROM **5**
INTRODUCTION 5
EVALUATION POINTS **7**
NORTHERN IDAHO **9**
OVERVIEW 9
MANUFACTURING 12
WOOD PRODUCTS MANUFACTURING 18
ADVANCED MANUFACTURING 22
GREEN JOBS IN MANUFACTURING 25
AEROSPACE MANUFACTURING 27
BIOMASS MANUFACTURING 29
HEALTH CARE AND SOCIAL ASSISTANCE 30
TOURISM 34
NORTH CENTRAL IDAHO **37**
OVERVIEW 37
MANUFACTURING 39
LOGGING AND BIOMASS 42
CONSTRUCTION 47
AGRICULTURE, FORESTRY, FISHING AND HUNTING 53
LEISURE AND HOSPITALITY 57
HEALTH CARE AND SOCIAL ASSISTANCE 61
PROFESSIONAL, BUSINESS, INFORMATION SERVICES 67
SOUTHWESTERN IDAHO **73**
OVERVIEW 73
AGRICULTURE 76
TRANSPORTATION 81
HEALTH CARE 86
HIGH TECHNOLOGY 90
ADVANCED MANUFACTURING 95
ENERGY 100
SOUTH CENTRAL IDAHO **106**
OVERVIEW 106
AGRICULTURE 110
ADVANCED MANUFACTURING 114
CONSTRUCTION 121
ENERGY 124
HEALTH CARE 129
TOURISM 133

EASTERN IDAHO **138**
OVERVIEW 138
TRANSPORTATION AND WAREHOUSING 139
HEALTH CARE AND SOCIAL SERVICES 142
HIGH TECHNOLOGY 146
ENERGY 151
METHODOLOGY **156**

Where the Next Jobs Come From

Introduction

The Great Recession eliminated over 55,000 jobs across Idaho from the expansion's peak in mid-2007 through mid-2010, and while the state economy appeared to have hit bottom at the end of 2009 in terms of jobs, it has bounced along the bottom into the second half of 2010 with no sector showing the strength to begin a solid recovery.

The signs are increasing that the recovery, once it begins, will be slow.

Extremely tight credit following the financial sector fiasco, deflation in real estate values and the excessive inventory hanging over the housing market have depressed the construction sector to the point it will be 2025 or later before it regains the 23,000 jobs lost since the housing bubble began bursting in late 2006 and early 2007.

Manufacturing shed 14,000 jobs over the same period, about 21 of the total. Over half were in the high technology sector that had given the Idaho economy such a lift up to, through and immediately after the 2001 recession.

Based on existing conditions and the outlook for the near term, it will likely be 2014 before Idaho regains all those jobs lost to the recession. The question has become what kind of jobs will those be.

To a great extent, economies – regional, state, national and international – chart their own courses. Compared to the businesses and their owners, government policymakers and economic developers are able to influence the course of an economy only marginally. But to the extent that they have influence on Idaho's future economic direction, this report looks at the economic value of specific sectors, offering insight into both economic stability and economic expansion.

The data are for 2008, offering a look at the Idaho economy during a year of transition from a period of robust expansion to one of sharp contraction. Long-term projections take for granted that the ups and downs of the business cycle balance themselves out over a decade.

Population growth will drive expansion in areas of the service economy, and Economic Modeling Specialists Inc. forecasts Idaho's population will grow 11 percent between 2008 and 2018 while the nation's population is expected to rise 6 percent.

Education should continue steady growth as the population of school age children remains at just over 22 percent of the total population over the next decade, and health care should follow a solid growth trend with the population over 55 increasing from under 23 percent now to nearly 27 percent in 2018.

With the rest of the country facing the same economic issues Idaho and its regions face, building on existing economic strengths offers a straightforward strategy for the future. That could involve recruiting companies to fill gaps in the supply lines of sectors and subsectors that already have a strong economic presence as reflected in their location quotients.

Whether Idaho's economy is undergoing a structural change through this recession is still to be determined. But during the structural change that accompanied the recessions of the 1980s, Idaho managed to trade good-paying resource sector jobs in timber and mining for lesser paying jobs in the service sector. Idaho's average wage dropped from 87 percent of the national average wage in 1979 to 75.5 percent in 2008.

Percent of Employment By Size of Business

	2007	2009
1000+	8.2%	8.4%
500-999	6.0%	5.7%
250-499	7.4%	7.4%
100-249	13.7%	13.9%
50-99	15.0%	15.0%
20-49	19.2%	18.8%
10-19	13.0%	13.0%
5-9	9.6%	9.7%
1-4	7.8%	8.1%

The loss of so many jobs on the production side of the Idaho economy since 2006 raises a similar specter, making wages for Idaho's emerging jobs an issue as the economy evolves.

Except for health care, the recession stripped jobs from every sector and every business size. The share of total employment was up slightly among both the largest and smallest employers while the biggest declines occurred among employers with payrolls of 20 to 49 and 500 to 999. The distribution of employment, however, was essentially unchanged. Businesses with fewer than 100 workers provided 64.7 percent of all jobs in 2007 and 64.5 percent in 2009.

Idaho Employers and Employees, by Size 2007 and 2009

	2007		2009		Percentage Change		Number Change	
Size	Employer	Employee	Employer	Employee	Employer	Employee	Employer	Employee
1000+	24	54,125	26	51,357	6.25%	-5.11%	2	-2,768
500-999	57	39,457	50	34,849	-11.84%	-11.68%	-7	-4,607
250-499	142	48,953	131	45,349	-7.92%	-7.36%	-11	-3,604
100-249	619	90,124	586	84,944	-5.29%	-5.75%	-33	-5,181
50-99	1,463	98,831	1,358	91,383	-7.21%	-7.54%	-106	-7,448
20-49	4,247	126,402	3,836	114,602	-9.68%	-9.34%	-411	-11,800
10-19	6,428	85,410	5,916	79,334	-7.96%	-7.11%	-512	-6,076
5-9	9,691	63,526	8,993	59,264	-7.20%	-6.71%	-698	-4,262
1-4	25,320	51,547	24,466	49,598	-3.37%	-3.78%	-854	-1,948
All	47,990	658,374	45,362	610,681	-5.48%	-7.24%	-2,629	-47,694

Evaluation Points

Seasonality. Industries subject to extreme seasonal patterns manage their work forces through periods of unemployment every year. As a result, many employees work fewer hours than they want. Ideally, industries targeted in sector strategies should have limited seasonal patterns.

Exports. Industries selling most of their goods and services outside their home region – exporters – play a central role in a region's economic success because they bring in money from other areas. Along with population, they determine what makes an economy grow. Industries targeted for sector strategies ideally should be exporters.

Multiplier. The higher the multiplier, the greater an industry's effect on the economy. A high multiplier means the industry direct expansion creates more jobs in other sectors. The multiplier effect comes from spending by the new employees of the expanding industry and that industry's spending with local suppliers. In general, the higher the wages offered by an industry and its suppliers, the higher the multiplier effect. The more an industry relies on local suppliers, the greater its multiplier effect.

Wages and Benefits. Industries targeted in sector strategies should offer higher wages and better benefits than average. The level of their financial infusion through wages and benefits increases an industry's impact on economic development in the region.

Location Quotient. A location quotient is calculated by dividing the industry's share of employment in the region by the industry's share of employment in the nation. If the location quotient is higher than 1, that means the industry's share of employment in the region is greater than its share of employment in the nation. The higher the quotient, the greater an industry's relative importance in the region. But the location quotient by itself is not a factor in determining whether an industry should be targeted.

Shift-Share Analysis. This method of estimating the relative importance of different elements in the growth or decline of industrial employment separates change attributable to the national rate of change in that industry from change due to the industrial structure of the region itself and its locational advantages or disadvantages to isolate growth or decline beyond those circumstances. The differential share compares the differences in a region between the actual employment in an industry and the employment it would have had if it had changed at the national rate for that industry. The regional share indicates what would have happened if the region had maintained its share of total national manufacturing employment. The structural shift estimates the change expected in a region if each industry in the region changes at its own national rate.

Size and Growth Over Time. The size and potential for establishment and employment growth is a factor in identifying targeted industries. In general, the larger an industry, the better choice

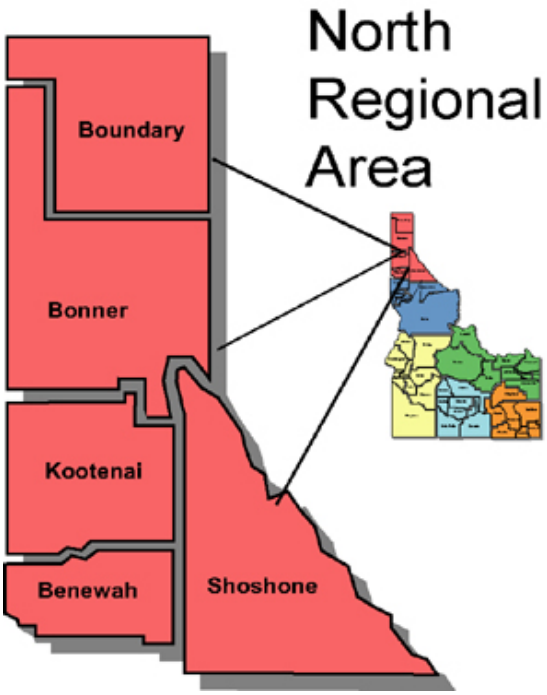
it may be for a sector strategy. Industries that have grown rapidly over time are more likely to grow rapidly in the future, which also makes them more viable.

U.S. Size and Growth. National industry growth over time – in the past and projected into the future – is likely to be mirrored regionally. So while there are exceptions, industries with strong growth nationally are viable targets in sector strategies.

Need for Replacement Workers. Work force demands from retirements and turnover during the next few years play into selecting targeted industries.

Source of Data. Except where noted, data in this report come from the Quarterly Census of Employment and Wages maintained by the Idaho Department of Labor. Job projections, multipliers and location quotients are provided through Economic Modeling Specialists Inc., which supplements the Quarterly Census of Employment and Wages with data from the Regional Economic Information System published by the Bureau of Economic Analysis, County Business Patterns and nonemployer statistics published by the U.S. Census Bureau.

Northern Idaho



Overview

In 2008, the health care and social assistance sector provided the largest percentage of jobs in northern Idaho followed by accommodations and food service, construction, educational services and administrative and support and waste management and remediation services.

Health care employed 12.8 percent of total average employment for the year. Ambulatory health care accounted for four of every 10 jobs, which included physicians' offices, and hospitals accounted for one in four in 2008.

Hotels and restaurants provided about 10.5 percent of the region's jobs, and three of every four were in full-service restaurants and drinking establishments.

Construction provided nearly 9 percent of the region's jobs, and more than half were in the specialty trades subsector.

Educational services accounted for 6.5 percent of the regional total, and four out of every five of those people worked in elementary and secondary schools.

Finally, administrative and support services, which provide all but a fraction of the jobs in the sector that includes waste management and remediation services, accounted for almost 5 percent of the region's jobs – about equally divided among employment services, business services and call centers.

Northern Idaho Average Employment 2008

Selected Sectors		
	Total	% of Total
Total Regional Employment	82,598	100.0%
Health Care and Social Assistance	10,532	12.8%
Ambulatory Health Care Services	4,448	5.4%
Hospitals	2,865	3.5%
Accommodation and Food Services	8,658	10.5%
Food Services and Drinking Places	6,444	7.8%

Construction	7,255	8.8%
Specialty Trade Contractors	4,249	5.1%
Educational Services	5,362	6.5%
Elementary and Secondary Schools	4,253	5.1%
Colleges, Universities and Professional Schools	836	1.0%
Administrative, Support, Waste Mgt and Remediation Services	3,958	4.8%
Employment Services	1,217	1.5%
Business Services	1,246	1.5%
Telephone Call Centers	1,102	1.3%

The industries with the largest growth over the past five years in the five-county region are similar but not identical.

Sectors Posting Most Job Growth, 2003-2008

	Jobs			Percent
Sector	2003	2008	Change	Change
Construction	5,003	7,255	2,252	45.0%
Accommodation, Food Services	7,010	8,658	1,648	23.5%
Health Care, Social Assistance	8,918	10,532	1,614	18.1%
Finance, Insurance	1,900	2,779	879	46.3%
Arts, Entertainment, Recreation	2,312	3,183	871	37.7%

These industries are ranked by nominal job change, which is a better indicator of growth since percentage changes can skew perception, especially when they are calculated on a small base.

Payrolls in the region increased by 38 percent between 2003 and 2008, but again the magnitude of the improvements can be distorted on a percentage basis.

Total Wages for Northern Idaho by Sector

	2003	2008	Change	% Chg
Total	$2,904,700	$4,009,734	$1,105,034	38.0%
Local Government	$429,560	$591,828	$162,268	37.8%
Construction	$284,898	$413,402	$128,504	45.1%
Retail Trade	$371,509	$496,969	$125,460	33.8%
Health Care, Social Assistance	$262,512	$380,557	$118,045	45.0%
Professional, Scientific, Technical Services	$140,207	$232,024	$91,817	65.5%
Manufacturing	$304,006	$392,123	$88,117	29.0%
Financial Services	$100,936	$165,885	$64,949	64.3%
Mining	$35,601	$87,974	$52,373	147.1%
Accommodations, Food Service	$112,891	$162,551	$49,660	44.0%
Wholesale Trade	$66,275	$112,102	$45,827	69.1%
Other Services	$112,013	$156,172	$44,159	39.4%
Arts, Entertainment, Recreation	$59,234	$83,526	$24,292	41.0%
Transportation, Warehousing	$76,138	$99,289	$23,151	30.4%
Information	$54,633	$69,295	$14,662	26.8%

	2003	2008	Change	% Chg
State Government	$55,907	$70,559	$14,652	26.2%
Utilities	$27,909	$36,437	$8,528	30.6%
Administrative, Waste Management Services	$96,724	$104,614	$7,890	8.2%
Federal Government	$84,758	$91,323	$6,565	7.7%
Educational Services	$20,044	$24,982	$4,938	24.6%
Real Estate	$65,296	$63,517	-$1,779	-2.7%
Management of Companies	$33,836	$30,272	-$3,564	-10.5%
Natural Resources	$52,131	$47,995	-$4,136	-7.9%

Over the long term an industry, which has steadily increased the number of employees over a 15-year period, is sustainable – economically sound through good and bad times. Health care, construction, accommodations and food services, administrative and support services and professional, scientific and technical services meet that standard in northern Idaho.

Based on an analysis of average employment, health care, accommodations and food services and construction were the driving forces in northern Idaho's economic development from 1993 through 2008.

Projections from Economic Modeling Specialists Inc., based on Quarterly Census of Employment and Wages data along with past trends and state and national industry growth rates identify health care, finance, real estate, construction and local government as the sectors to spur future growth.

These projections, however, do not tell the entire story because they could be skewed by the past activity of just a few businesses that have disproportionate influence on their specific sectors.

Historically, northern Idaho's economy has been dominated by logging, mining, health care, tourism and construction with manufacturing a secondary but solid contributor in 2008. While building on the foundation of the Panhandle economy should make the region more diverse and competitive, current demographics and skills of the work force play a role.

The excessive inventory created by the housing bubble in the mid-2000s and the downward pressure on housing values in the subsequent recession have essentially eliminated construction as an engine of future growth. Currently, construction is not expected to regain its pre-recession job levels for at least another decade and likely longer. While population growth will result in more construction jobs in the coming years, that does not justify a special capital investment to influence a sector that for the most part relies on expansion in other sectors for its growth. Collaborative efforts of the Kootenai Technical Education Center and Communiversity originating in Bonner County can maintain the skill levels needed to meet the region's construction demands at least for the near- and mid-terms.

The construction explosion in the five-county Panhandle was epitomized by the increase in employers from just 716 in 1993 to 1,719 in 2007. Employment more than doubled from 3,600 to over 8,100, accounting for nearly 11 percent of the region's total payroll in 2007. Almost two thirds of this activity was in Kootenai County.

But the recession bit into construction harder than any other sector. Employers, jobs and payroll began sliding in 2008 and dropped further in 2009. Employers fell 10 percent from the peak, employees 30 percent and wages 29 percent.

The erosion was worse statewide, and Economic Modeling Specialists Inc. still projects the region's construction sector will grow 17 percent from 2008 to 2018 with most of that coming in the next four years, well short of the 31 percent growth of the previous 10 years. Statewide, construction is expected to grow 11 percent over the decade.

The sector is comprised of mostly 25- to 34-year-old workers. Those 55 and older make up just 18 percent of total employment in northern Idaho and only 11 percent in regional construction so the need to replace retiring workers over the next decade is not high.

Manufacturing

Manufacturing provides a good economic base in the region's economy as well as a variety of products. But the federal push to develop so-called green jobs and the potential for clusters developing in specialized areas like aerospace and biomass offer opportunities to capitalize on the very skills existing manufacturing businesses foster and rely on.

Seasonality. Most manufacturing sectors are not affected by the seasons but often have temporary shut-downs, in many cases on a cyclical basis, for maintenance or product change-over.

Exports. Since most of its products are shipped out of the area to distributors, manufacturing is heavily oriented to exporting and, therefore, plays a large role on the region's economy. It has a direct impact on transportation and warehousing.

Multiplier. Manufacturing has a multiplier of 2.28, the average over all subsectors, with wood products the highest at 3.49. That means that for every 10 jobs created in manufacturing another 12.8 jobs are created in other sectors and subsectors or for every 10 jobs created in wood products production nearly 25 more are created in other industries. Due to the high multiplier, manufacturing generates a strong positive impact on the regional economy.

Wages and Benefits. Manufacturing offers high wages. Most employees also receive health care insurance and retirement benefits.

2008 Average Manufacturing Earnings for Idaho Panhandle

Statewide	$49,449
Region	$38,877
Wood Products	$40,380
Plastics, Rubber Products	$34,911
Primary Metal	$37,611
Electrical Equipment, Appliance	$64,998
Furniture, Related Product	$34,272
Miscellaneous Manufacturing	$33,459

Location Quotient. Overall the manufacturing location quotient is comparable to the national average and is projected to increase by 2018. The wood products, furniture and plastic and rubber products components of this sector are much more prevalent in the region. Their location quotients are already high, making them a sustainable component of the regional economy. According to Economic Modeling Specialists Inc. data, half of the subsectors have declining location quotients. However, these industries will continue to exhibit a higher demand for labor compared to the U.S. average.

Panhandle Location Quotient For Manufacturing

	2008	2018
Manufacturing Overall	0.97	1.10
Wood Products	6.83	6.84
Plastics and Rubber Products	1.11	1.38
Primary Metals	1.08	1.36
Electrical Equipment and Appliances	0.88	1.44
Furniture and Related Products	2.06	2.50
Miscellaneous Manufacturing	1.20	1.40

Size and Growth Over Time. Manufacturing accounted for 4.7 percent of the region's total payroll in 2008. Nearly 66 percent came from wood products, 20 percent from fabricated metal products, 16 percent from furniture and 12 percent from plastics and rubber products.

Panhandle Manufacturing Jobs, 1993- 2008

Sector	Employment				2008 Change From			2008 % Change From		
	1993	1998	2003	2008	2003	1998	1993	2003	1998	1993
Manufacturing Overall	6,117	7,310	7,115	8,030	915	720	1,914	12.9%	9.9%	31.3%
Wood Products	3,323	3,166	2,801	2,150	-650	-1,016	-1,173	-23.2%	-32.1%	-35.3%
Plastics, Rubber Products	257	343	408	498	91	155	241	22.3%	45.2%	93.9%
Primary Metals	124	173	176	332	156	159	208	88.7%	92.1%	168.5%
Electrical Equipment, Appliances	267	286	208	234	26	-52	-33	12.5%	-18.1%	-12.4%
Furniture, Related Products	179	745	665	608	-58	-137	428	-8.7%	-18.4%	238.7%
Miscellaneous Manufacturing	176	207	235	304	69	97	128	29.2%	46.9%	72.4%

In 2008, northern Idaho had 428 manufacturing employers, 126 more than in 1993. Over half made wood products and fabricated metal, and two of every three manufacturers were in Kootenai County. Another 22 percent were in Bonner County. But many of the existing employers in Bonner County have expanded over the years, and manufacturing employment was up 25 percent from 1993.

North Idaho's Largest Manufacturing Employers

Employer	Subsector Description	City	Payroll
Potlatch Land & Lumber LLC	Wood product manufacturing	St Maries, Post Falls	300-399
Flexcel Inc.	Furniture and related product manufacturing	Post Falls	300-399
Accurate Molded Plastics	Plastics and rubber products manufacturing	Coeur d'Alene	150-199
Sunshine Minting Inc.	Miscellaneous manufacturing	Coeur d'Alene	150-199
Thorne Research Inc.	Chemical manufacturing	Dover	150-199
Transtector Systems Inc.	Electrical equipment and appliance mfg.	Hayden Lake	150-199
Unicep Packaging Inc.	Plastics and rubber products manufacturing	Sandpoint	150-199
Idaho Forest Group	Wood product manufacturing	Athol, Laclede, Moyie Springs	100-149
Berg Integrated Systems	Primary metal manufacturing	Plummer	50-99
Lead-Lok Inc.	Miscellaneous manufacturing	Sandpoint	50-99
Louisiana Pacific Corp.	Wood product manufacturing	Sandpoint	50-99
Raycap Inc.	Electrical equipment and appliance mfg.	Post Falls	50-99
Unitech Composites Inc.	Plastics and rubber products manufacturing	Hayden Lake	50-99
21st Century Scientific Inc.	Miscellaneous manufacturing	Coeur D'Alene	20-49
Aagesen Millworks Inc.	Wood product manufacturing	Hayden	20-49
Abco Wood Recycling LLC	Wood product manufacturing	Post Falls	20-49
Custom Building & Supply Inc.	Wood product manufacturing	Post Falls	20-49
Elite Door And Sash Inc.	Wood product manufacturing	Hayden	20-49
Enyeart Cedar Products LLC	Wood product manufacturing	Smelterville	20-49
Essential Metals Corp.	Primary metal manufacturing	Kellogg	20-49
Fmi-Eps LLC	Plastics and rubber products manufacturing	Post Falls	20-49
Idaho Veneer Co.	Wood product manufacturing	Post Falls	20-49
Imco Recycling Of Idaho Inc.	Primary metal manufacturing	Post Falls	20-49
Interstate Plastics Inc.	Plastics and rubber products manufacturing	Post Falls	20-49

Employer	Subsector Description	City	Payroll
L A Aluminum Casting Co.	Primary metal manufacturing	Hayden Lake	20-49
Malloy Lumber Co. Inc.	Wood product manufacturing	Kingston	20-49
Merritt Brothers Lumber Co. Inc.	Wood product manufacturing	Athol	20-49
North Idaho Energy Logs Inc.	Wood product manufacturing	Bonners Ferry	20-49
Northwest Building Components	Wood product manufacturing	Rathdrum	20-49
Percussionaire Corp.	Miscellaneous manufacturing	Sagle	20-49
Pneumex Inc.	Miscellaneous manufacturing	Sandpoint	20-49
Professional Production Products	Wood product manufacturing	Old Town	20-49
Select Euro Systems Inc.	Furniture and related product manufacturing	Hayden	20-49
Stimson Lumber Co. Inc.	Wood product manufacturing	Coeur d'Alene, Plummer, Priest River	20-49
Stratford Homes	Wood product manufacturing	Rathdrum	20-49
Technologies Inc.	Miscellaneous manufacturing	Coeur d'Alene	20-49

Growth from 2008 to 2018 is projected by Economic Modeling Specialists Inc. at just 8 percent in northern Idaho. The largest increase in activity is expected in chemical production and electrical equipment and appliance manufacturing. The Panhandle growth projection runs counter to the estimated loss of 1,500 manufacturing jobs statewide, 2 percent, over the same decade.

2008 Manufacturing Jobs and 2018 Projections

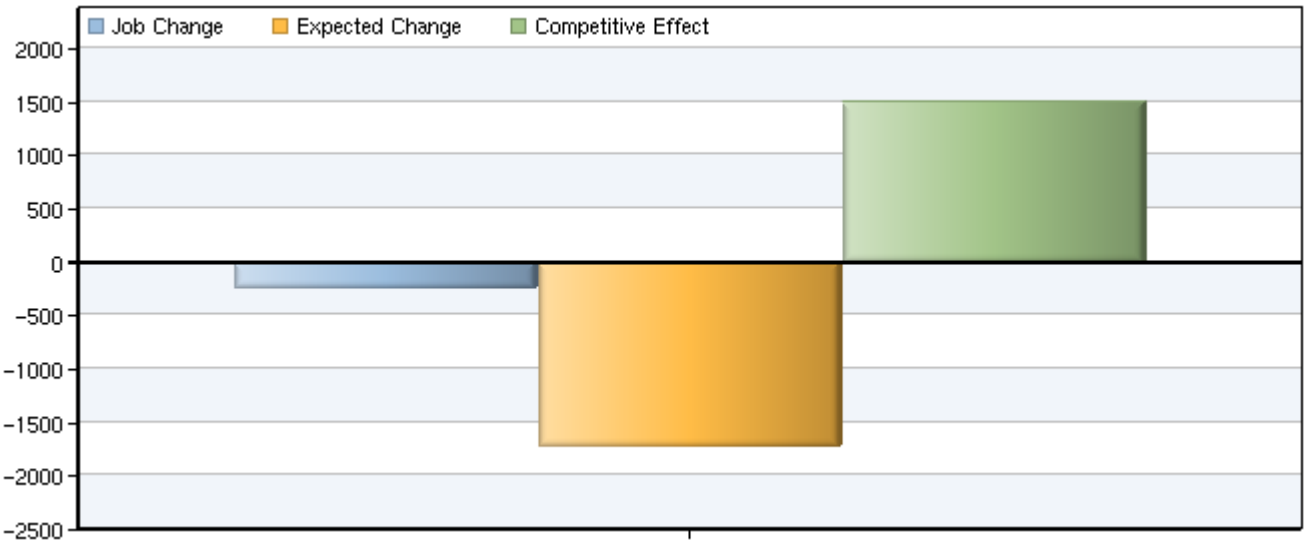
Description	2008 Jobs	2018 Jobs	Change	% Change
U.S. Total	14,019,886	12,446,604	-1,573,282	-11%
State Total	68,314	66,929	-1,385	-2%
Northern Idaho Total	9,111	9,843	732	8%
Wood product manufacturing	2,150	1,658	-492	-23%
Chemical manufacturing	168	307	139	83%
Plastics and rubber products manufacturing	560	649	89	16%
Nonmetallic mineral product manufacturing	412	457	45	11%
Primary metal manufacturing	327	338	11	3%
Fabricated metal product manufacturing	859	1,017	158	18%
Machinery manufacturing	666	648	-18	-3%
Computer and electronic product manufacturing	569	489	-80	-14%
Electrical equipment and appliance mfg.	259	384	125	48%
Transportation equipment manufacturing	381	539	158	41%
Furniture and related product manufacturing	704	718	14	2%
Miscellaneous manufacturing	610	764	154	25%

Source: Economic Modeling Specialists Inc. Jan 2010

Nationally, manufacturing employment rose nearly 5 percent from 1993 to 1998 and then began a precipitous decline, dropping over 4 million jobs, or 24 percent to hit 13.4 million in 2008. The U.S. Bureau of Labor Statistics projects manufacturing to fall another 9 percent to 12.2 million jobs by 2018.

Shift Share. While the expected change in manufacturing jobs in northern Idaho falls short of national trends, the sector has a competitive advantage over national trends. The industrial mix represents the share of regional industry growth attributable to growth of the industry nationally.

Shift-Share Analysis of Change in Northern Idaho Manufacturing Jobs



Replacement Workers. While workers 55 years and older make up 18 percent of employment in northern Idaho, they hold only 2 percent of the region's manufacturing jobs so replacement demand will be minimal. From 2003 to 2008, the manufacturing industry listed 2,184 job openings with the Idaho Department of Labor local offices in Bonners Ferry, Sandpoint, Coeur d'Alene, Kellogg and St. Maries. That accounted for less than 14 percent of all job listings in the region.

Manufacturing Occupational Projections

Occupation	Jobs				% Change	
	2006		2016		2016	
	State	Panhandle	State	Panhandle	State	Panhandle
Managers, All Other	3,899	499	4,108	489	5.36%	-2.00%
First-Line Supervisors/Managers of Production and Operating Workers	3,372	471	3,721	567	10.35%	20.38%
Team Assemblers	3,846	569	4,675	741	21.55%	30.23%
Machinists	1,486	194	1,808	243	21.67%	25.26%

Occupation	Jobs				% Change	
	2006		2016		2016	
	State	Panhandle	State	Panhandle	State	Panhandle
Cabinetmakers and Bench Carpenters	1,143	281	1,214	394	6.21%	40.21%
Woodworking Machine Setters, Operators, Tenders, Except Sawing	690	263	679	384	-1.59%	46.01%
Truck Drivers, Heavy and Tractor-Trailer	14,133	1,361	16,795	1,608	18.84%	18.15%
Laborers and Freight, Stock, Material Movers, Hand	9,568	839	10,092	940	5.48%	12.04%
Source: Economic Modeling Specialists Inc.						

Six of the eight occupations are projected to grow more rapidly in northern Idaho than in the state. Woodworking machine setters, operators and tenders are expected to outpace the rest of the occupations, growing regionally 46 percent from 2006 to 2016, but only at the rate of five replacements and 17 new job openings a year.

Truck drivers, both heavy and tractor-trailer, show the largest numeric increase during that period both statewide and regionally. The occupation also is projected to have the largest number of job openings annually.

Selected Northern Idaho Wages

Occupation	Jobs	Entry Wage	Midpoint Wage	Average Wage	25th Percentile	75th Percentile	Training
First-Line Supervisors-Managers of Production and Operating Workers	440	$14.74	$19.35	$21.36	$16.08	$24.16	Work Experience in a Related Field
Team Assemblers	550	$8.96	$11.10	$11.38	$9.74	$13.25	Moderate-Term On-The-Job Training
Machinists	190	$9.71	$15.90	$15.45	$10.57	$19.04	Long-Term On-The-Job Training
Cabinetmakers and Bench Carpenters	240	$9.98	$12.97	$13.18	$10.70	$15.58	Long-Term On-The-Job Training
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	260	$10.89	$12.71	$13.17	$11.38	$14.24	Moderate-Term On-The-Job Training
Truck Drivers, Heavy and Tractor-Trailer	1,220	$11.92	$16.83	$16.62	$13.85	$19.53	Moderate-Term On-The-Job Training
Laborers and Freight, Stock, and Material Movers, Hand	800	$8.14	$11.33	$12.29	$8.86	$15.04	Short-Term On-The-Job Training

Wood Products Manufacturing

The wood products industry has played a major role in northern Idaho's economy for over a century.

Seasonality. Many wood product manufacturers have temporary shutdowns, often on cyclical bases, for maintenance or product changeover.

Exports. Wood product manufacturing is heavily oriented to exporting since most of its products are shipped out of the area to distributors. Therefore, it plays a large role in northern Idaho's economy, having a direct impact on transportation and warehousing.

Multiplier. The multiplier for wood products manufacturing, developed using a variety of industrial sectors in the cluster, is 3.49. That means that for every 10 jobs created in wood products manufacturing nearly 25 more are created in other sectors. Due to the high multiplier, wood product manufacturing generates a strong positive impact on the regional economy, especially since many companies pay above-average wages.

Northern Idaho's Average Wood Products Manufacturing Wage

			Change to 2008	
Year	Jobs	Avg Wage	Jobs	Avg Wage
1993	3,323	$29,897	-1,173	$9,530
1998	3,166	$32,671	-1,016	$6,756
2003	2,801	$34,684	-651	$4,743
2008	2,150	$39,427	—	—

Wages and Benefits. The average wage in wood products manufacturing is 22 percent higher than all other sectors. Most jobs in wood products manufacturing carry benefits.

Location Quotient. While wood products manufacturing only accounted for 2.6 percent of total jobs in northern Idaho in 2008, the location quotient for the industry is astounding compared to the nation. This indicates that northern Idaho has a significantly larger demand for labor in this industry than the United States as a whole. The overall regional demand in the industry is not projected to change, however, and the disparity between sawmill and veneer and engineered wood production offset each other. Sawmills, having a high concentration of employment, are moving to a less labor intensive production process by integrating higher, more sustainable technology.

Panhandle Location Quotient for Wood Products Manufacturing

	Nation	
	2008	2018
Wood Products Manufacturing Overall	6.83	6.84
Sawmills and wood preservation	15.12	6.21
Veneer, plywood, engineered wood product manufacturing	9.92	15.39
Other wood product manufacturing	2.62	3.04

Size and Growth Over Time. Wood products manufacturing provided 2.6 percent of the region's employment in 2008 and 3.3 percent of its wages. Sawmills and wood preservation comprise over 50 percent of total industry employment and wages. This subsector was also responsible for nearly 50 percent of the decline in employment from 1993 to 2008.

Overall, there was a net growth of only two employers during that period. There are 12 fewer sawmills than there were in 1993 and 10 more employers producing veneer, plywood and engineered wood products.

Panhandle Wood Products Manufacturing Employers

Employer	City	Payroll
Potlatch Land & Lumber LLC	St. Maries, Post Falls	300-399
Idaho Forest Group	Athol, Laclede, Moyie Springs	100-149
Louisiana Pacific Corp.	Sandpoint	50-99
Aagesen Millworks Inc.	Hayden	20-49
ABCO Wood Recycling LLC	Post Falls	20-49
Custom Building & Supply Inc.	Post Falls	20-49
Elite Door and Sash Inc.	Hayden	20-49
Enyeart Cedar Products LLC	Smelterville	20-49
Idaho Veneer Co.	Post Falls	20-49
Malloy Lumber Co. Inc.	Kingston	20-49
Merritt Brothers Lumber Co. Inc.	Athol	20-49
North Idaho Energy Logs Inc.	Bonners Ferry	20-49
Northwest Building Components	Rathdrum	20-49
Professional Production Product	Old Town	20-49
Stimson Lumber Co. Inc.	Coeur d'Alene, Plummer, Priest River	20-49
Stratford Homes	Rathdrum	20-49

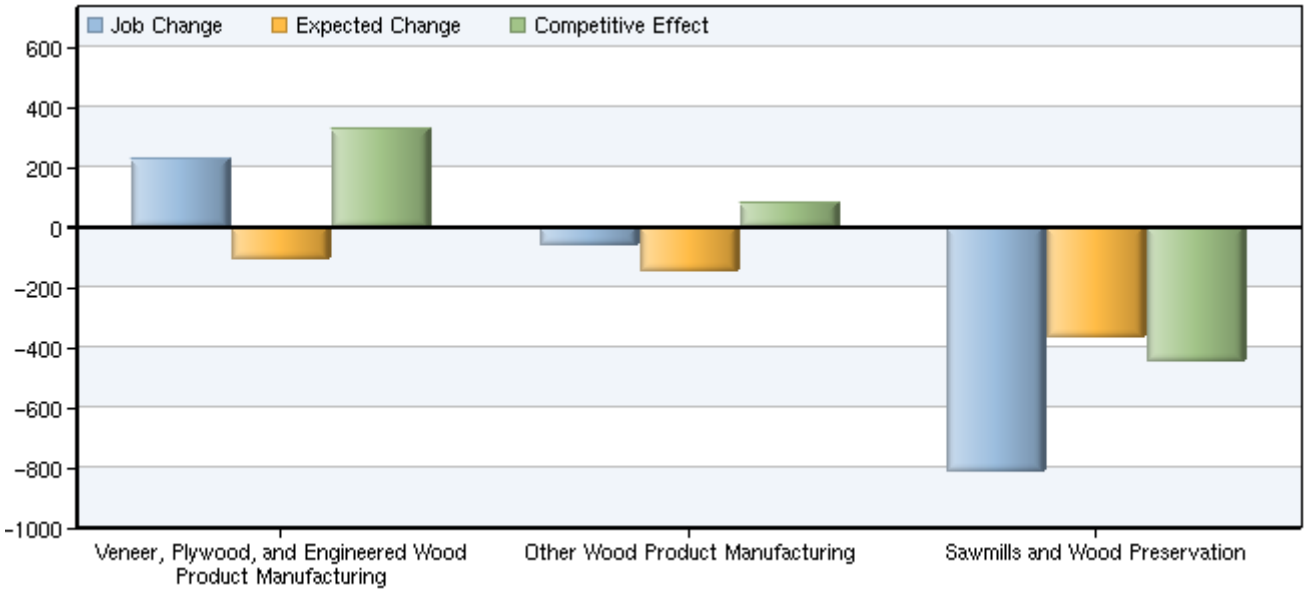
According to Economic Modeling Specialists Inc., the wood products industry in northern Idaho is projected to decline 28 percent from 2008 to 2018, essentially matching the 28 percent decline statewide and 29 percent drop nationally. Employment in sawmills and wood preservation are expected to decline 70.7 percent, from 1,146 in 2008 to 336 in 2018.

Wood Products Manufacturing Job Projections for the Panhandle

Description	2008 Jobs	2018 Jobs	Change	% Change
U.S. Total	506,000	372,335	(133,765)	(26%)
State Total	7,201	5,107	(2,094)	(29%)
Northern Idaho - Overall Wood Products Manufacturing	2,150	1,658	(492)	(23%)
Sawmills and wood preservation	1,146	336	(810)	(71%)
Veneer, plywood, engineered wood product manufacturing	633	857	(224)	(35%)
Other wood product manufacturing	529	466	(63)	(12%)

Shift Share. According to Economic Modeling Specialists Inc., veneer, plywood and engineered wood products have a competitive advantage over sawmills and wood preservation as well as over national trends. The sawmill and wood preservation sectors have a substantially less competitive advantage over national trends. Much of this is due to the smaller sawmill operators not having the capital their larger competitors have to keep up with the technological advances.

Shift-Share Analysis of Change in Northern Idaho Wood Products Jobs



Replacement Workers. While workers 55 years and older make up 18 percent of employment in northern Idaho, they hold 21.9 percent of the region's wood products manufacturing jobs so replacement demand will be substantial. The average age of a sawmill worker is 43. With few apprenticeships and little education in the trade, many of these jobs will be insignificant to the region.

From 2003 to 2008, the wood products industry listed only 146 job openings with the Idaho Department of Labor local offices in Bonners Ferry, Sandpoint, Coeur d'Alene, Kellogg and St. Maries. That accounted for less than 1 percent of all job listing. In 2008, there were 2,553 job applicants registered with the above offices who were either seeking or interested in the most concentrated occupations within the wood products industry — excluding carpenters, which totaled 1,153 applicants alone.

According to data is derived from Idaho Department of Labor's Occupation Regional Projections for 2006-2016, the largest concentrations of occupations within wood products manufacturing in northern Idaho are:

Wood Products Occupational Projections

	Jobs				% Change	
	2006		2016		2016	
Occupation	**State**	**Panhandle**	**State**	**Panhandle**	**State**	**Panhandle**
Carpenters	13,352	2,501	15,783	2,930	18.21%	17.20%
First-Line Supervisors/Managers of Production and Operating Workers	3,372	471	3,721	567	10.35%	20.38%
Team Assemblers	3,846	569	4,675	741	21.55%	30.23%
Sawing machine setters, operators, and tenders	796	315	907	423	13.94%	34.30%
Woodworking Machine Setters, Operators, and Tenders, Except Sawing	690	263	679	384	-1.59%	46.01%
Laborers and freight, stock, and material movers	9,568	839	10,092	940	5.48%	12.04%
Machine feeders and offbearers	820	159	848	173	3.41%	8.80%

Selected Wood Products Manufacturing Wages

Occupation	Jobs	Entry Wage	Midpoint Wage	Average Wage	25th Percentile	75th Percentile	Training
Carpenters	6,530	11.61	15.80	17.57	12.93	21.74	Long-Term On-the-Job Training
First-Line Supervisors, Managers of Production and Operating Workers	3,050	14.79	21.65	23.13	16.46	28.21	Work Experience in a Related Field
Team Assemblers	3,430	9.53	12.45	13.35	10.41	15.37	Moderate-Term On-the-Job Training
Sawing Machine Setters, Operators, Tenders, Wood	920	8.84	15.95	15.63	9.41	21.37	Moderate-Term On-the-Job Training
Woodworking Machine Setters, Operators, Tenders, Except Sawing	600	9.93	12.30	12.74	10.62	14.31	Moderate-Term On-the-Job Training
Laborers and Freight, Stock, Material Movers, Hand	9,010	7.93	9.75	10.68	8.26	12.40	Short-Term On-the-Job Training
Machine Feeders and Offbearers	710	8.86	11.84	12.28	9.66	14.83	Short-Term On-the-Job Training

Advanced Manufacturing

Advanced manufacturing is a cluster of 63 manufacturing subsectors identified by Economic Modeling Specialists Inc., the Bureau of Labor Statistic's O'NET and several other states to reflect the accelerated use of high-technology processes in production plants. The transformation to advanced manufacturing has profound implications for the manufacturing work force. Employers increasingly need workers who are focused on innovation in both products and processes. Modern manufacturing workers require advanced academic, workplace and technical skills to keep their employers competitive. This is reflected in the fact that even as overall employment in manufacturing declines, many employers report difficulty finding the highly-skilled workers they need.

Seasonality. Most manufacturing sectors are not subject to seasonal fluctuations, but many have temporary shutdowns, often on cyclical bases, for maintenance or product changeover.

Exports. Advanced manufacturing is heavily oriented to exporting since most of its products are shipped out of the area to distributors. Therefore, it plays a large role in the region's economy, having a direct impact on transportation and warehousing.

Multiplier. The multiplier for advanced manufacturing, developed using a variety of industrial sectors in the cluster, is 1.05, which means that this cluster does not produce many jobs in other sectors within this region. Due to the low multiplier, advanced manufacturing has an insignificant impact on the rest of the regional economy.

Wages and Benefits. The average wage in advanced manufacturing has ranged from 15 percent to 32 percent above the average wage for the region over the 15-year period. Most jobs in manufacturing carry benefits.

Location Quotient. The location quotient for the advanced manufacturing cluster is 1.02, indicating that advanced manufacturing in northern Idaho is comparable in demand to the United States as a whole. Economic Modeling Specialists Inc. forecasts the location quotient to rise to 1.12 by 2018, which exhibits more demand, as a group, in industries that make up the advanced manufacturing cluster.

Size and Growth Over time. Advanced manufacturing provided 9.1 percent of the region's employment in 2008 and 10.5 percent of its wages. Employment in advanced manufacturing increased 29.4 percent from 1993 to 2008. This cluster was growing during the expansion of the 1990s until the economy began cooling late in the decade heading into the 2001 recession. Most of the change in employment can be attributed to the rise and slowing decline in office furniture manufacturing and semiconductor and circuit board manufacturing. In just a year's time, this industry declined 12.3 percent from 7,536 in 2008 to 6,609 in 2009, with almost 20 employers leaving the region.

Northern Idaho Advanced Manufacturing Average Employment and Wages

Year	Average Jobs	Average Wage	Percent Change Jobs	Percent Change Wages
1991	5,257	$23,086.51		
1992	5,541	$25,549.22	5.4%	10.7%
1993	5,823	$25,637.36	5.1%	0.3%
Year	**Average Jobs**	**Average Wage**	**Percent Change Jobs**	**Percent Change Wages**
1994	6,485	$26,245.43	11.4%	2.4%
1995	6,906	$25,484.73	6.5%	-2.9%
1996	6,740	$27,402.31	-2.4%	7.5%
1997	7,074	$28,145.78	5.0%	2.7%
1998	6,951	$28,982.33	-1.7%	3.0%
1999	6,860	$29,590.56	-1.3%	2.1%
2000	6,838	$30,644.31	-0.3%	3.6%
2001	6,668	$30,178.97	-2.5%	-1.5%
2002	6,551	$30,961.62	-1.8%	2.6%
2003	6,808	$32,091.20	3.9%	3.6%
2004	6,864	$33,403.81	0.8%	4.1%
2005	7,500	$34,207.53	9.3%	2.4%
2006	7,829	$35,091.30	4.4%	2.6%
2007	7,848	$35,652.83	0.2%	1.6%
2008	7,536	$36,113.22	-4.0%	1.3%
2009	6,609	$35,560.83	-12.3%	-1.5%

Panhandle Advanced Manufacturing Employers

Employer	City	Payroll
Litehouse Inc.	Sandpoint	364
Advanced Input Devices Inc.	Coeur d'Alene	315
Potlatch Land & Lumber LLC	St Maries	294
Quest Aircraft Co. Inc.	Sandpoint	273
Buck Knives Inc.	Post Falls	226
Sunshine Minting Inc.	Coeur d'Alene	192
Stimson Lumber Co. Inc.	Coeur d'Alene	154
Accurate Molded Plastics	Coeur d'Alene	153
Thorne Research Inc.	Dover	150
Unicep Packaging Inc.	Sandpoint	150
Idaho Forest Group	Laclede	131
Encoder Products Co.	Sagle	120
Idaho Forest Group	Moyie Springs	94
Mor Manufacturing Corp.	Post Falls	94
Interstate Concrete & Asphalt Co	Coeur d'Alene	87
Louisiana Pacific Corp.	Sandpoint	83
Idaho Forest Group	Athol	79
Unitech Composites Inc.	Hayden Lake	77

Employer	City	Payroll
Nilfisk Advance Inc.	Coeur d'Alene	58
Energy Products Of Idaho	Coeur d'Alene	56
Heater Craft Marine Product	Rathdrum	52
Lead-Lok Inc.	Sandpoint	50
Stimson Lumber	Plummer	46
Ground Force Manufacturing LLC	Post Falls	45
Percussionaire Corp.	Sagle	37
L A Aluminum Casting Co.	Hayden Lake	36
All Seasons Apparel	Post Falls	35
Stratford Homes	Rathdrum	35
Fmi-Eps LLC	Post Falls	35
Schuon Manufacturing Co. Inc.	Coeur d'Alene	35
Professional Production Products	Old Town	34
Zanetti Brothers Inc.	Osburn	32
Spunstrand Inc.	Wallace	31
Interstate Concrete & Asphalt Co.	Sandpoint	30
Diedrich Coffee Roasters	Sandpoint	30
Lignetics of Idaho Inc.	Kootenai	30

Need for Replacement Workers. Economic Modeling Specialists Inc. projects advanced manufacturing will continue to lose jobs through 2018. But this cluster provided over 7,500 jobs paying more than $270 million in wages in 2008 across northern Idaho. It is important to the region's economy, and there is potential to retain existing jobs and attract new ones if the cluster is targeted during the recovery and the region's skilled work force, available facilities and other resources are highlighted.

Advanced Manufacturing Projections

	Jobs		Numeric	Percent
Area	2008	2018	Growth	Growth
Northern Idaho	7,536	7,139	-397	-5.30%
State of Idaho	65,828	57,452	-8,376	-12.72%
United States	12,286,491	10,410,773	-1,875,718	-15.27%

According to Idaho Department of Labor 2006-2016 occupation projections, all occupations most concentrated in advanced manufacturing in northern Idaho are projected to grow. In addition, with a projected location quotient in 2018 of just over one, advanced manufacturing will be slightly more in demand in northern Idaho than the rest of the nation.

2006-2016 Advanced Manufacturing Job Projections

	Jobs				% Change	
	2006		2016		2016	
Occupation	**State**	**Panhandle**	**State**	**Panhandle**	**State**	**Panhandle**
Managers, all other	5,048	703	5,441	768	7.8%	9.3%
First-Line Supervisors/Managers of Production and Operating Workers	3,372	471	3,721	567	10.4%	20.4%
Team Assemblers	3,846	569	4,675	741	21.6%	30.2%
Cabinetmakers and bench carpenters	1,712	343	2,105	440	23.0%	28.3%
Sawing machine setters, operators, and tenders	796	315	907	423	13.9%	34.3%
Woodworking Machine Setters, Operators, Tenders, Except Sawing	690	263	679	384	-1.6%	46.0%
Laborers and freight, stock, material movers	9,568	839	10,092	940	5.5%	12.0%
Machine feeders and offbearers	820	159	848	173	3.4%	8.8%

Green Jobs in Manufacturing

The concept of green jobs is still abstract. A green industry or occupation is not directly associated with the actual job but rather the specific product or service being provided. The Idaho Department of Labor defines a green job as one in which the work is essential to products or services in any of the following core areas:

- Renewable Energy and Alternative Fuels
- Energy Efficiency and Conservation
- Sustainable Agriculture and Natural Resource Conservation
- Pollution and Waste Prevention, Reduction and Management and Environmental Cleanup

Occupations and Skills Prevalent in Existing Panhandle Industries and the Green Sectors They Could Serve

Green Job Sector	Occupation
Building Retrofitting	Aircraft structure, surfaces, rigging, systems assemblers
	Electricians
	Plumbers
	Sheet metal workers
	Construction carpenters, laborers
	Insulation workers
Biomass	Agricultural, Forestry supervisors
	Truck drivers, Heavy, Tractor-Trailer
	Logging Equipment operators

	Forest, Conservation workers Tree trimmers
	Electrical engineer - wind turbine electrical engineer Electrical engineer - wind farm electrical systems designer Aircraft mechanics, service technicians
Wind Power Wind Power	Aircraft structure, surfaces, rigging, and systems assemblers Truck drivers, heavy, tractor-trailer Painters, transportation equipment

Building Retrofitting Occupational Projections

Occupation	2008 Jobs	2018 Jobs	Percent Change	Median Wage	Education Level
Carpenters	2,755	2,636	-4.3%	$14.81	Long-Term On-the-Job Training
Electricians	657	670	2.0%	$18.90	Long-Term On-the-Job Training
Insulation workers, floor, ceiling, wall	57	59	3.5%	$17.02	Moderate-Term On-the-Job Training
Plumbers, pipefitters, steamfitters	354	322	-9.0%	$16.65	Long-Term On-the-Job Training
Sheet metal workers	89	81	-9.0%	$19.65	Long-Term On-the-Job Training
Aircraft structure, surfaces, rigging, systems assemblers	18	43	138.9%	$18.03	Long-Term On-the-Job Training

Biomass Occupational Projections

Description	2008 Jobs	2018 Jobs	Percent Change	Median Wage	Education Level
Tree trimmers and pruners	129	163	26.4%	$9.57	Short-Term On-the-Job Training
Supervisors, farming, fishing, forestry workers	153	114	-25.5%	$15.61	Work Experience in a Related Field
Forest and conservation workers	11	<10	N/A	--	Moderate-Term On-the-Job Training
Logging equipment operators	315	167	-47.0%	$15.39	Moderate-Term On-the-Job Training
Truck drivers, heavy and tractor-trailer	1,538	1,525	-0.8%	$16.63	Moderate-Term On-the-Job Training

Wind Power Occupational Projections					
Description	2008 Jobs	2018 Jobs	Percent Change	Median Wage	Education Level
Electrical engineers	65	67	3.1%	$31.26	Bachelor's Degree
Aircraft structure, surfaces, rigging, systems assemblers	18	43	138.9%	$18.03	Long-Term On-the-Job Training
Aircraft mechanics and service technicians	114	163	43.0%	$17.18	Postsecondary Vocational Award
Painters, transportation equipment	37	40	8.1%	$16.71	Long-Term On-the-Job Training
Truck drivers, heavy and tractor-trailer	1,538	1,525	-0.8%	$16.63	Moderate-Term On-the-Job Training

Aircraft mechanics, service technicians and assemblers have the most competitive advantage of the listed occupations.

In addition to the wood products and advanced manufacturing occupations, employers in the Panhandle with some green jobs are the Forest Service, tribal governments and environmental cleanup projects such as the federal Superfund site in Silver Valley that includes the Spokane River and Lake Coeur d'Alene as well as phosphorus reduction, the calculation of total maximum daily loads of pollutants and wastewater treatment facilities.

Aerospace Manufacturing

The aerospace cluster in northern Idaho is small but growing rapidly. It includes not only aircraft and aircraft parts makers like Quest Aircraft in Sandpoint, Aerocet in Priest River and Aerostar in Coeur d'Alene but also manufacturers that supply them:

- Unitech Composites, a maker of fiberglass products in Hayden.
- Plastic Model Engineering, an injection molding company in Post Falls.
- Accurate Molded Plastics in Coeur d'Alene.
- Form Physics, a molder of metal components in Hayden.
- MEI, a parts crafter in Hayden.
- Cygnus, a metal parts manufacturer in Ponderay.
- Titan Springs, a high technology manufacturer of wires and springs in Hayden.
- Smart Plugs, a maker of ignition systems in Sandpoint.
- Integrated Ideas and Technologies, a maker of fiberglass products in Post Falls.
- Empire Aerospace, which provides air transport and repairs airplanes in Hayden.

In just 10 years, this component of the Panhandle economy doubled in size. From 1998 to 2008 aerospace-related employers grew from nine to 17 and their payrolls jumped from 369 to 825.

Aerospace is heavily export oriented so a high percentage of its gross revenue comes from outside the region, giving it much more economic impact than many other sectors. Because of the high skill level this sector demands, wages and benefits are also high.

Northern Idaho's Average 2008 Wage

All Sectors	$31,265
Aerospace Cluster	$37,121
Aerospace Manufacturing	$37,019
Other Aerospace	$37,164

Because it is an exporter with high wages, aerospace has a multiplier of 2.7 in Idaho. That means that for every 10 jobs it creates, another 17 are created in other areas of the economy. The growth this sector has exhibited in the past suggests this multiplier will rise as more suppliers join the cluster. Economic Modeling Specialists Inc. expects the relatively small regional aerospace cluster to grow another 32 percent from 2008 to 2018 in contrast to the sector remaining flat nationally over the coming decade. Between 1998 and 2003, employment in the U.S. aerospace cluster fell 13 percent from over 1.1 million to under a million in 2003. It recovered to 1 million by 2008. The location quotient for the Panhandle in 2009 was 1.13, meaning aerospace was a more important economic component regionally than nationally. Aerospace jobs accounted for 4.2 percent of all regional jobs, a half point more than nationally.

While small, the aerospace sector in northern Idaho has a significant diversifying effect on the economy, and its further growth lessens the region's reliance on the volatile timber industry.

Panhandle Aerospace Job Listings 2006-2008

Aircraft Mechanics, Service Technicians	67
Crossing Guards	58
Commercial Pilots	48
Aircraft Structure, Surfaces, Rigging, Systems Assemblers	22
Customer Service Representatives	16
Security Guards	15
Construction, Related Workers, All Other	14
Avionics Technicians	13
Automotive Service Technicians, Mechanics	12
Laborers, Freight, Stock, Material Movers, Hand	12
Truck Drivers, Heavy, Tractor-Trailer	8
Reservation, Transportation Ticket Agents	7
Painters, Transportation Equipment	7
Parts Salespersons	7
Cleaners of Vehicles, Equipment	7
First-Line Supervisors/Managers of Transportation, Material-Moving Machine, Vehicle Operators	6
Bookkeeping, Accounting, Auditing Clerks	5
Office Clerks, General	5
Service Station Attendants	5
Executive Secretaries, Administrative Assistants	4

Shipping, Receiving, Traffic Clerks	4
Truck Drivers, Light or Delivery Services	4
Janitors, Cleaners, Except Maids, Housekeeping Cleaners	3
Computer Systems Analysts	3
Maintenance, Repair Workers, General	3
Administrative Services Managers	3
Sales Managers	3
First-Line Supervisors of Office Workers	3
Upholsterers	3
Electrical, Electronic Engineering Technicians	2

As mentioned earlier, occupations within the aerospace industry have a large competitive advantage.

Biomass Manufacturing

With 87 percent – 4.4 million acres – of the Panhandle in forest, the region has a significant source of organic matter – biomass – for producing wood products, mulch, paper, even plastics as a replacement for petroleum and for generating heat and steam to run turbines that produce electricity. The environmental benefits include reduced reliance on fossil fuels and forest restoration and enhancement by removing diseased trees and invasive species and reducing fuels that feed forest fires.

Developing biomass projects can expand and diversify rural economies and replace some of the jobs lost in the severe contraction of the logging sector. The Panhandle has hundreds of experienced timber industry workers, who can no longer find jobs in forests and mills but have skills that fit well with biomass projects. Biomass can also benefit from available timber industry infrastructure.

Skills needed in biomass are similar to those needed in forestry and timber, which provide high wages – nearly $38,000 a year on average in 2008 compared to less than $31,300 for all jobs in the Panhandle. In addition, any move toward power generation would bring on higher paid professionals and technicians for electricity generating plants.

Other similarities exist between biomass and logging. As an exporter, logging has a multiplier of 3.81 in Idaho, meaning for every 10 logging jobs over 28 more jobs are created in other sectors of the economy. Logging's location quotient in 2008 was 19.83, which means logging is nearly 20 times as important in the Panhandle's economy as in the nation's economy. That would not be the current case with biomass, but with an abundance of the resources required of biomass, regional demand for labor will keep up with average U.S. demand. Logging jobs made up 0.81 percent of the jobs in the Panhandle, 20 times more than their share of jobs nationally, and only one employer had more than 50 workers in 2008.

Panhandle Logging Employers, 2008

	Number of Employers	Percent of Employers	Jobs	Payroll
Total	176	100%	100%	100%
Fewer than 5	130	74%	25%	22%
5 to 9	27	15%	24%	24%
10 to 19	14	8%	25%	26%
20 to 49	4	2%	18%	20%
50 to 99	1	1%	8%	8%

Health Care and Social Assistance

Health care has been northern Idaho's mainstay through the recession – adding nearly 800 jobs from 2007 to 2009. It continues to be the second largest industry in northern Idaho, which has the oldest median age of the state's six regions. The large aging population generates a larger growing demand on health care services.

Seasonality. The health care and social assistance sector has no seasonal pattern.

Exports. Services provided by this sector are consumed almost exclusively within the region.

Multiplier. Health care and social assistance have a multiplier of 2.19, meaning that for every 10 jobs created in that sector nearly 12 more are created in other sectors. This high multiplier generates a strong positive impact on the regional economy. Expansion in health care fosters growth in other sectors including administrative, real estate, finance, information, retail, construction and government. It also presents opportunities for the manufacture of medical equipment and the development of diagnostic technology.

Wages and Benefits. The health care sector offers relatively high wages, and most employees receive health care and retirement benefits. On the social assistance side, however, pay is markedly lower. Boundary County employers paid the highest wages in nursing and residential care compared to the rest of the region.

2008 Average Annual Pay

Health Care, Social Assistance-Statewide	$36,291
Health Care, Social Assistance-Panhandle	$34,458
Ambulatory Health Care	35,157
Hospitals	37,508
Nursing, Residential Care	25,661
Social Assistance	14,890

Location Quotient. Hospitals make substantial contributions to local and regional economies through the purchase of goods and services and the employment of large numbers of workers. In addition, research hospitals are a key component of the knowledge-based economy supporting an experienced and educated work force and originating and transferring knowledge and innovation. Despite this important role, health care is a "nonbasic," or locally serving, activity with little impact on driving its regional economic development.

Overall, the location quotient for health care was 0.98, indicating that this industry is as important to northern Idaho as it is to the nation. According to Economic Modeling Specialists Inc., the health care location quotient is expected to decrease to 0.85 for the state and 0.80 for the nation. In the cases of ambulatory health care and nursing and residential care, however, the quotient is greater than 1 in Kootenai County, making those subsectors increasingly important to the regional economy. In 2008, the health care industry provided nearly 13 percent of all employment in northern Idaho – 42 percent in ambulatory services. A higher concentration of ambulatory services and nursing care facilities would contribute to the decreased demand for labor in other more labor intensive health care areas.

Panhandle Health Care Location Quotient for Nation

	Nation	
Sector	**2002**	**2019**
Health Care and Social Assistance	0.87	0.8
Ambulatory Health Care Services	1.16	1.09
Hospitals	0.03	0.14
Nursing and Residential Care Facilities	1.15	0.97
Social Assistance	1.24	0.84

Size and Growth Over Time. Health care and social assistance accounted for 13 percent of the region's total payroll in 2008. Of that, 46.5 percent was in ambulatory health care services, 33.7 percent in hospitals and 13.7 percent in nursing and residential care facilities.

Average Panhandle Health Care Employment Over Time

Sector	Employment				2008 Change From			2008 % Change From		
	1993	1998	2003	2008	2003	1998	1993	2003	1998	1993
Health Care, Social Assistance	4,747	6,766	8,918	10,532	1,614	3,767	5,786	18.10%	55.68%	121.89%
Ambulatory Health Care Services	1,469	2,142	3,211	4,448	1,237	2,305	2,979	38.53%	107.61%	202.75%
Hospitals	1,580	2,003	2,303	2,865	562	862	1,285	24.40%	43.05%	81.34%
Nursing, Residential Care Facilities	1,157	1,716	1,896	1,893	-3	178	736	-0.15%	10.37%	63.65%
Social Assistance	541	905	1,509	1,327	-182	422	786	-12.06%	46.56%	145.24%

In 2008, northern Idaho had 667 health care and social assistance employers, 68.8 percent of them in Kootenai County. Of those, 451 were in ambulatory health care services including physicians, dentists and other health practitioners. Between 1993 and 2008, the region added

300 health care and social assistance employers, an 82 percent increase that mirrored the region's population increase.

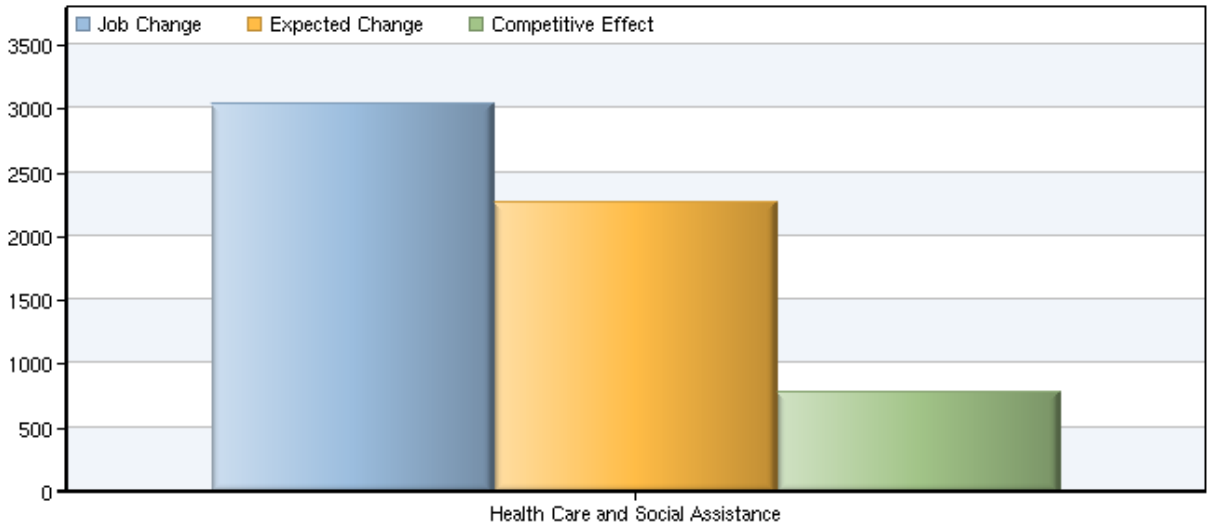
Panhandle Employers in Health Care and Social Assistance

Employer	City	Payroll
Kootenai Medical Center	Coeur d'Alene	1,500-1,999
Bonner General Hospital	Sandpoint	300-399
Boundary Community Hospital	Bonners Ferry	150-199
Valley Vista Care Center	St. Maries	150-199
A Full Life Home Care	Hayden	150-199
Nighthawk Radiology Services	Coeur d'Alene	100-149
Benewah Medical Center	Plummer	100-149
Care Center Of Sandpoint	Sandpoint	100-149
Surgery LLC	Coeur d'Alene	100-149
Idaho Hospital Association	Kellogg	100-149
Employer	**City**	**Payroll**
Benewah Community Hospital	St. Maries	100-149
August Home Health Inc.	Coeur d'Alene	50-99
Comfort Keepers	Coeur d'Alene	50-99
Hospice Of North Idaho Inc.	Hayden	50-99
A Better Personal Care Inc.	Coeur d'Alene	50-99
Good Samaritan Society Silver Wood	Silverton	50-99
Uhs Of Kootenai River Inc.	Naples	50-99
Coeur d'Alene Pediatrics PA	Coeur d'Alene	50-99

According to Economic Modeling Specialists Inc., health care is projected to grow 36 percent regionally from 2008 to 2018 – less than half the growth rate expected for the state but 11 percentage points higher than the anticipated national growth rate. The bulk of the Panhandle's growth will be in hospitals, which will rise 78 percent, generating a more competitive advantage over national trends.

Between 1993 and 2008, employment in health care and social assistance grew 44 percent nationally. It rose from 9.3 million in 1993 to 10.5 million in 1998 to 11.8 million in 2003 and then to 13.3 million in 2008, when it made up 9.7 percent of all U.S. payroll jobs. The U.S. Bureau of Labor Statistics projects that the sector will rise 25 percent to 16.7 million jobs by 2018.

Shift-Share Analysis for Panhandle Health Care and Social Assistance



Replacement Workers. While workers 55 years and older make up 18.4 percent of employment in northern Idaho, they hold 21.4 percent of the jobs in the region's health care and social assistance sector, making demand for replacements over the next 10 years comparatively high. From 2003 to 2008, the health care and social assistance industry listed 986 job openings with the Idaho Department of Labor offices in Bonners Ferry, Sandpoint, Coeur d'Alene, Kellogg and St. Maries, about 6 percent of all job openings in the region.

The fastest growing occupations in the health care industry are home health aides, personal and home care aides, registered nurses, nursing aides, office clerks, medical assistants, licensed practical nurses, dental assistants, medical secretaries and receptionists.

Highest Concentration of Occupations in Health Care and Social Assistance, Panhandle

Occupation	2008 Jobs	2018 Jobs	Percent Change	Percent of Industry	Median Wage	Education Level
Child care workers	682	706	4%	7%	$7.78	Short-Term On-the-Job Training
Home health aides	619	919	48%	6%	$8.48	Short-Term On-the-Job Training
Registered nurses	575	806	40%	6%	$31.08	Associate Degree
Personal and home care aides	569	853	50%	6%	$9.06	Short-Term On-the-Job Training
Nursing aides, orderlies, attendants	538	674	25%	6%	$11.17	Postsecondary Vocational Award

Occupation	2008 Jobs	2018 Jobs	Percent Change	Percent of Industry	Median Wage	Education Level
Receptionists and information clerks	311	379	22%	3%	$11.23	Short-Term On-the-Job Training
Licensed practical and licensed vocational nurses	295	378	28%	3%	$16.13	Postsecondary Vocational Award
Physicians and surgeons	287	350	22%	3%	$61.71	First professional degree
Dental assistants	262	339	29%	3%	$13.09	Moderate-Term On-the-Job Training
Office clerks, general	258	356	38%	3%	$11.07	Short-Term On-the-Job Training

Tourism

Although people often refer to the tourism industry, there is no formal compilation of industries or occupations that make up this sector. The arts, entertainment and recreation sector combined with accommodations and food services most closely represents the components that form the backbone of tourism in northern Idaho.

Seasonality. Tourism is highly seasonal with very pronounced peaks and valleys. Wage payments in many sectors are between 80 percent and 90 percent lower in the second quarter compared to the remaining quarters of the year.

Exports. While tourism does not sell its products or services outside the region, it does draw consumers of those products and services from outside the region and therefore brings new money into the regional economy similar to the new money brought into the economy by export-oriented sectors.

Multiplier. Tourism has an average multiplier of 1.27, meaning for every 10 tourism jobs, just under three jobs are created in other sectors. Arts, entertainment and recreation drive the multiplier down while accommodations and food services work to offset that. The low multiplier keeps this sector from being a significant factor in solid economic expansion.

Wages and Benefits. Assessing tourism wages is difficult due to the sector's seasonal nature and the disproportionate number of part-time and temporary jobs.

2008 Panhandle Average Annual Pay

Statewide Tourism	$16,070
Regional Arts, Entertainment, Recreation	$22,462
Regional Accommodations	$17,573
Regional Food Services, Drinking Places	$12,592

Location Quotient. Northern Idaho tourism has an estimated state location quotient of 1.45 or four and a half jobs in other sectors for every 10 jobs in tourism. The quotient should hold steady over the forecasted period, identifying tourism as a reliable industry in the regional economy. Beyond basic leisure and hospitality businesses, the transportation sector moves tourists, grocery and other retail stores sell to them and marinas, parks and other venues attract them.

Panhandle Tourism Location Quotient for Nation

	Nation	
Sector	2008	2018
Arts, Entertainment and Recreation	1.35	1.35
Accommodations	1.69	1.69
Food Services and Drinking Places	1.02	0.92

Size and Growth Over Time. Development of golf courses, ski areas, amusement parks and restaurants have made the Panhandle a more attractive place to live, and these amenities have played an especially important role in attracting well-heeled retirees to northern Idaho. The region's convention business draws people who would otherwise never visit. They become enchanted with the Panhandle and decide to relocate. Some move their businesses to take advantage of the amenities and lifestyle.

- Cascade Toboggan, which moved near Schweitzer Mountain Resort.
- Bendigo Inc., a swimsuit manufacturer that benefited from Lake Coeur d'Alene's reputation as a fun place and which featured the lake in its advertising.
- ROW Inc., a travel company headquartered in Coeur d'Alene that sponsors tours all over the world.
- Buck Knives, the knife manufacturer that moved to Post Falls from California about six years ago in part because of the region's reputation as a hunting and fishing heaven.

Tourism has also fueled second home construction in the region.

The region's tourist attractions are one reason why Sandpoint and Coeur d'Alene have growing reputations as havens for the arts. Tourists enjoy the art galleries, and the artists appreciate the wider audience and larger sales.

Tourism accounted for 6.6 percent of the region's total payroll in 2008. Of that, 43 percent was in restaurants and bars.

Average Panhandle Tourism Employment Over Time

Sector	Employment				2008 Change From			2008 % Change From		
	1993	1998	2003	2008	2003	1998	1993	2003	1998	1993
Arts, Entertainment, Recreation	1,443	1,730	2,312	3,183	871	1,453	1,739	37.7%	84.0%	120.5%

Performing Arts, Spectator Sports, Related Industries	278	91	107	89	-17	-2	-189	-16.3%	-2.1%	-67.9%
Museums, Historical Sites, Similar Institutions	6	13	13	15	2	2	9	15.6%	17.9%	143.8%
Amusement, Gambling, Recreation Industries	1,159	1,626	2,192	3,078	886	1,452	1,920	40.4%	89.3%	165.6%
Accommodations, Food Services	5,418	6,783	7,010	8,658	1,648	1,876	3,240	23.5%	27.7%	59.8%
Accommodations	1,674	1,926	1,728	2,214	486	288	541	28.1%	15.0%	32.3%
Food Services, Drinking Places	3,745	4,857	5,282	6,444	1,162	1,588	2,700	22.0%	32.7%	72.1%

In 2008, Northern Idaho had 704 tourism-related employers, 62.2 percent in Kootenai County and 20.7 percent in Bonner County. Of those, two of every three were restaurants or bars. The total was 192 more than in 1993.

According to Economic Modeling Specialists Inc., tourism is projected to add 1,868 more jobs in northern Idaho by 2018 with the largest increase in amusements, gambling and recreation. Arts, entertainment and recreation coupled with accommodations and food services should add 20,721 jobs statewide in the same period.

Between 1993 and 2008, U.S. employment in leisure and hospitality grew 38 percent, rising from 9.7 million to 11.2 million in 1998, 12.2 million in 2003 and 13.5 million in 2008 when it made up 9.8 percent of payroll jobs nationally. The U.S. Bureau of Labor Statistics projects an 8 percent increase to 14.6 million jobs by 2018.

Replacement Workers. The work force in the tourism industry is younger than workers in the rest of the economy so replacements due to retirements will be minimal over the next several years. This industry, however, does have higher-than-normal turnover, to a large extent because of its lower average wages.

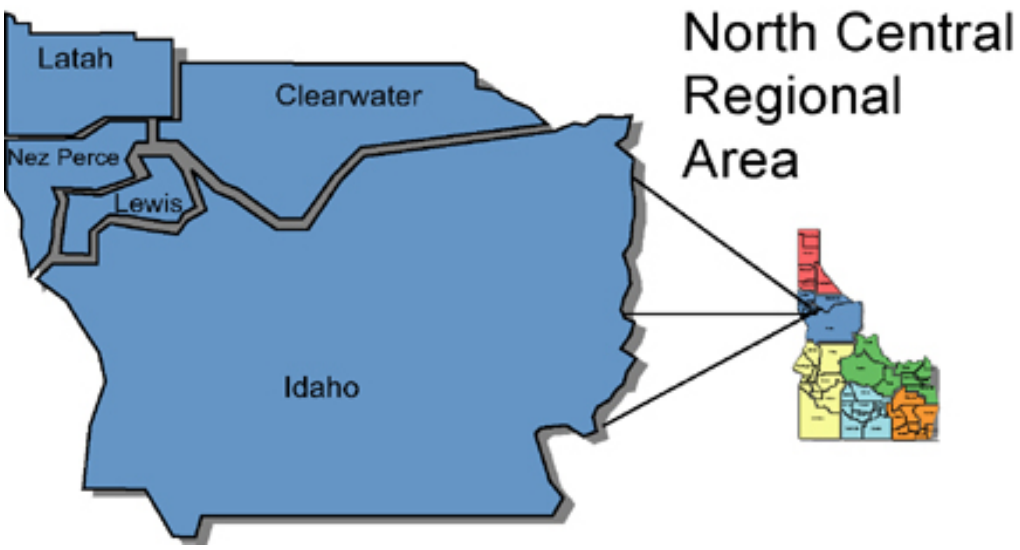
From 2003 to 2008, 17,491 tourism-related job openings were listed with the Idaho Department of Labor's offices in Bonners Ferry, Sandpoint, Coeur d'Alene, Kellogg and St. Maries, approximately 10.9 percent of all job openings in the region.

Summary

			Location Quotient		% of	Job Projections		
Industry	**Multiplier**	**Wage**	**2008**	**2018**	**Jobs**	**2008**	**2018**	**% Chg**
Manufacturing	2.28	$38,877	0.97	1.1	4.20%	9,111	9,843	8.0%
Wood products manufacturing	3.49	$40,380	6.83	6.84	2.60%	2,150	1,658	-22.9%
Advanced Manufacturing	1.05	$36,113	1.02	1.12	9.10%	7,536	7,139	-5.3%
Aerospace Manufacturing	2.7	$37,019	1.13	1.72	4.20%	3,469	4,579	32.0%
Biomass Manufacturing	3.81	$38,000	0.99	0.96	0.81%	660	681	3.2%
Health Care and Social Assistance	2.19	$34,458	0.87	0.8	13.00%	9,578	12,612	31.7%
Tourism	1.27	$17,542	1.02	0.92	6.60%	12,685	12,457	-1.8%

Source: Economic Modeling Specialists Inc.

North Central Idaho



Overview

In 2008, the educational services sector provided the largest percentage of jobs in north central Idaho followed by health care and retail.

With the University of Idaho in Moscow and Lewis-Clark State College in Lewiston, educational services provided 16.3 percent of total average employment for the year. Postsecondary education accounted for six of every 10 education jobs in the region.

Health care supplied another 14 percent of the region's payroll jobs. One of every three was in ambulatory care while nearly that many were in the five-county region's hospitals.

Retail jobs, which accounted for 13.6 percent of the jobs, were spread along the usual lines – one in five in food and beverage stores, one in six in both general merchandise stores and vehicle dealers and parts stores.

Manufacturing provided 9 percent, more than half in the wood products sector, and hotels and restaurants provided nearly that many.

North Central Idaho Average Employment 2008

Sector	Jobs	% of Total
Regional Total	44,175	100.0%
Natural Resources	1,006	2.3%
Mining	199	0.5%

Sector	Jobs	% of Total
Utilities	148	0.3%
Construction	2,080	4.7%
Manufacturing	4,010	9.1%
Wholesale Trade	1,050	2.4%
Retail Trade	6,011	13.6%
Transportation, Warehousing	1,523	3.4%
Information	818	1.9%
Financial Services	1,869	4.2%
Real Estate	436	1.0%
Professional, Scientific, Technical Services	1,024	2.3%
Management of Companies	395	0.9%
Administrative, Support Services	767	1.7%
Educational Services	7,193	16.3%
Health Care, Social Assistance	6,192	14.0%
Arts, Entertainment, Recreation	761	1.7%
Accommodations, Food Services	3,961	9.0%
Other Services	1,065	2.4%
Public Administration	3,668	8.3%

The industries with the largest growth over the past five years in the five-county region include health care and education.

Sectors Posting Most Job Growth, 2003-2008

	Jobs			Percent
Sector	2003	2008	Change	Change
Regional Total	42,706	44,175	1,469	3.4%
Health Care, Social Assistance	5,617	6,192	575	10.2%
Construction	1,640	2,080	440	26.8%
Financial Services	1,554	1,869	315	20.3%
Educational Services	6,878	7,193	315	4.6%
Accommodations, Food Services	3,786	3,961	175	4.6%
Manufacturing	3,873	4,010	137	3.5%

These industries are ranked by nominal job change, which is a better indicator of growth since percentage changes can skew perception, especially when they are calculated on a small base.

Payrolls in the region increased by 14 percent between 2003 and 2008, but again the magnitude of the improvements can be distorted on a percentage basis.

Total Wages for North Central Idaho by Sector

Sector	2003	2008	Change	% Chg
Regional Total	$1,141,095,088	$1,378,962,739	$237,867,651	20.8%
Health Care, Social Assistance	$151,641,762	$193,927,757	$42,285,995	27.9%
Educational Services	$209,489,861	$245,346,450	$35,856,589	17.1%
Construction	$44,395,474	$71,288,902	$26,893,428	60.6%
Retail Trade	$116,540,350	$140,451,131	$23,910,781	20.5%

Sector	2003	2008	Change	% Chg
Financial Services	$50,218,628	$70,840,898	$20,622,270	41.1%
Manufacturing	$147,658,282	$167,304,124	$19,645,842	13.3%
Public Administration	$122,918,211	$139,068,107	$16,149,896	13.1%
Wholesale Trade	$28,512,479	$39,323,576	$10,811,097	37.9%
Professional, Scientific, Technical Services	$29,959,865	$40,079,797	$10,119,932	33.8%
Accommodations, Food Services	$35,564,724	$42,773,432	$7,208,708	20.3%
Information	$16,969,066	$23,713,240	$6,744,174	39.7%
Natural Resources	$33,033,621	$36,885,696	$3,852,075	11.7%
Administrative, Support Services	$13,503,313	$17,319,058	$3,815,745	28.3%
Real Estate	$7,134,829	$10,313,305	$3,178,476	44.5%
Transportation, Warehousing	$49,580,871	$52,233,195	$2,652,324	5.3%
Mining	$6,958,515	$9,063,559	$2,105,044	30.3%
Arts, Entertainment, Recreation	$13,667,836	$15,062,700	$1,394,864	10.2%
Other Services	$20,583,555	$21,893,718	$1,310,163	6.4%
Utilities	$6,987,256	$7,953,837	$966,581	13.8%
Management of Companies	$35,768,176	$34,120,257	-$1,647,919	-4.6%

Over the long term an industry, which has steadily increased the number of employees over a 15-year period, is sustainable – economically sound through good and bad times. Education and health care clearly meet that standard, both producing wage improvements of more than $100 million in the past 15 years. Manufacturing, construction and retail trade have also performed solidly over the long haul.

The north central Idaho economy exhibited relative stability from 1993 through 2008, avoiding the dramatic shifts that most other regions of the state experienced. The economy grew modestly during Idaho's periods of expansion and contracted less during the recessions. Based on an analysis of average employment, education and health care were the driving forces in regions economic development from 1993 through 2008, supported by manufacturing and construction. But like other regions of the state, construction has taken a significant hit since the Idaho economy became fully mired in the recession, slipping back to employment levels running up to the 2001 recession.

Projections from Economic Modeling Specialists Inc., based on Quarterly Census of Employment and Wages data along with past trends and state and national industry growth rates identify health care, education, real estate and information as the sectors that could spur future growth. Unfortunately, information is the only one among these sectors that generally draws capital from outside the region. The others tend to redistribute a region's financial resources internally.

Manufacturing

Seasonality. This sector has a nearly indiscernible seasonal pattern. Most manufacturing is not affected by the seasons, but concrete operations are busiest in the third quarter of the year and

least busy in the first quarter, for example. Wage payments for the manufacturing sector in the third quarter are about 7 percent higher than wage payments in the first quarter.

Exports. Manufacturing is heavily oriented to exporting. Because it brings in so many dollars from outside the region, it has a major impact on the region's economy.

Multiplier. Because it is an important export sector with many local suppliers, manufacturing has a multiplier of 3.7 in Idaho. That means that for every 10 jobs created directly in manufacturing, another 27 jobs are created in other sectors of the economy. A high multiplier indicates that a sector can have a strong positive impact on the local economy if it grows.

Wages and Benefits. Manufacturing provides high wages, and most workers receive good health care insurance and retirement benefits.

2008 Annual Average Manufacturing Earnings for North Central Idaho

All Sectors of North Central Idaho	$31,216
All Manufacturing	$41,721
Wood Products	$38,857
Paper Products	$55,232
Fabricated Metal Products	$39,048
All Other Manufacturing	$29,591

Location Quotient. Manufacturing's location quotient is 0.93, which means that it is marginally less important in the region than it is in the state and 0.87 nationally.

Size and Growth Over Time. This sector accounted for 9.1 percent of the region's total jobs in 2008 but over 12 percent of its total wages.

North Central Idaho Manufacturing Jobs, 1993-2008

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
All Manufacturing	4,167	4,496	3,873	4,010	-4%	-11%	4%
Wood Products	1,273	1,450	1,149	999	-21%	-31%	-13%
Paper Products	1,344	1,308	1,151	1,095	-19%	-16%	-5%
Fabricated Metal Products	756	957	910	1,196	58%	25%	32%
All Other Manufacturing	795	781	664	720	-9%	-8%	8%

In 2008, North Central Idaho had 144 manufacturing employers – a total which changed only marginally over the previous 15 years. Of those 144, 24 made wood product, 24 fabricated metal, 24 produced equipment, 12 processed food, six were in concrete and cement and the rest made a variety of products.

North Central Idaho Manufacturing Sector, 2008

by Size of Employer						
	Number	Jobs	Payroll	% of Employers	% of Jobs	% of Payroll
Total	144	4,051	$167,304,124	100%	100%	100%
Fewer than 5	70	141	$3,193,586	48%	3%	2%
5 to 9	26	178	$5,510,018	18%	4%	3%
10 to 19	24	306	$8,865,212	17%	8%	5%
20 to 49	14	409	$15,535,359	10%	10%	9%
50 to 99	5	303	$8,749,827	3%	7%	5%
100 to 249	3	371	$15,963,456	2%	9%	10%
250 to 499	2	667	$28,272,918	1%	16%	17%
500 or more	2	1,677	$81,213,748	2%	41%	49%

Between 1998 and 2003, U.S. manufacturing employment fell 20 percent. It rose from 16.8 million in 1993 to 17.6 million in 1998 before falling to 14.5 million in 2003 and to 13.4 million in 2008. At that point, manufacturing accounted for 9.8 percent of all U.S. payroll jobs. The U.S. Bureau of Labor Statistic projects another decline of 9 percent to 12.2 million jobs by 2018.

In Idaho, Economic Modeling Specialists Inc. projects a 14 percent decline in manufacturing employment in the north central region by 2018. But there are reasons why that may be too negative a projection.

North central Idaho's manufacturing sector should grow in the next couple of years as the nation's recovery from the recession boosts consumer demand, increases business investment in equipment and machinery and increases U.S. housing construction, which will benefit the wood products sector.

Despite the recession, many manufacturers in the region have grown in the last few years. ATK's ammunition plant in Lewiston has added more than 300 jobs since the recession began. Its expansion led to the creation of a couple dozen jobs at two of its suppliers in Lewiston. ATK expects to add another 100 jobs before the end of the year, and a related company, Extreme Bullets, expects to employ 100 people at its new facility at the Lewiston airport in a couple of years. Other manufacturers that have expanded include Nighforce Optics, SJX Boats, ASE Signs, Potting Shed Creation, the Uhling and Wimer machine shops in Idaho County, Idaho Sewing for Sport and Hillco Technologies.

Economic development organizations in north central Idaho are trying to recruit new manufacturing operations and help existing firms grow. The region's low labor costs, workers' compensation premiums, taxes and utilities and Idaho's business-friendly climate help them. For some manufacturers, proximity to colleges and technical training programs can be a major incentive. The University of Idaho and Lewis-Clark State College can meet their training and college graduate needs. The region's attractions include rail transportation and access at the

port of Lewiston by barge to the Pacific Ocean. Financially, Idaho offers up to $3,000 per employee for training costs for new or expanding manufacturers.

In the Moscow area, technology transfer from the University of Idaho – spinning off businesses using products and technology developed by university researchers – is expected to create manufacturing jobs over the next 10 years. It already has created about 1,400 jobs on the other side of the state border at Schweitzer Engineering Laboratory in Pullman. Go Nano Technologies expects to begin producing nanosprings in Moscow sometime in the next couple of years. It expects to employ at least 50.

Northwest Inland Manufacturers Association currently is developing a program to help local manufacturers grow. Its American Manufacturing Network would help the U.S. Defense Department find local manufacturers to re-engineer and supply replacements for obsolete parts. With hundreds of aging Department of Defense airplanes, tanks and ships, the program has the potential to create many jobs in the region.

The region has a work force that has considerable experience in manufacturing and related industries, and the University of Idaho can provide high-skilled engineers and others with research and development skills while Lewis-Clark State College can turn out machinists, welders and other skilled tradesmen through training customized to the needs of particular manufacturers. There are many people who graduate from both schools who wish to remain in the area but are forced to leave because of a lack of job opportunities. An expanding manufacturing sector would find a skilled and eager labor force and provide the opportunities needed to reduce the "brain drain" that has plagued the region for so long.

Need for Replacement Workers. Workers 55 years and older made up 19 percent of both total employment and manufacturing employment in north central Idaho in 2008. So even with the anticipated contraction, replacement needs are likely to be high over the next few years.

Logging and Biomass

The potential is significant in north central Idaho for the biomass industry, which should grow over the next few years.

Because 73 percent – 6.3 million acres – of the region is covered by forests, it has a ready supply of woody biomass – organic matter from forests including tops of trees, branches, needles and leaves – that can be used for wood products, mulch, pulp for paper, possible replacement material for oil-based products in plastics production and steam generation to produce electricity. Biomass gathering also helps restore streams and improve the health of forests by removing diseased trees and invasive species and reducing hazardous fuels that can lead to costly forest fires that destroy timber, wildlife and scenery. In the long run, removing materials that block streams can lead to faster production of trees for logging and better water quality. The subsequent improvement in habitat for fish and game can result in more tourists

coming to fish, hunt or view the wildlife in forests that have been thinned of trees and brush, making them more accessible and attractive.

Biomass is used as fuel for wood-burning stoves, electricity generators and to heat public buildings including schools, which reduces their operating costs. With so many rural school districts and cities struggling financially, biomass can provide substantial relief for their budgets.

The purchase of the relatively low-cost electricity generated by biomass can help public utilities meet rising demand for power in fast-growing regions like north central Idaho while reducing reliance on petroleum.

Experts on rural development believe biomass projects can expand and diversify local economies while replacing some of the timber industry jobs lost in the last two decades. North central Idaho has hundreds of people with experience in the timber industry who prefer to work in the forests and mills but cannot find jobs that pay as well and use their skills. Biomass projects will provide those kinds of job opportunities, benefiting from available infrastructure, technical expertise and skilled labor force available in former logging communities.

Current biomass efforts in the region are limited, but the industry's impact on the economy and work force is very similar to the logging industry.

Since current statistics are not available for the biomass industry, statistics for the logging industry serve as a proxy.

Seasonality. The logging industry has an especially pronounced seasonal pattern. Employment usually peaks in September and then falls gradually through the fall and winter. It falls sharply, but temporarily, when spring break-up limits the loads that can be carried on forest roads. Wage payments are normally twice as high in the third quarter as they are in the second when spring break-up occurs.

Exports. While logging is an export sector, sending much of its production beyond the region, biomass, especially used in power production, probably will not be an active exporter.

Multiplier. Because it is an important export sector with many local suppliers, logging has a high multiplier of 3.81 in Idaho. That means that for every 10 jobs created directly in logging, another 28 are created in other sectors of the economy. This high multiplier indicates the potential for a strong economic impact from growth. Biomass will have a similar multiplier effect.

Wages and Benefits. Logging offers high wages -- $43,295 in 2008 compared to the region's average wage of $31.216. But most loggers do not receive health insurance or retirement benefits.

Location Quotient. Logging location quotient in 2008 was 33.81, which means logging is 33 times more important to the north central Idaho economy than it is to the national economy.

Size and Growth Over Time. Forestry and logging accounted for 1.7 percent of the region's total payroll in 2008. The sector supplied 1.38 percent of the jobs in the region compared to 0.4 percent of the jobs in the United States. In 2008, north central Idaho had 103 logging companies, down 25 from 1993.

North Central Idaho Forestry, Logging Jobs, 1993-2008

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
Forestry, Logging	1,076	903	694	632	-41%	-30%	-9%
Logging	987	885	674	608	-38%	-31%	-10%

North Central Idaho Logging Sector, 2008

by Size of Employer

	Number	Jobs	Payroll	% of Employers	% of Jobs	% of Payroll
Total	103	608	$26,341,317	100%	100%	100%
Fewer than 5	74	106	$3,510,954	71%	17%	13%
5 to 9	11	65	$2,069,346	11%	11%	8%
10 to 19	12	151	$6,878,046	12%	25%	26%
20 to 49	6	157	$6,643,471	6%	26%	25%
50 to 99	2	129	$7,239,500	2%	21%	27%
100 to 249	0	0	$0	0%	0%	0%
250 to 499	0	0	$0	0%	0%	0%
500 or more	0	0	$0	0%	0%	0%

North Central Idaho's Largest Logging Employers

Forestry including Logging		
Steve Henderson Logging Inc.	Lewiston	50 to 99
Clearwater Potlatch Timber Protective Association	Orofino	20 to 49
Idaho Cedar Sales	Troy	20 to 49
Lara Brothers Ltd.	Orofino	20 to 49
Northwest Management Inc.	Moscow	20 to 49
Pine Creek Logging LLC	Deary	20 to 49
Western Forest Systems Inc.	Lewiston	20 to 49
Darby Logging Inc.	Troy	10 to 19
Finke Logging Co. Inc.	Pierce	10 to 19
Framing Our Community Inc.	Elk City	10 to 19
Hansen Logging Co. Inc.	Harvard	10 to 19
Ken Miller Logging Inc.	Orofino	10 to 19
Merrell Logging Inc.	Princeton	10 to 19
Timberworks Inc.	Deary	10 to 19
William V. Lowry and Son Trucking LLC	Princeton	10 to 19

An industrial projection for north central Idaho by Economic Modeling Specialists Inc. forecasts that employment in the logging industry will fall to 347 jobs by 2018, dropping 43 percent from 608 in 2008.

Over the long run, logging job have declined as timber land is converted to other uses, the Forest Service restricts logging on federal land, lumber mills close down and technology reduces the number of people needed to do the work that remains. The same forces are likely to continue reducing logging jobs over the next decade or two. Development of biomass projects can offset some of that job loss.

Between 1993 and 2008, logging employment in the U.S. declined 30 percent from 81,000 in 1993 to 80,000 in 1998 to 69,000 in 2003 to 57,000 in 2008, when it made up just 0.4 percent of all U.S. payroll jobs. The U.S. Bureau of Labor Statistic projects that over the next 10 years that the decline in the logging industry will reverse and jobs will grow 32 percent to 72,000 by 2018.

Need for Replacement Workers. Workers 55 years and older make up 18 percent of employment in north central Idaho, and they also hold 18 percent of the region's logging jobs – twice the concentration as in 1993. Because these jobs require strength and stamina, the sector needs a higher proportion of younger workers. The number of workers under 35 has fallen more than 50 percent since the 1990 so the logging industry's replacement needs will be very high in the coming years because of retirements despite the sector's persisting decline.

2008 Logging Jobs and 2018 Projections

Description	2008	2018	Earnings	Education Level
Truck drivers, heavy, tractor-trailer	166	79	$16.08	Moderate on-the-job training
Supervisors, farming, fishing, forestry workers	86	40	$18.31	Work exp. in related field
Log graders, scalers	83	34	$16.23	Moderate on-the-job training
Logging equipment operators	79	30	$15.52	Moderate on-the-job training
Bookkeeping, accounting, auditing clerks	40	19	$13.37	Moderate on-the-job training
Fallers	53	19	$15.17	Moderate on-the-job training
Logging workers, all other	47	17	$17.75	Moderate on-the-job training
Office clerks, general	34	16	$11.62	Short on-the-job training
General, operations managers	30	13	$28.45	Degree plus work experience
Foresters	23	12	$26.14	Bachelor's degree
Forest, conservation workers	10	11	$13.82	Moderate on-the-job training
Laborers, freight, stock, material movers, hand	26	11	$9.87	Short on-the-job training
Chief executives	10	<10	--	Degree plus work experience
Farm, ranch, other agricultural managers	<10	<10	--	Degree plus work experience
Purchasing agents, except wholesale, retail, farm products	<10	<10	--	Work exp. in related field
Conservation scientists	<10	<10	--	Bachelor's degree
Security guards	<10	<10	--	Short on-the-job training
Janitors, cleaners, except maids, housekeeping cleaners	<10	<10	--	Short on-the-job training

Description	2008	2018	Earnings	Education Level
Landscaping, groundskeeping workers	<10	<10	--	Short on-the-job training
Sales representatives, wholesale, manufacturing	<10	<10	--	Moderate on-the-job training
First-line supervisors of office, administrative support workers	<10	<10	--	Work exp. in related field
Payroll, timekeeping clerks	<10	<10	--	Moderate on-the-job training
Executive secretaries, administrative assistants	<10	<10	--	Moderate on-the-job training
Secretaries, except legal, medical, executive	13	<10	--	Moderate on-the-job training
Data entry keyers	<10	<10	--	Moderate on-the-job training
Graders, sorters, agricultural products	<10	<10	--	Work exp. in related field
Farmworkers, laborers, crop, nursery, greenhouse	<10	<10	--	Short on-the-job training
Agricultural workers, all other	<10	<10	--	Short on-the-job training
Operating engineers, other construction equipment operators	<10	<10	--	Moderate on-the-job training
First-line supervisors of mechanics, installers, repairers	<10	<10	--	Work exp. in related field
Bus, truck mechanics, diesel engine specialists	<10	<10	--	Postsecondary vocational
Mobile heavy equipment mechanics, except engines	15	<10	--	Postsecondary vocational
Maintenance, repair workers, general	10	<10	--	Moderate on-the-job training
Maintenance workers, machinery	<10	<10	--	Short on-the-job training
Riggers	<10	<10	--	Short on-the-job training
Helpers--Installation, maintenance, repair workers	<10	<10	--	Short on-the-job training
First-line supervisors of production, operating workers	<10	<10	--	Work exp. in related field
Sawing machine setters, operators, tenders, wood	<10	<10	--	Moderate on-the-job training
Semiconductor processors	<10	<10	--	Associate's degree
Cooling, freezing equipment operators, tenders	<10	<10	--	Moderate on-the-job training
Production workers, all other	<10	<10	--	Moderate on-the-job training
First-line supervisors of transportation workers	<10	<10	--	Work exp. in related field
Driver/sales workers	<10	<10	--	Short on-the-job training
Truck drivers, light or delivery services	<10	<10	--	Short on-the-job training
Crane, tower operators	<10	<10	--	Long-term on-the-job training
Excavating, loading machine, dragline operators	<10	<10	--	Moderate on-the-job training
Hoist, winch operators	<10	<10	--	Moderate on-the-job training
Industrial truck, tractor operators	10	<10	--	Short on-the-job training
Cleaners of vehicles, equipment	<10	<10	--	Short on-the-job training
Machine feeders, offbearers	<10	<10	--	Short on-the-job training

From 2003 to 2009, the logging industry listed an average of 204 job openings a year with the Idaho Department of Labor's Lewiston, Moscow, Orofino and Grangeville offices. That was about 5 percent of all jobs openings in the region.

Logging Occupations With Most Job Openings, 2006 to 2009

Fallers	55
Truck Drivers, Heavy, Tractor-Trailer	44
Logging Workers, All Other	37
Logging Equipment Operators	33
Laborers, Freight, Stock, Material Movers, Hand	7
Bus, Truck Mechanics, Diesel Engine Specialists	5
Hoist, Winch Operators	4
Log Graders, Scalers	3
Fence Erectors	2
Fire Fighters	2
Security Guards	2
Accountants, Auditors	1
Bookkeeping, Accounting, Auditing Clerks	1
Construction Laborers	1
First-Line Supervisors of Production, Operating Workers	1
Industrial Truck, Tractor Operators	1
Mobile Heavy Equipment Mechanics, Except Engines	1
Office Clerks, General	1
Receptionists, Information Clerks	1
Riggers	1
Sawing Machine Setters, Operators, Wood	1

Construction

Seasonality. Construction has a pronounced seasonal pattern. The first quarter of the year is the period of lowest employment since winter weather ends or slows many projects while the third quarter is the period of highest employment. Wage payments in the third quarter are usually 51 percent higher than wage payments in the first quarter.

Exports. The vast majority of construction work is conducted in the region. Because this is not an export sector, construction has less impact on the long-term growth of the economy than manufacturing and tourism, for instance.

Multiplier. Because it relies on many local suppliers, construction has a multiplier of 2.83 in Idaho. That means that for every 10 jobs created directly, over 18 more are created in other sectors of the economy. A moderate multiplier like this one indicates that the sector can have an impact beyond its own growth on the local economy.

Wages and Benefits. Construction tends to provide relatively high wages. But most workers do not receive health care or retirement benefits.

2008 Annual Average Construction Wage

All Sectors of North Central Idaho	$31,216
All Construction	$34,282
Construction of Buildings	$30,978
Heavy Construction	$36,271
Specialty Trade Contractors	$34,835

Location Quotient. Construction's location quotient is 0.89, which means that it is slightly less important in the region than it is in the nation. Economic Modeling Specialists Inc. estimate the quotient on the state level at 0.72, which means that it is slightly less important in the region than it is statewide.

Size and Growth Over Time. Construction accounted for 4.7 percent of the region's employment in 2008 but 5.2 percent of its payroll.

North Central Idaho Construction Jobs, 1993-2008

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
All Construction	1,361	1,719	1,640	2,080	53%	21%	27%
Construction of Buildings	267	352	365	442	66%	26%	21%
Heavy Construction	344	428	359	387	12%	-10%	8%
Specialty Trade Contractors	749	940	916	1,250	67%	33%	36%

In 2008, north central Idaho had 477 construction employers. Of those, 155 were building contractors, 62 were heavy construction firms and 260 were in the specialty trades. This highly cyclical sector fluctuated from 314 employers in 1993 to 403 in 1998 to 394 in 2003 to 477 in 2008.

North Central Idaho Construction Sector, 2008

by Size of Employer						
	Number	**Jobs**	**Payroll**	**% of Employers**	**% of Jobs**	**% of Payroll**
Total	477	2,149	$71,288,902	100%	100%	100%
Fewer than 5	346	510	$12,700,774	72%	24%	18%
5 to 9	79	519	$15,213,676	17%	24%	21%
10 to 19	33	408	$14,896,860	7%	19%	21%
20 to 49	16	431	$18,044,804	3%	20%	25%
50 to 99	3	189	$8,757,323	1%	9%	12%
100 to 249	1	92	$1,675,465	0%	4%	2%
250 to 499	0	0	$0	0%	0%	0%
500 or more	0	0	$0	0%	0%	0%

North Central Idaho's Largest Construction Employers

Business	City	Payroll
Construction of Buildings		
Arnzen Building Construction Inc.	Cottonwood	10 to 19
Aspen Enterprises	Moscow	10 to 19
Clark General Contractors LLC	Moscow	10 to 19
HGC Inc.	Grangeville	10 to 19
Kenaston Corporation	Lewiston	10 to 19
Business	**City**	**Payroll**
Riverview Construction	Orofino	10 to 19
RMR Construction LLC	Moscow	10 to 19
Heavy Construction		
A & R Construction Inc.	Lewiston	20 to 49
Debco	Orofino	50 to 99
Gieses Paving	Lewiston	10 to 19
Highland Enterprises LLC	Grangeville	10 to 19
Idaho County Road Department	Kooskia	10 to 19
Ma Deatley Construction Inc.	Lewiston	20 to 49
McCann Development Company LLC	Winchester	10 to 19
North Latah County Highway District	Moscow	20 to 49
Scarsella Bros Inc.	Potlatch	10 to 19
Valley Paving & Asphalt Inc.	Cottonwood	10 to 19
Specialty Trade Contractors		
Advanced Welding and Steel Inc.	Grangeville	20 to 49
B and B Pools LLC	Lewiston	10 to 19
Barnes Inc.	Lewiston	10 to 19
BCL Electric Inc.	Moscow	10 to 19
Bi-State Siding & Window Inc.	Lewiston	20 to 49
Blue Rock Group Inc.	Kuna	10 to 19
CIS Incorporated	Lewiston	10 to 19
Palouse Drywall Contractors LLC	Moscow	10 to 19
Cook & Sons Construction	White Bird	10 to 19
Crea Construction Inc.	Lewiston	20 to 49
Cuddy and Associates Inc.	Orofino	10 to 19
Engel Electric	Lewiston	10 to 19
Fisher Systems Inc.	Lewiston	10 to 19
Fork Refrigeration Inc.	Moscow	10 to 19
Germer Construction Inc.	Moscow	10 to 19
Gropp Heating Air & Electric	Moscow	20 to 49
Guardian Plumbing & Heating	Lewiston	20 to 49
J H Kelly LLC	Lewiston	50 to 99
Lucky Acres Fencing Inc.	Lewiston	10 to 19
M L Albright & Sons Inc.	Lewiston	20 to 49
Mangums Concrete Forming	Orofino	10 to 19
McCoy Plumbing & Heating Inc.	Moscow	10 to 19
McPeak Roofing and Decking LLC	Lewiston	10 to 19
Mikes Heating and Air	Lewiston	50 to 99
Q C Electric Inc.	Moscow	10 to 19
Quality Heating & A/C	Grangeville	10 to 19
Business	**City**	**Payroll**

Business	City	Payroll
R and R Masonry Inc.	Lewiston	10 to 19
Rez Painting LLC	Moscow	10 to 19
S and S Contracting Inc.	Lewiston	10 to 19
Scientific Environments Inc.	Ferdinand	10 to 19
Steve Carlton Construction	Lewiston	10 to 19
Strom Electric Inc.	Troy	50 to 99
Wasankari Construction	Moscow	10 to 19

An industrial projection for north central Idaho by Economic Modeling Specialists Inc. forecasts a 2 percent construction employment decline from 2008 to 2018. That would be a loss of about 40 jobs.

With the region's population projected to grow only 4.1 percent over that decade – less than half as fast as the nation's population growth of 9.7 percent – there will only be about 4,100 new residents in the region to build homes for. With a surplus of homes still on the market, there may not be much home construction.

2008 Construction Jobs and 2018 Projections

Description	2008	2018	Earnings	Education Level
Carpenters	669	667	$14.85	Long-term on-the-job training
Construction laborers	475	463	$12.46	Moderate on-the-job training
First-line supervisors of construction, extraction workers	337	343	$17.67	Work experience in related field
Construction managers	268	300	$13.43	Bachelor's degree
Painters, construction, maintenance	192	210	$13.96	Moderate on-the-job training
Electricians	199	181	$21.40	Long-term on-the-job training
Plumbers, pipefitters, steamfitters	122	93	$20.76	Long-term on-the-job training
Operating engineers, other construction equipment operators	96	88	$15.54	Moderate on-the-job training
Heating, AC, refrigeration mechanics, installers	66	58	$13.07	Long-term on-the-job training
Bookkeeping, accounting, auditing clerks	64	57	$13.37	Moderate on-the-job training
Chief executives	45	49	$20.08	Degree plus work experience
Office clerks, general	59	48	$11.62	Short on-the-job training
Brickmasons, blockmasons	40	46	$17.85	Long-term on-the-job training
Cement masons, concrete finishers	46	43	$13.87	Moderate on-the-job training
Roofers	38	41	$13.64	Moderate on-the-job training
Pipelayers	39	40	$13.42	Moderate on-the-job training
Managers, all other	34	39	$10.91	Work experience in related field
General, operations managers	49	38	$28.45	Degree plus work experience
Stonemasons	33	38	$14.99	Long-term on-the-job training
Drywall, ceiling tile installers	33	35	$14.14	Moderate on-the-job training
Tapers	30	32	$16.73	Moderate on-the-job training

Description	2008	2018	Earnings	Education Level
Truck drivers, heavy, tractor-trailer	32	30	$16.08	Moderate on-the-job training
Secretaries, except legal, medical, executive	34	27	$12.25	Moderate on-the-job training
Sheet metal workers	35	26	$16.03	Long-term on-the-job training
Cost estimators	26	25	$17.40	Work experience in related field
Sales representatives, services, all other	23	23	$12.97	Moderate on-the-job training
Sales representatives, services, all other	23	23	$12.97	Moderate on-the-job training
Excavating, loading machine, dragline operators	26	23	$15.55	Moderate on-the-job training
Helpers, brickmasons, stonemasons, tile, marble setters	17	22	$15.32	Short on-the-job training
Executive secretaries, administrative assistants	23	21	$15.48	Moderate on-the-job training
Floor sanders, finishers	18	19	$13.98	Moderate on-the-job training
Tile, marble setters	18	19	$14.77	Long-term on-the-job training
Pile-driver operators	15	17	$14.21	Moderate on-the-job training
First-line supervisors of office, administrative. support workers	17	15	$18.55	Work experience in related field
Carpet installers	13	15	$14.85	Moderate on-the-job training
Floor layers, except carpet, wood, hard tiles	13	15	$15.01	Moderate on-the-job training
Insulation workers, floor, ceiling, wall	15	15	$12.57	Moderate on-the-job training
Plasterers, stucco masons	14	15	$15.52	Long-term on-the-job training
Fence erectors	14	14	$12.52	Moderate on-the-job training
Structural iron, steel workers	14	12	$15.88	Long-term on-the-job training
Earth drillers, except oil, gas	14	12	$14.29	Moderate on-the-job training
Paving, surfacing, tamping equipment operators	11	11	$13.41	Moderate on-the-job training
Welders, cutters, solderers, brazers	11	11	$17.33	Long-term on-the-job training
Receptionists, information clerks	12	10	$10.33	Short on-the-job training
Maintenance, repair workers, general	12	10	$14.14	Moderate on-the-job training
Laborers, freight, stock, material movers, hand	13	10	$9.87	Short on-the-job training
Accountants, auditors	10	<10	--	Bachelor's degree
Helpers, carpenters	10	<10	--	Short on-the-job training
Helpers, pipelayers, plumbers, pipefitters, steamfitters	12	<10	--	Short on-the-job training
Helpers, extraction workers	13	<10	--	Short on-the-job training

Description	2008	2018	Earnings	Education Level
First-line supervisors of mechanics, installers, repairers	12	<10	--	Work experience in related field
Laborers, freight, stock, material movers, hand	13	10	$9.87	Short on-the-job training

Source: Economic Modeling Specialists Inc.

Between 1998 and 2003, construction employment grew 7 percent in the United States. It rose from 4.8 million in 1993 to 6.1 million in 1998, then to 6.7 million in 2003 and 7.2 million in 2008, when it made up 5.3 percent of all U.S. payroll jobs. The U.S. Bureau of Labor Statistic projects another 19 percent increase to 8.6 million jobs by 2018.

Need for Replacement Workers. While workers 55 years and older hold 19 percent of the jobs in north central Idaho, they make up only 15 percent of employment in the region's construction sector. Given that, replacement needs may not be as high in construction over the next few years as in other industries. But most skilled workers – those in plumbing, electrical, finish carpentry, HVAC installation and repairer, cost estimation, construction management, heavy equipment operation – will need to be replaced at a higher rate than construction workers in general.

From 2003 to 2009, construction listed an average of 286 job openings a year with the Idaho Department of Labor's north central Idaho offices in Lewiston, Moscow, Grangeville and Orofino. That was about 7 percent of all jobs openings in the region.

Average Annual Construction Job Listings 2003-2009

	Total	Full-Time	Part-Time
Total	286	238	48
Listed 1 to 3 Days	28	15	13
Listed 4 to 150 Days	87	81	6
Listed Over 150 Days	171	142	29

Construction Occupations With Most Job Openings 2003 to 2009

Carpenters	401
Construction Laborers	329
Roofers	149
Crossing Guards	104
Operating Engineers, Other Construction Equipment Operators	99
Truck Drivers, Heavy, Tractor-Trailer	88
Helpers, Construction Trades, All Other	64
Drywall, Ceiling Tile Installers	60
Laborers, Freight, Stock, Material Movers, Hand	56
Electricians	46
Helpers, Carpenters	42
Cement Masons, Concrete Finishers	41
Construction, Related Workers, All Other	37
Painters, Construction, Maintenance	29
Heating, Air Conditioning, Refrigeration Mechanics, Installers	24

Retail Salespersons	24
Plumbers, Pipefitters, Steamfitters	23
Cleaners of Vehicles, Equipment	20
Secretaries, Except Legal, Medical, Executive	17
Landscaping, Groundskeeping Workers	15
Helpers, Roofers	13
Office, Administrative Support Workers, All Other	13
Bookkeeping, Accounting, Auditing Clerks	12
Forest, Conservation Technicians	12
Helpers, Painters, Paperhangers, Plasterers, Stucco Masons	12
Janitors, Cleaners, Except Maids, Housekeeping Cleaners	12
Mechanical Door Repairers	11
Welders, Cutters, Solderers, Brazers	11
Mobile Heavy Equipment Mechanics, Except Engines	10
First-Line Supervisors of Helpers, Laborers, Material Movers	9

Agriculture, Forestry, Fishing and Hunting

Seasonality. This sector has a pronounced seasonal pattern. The second quarter of the year is the period of lowest employment since agricultural activity is at a relatively low point and spring break-up slows logging activity considerably. The third quarter when harvest occurs and logging activity is strongest is the period of highest employment. The wage payments in the third quarter are usually 70 percent higher than wage payments in the second quarter.

Exports. Logging can be considered an export industry, although most logs are processed in the region. The resulting products – lumber, plywood, veneer, paper and wood furniture – are shipped outside the region. Agriculture is an export industry, producing far more grains, peas, lentils, beef and other commodities products than the region consumes. Outfitters and guides, who make up most of the fishing and hunting industry, primarily serve tourists and therefore qualify as service exporters.

Multiplier. Because it is an important export sector with many local suppliers, agriculture, forestry, fishing and hunting has a high multiplier of 3.98 in Idaho. That means that for every 10 jobs created directly, nearly 30 more are created in other sectors of the economy. This high multiplier indicates these businesses could have a strong impact on future economic growth if they expand.

Wages and Benefits. Logging and support activities for agriculture and forestry tend to have relatively high wages while the other sectors have relatively low wages. Most workers in this sector do not receive health care or retirement benefits.

2008 Annual Average Wage in Ag, Forestry, Fishing, Hunting

All Jobs in North Central Idaho	$31,216
All Agriculture, Forestry, Fishing, Hunting Jobs	$36,660
Crop Production	$24,388
Animal Production	$25,528
Forestry, Logging	$42,652
Logging	$43,295
Fishing, Hunting	$18,158
Support for Agriculture, Forestry	$32,105

Location Quotient. The location quotient is 2.2, which means that it is more than twice as important in the region as it is in the nation. Economic Modeling Specialists Inc. estimated the state location quotient at 1.12 for agriculture, forestry, fishing and hunting, which means that it is barely more important in the region than in the state.

Size and Growth Over Time. This sector accounted for 2.7 percent of the region's total payrolls in 2008 and 2.3 percent of its jobs. In 2008, north central Idaho had 187 agricultural, forestry, fishing and hunting employers. Of those, 103 were logging companies. The sector lost eight employers between 1993 and 2008.

North Central Idaho Agriculture, Forestry, Fishing, Hunting Jobs 1993-2008

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
All Agriculture, Forestry, Fishing, Hunting Jobs	1,827	1,269	1,043	1,006	-45%	-21%	-4%
Crop Production	88	94	98	121	37%	29%	24%
Animal Production	15	38	23	36	137%	-5%	54%
Forestry, Logging	1,076	903	694	632	-41%	-30%	-9%
Logging	987	885	674	608	-38%	-31%	-10%
Fishing, Hunting	9	37	49	65	652%	75%	32%
Support for Agriculture, Forestry	639	198	178	152	-76%	-23%	-15%

North Central Idaho Ag, Forestry, Fishing, Hunting Sector, 2008

by Size of Employer

	Number	Jobs	Payroll	% of Employers	% of Jobs	% of Payroll
Total	187	1,006	$36,885,696	100%	100%	100%
Fewer than 5	132	200	$6,163,799	71%	20%	17%
5 to 9	26	164	$4,315,925	14%	16%	12%
10 to 19	18	231	$8,657,608	10%	23%	23%
20 to 49	9	240	$9,669,404	5%	24%	26%
50 to 99	3	172	$8,078,960	1%	17%	22%
100 to 249	0	0	$0	0%	0%	0%
250 to 499	0	0	$0	0%	0%	0%
500 or more	0	0	$0	0%	0%	0%

An industrial projection for north central Idaho by Economic Modeling Specialists Inc. forecasts a 13 percent employment decline in the agriculture, forestry, fishing and hunting from 2008 to 2018. That would be a loss of 130 jobs.

Over the long run, jobs in agriculture and forestry – especially logging – have declined as agricultural and timber land have been converted to other uses, the region has lost lumber mills, the Forest Service has restricted logging and technology has reduced the labor needed for farming and logging. The same forces are likely to further reduce agriculture and forestry jobs in the next decade or two. The development of biomass projects is likely to offset some of those job losses.

North Central Idaho's Largest Forestry Employers

Business	City	Payroll
Clearwater Potlatch Timber Prot. Assoc.	Orofino	20 to 49
Darby Logging Inc.	Troy	10 to 19
Finke Logging Co Inc.	Pierce	10 to 19
Framing Our Community Inc.	Elk City	10 to 19
Hansen Logging Co Inc.	Harvard	10 to 19
Idaho Cedar Sales	Troy	20 to 49
Ken Miller Logging Inc.	Orofino	10 to 19
Lara Brothers Ltd	Orofino	20 to 49
Merrell Logging Inc.	Princeton	10 to 19
Northwest Management Inc.	Moscow	20 to 49
Pine Creek Logging LLC	Deary	20 to 49
Steve Henderson Logging Inc.	Lewiston	50 to 99
Timberworks Inc.	Deary	10 to 19
Western Forest Systems Inc.	Lewiston	20 to 49
William V Lowry and Son Trucking LLC	Princeton	10 to 19

Agriculture, forestry, fishing and hunting employment has declined in the United States from 1.2 million in 1993 to 1.18 million in 1998 to 1.16 million in 2003 to 1.17 in 2008, when it made up 1 percent of all U.S. payroll jobs. The U.S. Bureau of Labor Statistic projects another 4 percent decline over the next 10 years to 1.12 million jobs by 2018.

Need for Replacement Workers. While workers 55 years and older make up 19 percent of employment in north central Idaho, they hold 23 percent of the jobs in the region's agriculture, forestry, fishing and hunting sector. Bearing in mind the relative low number of jobs overall, replacement needs will be high over the next few years, as the older workers retire.

From 2003 to 2009, the agriculture, forestry, fishing and hunting sector listed an average of 554 job openings a year with the Idaho Department of Labor's north central Idaho offices in Lewiston, Moscow, Grangeville and Orofino. That was about 13 percent of all jobs openings in the region.

Average Annual Job Openings in Agriculture, Forestry, Fishing and Hunting 2003-2009

	Total	Full-Time	Part-Time
Total	554	529	25
Listed 1 to 3 Days	5	0	5
Listed 4 to 150 Days	51	46	5
Listed Over 150 Days	498	483	15

Agriculture, Forestry, Fishing and Hunting Occupations With Most Job Openings, 2003 to 2009

Forest, Conservation Workers	1,277
Farmworkers, Farm, Ranch Animals	161
Biological Technicians	116
Truck Drivers, Heavy, Tractor-Trailer	61
Fallers	57
Farmworkers, Laborers, Crop, Nursery, Greenhouse	42
Fence Erectors	41
Laborers, Freight, Stock, Material Movers, Hand	38
Logging Workers, All Other	37
Logging Equipment Operators	34
Fishers, Related Fishing Workers	33
Agricultural Equipment Operators	25
Agricultural Workers, All Other	24
Fire Fighters	22
Receptionists, Information Clerks	17
Construction Laborers	15
Assemblers, Fabricators, All Other	13
Office Clerks, General	9
Cashiers	7
Carpenters	6
Cooks, All Other	6
Zoologists, Wildlife Biologists	6
Bus, Truck Mechanics, Diesel Engine Specialists	5
Executive Secretaries, Administrative Assistants	5
Grounds Maintenance Workers, All Other	5
Helpers--Production Workers	5
Log Graders, Scalers	5
Tree Trimmers, Pruners	5
Bookkeeping, Accounting, Auditing Clerks	4
Cooks, Institution, Cafeteria	4

Leisure and Hospitality

Seasonality. Leisure and hospitality has a pronounced seasonal pattern. Wage payments for this sector in the third quarter normally run 18 percent higher than in the first quarter.

Exports. This sector primarily serves visitors, making it an export industry that attracts dollars into the region. This gives the sector the potential to have a major impact on the region's economy as it expands.

Multiplier. Leisure and hospitality has a multiplier of 1.81 in Idaho, which means that for every 10 jobs created directly, just over eight more are created in other sectors of the economy. A modest multiplier in this range indicates that growth in the sector will benefit the rest of the economy but not to the significant extent of sectors like manufacturing.

Wages and Benefits. Wages in leisure and hospitality are low, and most workers do not receive health care insurance or retirement benefits.

2008 Annual Average Wages for Leisure and Hospitality

All North Central Idaho Sectors	$31,216
All Leisure, Hospitality	$12,249
Arts, Amusement, Recreation	$19,798
Accommodations	$10,884
Food Services, Drinking Places	$10,780

Location Quotient. The location quotient for leisure and hospitality is 1.09, which means that it is slightly more important in the region than it is in the nation.

Size and Growth Over Time. Leisure and hospitality accounted for 4.2 percent of the region's total payrolls in 2008.

North Central Idaho Leisure and Hospitality Jobs 1993-2008

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
All Leisure, Hospitality	3,764	4,027	4,489	4,722	25%	17%	5%
Performing Arts, Sports	18	16	28	27	52%	67%	-4%
Museums, Historical Sites	32	35	41	37	17%	6%	-10%
Amusement, Recreation	261	363	634	697	166%	92%	10%
Accommodation	690	693	797	741	7%	7%	-7%
Food Services, Bars	2,764	2,919	2,989	3,220	17%	10%	8%

In 2008, north central Idaho had 375 leisure and hospitality employers. Of those, eight were in the performing arts, spectator sports and related industries; seven were museums or historical sites; 68 were in the amusement, gambling and recreation industry; 65 were hotels, motels or

other accommodations; 176 were restaurants, eight were food service operations companies or caterers and 43 were bars.

North Central Idaho Leisure and Hospitality Sector, 2008

by Size of Employer						
	Number	Jobs	Payroll	% of Employers	% of Jobs	% of Payroll
Total	375	4,722	$57,836,132	100%	100%	100%
Fewer than 5	165	303	$3,802,918	44%	6%	7%
5 to 9	72	471	$4,650,479	19%	10%	8%
10 to 19	69	881	$9,570,116	18%	19%	17%
20 to 49	55	1,485	$18,519,615	15%	31%	32%
50 to 99	9	520	$8,216,967	2%	11%	14%
100 to 249	5	806	$12,514,462	1%	17%	22%
250 to 499	1	256	$561,575	0%	5%	1%
500 or more	0	0	$0	0%	0%	0%

Between 1993 and 2008, U.S. employment in leisure and hospitality grew 38 percent from 9.7 million in 1993 to 11.2 million in 1998 to 12.2 million in 2003 to 13.5 million in 2008, when it made up 9.8 percent of all U.S. payroll jobs. The U.S. Bureau of Labor Statistic projects another 8 percent increase to 14.6 million jobs by 2018.

Economic Modeling Specialists Inc. forecasts a 5 percent decline in leisure and hospitality employment in north central Idaho. That would be a loss of about 240 jobs.

North Central Idaho's Largest Leisure and Hospitality Employers

Business	City	Payroll
Amusement, Recreation		
Bryden Canyon Golf Course	Lewiston	10 to 19
Epleys Whitewater	Riggins	10 to 19
Gold Gym Lewiston LLC	Lewiston	20 to 49
Grangeville Country Club	Grangeville	10 to 19
Groaners	Grangeville	10 to 19
Itse Ye Ye Casino	Kamiah	50 to 99
Lewiston Golf & Co Club Inc.	Lewiston	20 to 49
National Park Service	Spalding	20 to 49
Nez Perce Express II	Lewiston	20 to 49
Nez Perce Tribal	Lewiston	200 to 299
North Idaho Athletic Club LLC	Moscow	20 to 49
Oars Dories Inc.	Lewiston	20 to 49
Orchard Lanes Inc.	Lewiston	10 to 19
Salmon River Experience Inc.	Moscow	10 to 19
Snake River Adventures	Lewiston	10 to 19
The Hub	Kamiah	10 to 19
Wagner Theaters	Grangeville	20 to 49
Wilderness Trails Inc.	Lowell	10 to 19

Business	City	Payroll
Accommodations		
Adcope Athletic Club	Lewiston	150 to 199
Clearwater 12 Motel	Kamiah	10 to 19
Comfort Inn	Lewiston	10 to 19
Country Haus Restaurant and Village Inc.	Cottonwood	20 to 49
Guesthouse Inn and Suites of Lewiston	Lewiston	10 to 19
Holiday Inn Express	Lewiston	20 to 49
Lodge at River's Edge	Orofino	20 to 49
Royal Motor Inn	Moscow	10 to 19
Salmon Rapids Lodge Inc.	Riggins	20 to 49
Samvid Corp.	Moscow	10 to 19
Super 8	Grangeville	20 to 49
Super 8	Lewiston	10 to 19
Super 8	Moscow	10 to 19
University Inn - Best Western	Moscow	150 to 199
Valley Enterprises	Orofino	10 to 19
Restaurants, Food Services		
Alibi Sports Edition Club	Lewiston	20 to 49
Antonio's	Lewiston	20 to 49
Applebee's Grill & Bar	Lewiston	50 to 99
Applebee's Grill & Bar	Moscow	50 to 99
Arby's	Moscow	20 to 49
Arby's of Lewiston	Lewiston	20 to 49
Arby's of Lewiston Orchards	Lewiston	20 to 49
Burger King	Lewiston	20 to 49
C&S Enterprises	Moscow	20 to 49
Delta Chi Fraternity	Moscow	20 to 49
Dining on the Edge	Orofino	20 to 49
Ernie's Steakhouse and 41 Club	Grangeville	20 to 49
Golden Dreams Mgmt Inc.	Lewiston	100 to 149
HD (Happy Days) Catering	Lewiston	20 to 49
IHOP	Lewiston	20 to 49
Jack in the Box	Lewiston	20 to 49
Le Beef Inc.	Lewiston	20 to 49
Lewis Clark Resort	Kamiah	20 to 49
Main Street Grill	Lewiston	20 to 49
McDonalds of Moscow	Moscow	20 to 49
McDonalds of Moscow II	Moscow	20 to 49
Mingles of Moscow Inc.	Moscow	20 to 49
Oro Enterprises Inc.	Moscow	20 to 49
Oscars Restaurant	Grangeville	20 to 49
Petty Restaurants Inc.	Lewiston	20 to 49
Pizza Hut	Lewiston	20 to 49
Ponderosa Restaurant & Brass R	Orofino	20 to 49
Red Lobster	Lewiston	50 to 99
Rowdy's Texas Steakhouse & Saloon	Lewiston	20 to 49
Sangria Grille	Moscow	20 to 49
Shari's Restaurant	Moscow	20 to 49

Business	City	Payroll
Shari's Restaurant	Lewiston	20 to 49
Sharp Drive-Ins Inc.	Lewiston	20 to 49
Sodexo USA	Moscow	50 to 99
Southway Pizzeria & Deli	Lewiston	20 to 49
Strike & Spare Room	Lewiston	20 to 49
Subway	Lewiston	20 to 49
Taco Bell	Moscow	20 to 49
Taco Time	Lewiston	20 to 49
The Breakfast Club of Moscow	Moscow	20 to 49
The Garden Lounge	Moscow	20 to 49
Tucci's Cucina Italiana	Moscow	20 to 49
Wayback Cafe and Catering	Lewiston	20 to 49
Wendy's	Moscow	20 to 49
WS Hospitality LLC	Moscow	20 to 49

Need for Replacement Workers. While workers 55 years and older hold 19 percent of all north central Idaho jobs, they make up 10 percent of employment in the region's leisure and hospitality sector so replacement needs are likely to be relatively low over the next few years.

From 2003 to 2009, employers in the leisure and hospitality sector listed an average of 517 job openings a year with the Idaho Department of Labor's north central Idaho offices in Lewiston, Moscow, Grangeville and Orofino. That was about 12 percent of all jobs openings in the region.

Average Annual Leisure and Hospitality Job Openings 2003-2009

	Total	Full-Time	Part-Time
Total in North Central Idaho	517	243	274
Listed 1 to 3 Days	26	21	5
Listed 4 to 150 Days	32	13	19
Listed Over 150 Days	459	209	250

Leisure and Hospitality Occupations With Most Job Openings, 2003 to 2009

Waiters, Waitresses	639
Maids, Housekeeping Cleaners	599
Cooks, Restaurant	255
Combined Food Preparation, Serving Workers Including Fast Food	240
Dishwashers	206
Cashiers	182
Hotel, Motel, Resort Desk Clerks	177
Bartenders	119
Cooks, Institution, Cafeteria	115
Food Preparation Workers	102
Food Service Managers	74
First-Line Supervisors of Food Preparation, Serving Workers	69
Janitors, Cleaners, Except Maids, Housekeeping Cleaners	69

Food Servers, Nonrestaurant	64
Counter Attendants, Cafeteria, Food Concession, Coffee Shop	62
Cooks, All Other	60
Driver/Sales Workers	58
Cooks, Fast Food	52
Hosts, Hostesses, Restaurant, Lounge, Coffee Shop	52
Maintenance, Repair Workers, General	52
Dining Room, Cafeteria Attendants, Bartender Helpers	48
Food Preparation, Serving Related Workers, All Other	44
Laborers, Freight, Stock, Material Movers, Hand	31
Sales, Related Workers, All Other	30
Bookkeeping, Accounting, Auditing Clerks	27
Grounds Maintenance Workers, All Other	27
Bakers	26
Customer Service Representatives	25
First-Line Supervisors of Office, Administrative Support Workers	24
Landscaping, Groundskeeping Workers	24

Health Care and Social Assistance

Health Care and social assistance, which includes assisted living centers, residences and special services for people with disabilities, mental health problems and counseling needs, have fairly similar staffing patterns, and both have grown rapidly in the last few decades.

Seasonality. This sector has a pronounced seasonal pattern for wages although not much of a seasonal pattern for employment. The last quarter of the year appears to be slightly busier than other quarters. But the big difference in wages appears to be the result of bonuses paid around Christmas and yearend by medical clinics and the offices of doctors, dentists and other health practitioners. Wage payments for the health care and social assistance sector in the fourth quarter normally run 9 percent higher than wage payments in the first quarter.

Export. Health care and social assistance primarily serves local residents rather than drawing clients from outside the region like tourism does. Consequently its economic impact is smaller than tourism or manufacturing, for example.

Multiplier. This sector has a multiplier of 1.93, which means for every 10 jobs created in health care and social services just over nine more jobs are created in other economic sectors. This is a solid multiplier, and growth in this sector would have a positive impact on the local economy overall.

Wages and Benefits. The average annual pay in this sector is similar to the average for all sectors in north central Idaho. Most full-time workers in health care receive medical insurance and retirement benefits while social assistance workers typically do not.

2008 Annual Average Wages for Health Care and Social Assistance

All Sectors in North Central Idaho	$31,216
Health Care, Social Assistance	$31,319
Ambulatory Health Care	$33,352
Hospitals	$44,452
Nursing, Residential Care	$22,660
Social Assistance	$14,912

Location Quotient. The location quotient for health care and social assistance is 1.44, which means that it is markedly more important in the region than in the nation.

Size and Growth Over Time. Health care and social assistance accounted for 14.1 percent of the region's total payrolls in 2008, making it the second largest economic sector after education.

North Central Idaho Health Care and Social Assistance Jobs, 1993-2008

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
Health Care, Social Assistance	3,955	4,768	5,617	6,192	57%	30%	10%
Ambulatory Health Care	994	1,366	1,740	1,991	100%	46%	14%
Hospitals	1,473	1,590	1,749	1,876	27%	18%	7%
Nursing, Residential Care	1,013	1,187	1,280	1,223	21%	3%	-4%
Social Assistance	475	625	848	1,103	132%	76%	30%

In 2008, north central Idaho had 322 health care and social assistance employers. There were 175 medical clinics, laboratories and offices of doctors, dentists, and other health care practitioners; seven hospitals; 30 nursing and residential care providers and 110 social assistance organizations.

North Central Idaho Health Care, Social Assistance Sector, 2008 by Size of Employer

	Number	Jobs	Payroll	% of Employers	% of Jobs	% of Payroll
Total	322	6,192	$193,927,757	100%	100%	100%
Fewer than 5	150	334	$9,066,296	46%	5%	5%
5 to 9	69	457	$17,021,568	21%	7%	9%
10 to 19	46	610	$16,466,372	14%	10%	8%
20 to 49	28	857	$18,430,424	9%	14%	10%
50 to 99	16	1,151	$29,055,322	5%	19%	15%
100 to 249	11	1,526	$46,414,624	3%	25%	24%
250 to 499	1	365	$15,095,795	0%	6%	8%
500 or more	1	894	$42,377,356	0%	14%	22%

An industrial projection for North Central Idaho by Economic Modeling Specialists Inc. forecasts employment in health care and social assistance to rise 32 percent from 2008 to 2018, a gain of about 1,980 jobs.

2008 Health Care and Social Service Jobs and 2018 Projections

Description	2008	2018	Earnings	Education Level
Nursing aides, orderlies, attendants	818	1,115	$10.00	Postsecondary vocational award
Registered nurses	639	870	$26.07	Associate's degree
Child care workers	460	481	$7.72	Short on-the-job training
Home health aides	263	444	$8.36	Short on-the-job training
Personal, home care aides	240	421	$7.93	Short on-the-job training
Maids, housekeeping cleaners	192	258	$7.55	Short on-the-job training
Office clerks, general	175	236	$11.62	Short on-the-job training
Licensed practical, licensed vocational nurses	175	224	$16.82	Postsecondary vocational award
Physicians, surgeons	190	221	N/A	First professional degree
Medical secretaries	184	212	$13.22	Postsecondary vocational award
Receptionists, information clerks	132	173	$10.33	Short on-the-job training
Mental health counselors	101	149	$14.11	Master's degree
Dental assistants	105	124	$13.33	Moderate on-the-job training
Mental health, substance abuse social workers	64	109	$15.59	Master's degree
Medical, health services managers	87	106	$28.78	Degree plus work experience
Social, human service assistants	64	105	$14.16	Moderate on-the-job training
Medical assistants	72	99	$13.11	Moderate on-the-job training
First-line supervisors/managers of office, administrative support workers	81	98	$18.55	Work experience in related field
Bookkeeping, accounting, auditing clerks	69	93	$13.37	Moderate on-the-job training
General, operations managers	68	89	$28.45	Degree plus work experience
Janitors, cleaners, except maids, housekeeping cleaners	70	89	$9.15	Short on-the-job training
Preschool teachers, except special education	91	88	$8.63	Postsecondary vocational award
Community, social service specialists, all other	54	84	$19.78	Bachelor's degree
Medical transcriptionists	73	82	$15.40	Postsecondary vocational award
Rehabilitation counselors	64	81	$18.06	Master's degree
Clinical, counseling, school psychologists	51	73	$22.29	Doctoral degree
Dental hygienists	61	72	$33.57	Associate's degree
Teacher assistants	62	69	$15.42	Short on-the-job training
Executive secretaries, administrative assistants	50	69	$15.48	Moderate on-the-job training
Food preparation workers	52	68	$8.50	Short on-the-job training
Secretaries, except legal, medical, executive	59	68	$12.25	Moderate on-the-job training
Pharmacy technicians	46	66	$11.47	Moderate on-the-job training
Cooks, institution, cafeteria	48	65	$9.31	Moderate on-the-job training
Physical therapists	46	64	$27.89	Master's degree
Child, family, school social workers	40	61	$17.12	Bachelor's degree
Recreation workers	45	58	$9.97	Short on-the-job training
Billing, posting clerks, machine operators	49	58	$14.42	Moderate on-the-job training
Substance abuse, behavioral disorder counselors	33	54	$15.70	Master's degree

Description	2008	2018	Earnings	Education Level
Social, community service managers	35	52	$16.03	Bachelor's degree
Psychiatric aides	42	50	$10.10	Short on-the-job training
Psychologists, all other	35	46	$18.78	Master's degree
Food servers, nonrestaurant	32	46	$8.83	Short on-the-job training
Industrial-organizational psychologists	34	45	$17.67	Master's degree
Medical records, health information technicians	35	45	$14.18	Associate's degree
Maintenance, repair workers, general	30	40	$14.14	Moderate on-the-job training
Therapists, all other	30	39	$16.03	Bachelor's degree
Health diagnosing, treating practitioners, all other	30	38	$19.64	Bachelor's degree
Optometrists	27	37	$28.18	First professional degree
Dentists, general	29	30	$51.00	First professional degree
File clerks	37	23	$14.06	Short on-the-job training

Jobs will be added to this sector by an aging but still growing population. While 12.8 percent of the U.S. population is 65 years and older, 16.1 percent of north central Idaho's population is in that category. This senior population is projected to grow more rapidly in the region than nationally – 36 percent from 16,423 in 2008 to 22,275 by 2018, according to Economic Modeling Specialists. Another factor is the increasing tendency of local health care facilities to provide services that previously were unavailable in the area, allowing local residents to find the services they need in their own communities rather than having to travel to Spokane or Seattle.

North Central Idaho's Largest Health Care, Social Assistance Employers

Employer	City	Payroll
Health Care		
St. Joseph Regional Medical Center	Lewiston	900 to 999
Gritman Medical Center	Moscow	300 to 399
Clearwater Valley Hospital & Clinics Inc.	Orofino	150 to 199
Life Care Centers of Lewiston	Lewiston	150 to 199
St. Mary's Hospital Inc.	Cottonwood	150 to 199
Alternative Nursing Services Inc.	Lewiston	100 to 149
Good Samaritan Society Moscow	Moscow	100 to 149
Ne Mee Poo Health	Lapwai	100 to 149
Northwest Children's Home Inc.	Lewiston	100 to 149
Royal Plaza Retirement & Care Center	Lewiston	100 to 149
Syringa General Hospital	Grangeville	100 to 149
Valley Medical Center PLLC	Lewiston	100 to 149
A Compassionate Care Co.	Orofino	50 to 99
A Full Life Home Care	Lewiston	50 to 99
Alternative Nursing Services Inc.	Kamiah	50 to 99
Care Connection LLC	Lewiston	50 to 99
Clearwater Healthcare LLC	Orofino	50 to 99
Eagle Healthcare	Lewiston	50 to 99
Grangeville Health and Rehabilitation	Grangeville	50 to 99

Employer	City	Payroll
Guardian Angel Homes	Lewiston	50 to 99
Idaho Department of Health and Welfare	Orofino	50 to 99
Lewiston Care Center #221	Lewiston	50 to 99
Milestone Decisions Inc.	Moscow	50 to 99
Moscow Care Center #225	Moscow	50 to 99
Moscow Family Medicine Inc.	Moscow	50 to 99
Pathologists Regional Laboratory	Lewiston	50 to 99
Alternative Nursing Services Inc.	Moscow	20 to 49
Alternative Nursing Services Inc.	Lewiston	20 to 49
Bearable Dentistry PLLC	Moscow	20 to 49
Brookside Landing	Orofino	20 to 49
Camas Professional Counseling	Grangeville	20 to 49
Clearwater Medical Clinic	Lewiston	20 to 49
Devins Home Care LLP	Grangeville	20 to 49
Emeritus Properties Inc.	Lewiston	20 to 49
Gritman Therapy Center	Moscow	20 to 49
Homecare Inc.	White Bird	20 to 49
IPC Surgical Center LLC	Lewiston	20 to 49
Lewiston Orthopedic Association PA	Lewiston	20 to 49
Medcor Inc.	Lewiston	20 to 49
Provident Resources Group Inc.	Lewiston	20 to 49
Scott Community Care PLLC	Moscow	20 to 49
Sport Physical Therapy Clinic	Lewiston	20 to 49
Bradley J. Morlock DDS PC	Lewiston	10 to 19
Clearview Eye Clinic Ltd.	Moscow	10 to 19
Dan R Wilson DDS	Lewiston	10 to 19
Devlin & Huberty PS	Moscow	10 to 19
Gentle Family Dentistry	Orofino	10 to 19
Gritman Adult Day Health	Moscow	10 to 19
Gritman Home Health	Moscow	10 to 19
James E Pierce DDS	Lewiston	10 to 19
Lakeside Residential Care Inc.	Winchester	10 to 19
Lewis and Clark Orthopaedic Institute	Lewiston	10 to 19
Lewis Clark Endoscopy PLLC	Lewiston	10 to 19
Lewis Clark Gastroenterology	Lewiston	10 to 19
Lewiston Emergency Physicians	Lewiston	10 to 19
Living Spring Residential Care LLC	Lewiston	10 to 19
Meadowlark Homes Inc.	Grangeville	10 to 19
Moscow Medical PA	Moscow	10 to 19
Pacific Cataract and Laser	Lewiston	10 to 19
Palouse Surgery Center LLC	Moscow	10 to 19
PC Wilkinson Orthodontics	Lewiston	10 to 19
Phillips Agency Inc.	Lewiston	10 to 19
St. Mary's Clinic	Kamiah	10 to 19
Syringa Surgical Center LLC	Lewiston	10 to 19
Valley Ear Nose & Throat Group PA	Lewiston	10 to 19
Social Assistance		
C and R Inc.	Moscow	50 to 99
Community Action Agency Inc.	Lewiston	50 to 99
Disability Action Center Northwest Inc.	Moscow	50 to 99

Employer	City	Payroll
Goodwill Industries Inland Northwest	Lewiston	50 to 99
Seubert's Quality Home Care	Lewiston	50 to 99
A to Z Family Services Orofino LLC	Orofino	20 to 49
Care For Kids Learning Laboratory	Lewiston	20 to 49
Inclusion North Inc.	Moscow	20 to 49
Lewiston-Clarkston YWCA	Lewiston	20 to 49
Opportunities Unlimited Inc.	Moscow	20 to 49
Opportunities Unlimited Inc.	Lewiston	20 to 49
Seubert's Quality Home Care	Moscow	20 to 49
Seubert's Quality Home Care	Grangeville	20 to 49
Clearwater Counseling	Lewiston	10 to 19
Clearwater Youth Alliance	Orofino	10 to 19
Community Services PS	Moscow	10 to 19
Head Start	Lewiston	10 to 19
Inclusion North Inc.	Grangeville	10 to 19
Lewis-Clark Care Center LLC	Lewiston	10 to 19
Malone Counseling Services	Orofino	10 to 19
Opportunities Unlimited Inc.	Orofino	10 to 19
Opportunities Unlimited Inc.	Grangeville	10 to 19
Opportunities Unlimited Inc.	Kamiah	10 to 19
R & T Agency Inc.	Cottonwood	10 to 19
S L Start and Associates	Lewiston	10 to 19
Sequoia Counseling Services	Lewiston	10 to 19
Snake River Rehabilitation	Lewiston	10 to 19
Susan Calls Case Management	Lewiston	10 to 19
Tami and Matthew Stinebaugh	Moscow	10 to 19
Tendercare Children's Centers	Lewiston	10 to 19

Between 1993 and 2008, U.S. employment in health care and social assistance grew 44 percent from 9.3 million in 1993 to 10.5 million in 1998 to 11.8 million in 2003 to 13.3 million in 2008, when it made up 9.7 percent of all U.S. payroll jobs. The U.S. Bureau of Labor Statistic projects another 25 percent increase to 16.7 million jobs by 2018.

Need for Replacement Workers. While workers 55 years and older make up 19 percent of employment in north central Idaho, they hold 20 percent of the region's health care and social assistance jobs. That means replacement needs are likely to be relatively high over the next few years. Replacing nurses, many of whom are in their 50s and 60s, will be a special challenge.

From 2003 to 2009, the health care and social assistance sector listed 408 job openings a year with the Idaho Department of Labor's local offices in Lewiston, Moscow, Grangeville and Orofino. That was about 10 percent of all jobs openings in the region.

Average Annual Health Care and Social Assistance Job Openings 2003-2009

	Total	Full-Time	Part-Time
Total	408	204	204
1 to 3 Days	3	0	3
4 to 150 Days	9	7	2
Over 150 Days	396	197	199

Health Care and Social Assistance Occupations With Most Job Openings 2006 to 2009

Nursing Aides, Orderlies, Attendants	717
Registered Nurses	303
Personal, Home Care Aides	237
Child Care Workers	190
Home Health Aides	187
Maids, Housekeeping Cleaners	137
Janitors, Cleaners, Except Maids, Housekeeping Cleaners	126
Social, Human Service Assistants	113
Cooks, Institution, Cafeteria	97
Dietitians, Nutritionists	79
Receptionists, Information Clerks	78
Community, Social Service Specialists, All Other	70
Medical Assistants	69
Health Care Support Workers, All Other	49
Licensed Practical, Licensed Vocational Nurses	43
Customer Service Representatives	42
Mental Health, Substance Abuse Social Workers	39
Medical Secretaries	37
Dishwashers	36
Secretaries, Except Legal, Medical, Executive	35
Education Administrators, Preschool, Child Care Center/Program	30
Food Servers, Nonrestaurant	30
Medical, Clinical Laboratory Technologists	30
Preschool Teachers, Except Special Education	30
Personal Care, Service Workers, All Other	29
Office Clerks, General	28
Clinical, Counseling, School Psychologists	27
Physical Therapists	27
First-Line Supervisors of Housekeeping, Janitorial Workers	26
Respiratory Therapists	25

Professional, Business, Information Services

Seasonality. Several components of this supersector have seasonal patterns, but these sectors together do not have a significant seasonal pattern in employment. Wage payments for the professional, business and information services supersector in the first quarter of the year—the high quarter—normally run 3 percent above wage payments in the second quarter.

Exports. The professional, business and information services supersector in north central Idaho primarily serve locals residents so there are few if any exports. Given that, the overall economic impact of growth in this supersector is smaller than other sectors such as tourism or manufacturing.

Multiplier. This supersector has a multiplier of 2.15 in Idaho. That means that for every 10 jobs created directly, another 11½ jobs are created in other economic sectors. A high multiplier indicates that a sector has the potential to have strong positive impacts on the local economy when it is growing.

Wages and Benefits. Professional, business and information services provide relatively high average annual pay. Most full-time workers in large professional, information and waste management businesses receive health care insurance and retirement benefits while most of the other workers in this supersector do not.

2008 Annual Average Wages for Professional, Business, Information Services

All Sectors in North Central Idaho	$31,216
All Professional, Business, Information Services	$38,372
Professional, Business	$41,880
Professional, Technical	$39,156
Management of Companies	$86,453
Administrative, Support	$21,218
Waste Management	$27,984
Information	$28,998
Publishing Industries	$27,836
Motion Picture, Sound Recording	$7,318
Broadcasting, except Internet	$30,593
Telecommunications	$46,761
Other Information Services	$11,513

Location Quotient. This supersector's location quotient is 0.45, which means that it is less than half as important in the region as it is in the nation.

Size and Growth Over Time. Professional, business and information services accounted for 8.4 percent of the region's total payrolls in 2008.

North Central Idaho Professional, Business, Information Services Jobs 1993-2008

	Jobs				Percent Change From		
Sector	1993	1998	2003	2008	1993	1998	2003
All Professional, Business, Information Services	2,745	2,812	3,225	3,003	9%	7%	-7%
Professional, Business	1,861	2,068	2,516	2,185	17%	6%	-13%
Professional, Technical	700	842	1,281	1,024	46%	22%	-20%
Management of Companies	587	607	524	395	-33%	-35%	-25%
Administrative, Support	439	478	593	613	40%	28%	3%
Waste Management	135	141	118	154	14%	10%	30%
Information	884	744	709	818	-7%	10%	15%
Publishing Industries	342	291	272	257	-25%	-12%	-6%
Motion Picture, Sound Recording	73	104	82	97	34%	-6%	19%
Broadcasting, except Internet	146	127	168	184	26%	45%	9%
Telecommunications	248	139	101	199	-20%	43%	96%
Other Information Services	75	83	83	79	5%	-6%	-5%

In 2008, north central Idaho had 427 professional, business and information services employers. There were 216 professional, scientific and technical service companies; 146 business service providers; 14 publishers; six movie theaters; 11 broadcasters; 21 telecommunications facilities and 13 other information businesses.

North Central Idaho Professional, Business, Information Services Supersector, 2008

by Size of Employer

	Number	Jobs	Payroll	% of Employers	% of Jobs	% of Payroll
Total	427	3,003	$115,232,352	100%	100%	100%
Fewer than 5	285	465	$14,094,370	67%	15%	12%
5 to 9	65	413	$12,931,785	15%	14%	11%
10 to 19	44	577	$20,172,451	10%	19%	18%
20 to 49	25	772	$22,952,684	6%	26%	20%
50 to 99	6	335	$10,125,384	1%	11%	9%
100 to 249	1	143	$4,188,748	0%	5%	4%
250 to 499	1	298	$30,766,930	0%	10%	27%
500 or more	0	0	$0	0%	0%	0%

An industrial projection for north central Idaho by Economic Modeling Specialists Inc. forecasts that employment in professional, business and information services will rise 9 percent from 2008 to 2018, a gain of about 280 jobs.

Technology transfer – spinning off businesses using products and technology developed by university researchers – is likely to continue to be the source of new professional service and information jobs over the next 10 years. Gains in professional, business and Internet and computer-related information services are likely to be offset somewhat by the continued decline of jobs at newspapers and publishing companies.

North Central Idaho's Largest Professional, Business, Information Services Employers

Employer	City	Payroll
Professional, Scientific, Technical Services		
Economic Modeling Specialists Inc.	Moscow	50 to 99
Animal Clinic	Moscow	20 to 49
Army Corps of Engineers	Orofino	20 to 49
Benchmark Research & Safety Inc.	Moscow	20 to 49
Clark & Feeney	Lewiston	20 to 49
Eco Analysts Inc.	Moscow	20 to 49
First Step Internet	Moscow	20 to 49
Image Studios	Moscow	20 to 49
Lewiston Veterinary Clinic	Lewiston	20 to 49
Northwest Hotel Management LLC	Orofino	20 to 49
Presnell Gage PLLC	Lewiston	20 to 49
Terragraphics	Moscow	20 to 49
The Management Co.	Lewiston	20 to 49
Aherin Law Office PA	Lewiston	10 to 19
Allwest Testing & Engineering	Lewiston	10 to 19
Alturas Analytics	Moscow	10 to 19
Anatek Labs Inc.	Moscow	10 to 19
Ascension Health Insurance Inc.	Lewiston	10 to 19
Clements Brown & McNichols PA	Lewiston	10 to 19
Clinic LLC	Potlatch	10 to 19
Clinics PA	Orofino	10 to 19
Hayden and Ross PA	Moscow	10 to 19
Human Resources Novations	Moscow	10 to 19
Orchards Pet Hospital	Lewiston	10 to 19
Progressive Engineering Group	Lewiston	10 to 19
Ridingers Enterprises Inc.	Lewiston	10 to 19
USKH Inc.	Lewiston	10 to 19
Management of Companies		
Clearwater Paper	Lewiston	200 to 299
Genesee Union Warehouse	Genesee	10 to 19
Happy Day Corporation Office	Lewiston	10 to 19
Lewis-Clark Early Childhood Program	Lewiston	10 to 19
Lewiston Grain Growers	Lewiston	10 to 19
Milestone Decisions Inc.	Moscow	5 to 9
Business Services		
Empro Employer Solutions LLC	Lewiston	50 to 99
Express Temporary Services Inc.	Lewiston	50 to 99
Clearwater Traffic Control LLC	Lewiston	20 to 49
Evcar Inc.	Moscow	20 to 49
Evcar Inc.	Lewiston	20 to 49
Latah Sanitation	Moscow	20 to 49
Transcend Services Inc.	Moscow	20 to 49
Automobile Club of Washington	Lewiston	10 to 19

Employer	City	Payroll
B and F Power Vacuum Inc.	Lewiston	10 to 19
Chemical Dry King Services	Lewiston	10 to 19
Credit Bureau of Lewiston-Clarkston Inc.	Lewiston	10 to 19
Idaho Department of Labor	Orofino	10 to 19
Idaho Department of Labor	Lewiston	10 to 19
Osborne's Cleaning & Restoration	Lewiston	10 to 19
Sanitary Disposal Inc.	Lewiston	10 to 19
Shull Bros Pest Control	Moscow	10 to 19
Siemens Building Technologies Inc.	Moscow	10 to 19
Total Lawn Care Inc.	Moscow	10 to 19
Walco Inc.	Grangeville	10 to 19
Water Feature LLC	Lewiston	10 to 19
Information		
Tribune Publishing Co.	Lewiston	100 to 149
Inland Cellular	Moscow	50 to 99
KRLS AM - KMOK AM	Lewiston	50 to 99
Cable One Inc.	Lewiston	20 to 49
Eastside Cinemas	Moscow	20 to 49
Idaho County Free Press/Shopper	Grangeville	20 to 49
KRPL Incorporated	Moscow	20 to 49
Latah County Free Library District	Moscow	20 to 49
Lewiston LLC	Lewiston	20 to 49
News Review Publishing Co Inc.	Moscow	20 to 49
Pacific Empire Radio Corp	Lewiston	20 to 49
Prairie River Library District	Lapwai	20 to 49
Time Warner Cable	Moscow	20 to 49
Washington TV (Fisher Broadcasting)	Lewiston	20 to 49
4-K Radio Inc.	Lewiston	10 to 19
Cingular Wireless Employee Services	Moscow	10 to 19
Clearwater Memorial Public Library	Orofino	10 to 19
Northwest Communications Inc.	Lewiston	10 to 19
Cactus Computer Co.	Moscow	5 to 9
Central Idaho Broadcasting	Orofino	5 to 9
Clearwater Publishing Co Inc.	Orofino	5 to 9
Elk River Library District	Elk River	5 to 9
Elk River TV Cable Inc.	Troy	5 to 9
Idaho Educational Public Broadcasting	Moscow	5 to 9
Sprint Nextel	Lewiston	5 to 9
The Clearwater Progress Inc.	Kamiah	5 to 9
Verizon Northwest Inc.	Moscow	5 to 9

Between 1993 and 2008, U.S. employment in professional, business and information services grew 47 percent, rising from 14.2 million in 1993 to 18.4 million in 1998, then to 19.2 million in 2003 to 20.8 million in 2008, when it made up 15.2 percent of all U.S. payroll jobs. The U.S. Bureau of Labor Statistic projects another 21 percent increase to 25.1 million jobs by 2018.

Need for Replacement Workers. While workers 55 years and older make up 19 percent of employment in North Central Idaho, they hold 17 percent of the jobs in the region's

professional, business, and information services supersector. Replacement needs will be marginally lower than in most other sectors over the next few years.

From 2003 to 2009, the professional, business and information supersector listed 542 job openings a year with the Idaho Department of Labor's local offices in Lewiston, Moscow, Grangeville and Orofino. That was about 13 percent of all jobs openings in the region.

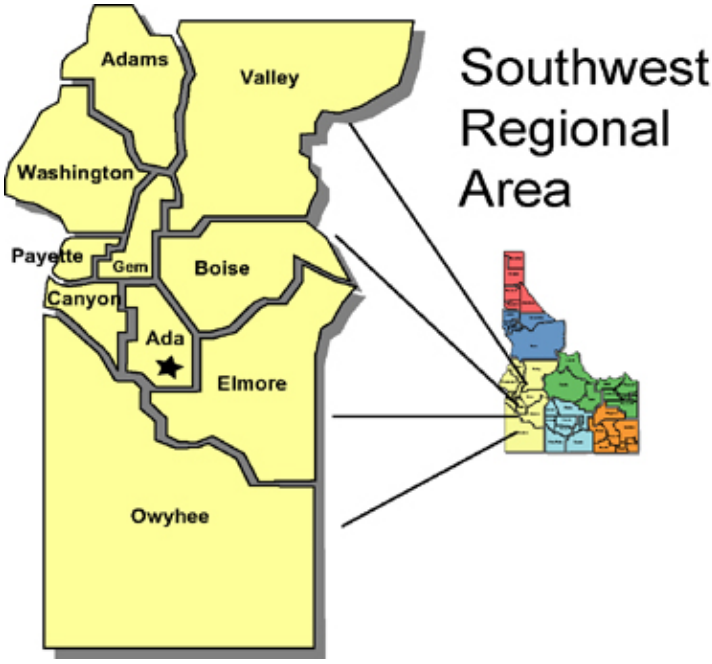
Average Annual Professional, Business, Information Services Job Openings 2003-2009

	Total	Full-Time	Part-Time
Total	540	326	214
1 to 3 Days	43	35	8
4 to 150 Days	112	66	46
Over 150 Days	385	225	160

Professional, Business, Information Services Occupations With Most Job Openings, 2006 to 2009

Janitors, Cleaners, Except Maids, Housekeeping Cleaners	427
Landscaping, Groundskeeping Workers	227
Laborers, Freight, Stock, Material Movers, Hand	145
Security Guards	144
Door-To-Door Sales Workers, Street Vendors, Related Workers	117
Management Analysts	116
Nursing Aides, Orderlies, Attendants	104
Telecommunications Line Installers, Repairers	104
Home Health Aides	90
Maids, Housekeeping Cleaners	90
Secretaries, Except Legal, Medical, Executive	67
Receptionists, Information Clerks	62
Market Research Analysts	57
Retail Salespersons	55
Architectural, Civil Drafters	42
Executive Secretaries, Administrative Assistants	40
Customer Service Representatives	38
Bookkeeping, Accounting, Auditing Clerks	37
Building Cleaning Workers, All Other	37
Driver/Sales Workers	36
Advertising Sales Agents	35
Office Clerks, General	34
Truck Drivers, Heavy, Tractor-Trailer	32
Industrial Truck, Tractor Operators	31
Sales, Related Workers, All Other	31
Environmental Science, Protection Technicians, Including Health	30
Telecommunications Equipment Installers, Repairers, Except Line Installers	29
Archivists	26
Civil Engineers	25
Personal Care, Service Workers, All Other	25

Southwestern Idaho



Overview

Southwestern Idaho is the state center not only of population but also of government and financial operations. As such, what happens in this region has a significant effect on the Idaho economy overall.

Many of the large industries provide services to government, and this has given some service sectors economic dominance in the region.

Based on wages, company management, mining and utilities provide the highest average pay, but company management is a sector that does not lend itself as a focus for economic development. These are businesses that own or control other businesses for the purpose of affecting decisions or providing services otherwise provided in-house. Mining and utilities offer comparatively few jobs.

Southwestern Idaho Average Employment 2008

Sector	Employment	% of Total
Regional Total	293,798	100.0%
Natural Resources	6,178	2.1%
Mining	271	0.1%
Utilities	1,238	0.4%
Construction	20,057	6.8%
Manufacturing	30,552	10.4%
Wholesale Trade	12,666	4.3%
Retail Trade	36,198	12.3%
Transportation and Warehousing	9,143	3.1%
Information	6,085	2.1%
Finance and Insurance	10,704	3.6%
Real Estate and Rental and Leasing	4,115	1.4%
Professional, Scientific, and Technical Services	13,072	4.4%
Management of Companies and Enterprises	5,491	1.9%
Administrative and Support and Waste Management and Remediation Services	23,149	7.9%
Educational Services	21,991	7.5%
Health Care and Social Assistance	35,496	12.1%
Arts, Entertainment, and Recreation	4,051	1.4%

Sector	Employment	% of Total
Accommodation and Food Services	23,974	8.2%
Other Services	8,083	2.8%
Government	21,286	7.2%

Retail trade, while providing the most job of all sectors and more new jobs than all but one since 2003, is driven by population growth and the general state of the economy. It is a reactive rather than proactive sector.

Construction also offers little prospect for growth in the future but for a much different reason. While construction lead the expansion of the mid-2000s, the excessive housing inventory will take years to work through, leaving this sector languishing. It will likely be 2025 before construction regains the job levels it had in 2006.

Job Growth by Sector, 2003-2008

	2003	2008	Change	% Change
Regional Total	255,229	293,798	38,569	15.1%
Health Care and Social Assistance	29,163	35,496	6,333	21.7%
Retail Trade	30,530	36,198	5,669	18.6%
Administrative, Support, Waste Management, Remediation Services	17,791	23,149	5,357	30.1%
Accommodation and Food Services	20,137	23,974	3,837	19.1%
Educational Services	18,619	21,991	3,371	18.1%
Construction	17,176	20,057	2,881	16.8%
Wholesale Trade	10,256	12,666	2,410	23.5%
Government	18,936	21,286	2,351	12.4%
Professional, Scientific, and Technical Services	10,763	13,072	2,309	21.4%
Information	4,522	6,085	1,563	34.6%
Other Services	6,825	8,083	1,259	18.4%
Finance and Insurance	9,481	10,704	1,223	12.9%
Transportation and Warehousing	8,383	9,143	760	9.1%
Arts, Entertainment, and Recreation	3,455	4,051	597	17.3%
Real Estate and Rental and Leasing	3,605	4,115	510	14.1%
Utilities	1,065	1,238	172	16.2%
Natural Resources	6,092	6,178	86	1.4%
Mining	195	271	76	38.8%
Management of Companies and Enterprises	5,701	5,491	-210	-3.7%
Manufacturing	32,494	30,552	-1,942	-6.0%

Agriculture has the highest location quotient of any sector, which warrants its review. Health care was the fastest growing sector during the 2000s and the second largest in terms of jobs in the region. The customer service component of administrative and support services has grown significantly. While these jobs are generally in the lower wage range, there are areas in several industrial sectors where customer service could be beneficial.

Southwestern Idaho Sectors Ranked by Location Quotient

Sector	2008			Change 2003-2008			
	Estab	Emp	Wage	Estab	Emp	Wages	LQ
Total Private Employment	23,091	293,798	$36,637	17.64%	15.11%	16.55%	
Agriculture, Forestry, Fishing and Hunting	505	6,178	$25,084	1.25%	1.41%	27.91%	**2.43**
Management of Companies and Enterprises	151	5,491	$77,370	40.23%	-3.68%	26.39%	**1.33**
Administrative, Support, Waste Management, Remediation Services	1,326	23,149	$26,062	15.28%	30.11%	16.37%	**1.33**
Construction	3,922	20,057	$41,226	27.47%	16.78%	27.90%	**1.26**
Retail Trade	2,447	36,198	$25,133	9.86%	18.57%	12.39%	**1.08**
Manufacturing	917	30,552	$54,318	18.20%	-5.98%	20.56%	**1.05**
Health Care and Social Assistance	1,831	35,496	$39,088	19.38%	21.71%	21.21%	0.99
Wholesale Trade	1,520	12,666	$51,481	5.59%	23.50%	19.30%	0.98
Accommodation, Food Services	1,352	23,974	$12,926	11.97%	19.05%	19.01%	0.94
Arts, Entertainment, Recreation	281	4,051	$18,479	18.23%	17.27%	31.52%	0.90
Information	363	6,085	$41,767	23.57%	34.57%	7.36%	0.90
Real Estate, Rental, Leasing	1,302	4,115	$30,306	55.91%	14.15%	27.49%	0.87
Finance, Insurance	1,461	10,704	$49,026	17.97%	12.90%	13.22%	0.81
Transportation, Warehousing	747	9,143	$36,873	4.74%	9.06%	15.60%	0.80
Other Services	1,499	8,083	$24,688	13.01%	18.44%	17.25%	0.80
Professional, Scientific, Technical Services	2,507	13,072	$47,789	22.33%	21.45%	14.10%	0.77
Utilities	104	1,238	$57,226	14.05%	16.15%	12.01%	0.69
Educational Services	486	21,991	$30,558	15.80%	18.11%	10.70%	0.48
Mining	47	271	$68,746	15.34%	38.79%	66.35%	0.17

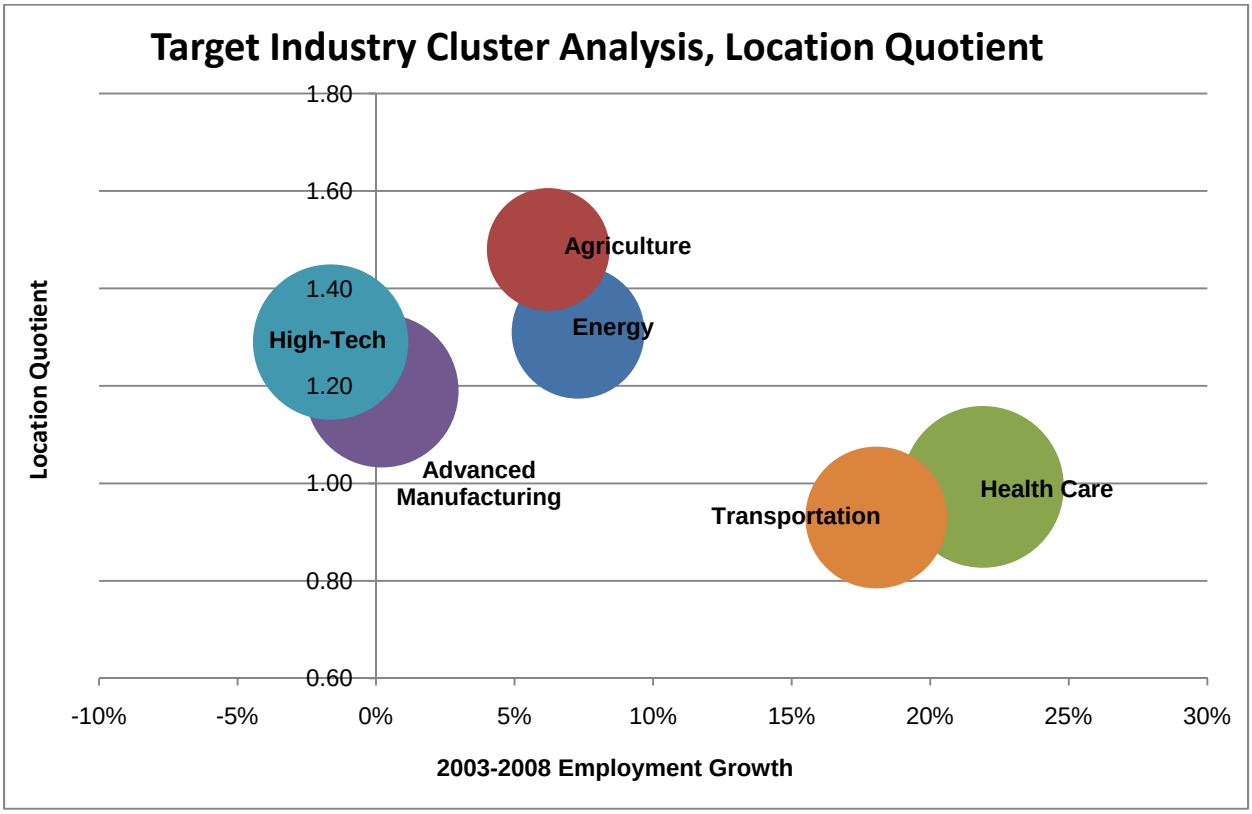
In addition, advanced manufacturing, high technology, energy and transportation offer development prospects.

While transportation and health care hover just over 1 in location quotient, there is potential for expansion. Health care was the only sector other than manufacturing to have a billion-dollar plus payroll in 2008.

Total Wages in Southwestern Idaho By Sector

Sector	2003	2008	Change	% Change
Regional Total	$8,023,003,527	$10,763,946,147	$2,740,942,620	34.2%
Natural Resources	$119,474,579	$154,963,009	$35,488,430	29.7%
Mining	$8,062,224	$18,612,893	$10,550,669	130.9%
Utilities	$54,431,164	$70,817,146	$16,385,982	30.1%
Construction	$553,619,183	$826,880,979	$273,261,796	49.4%
Manufacturing	$1,463,960,441	$1,659,541,528	$195,581,087	13.4%
Wholesale Trade	$442,568,991	$652,037,713	$209,468,722	47.3%
Retail Trade	$682,706,815	$909,788,521	$227,081,706	33.3%
Transportation and Warehousing	$267,394,934	$337,132,869	$69,737,935	26.1%
Information	$175,914,509	$254,147,033	$78,232,524	44.5%
Finance and Insurance	$410,528,931	$524,754,685	$114,225,754	27.8%
Real Estate and Rental and Leasing	$85,691,113	$124,702,175	$39,011,062	45.5%

Sector	2003	2008	Change	% Change
Professional, Scientific, and Technical Services	$450,808,596	$624,687,830	$173,879,234	38.6%
Management of Companies and Enterprises	$348,987,469	$424,837,352	$75,849,883	21.7%
Administrative, Support, Waste Management, Remediation Services	$398,439,474	$603,295,984	$204,856,510	51.4%
Educational Services	$513,966,692	$671,994,358	$158,027,666	30.7%
Health Care and Social Assistance	$940,453,767	$1,387,462,576	$447,008,809	47.5%
Arts, Entertainment, and Recreation	$48,534,276	$74,860,324	$26,326,048	54.2%
Accommodation and Food Services	$218,722,996	$309,891,988	$91,168,992	41.7%
Other Services	$143,697,617	$199,553,405	$55,855,788	38.9%
Government	$693,976,975	$933,983,779	$240,006,804	34.6%



Agriculture

Over the long run agriculture has been an important component of the southwestern Idaho economy. Clustered with crop production, animal production and general support activities for agriculture and forestry are food manufacturing, wholesale trade in nondurable goods and truck transportation. Over one-third of the state's businesses and employment in these six subsectors are in southwestern Idaho. The average wage is nearly 2 percent above the state

average. For decades Idaho's economy was based on natural resources. The 1,300 businesses in this sector provide 19,000 jobs and nearly $700 million in wages annually.

Seasonality. Agriculture is highly seasonal, and wage payments and employment fluctuate through the production cycle.

Exports. Agricultural commodities are among the largest exports for Idaho, accounting for over 13 percent of total Idaho sales to foreign markets.

Multiplier. The multiplier for the agriculture cluster is high at 3.11 in southwestern Idaho, which means that for every 10 jobs that are created in the agricultural cluster, 21 more jobs are created in the rest of the economy.

Agricultural Cluster Jobs Multiplier

Crop Production	2.42
Animal Production	2.42
Support Activities for Agriculture	1.39
Food Manufacturing	4.64
Wholesale Trade, Nondurable Goods	2.28
Truck Transportation	2.28

Wages and Benefits. The food manufacturing component of the cluster provides the highest wages and typically provides benefits as do the components not directly connected to raw commodity production, which carry lower wages and often no benefits.

2008 Average Annual Agricultural Cluster Wage

All Jobs in the Region	$36,637
Crop Production	$24,759
Animal Production	$29,028
Support Activities for Agriculture	$19,408
Food Manufacturing	$37,120
Wholesale Trade, Nondurable Goods	$44,502
Truck Transportation	$37,679
Agricultural Cluster Total	$35,002

Location Quotient. The location quotient for agriculture is the highest of any major economic sector in the region at over 2.4, meaning that agriculture is almost two and a half times more important to the region than it is to the nation.

Size and Growth Over Time. The agricultural cluster accounted for 6.6 percent of the region's total jobs in 2008 and 6.3 percent of total wages.

Southwestern Idaho Agricultural Cluster Jobs, 1993-2008

	Jobs				Percent Change From		
	1993	1998	2003	2008	1993	1998	2003
Crop Production	4,541	2,888	2,710	2,361	-48.0%	-18.2%	-12.9%
Animal Production	865	1,080	1,490	1,981	129.1%	83.5%	33.0%
Support Activities for Agriculture, Forestry	1,834	1,695	1,673	1,628	-11.2%	-4.0%	-2.7%
Food Manufacturing	6,803	6,496	6,158	5,834	-14.2%	-10.2%	-5.3%
Wholesale Trade, Nondurable Goods	3,749	3,985	3,276	4,220	12.6%	5.9%	28.8%
Truck Transportation	2,400	2,756	2,936	3,349	39.5%	21.5%	14.0%
Cluster Total	20,192	18,899	18,243	19,374	-4.1%	2.5%	6.2%

The number of workers has dropped since 1993, but employment is on the rebound. Wages continued to increase with the largest increase almost $7,000 in the last five years. The number of establishments continued to grow. Animal production and trucking experienced the largest growth from 1993, and it was steady. The other sectors experience employment losses during the last 15 years.

Southwestern Idaho Agricultural Cluster

	1993	1998	2003	2008
Businesses	1,116	1,214	1,288	1,335
Employment	20,192	18,899	18,243	19,374
Average Wage	$19,771	$25,499	$28,103	$35,002

Employers in this cluster include potato and sugar beet farms, greenhouses, orchards, dairies, cattle ranches, farm labor contractors, fresh fruit and vegetable packers, potato processors, sugar beet processors, meat slaughter plants, cheese manufacturers, dairy processors, distributors of food products both fresh and processed and trucking companies that deliver products locally and across the county. Employers are diverse and include the J.R. Simplot Co., Amalgamated Sugar, Dickenson Frozen Foods, Great American Appetizers, Nestle USA, Marathon Cheese, Sorrento Lactalis, SSI Food Services at the College of Southern Idaho, XL Four Star Beef, Crookham Seed, Henggleler Packing Co. and Motor West.

Need for Replacement Workers. Occupations in this cluster run the gamut.

Agriculture Occupations, Wages and Training Requirements, 2008

Occupation	Employ-ment	Wage	Education/Training
Farmers, ranchers	5,375	N/A	Long-term on-the-job training
Truck drivers, heavy and tractor-trailer	3,249	$14.37	Moderate-term on-the-job training
Miscellaneous agricultural workers	3,192	$10.07	Short-term on-the-job training
Farm, ranch, other agricultural managers	1,891	$30.74	Degree plus work experience

Occupation	Employ-ment	Wage	Education/Training
Laborers, freight, stock, material movers, hand	879	$9.46	Short-term on-the-job training
Truck drivers, light or delivery services	829	$12.53	Short-term on-the-job training
Sales representatives, wholesale and manufacturing	762	$20.12	Moderate-term on-the-job training
Driver/sales workers	757	$14.04	Short-term on-the-job training
Packaging, filling machine operators & tenders	519	$12.48	Short-term on-the-job training
Food batchmakers	435	$14.67	Short-term on-the-job training
Bookkeeping, accounting, auditing clerks	394	$14.40	Moderate-term on-the-job training
Graders, sorters, agricultural products	375	$7.62	Work experience in a related field
General, operations managers	372	$34.01	Degree plus work experience
Industrial truck, tractor operators	354	$12.81	Short-term on-the-job training
Office clerks, general	337	$12.03	Short-term on-the-job training
Packers and packagers, hand	328	$10.18	Short-term on-the-job training
Animal trainers	307	$7.58	Moderate-term on-the-job training
First-line supervisors/managers of non-retail sales workers	287	$23.64	Work experience in a related field
Sales representatives, wholesale and manufacturing, technical and scientific products	282	$36.11	Moderate-term on-the-job training
Nonfarm animal caretakers	264	$10.16	Short-term on-the-job training
Maintenance, repair workers, general	256	$13.81	Moderate-term on-the-job training
Meat, poultry, fish cutters and trimmers	255	$9.90	Short-term on-the-job training

Projections by Economic Modeling Specialists Inc. indicate that by 2018 components of the agricultural cluster will add nearly 2,300 jobs, an 8 percent increase. Although this is less than average growth, this cluster will significantly contribute to the gross state product and regional economy over the next 10 years because of its export capability and its multiplier.

2008-2018 Agriculture Cluster Job Projections

	Jobs		Numeric	Percent	Average
Industry	2008	2018	Growth	Growth	Wage
Crop and Animal Production	10,077	10,196	119	1.2%	$38,887
Support Activities for Agriculture	3,024	3,675	651	21.5%	$23,898
Food Manufacturing	5,812	6,740	928	16.0%	$44,427
Wholesale Trade, Nondurable Goods	4,862	4,916	54	1.1%	$53,248
Truck Transportation	5,073	5,587	514	10.1%	$49,587
Agriculture Cluster	28,848	31,114	2,266	7.9%	$42,451
Regional Total	414,947	459,984	45,037	10.9%	$41,349
State Total	930,604	1,036,318	105,714	11.4%	$38,099
U.S. Total	180,018,215	192,442,469	12,424,254	6.9%	$49,718

Source: EMSI

The 2007 Census of Agriculture found that half of the 11,200 farm operators in southwestern Idaho own their farms, and 56 percent of them farmed as their primary occupation. The average age was over 55 so there will be a need for people to take over this work, whether as new owners or as hired managers, over the next decade.

The largest growth occupations will be truckers and miscellaneous agricultural workers. The trucking occupations cross many industries, but they will continue to be in demand in the agriculture sector, which will always need manual labor to operate field equipment and monitor crop irrigation.

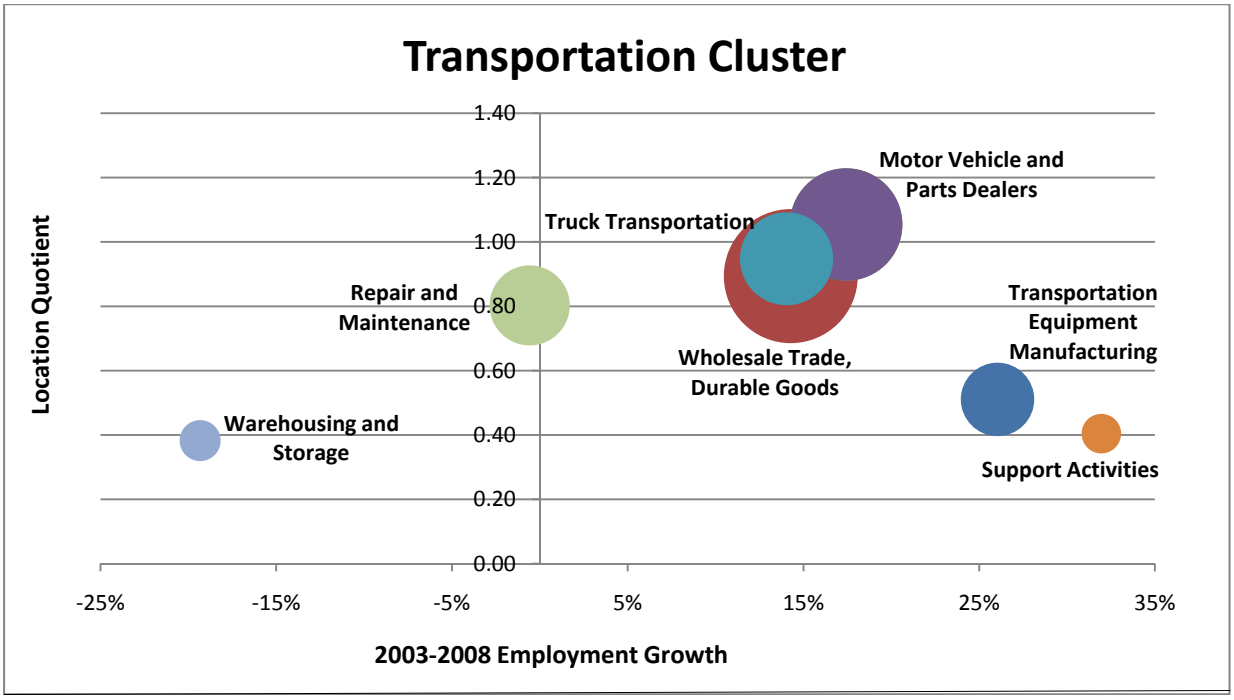
Of 22 specific agricultural cluster occupations, only four are projected to lose jobs over the next 10 years, and the number of new people needed to replace those who retire or move to other jobs will be even larger.

Selected Agriculture Cluster Occupation Projections

Occupation	2008 Emp	2018 Emp	Change	2009 Applicants
Farmers, ranchers	5,375	5,177	-198	70
Truck drivers, heavy and tractor-trailer	3,249	3,710	461	1,952
Miscellaneous agricultural workers	3,192	3,606	414	1,513
Farm, ranch, other agricultural managers	1,891	2,016	125	62
Laborers, freight, stock, material movers, hand	879	844	-35	2,992
Truck drivers, light or delivery services	829	905	76	1,323
Sales representatives, wholesale and manufacturing	762	791	29	945
Driver/sales workers	757	876	119	544
Packaging, filling machine operators, tenders	519	587	68	85
Food batchmakers	435	578	143	84
Bookkeeping, accounting, auditing clerks	394	416	22	1,008
Graders, sorters, agricultural products	375	411	36	268
General, operations managers	372	354	-18	188
Industrial truck, tractor operators	354	396	42	2,027
Office clerks, general	337	356	19	2,514
Packers and packagers, hand	328	338	10	458
Animal trainers	307	351	44	100
First-line supervisors/managers of non-retail sales workers	287	296	9	101
Sales representatives, wholesale and manufacturing technical, scientific products	282	318	36	376
Nonfarm animal caretakers	264	308	44	807
Maintenance, repair workers, general	256	295	39	423
Meat, poultry, fish cutters and trimmers	255	225	-30	34

Transportation

With a major east-west interstate highway, a main east-west rail line and the largest airport within 350 miles in any direction, southwestern Idaho has potential as a major transportation hub. While not the best highway, the state's only north-south highway U.S. 95 and its state counterpart Idaho 55 link to the interstate in the Treasure Valley. The current transportation cluster is small but has growth potential. The cluster's primary components are transportation equipment manufacturing, wholesale trade in both durable and nondurable goods, motor vehicle parts and dealers, truck transportation, support activities for transportation, other information services and repair and maintenance. Southwestern Idaho already has 40 percent of the statewide total of establishments and employment in these nine industrial sectors. The average wage is 11 percent above the state average. Seventy percent of the employment and wages are at businesses with fewer than 50 workers. These employers account for 98 percent of all regional employers in this cluster.



Seasonality. Transportation and warehousing has a marked, but not extreme, seasonal pattern.

Exports. This sector is not a primary exporter, but it is vital to the core exporting economy. These businesses handle and move the goods of other sectors such as manufacturing and agriculture, which drive the regional economy.

Multiplier. The multiplier for the transportation cluster was 2.18 in southwestern Idaho, which means that for every 10 jobs that are created in transportation, nearly 12 more jobs are created in the rest of the economy.

Wages and Benefits. Wages for jobs in the transportation cluster average at or above the regional average wage and many include benefits.

2008 Average Annual Transportation Cluster Wage

All Jobs in the Region	$36,637
Transportation Cluster	$44,291
Transportation Equipment Manufacturing	$37,982
Wholesale Trade, Durable Goods	$53,622
Wholesale Trade, Nondurable Goods	$44,502
Motor Vehicle and Parts Dealers	$38,228
Truck Transportation	$37,679
Support Activities for Transportation	$41,694
Warehousing and Storage	$34,582
Other Information Services	$53,444

Location Quotient. The location quotient for transportation in general is below one, meaning it is less important in the region than it is either statewide or nationally despite the elements of a transportation hub. But components of the transportation cluster have location quotients above one at both the state and national levels.

Transportation Cluster Location Quotients, 2008

	State	Nation
Transportation Equipment Manufacturing	1.45	0.57
Wholesale Trade, Durable Goods	1.21	1.00
Wholesale Trade, Nondurable Goods	0.83	0.93
Motor Vehicle and Parts Dealers	0.91	1.16
Truck Transportation	0.83	1.03
Support Activities for Transportation	0.97	0.56
Warehousing and Storage	1.02	0.52
Other Information Services	1.66	1.84

Source: EMSI

Size and Growth Over Time. The transportation cluster accounted for 8 percent of the region's total jobs in 2008 and 9.7 percent of total wages.

Southwestern Idaho Transportation Cluster Jobs, 1993-2008

	Jobs				Percent Change From		
	1993	1998	2003	2008	1993	1998	2003
Regional Total	183,490	229,342	255,229	293,798	60.1%	28.1%	15.1%
Transportation Cluster	15,659	19,001	19,652	23,599	50.7%	24.2%	20.1%
Transportation Equipment Manufacturing	1,191	1,974	1,651	2,082	74.7%	5.4%	26.0%
Wholesale Trade, Durable Goods	4,045	5,115	6,075	6,943	71.6%	35.7%	14.3%
Wholesale Trade, Nondurable Goods	3,749	3,985	3,276	4,220	12.6%	5.9%	28.8%
Motor Vehicle and Parts Dealers	3,164	3,732	4,159	4,883	54.3%	30.8%	17.4%
Truck Transportation	2,400	2,756	2,936	3,349	39.5%	21.5%	14.0%
Support Activities for Transportation	487	585	521	608	24.8%	3.9%	16.7%
Warehousing and Storage	517	710	843	693	34.0%	-2.4%	-17.8%
Other Information Services	105	145	191	821	685.0%	467.5%	330.0%

Several components of the transportation cluster saw employment dip during the 2001 recession, but in each case except warehousing, employment rebounded by 2008 to its highest level in the 15-year period. Wages and establishments grew steadily over the period with average wages picking up a $6,000 increase from 1998 to 2003 and another $7,000 from 2003 to 2008.

Southwestern Idaho Transportation Cluster

	1993	1998	2003	2008
Businesses	1,579	1,838	1,890	2,072
Employment	15,659	19,001	19,652	23,599
Average Wage	$25,475	$31,115	$37,121	$44,291

Employers in this cluster include motor vehicle, trailer and railroad car manufacturers; wholesale distributors; vehicle sales, parts and maintenance businesses; warehouses and Internet-based freight matching services. These diverse businesses include J.R. Simplot Co., Motive Power, WinCo, Trebar Kenworth Sales, Cargo Express, Motor West, Shopko, Nunhems, Western States Equipment and MWI Veterinary Supply.

Need for Replacement Workers. Occupations in this cluster range from truck drivers to welders to customer service representatives.

Transportation Occupations, Wages and Training

Occupation Title	Total	Wage	Education/Training
Truck drivers, heavy and tractor-trailer	3,423	$14.37	Moderate-term on-the-job training
Sales representatives, wholesale and manufacturing	1,688	$20.12	Moderate-term on-the-job training
Automotive service technicians, mechanics	1,481	$14.78	Postsecondary vocational award
Laborers, freight, stock, material movers, hand	1,367	$9.46	Short-term on-the-job training
Retail salespersons	1,230	$9.54	Short-term on-the-job training
Truck drivers, light or delivery services	1,100	$12.53	Short-term on-the-job training
General, operations managers	950	$34.01	Degree plus work experience
First-line supervisors/managers of non-retail sales workers	919	$23.64	Work experience in a related field
Office clerks, general	908	$12.03	Short-term on-the-job training
Sales representatives, wholesale and manufacturing, technical, scientific products	793	$36.11	Moderate-term on-the-job training
Driver/sales workers	766	$14.04	Short-term on-the-job training
Bookkeeping, accounting, auditing clerks	667	$14.40	Moderate-term on-the-job training
Cleaners of vehicles, equipment	600	$8.57	Short-term on-the-job training
Welders, cutters, solderers, brazers	588	$14.02	Long-term on-the-job training
Automotive body, related repairers	546	$10.07	Long-term on-the-job training
Customer service representatives	537	$12.59	Moderate-term on-the-job training
First-line supervisors/managers of retail sales workers	532	$14.68	Work experience in a related field

Occupation Title	Total	Wage	Education/Training
First-line supervisors/managers of mechanics, installers, repairers	446	$22.95	Work experience in a related field
Bus, truck mechanics and diesel engine specialists	422	$18.13	Postsecondary vocational award
Parts salespersons	416	$14.23	Moderate-term on-the-job training

Economic Modeling Specialists Inc. projects that by 2018 the components of this cluster will lose nearly 1,700 jobs, or 5 percent of their 2008 total. The loss is expected to be in transportation equipment production and sales.

2008-2018 Transportation Cluster Job Projections

	Jobs		Numeric	Percent	Average
Industry	2008	2018	Growth	Change	Wage
Transportation Cluster Total	32,593	30,934	-1,659	-5.09%	$52,364
Transportation Equipment Manufacturing	2,140	1,580	-560	-26.17%	$54,330
Merchant Wholesalers, Durable Goods	7,726	6,141	-1,585	-20.52%	$66,362
Merchant Wholesalers, Nondurable Goods	4,862	4,916	54	1.11%	$53,246
Motor Vehicle and Parts Dealers	5,455	4,447	-1,008	-18.48%	$46,397
Truck Transportation	5,073	5,587	514	10.13%	$49,587
Support Activities for Transportation	857	978	121	14.12%	$50,897
Warehousing and Storage	873	922	49	5.61%	$38,181
Other Information Services	667	1,431	764	114.54%	$69,752
Repair and Maintenance	4,940	4,932	-8	-0.16%	$38,705

Source: EMSI, which augments covered employment statistics.

But even with this declining outlook for southwestern Idaho, the region has great potential for transportation with its roads and rail access and several warehouse facilities for national companies, which will likely expand as the economy rebounds. The region is attractive to companies that build and maintain various types of transportation equipment – truck, trains and recreation vehicles -- offering existing facilities for startup businesses. The existing labor pool has the necessary skill sets, and there are institutions to provide custom training. One of the fastest growing transportation related businesses is The Internet Truckstop that connects truckers and loads and may offer only the first glimpse of the Internet's emerging role in transportation.

Despite the discouraging projections, once the economy begins recovering, southwestern Idaho's transportation sector can provide innovative opportunities for businesses and workers.

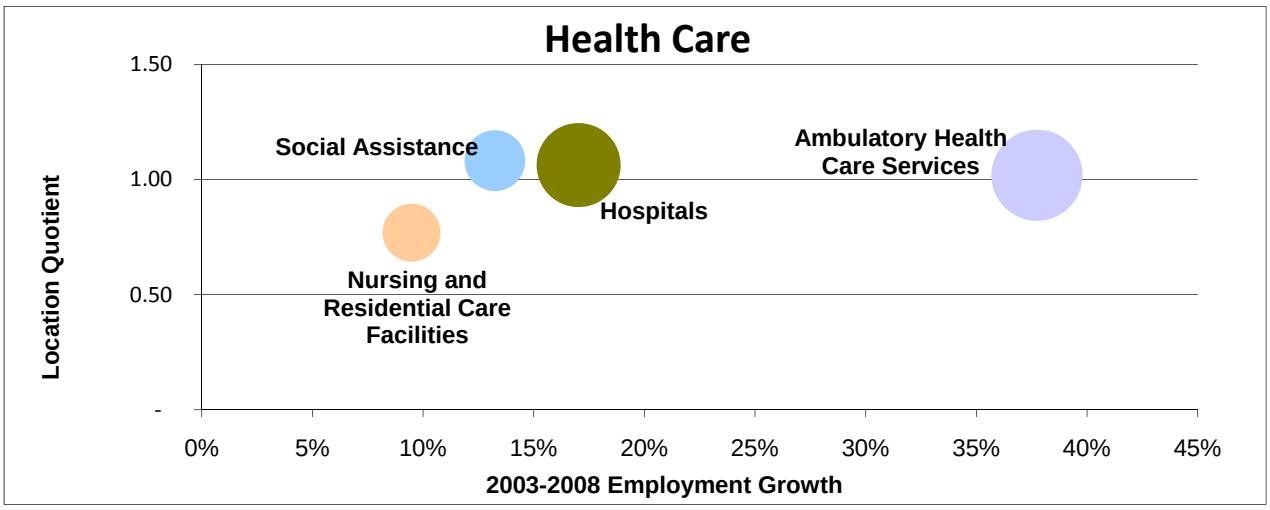
Selected Transportation Cluster Occupation Projections

Occupation	2008 Emp	2018 Emp	Change	2009 Applicants
Truck drivers, heavy and tractor-trailer	3,423	3,804	381	1,952
Sales representatives, wholesale and manufacturing	1,688	1,501	-187	376
Automotive service technicians, mechanics	1,481	1,406	-(75)	780
Laborers, freight, stock, material movers, hand	1,367	1,198	-169	2,992
Retail salespersons	1,230	1,062	-168	2,485
Truck drivers, light or delivery services	1,100	1,102	2	1,323
General, operations managers	950	747	-203	188
First-line supervisors/managers of non-retail sales workers	919	890	-29	101
Office clerks, general	908	809	-99	2,514
Sales representatives, wholesale and manufacturing, technical, scientific products	793	726	-7	280
Driver/sales workers	766	859	93	544
Bookkeeping, accounting, auditing clerks	667	599	-68	1,008
Cleaners of vehicles, equipment	600	535	-65	242
Welders, cutters, solderers, brazers	588	401	-187	702
Automotive body, related repairers	546	491	-55	202
Customer service representatives	537	514	-23	3,415
First-line supervisors/managers of retail sales workers	532	492	-40	424
First-line supervisors/managers of mechanics, installers, repairers	446	391	-55	351
Bus, truck mechanics and diesel engine specialists	422	404	-18	190
Parts salespersons	416	338	-78	215

Source: EMSI

Health Care

With the state's largest hospitals already located in the region, southwestern Idaho already has a solid economic foundation in health care through individual doctor and dentist offices, outpatient clinics, home health care services, nursing homes and social services such as relief organizations, child care centers, family assistance and vocational rehabilitation services.



Seasonality. The health care and social assistance sector has no seasonal pattern.

Exports. The health care and social assistance sector primarily serves local residents; the services are consumed almost exclusively within the region.

Multiplier. Health care and social assistance has a relatively low jobs multiplier of 1.59 in southwestern Idaho, which means that for every 10 jobs created in health care and social assistance nearly six more jobs are created in the rest of the economy. It does not have the same potential to create jobs as many other sectors, which pay higher wages or have more local suppliers

Wages and Benefits. Wages steadily increased from 1993 through 2008 in health care with a jump of nearly $7,000 in the final five years. Many jobs include benefits although wages range from minimum wage aides and housekeepers to highly paid surgeons.

2008 Average Annual Health Care Wages

All Jobs in Region	$36,637
Health Care and Social Assistance	$39,088
Ambulatory Health Care Services	$46,536
Outpatient Care Centers	$52,010
Home Health Care Services	$20,263
Hospitals	$47,312
Nursing and Residential Care Facilities	$23,650
Social Assistance	$18,494

Location Quotient. Health care and social assistance has a location quotient of 0.99, which means it is no more important economically in southwestern Idaho than it is nationally, despite the concentration of health care professionals and facilities.

Size and Growth Over Time. Health care has been the one sector in the Idaho and regional economies that has grown steadily since the severe recessions of the 1980s, avoiding not only the dramatic declines during downturns but also the robust increases during expansions. In 2008, health care and social services provided just over 12 percent of southwestern Idaho's employment but nearly 13 percent of its wages.

Southwestern Idaho Health Care Jobs, 1993-2008

	Jobs				Percent Change From		
	1993	1998	2003	2008	1993	1998	2003
Regional Total	183,490	229,342	255,229	293,798	60.1%	28.1%	15.1%
Health Care and Social Assistance	16,391	22,396	29,163	35,496	116.6%	58.5%	21.7%
Ambulatory Health Care Services	4,753	6,672	9,269	12,563	164.3%	88.3%	35.5%
Hospitals	6,314	7,951	10,285	12,239	93.9%	53.9%	19.0%
Nursing and Residential Care Facilities	3,072	4,361	4,606	5,043	64.2%	15.6%	9.5%
Social Assistance	2,252	3,412	5,003	5,651	150.9%	65.7%	13.0%

Ambulatory health care services experienced the largest growth during the 15-year period. But the real development has been the significant growth in outpatient care centers and home health care services. Many procedures previously performed in hospitals are now done in outpatient specialty centers at a significant cost reduction. These centers, many owned and operated by the doctors and surgeons who perform the work, have siphoned patients from traditional care at the hospitals. Home health care services have become a popular, and less expensive, option to nursing homes for the elderly and disabled who need less than full-time assistance to function.

Ambulatory Health Care Component Jobs

	Jobs				Percent Change From		
	1993	1998	2003	2008	1993	1998	2003
Ambulatory Health Care Services	4,753	6,672	9,269	12,563	164.3%	88.3%	35.5%
Offices of Physicians	2,305	3,248	4,053	4,904	112.8%	51.0%	21.0%
Offices of Dentists	1,014	1,377	1,805	2,263	123.1%	64.4%	25.4%
Offices of Other Health Practitioners	588	820	1,289	1,808	207.6%	120.4%	40.3%
Outpatient Care Centers	136	198	243	608	348.1%	206.4%	149.8%
Medical and Diagnostic Laboratories	255	308	404	320	25.7%	3.9%	-20.7%
Home Health Care Services	357	579	1,297	2,235	526.8%	286.1%	72.3%
Other Ambulatory Health Care Services	99	142	178	424	329.7%	199.5%	138.6%

While care centers and hospitals employ medical assistances, technicians and aides along with physicians and nurses, nursing and residential care facilities primarily use aides.

Southwestern Idaho Health Care Sector

	1993	1998	2003	2008
Businesses	1,002	1,299	1,534	1,831
Employment	16,391	22,396	29,163	35,496
Average Wage	$23,831	$28,083	$32,248	$39,088

Need for Replacement Workers. Occupations in this sector range from highly paid physicians and surgeons to nurses to lesser paid maids and housekeepers.

Health Care Occupations, Wages and Training

Occupation	Emp	Wage	Education/Training
Registered nurses	3,868	$27.15	Associate degree
Child care workers	3,614	$8.18	Short-term on-the-job training
Nursing aides, orderlies, attendants	2,929	$11.23	Postsecondary vocational award
Personal and home care aides	1,495	$9.26	Short-term on-the-job training
Home health aides	1,418	$9.04	Short-term on-the-job training
Physicians and surgeons	1,364	$66.17	First professional degree
Office clerks, general	1,059	$12.03	Short-term on-the-job training
Licensed practical, licensed vocational nurses	929	$19.49	Postsecondary vocational award
Medical assistants	884	$13.71	Moderate-term on-the-job training
Social and human service assistants	844	$10.55	Moderate-term on-the-job training
Dental assistants	838	$14.37	Moderate-term on-the-job training
Receptionists, information clerks	815	$11.24	Short-term on-the-job training
Medical and health services managers	770	$34.62	Degree plus work experience
Rehabilitation counselors	633	$18.34	Master's degree
Maids and housekeeping cleaners	629	$8.23	Short-term on-the-job training
Dental hygienists	616	$35.22	Associate degree
Medical secretaries	570	$14.54	Postsecondary vocational award
First-line supervisors/mgrs of office, administrative support workers	526	$19.25	Work experience in a related field
Physical therapists	493	$32.00	Master's degree
Mental health, substance abuse social workers	492	$16.56	Master's degree
Billing, posting clerks, machine operators	485	$13.66	Moderate-term on-the-job training
Medical records, health information technicians	477	$15.64	Associate degree

Occupation	Emp	Wage	Education/Training
Cooks, institution and cafeteria	460	$11.22	Moderate-term on-the-job training
General, operations managers	423	$34.01	Degree plus work experience
Clinical, counseling, school psychologists	405	$33.14	Doctoral degree
Executive secretaries, administrative assistants	403	$16.97	Moderate-term on-the-job training

Employers in this cluster include St Luke's Health Systems, West Valley Medical Center, Saltzer Medical Group, Above and Beyond, Idaho Elks Rehabilitation Hospital, the Good Samaritan Society, Community Partnerships of Idaho, Intermountain Surgery Center, Laser Aesthetics Contouring, MRI Center of Idaho, Guardian Homecare and Hospice, Communicare, Parma Living Center and the Elderly Opportunity Agency.

Economic Modeling Specialists Inc. projects the health care and social assistance sector will add more than 15,300 jobs through 2018, a 37 percent increase to more than 56,000 in the sector. As over the past 15 years, the most growth in the next 10 will be in ambulatory heath care services.

In terms of the number of jobs, demand will be highest for registered nurses followed by nursing aides, orderlies and attendants; personal and home care aides and home health aides. With the exception of registered nurses, the top occupations are on the lower end of the pay scale and generally require no more than short-term-on-the-job training. The growth is linked to the continuing trend of home health care services replacing nursing homes.

All 26 selected health care occupations will increase over the decade, and four will grow by more than 1,000 jobs. But the need for new workers is even higher because retirees and those moving to other occupations must be replaced.

Selected Health Care Occupation Projections

Occupation	Employment 2008	Employment 2018	Change	2009 Applicants
Registered nurses	3,868	5,452	1,584	90
Home health aides	1,418	2,607	1,189	570
Personal and home care aides	1,495	2,663	1,168	474
Nursing aides, orderlies, attendants	2,929	4,035	1,106	871
Dental assistants	838	1,273	435	236
Physicians and surgeons	1,364	1,795	431	1
Office clerks, general	1,059	1,486	427	2,514
Social and human service assistants	844	1,266	422	264

Occupation	Employment 2008	2018	Change	2009 Applicants
Medical assistants	884	1,303	419	549
Licensed practical, licensed vocational nurses	929	1,325	396	156
Dental hygienists	616	934	318	5
Child care workers	3,614	3,913	299	1,284
Physical therapists	493	789	296	6
Rehabilitation counselors	633	918	285	83
Medical and health services managers	770	1,032	262	46
Mental health, substance abuse social workers	492	747	255	145
Receptionists, information clerks	815	1,058	243	1,837
Medical secretaries	570	812	242	535
First-line supervisors/managers of office, administrative support workers	526	733	207	1,425
Medical records, health information technicians	477	651	174	124
Billing, posting clerks, machine operators	485	653	168	291
Clinical, counseling, school psychologists	405	554	149	23
Executive secretaries, administrative assistants	403	545	142	1,824
Cooks, institution, cafeteria	460	600	140	436
General, operations managers	423	556	133	188
Maids and housekeeping cleaners	629	665	36	1,001
Source: EMSI				

High Technology

High technology, a mix of 49 specific industries cutting across the major economic sectors, has provided thousands of jobs in southwestern Idaho for the last 15 years. In that time, there have been two significant contractions, driven primarily by the region's largest employer, Micron Technology Inc. In 2007 there was a modest decline in the number of businesses in the high-tech cluster, but it rebounded the following year as talented workers laid off because of the recession struck out on their own, turning to incubators to begin new businesses that are still developing. These businesses will never reach the size of a Micron or Hewlett-Packard, but they will help the region increase its market share, begin restoring the jobs lost to the downturn and provide innovation that could boost the region's stature in the high-tech world.

Seasonality. While there are no seasonal fluctuations in high technology in the traditional sense, there are temporary production shutdowns at times for maintenance or product changeover. This cluster is also sensitive to the ups and downs of the business cycle, both domestically and globally, as the financial fortunes of Micron Technology have shown over the past 15 years.

Exports. The region's largest high-tech companies generally export their products. High-tech goods generally account for up to two-thirds of Idaho's foreign sales each year.

Multiplier. The multiplier for high-tech companies is substantial at 2.75 in southwestern Idaho, which means that for every 10 jobs a high-tech company creates, 17.5 more jobs are created in the rest of the economy. Growth in this sector impacts the rest of the economy, in part because of the comparatively high wages these companies pay and because these businesses tend to breed development of new and related businesses.

Wages and Benefits. The average wage in the high-tech sector has been running at nearly twice the average for the region. Benefits are typically provided by employers in this cluster during the highly competitive period for personnel prior to the recession.

Southwestern Idaho's Average High-Tech Wage

	Average	Average	Annual Change	
Year	Employment	Wage	Employment	Wage
1993	19,930	$37,357	--	--
1994	20,904	$42,865	974	$5,508
1995	22,081	$48,841	1,177	$5,977
1996	23,245	$45,170	1,164	-$3,672
1997	25,208	$44,935	1,964	-$234
1998	27,837	$45,864	2,629	$929
1999	28,600	$54,165	763	$8,301
2000	31,813	$66,853	3,213	$12,688
2001	36,434	$54,193	4,621	-$12,660
2002	34,196	$55,334	-2,238	$1,140
2003	31,564	$57,298	-2,633	$1,964
2004	31,827	$60,733	263	$3,434
2005	32,367	$61,739	540	$1,006
2006	33,239	$69,785	873	$8,046
2007	32,870	$70,649	-369	$864
2008	31,047	$69,434	-1,824	-$1,215

Location Quotient. The location quotient for the high-tech cluster in 2003 was 1.26, rising to 1.52 in 2008. The quotient will probably drop in the next few years in response to the contraction brought on by the recession. But the region has the talent and facilities to enable this cluster to expand, probably not in semiconductor production but in other high-tech areas like pharmaceuticals, software development and Internet publishing.

Size and Growth Over Time. High technology provided 11 percent of the region's employment in 2008 but 20 percent of its wages.

Southwestern Idaho High-Tech Employers and Employees				
			Annual Change	
Year	Employers	Employees	Employers	Employees
1993	717	19,930	–	–
1994	781	20,904	64	974
1995	854	22,081	74	1,177
1996	895	23,245	41	1,164
1997	970	25,208	75	1,964
1998	1,121	27,837	151	2,629
1999	1,222	28,600	102	763
2000	1,405	31,813	183	3,213
2001	1,611	36,434	206	4,621
2002	1,660	34,196	49	-2,238
2003	1,747	31,564	88	-2,633
2004	1,803	31,827	56	263
2005	1,970	32,367	167	540
2006	2,044	33,239	74	873
2007	2,037	32,870	-7	-369
2008	2,072	31,047	35	-1,824

Need for Replacement Workers. Economic Modeling Specialists Inc. projects southwestern Idaho's high technology cluster will add only 447 new jobs through 2018 while the state is anticipated to do much better. Southwestern Idaho has human resources, facilities and a good work ethic. High-tech growth in this region will be driven by the small entrepreneurs.

Projected High Technology Growth

	Jobs		Numeric	Percent
	2008	2018	Growth	Growth
Southwestern Idaho	39,599	40,046	447	1.13%
State of Idaho	71,777	77,328	5,551	7.73%
United States	15,953,847	17,200,533	1,246,686	7.81%

This cluster encompasses utilities, communications, manufacturing, design, wholesale trade and research and development. Employers include Micron Technology, Hewlett-Packard, Plexus, Bioflora, Omnipure Filter, Qwest, Holladay Engineering, Idaho Power, Intermountain Communications of Southern Idaho, Mutual Materials, Preco Electronics, Integra Information Technologies, Solution Pro, Silver Creek Computers, Electronic Data System, Science Applications International and Telco Electronics.

Of 27 selected occupations, 12 are projected to lose jobs over the next decade. However, in addition to the modest number of workers need for new jobs in some areas, more workers will be required to fill openings created by retirements or moves to other sectors.

2008-2018 High-Tech Job Projections

	Employment			2009	2008	Education
Occupation	2008	2018	Change	Applicants	Wage	Training
Management analysts	1,813	2,579	766	97	$34.54	Degree plus work experience
Electrical engineers	1,367	920	-447	65	$36.50	Bachelor's degree
General, operations managers	1,140	1,132	-8	188	$34.01	Degree plus work experience
Computer support specialists	1,062	1,130	68	6	$16.38	Associate degree
Computer software engineers, systems software	1,011	964	-47	67	$41.79	Bachelor's degree
Customer service representatives	928	1,105	177	3,415	$12.59	Moderate-term on-the-job training
Computer programmers	831	826	-5	255	$29.20	Bachelor's degree
Managers, all other	809	833	24	873	$38.40	Work experience in a related field
Electrical, electronic engineering technicians	797	482	-315	339	$26.00	Associate degree
Office clerks, general	746	839	93	2,514	$12.03	Short-term on-the-job training
Sales representatives, services, all other	730	922	192	945	$16.50	Moderate-term on-the-job training
Network systems, data communications analysts	719	989	270	89	$29.10	Bachelor's degree
Chief executives	670	713	43	193	$58.45	Degree plus work experience
Sales representatives, wholesale and manufacturing, technical, scientific products	667	543	-124	280	$36.11	Moderate-term on-the-job training
Computer hardware engineers	646	387	-259	44	$39.15	Bachelor's degree
Executive secretaries, administrative assistants	639	701	62	1,824	$16.97	Moderate-term on-the-job training
Computer software engineers, applications	627	685	58	262	$40.23	Bachelor's degree

	Employment			2009	2008	Education
Occupation	**2008**	**2018**	**Change**	**Applicants**	**Wage**	**Training**
Electrical, electronic equipment assemblers	594	295	-299	590	$11.77	Short-term on-the-job training
Mechanical engineers	568	483	-85	88	$44.37	Bachelor's degree
Bookkeeping, accounting, auditing clerks	552	596	44	1,008	$14.40	Moderate-term on-the-job training
Financial managers	519	524	5	257	$35.61	Degree plus work experience
Engineering managers	511	375	-136	34	$47.12	Degree plus work experience
Computer systems analysts	506	542	36	1,214	$34.14	Bachelor's degree
Mechanical engineering technicians	504	380	-124	16	$15.39	Associate degree
Business operation specialists, all other	448	481	33	351	$24.81	Bachelor's degree
First-line supervisors/mgrs of production, operating workers	421	300	-121	595	$22.37	Work experience in a related field
Computer, information systems managers	421	422	1	48	$45.63	Degree plus work experience

Source: EMSI

Components of High Technology Cluster

NAICS	Subsector
1131	Timber Tract Operations
1132	Forest Nurseries and Gathering of Forest Products
211	Oil and Gas Extraction
2211	Electric Power Generation, Transmission and Distribution
3241	Petroleum and Coal Products Manufacturing
3251	Basic Chemical Manufacturing
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing
3254	Pharmaceutical and Medicine Manufacturing
3255	Paint, Coating, and Adhesive Manufacturing
3259	Other Chemical Product and Preparation Manufacturing
3332	Industrial Machinery Manufacturing
3333	Commercial and Service Industry Machinery Manufacturing
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing
3339	Other General Purpose Machinery Manufacturing
3341	Computer and Peripheral Equipment Manufacturing
3342	Communications Equipment Manufacturing

NAICS	Subsector
3343	Audio and Video Equipment Manufacturing
3344	Semiconductor and Other Electronic Component Manufacturing
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing
3346	Manufacturing and Reproducing Magnetic and Optical Media
3353	Electrical Equipment Manufacturing
3364	Aerospace Product and Parts Manufacturing
3369	Other Transportation Equipment Manufacturing
4234	Professional and Commercial Equipment and Supplies Wholesalers
4861	Pipeline Transportation of Crude Oil
4862	Pipeline Transportation of Natural Gas
4869	Other Pipeline Transportation
5112	Software Publishers
5161	Internet Publishing and Broadcasting
5171	Wired Telecommunications Carriers
5172	Wireless Telecommunications Carriers
5173	Telecommunications Resellers
5174	Satellite Telecommunications
5179	Other Telecommunications
5181	ISP's and Web Search Portals
5182	Data Processing and Related Services
5191	3-Internet Publishing & Broadcasting & Web Search Portals
5211	Monetary Authorities - Central Bank
5232	Securities and Commodity Exchanges
5413	Architectural, Engineering, and Related Services
5415	Computer Systems Design and Related Services
5416	Management, Scientific, and Technical Consulting Services
5417	Scientific Research and Development Services
5511	Management of Companies and Enterprises
5612	Facilities Support Services
8112	Electronic and Precision Equipment Repair and Maintenance

Advanced Manufacturing

Advanced manufacturing is a cluster of 63 manufacturing subsectors identified by Economic Modeling Specialists Inc., O'NET and several other states to reflect the accelerated use of high-technology processes in production plants. The transformation to advanced manufacturing has profound implications for the manufacturing work force. Employers increasingly need workers who are continually focused on innovation of both products and processes. Modern manufacturing workers require advanced academic, workplace and technical skills to keep their employers competitive. This is reflected in the fact that as overall employment in manufacturing declines, many employers report difficulty finding the highly-skilled workers they need.

Seasonality. Most manufacturing sectors are not subjected to seasonal fluctuations, but many have temporary shutdowns, often on cyclical bases, for maintenance or product changeover.

Exports. Advanced manufacturing is heavily oriented to exporting since most of its products are shipped out of the area to distributors. Therefore it plays a large role in the region's economy, having a direct impact on transportation and warehousing.

Multiplier. The multiplier for advanced manufacturing, developed using a variety of industrial sectors in the cluster, is 2.97, which means that for every 10 jobs created in advanced manufacturing nearly 20 more are created in other sectors. Due to the high multiplier, advanced manufacturing generates a strong positive impact on the regional economy, especially since many companies pay above-average wages.

Wages and Benefits. The average wage in advanced manufacturing has been well above the average wage for the region over the 15-year period, but just under half of the subsectors paid average wages over the regional average in 2008. Wages in the remaining sectors fell as low as $20,000. Most jobs in manufacturing carry benefits. Changes in employment and wages did not necessarily coincide except for two years. It appears that bonuses paid in 2000 were not repeated in 2001, which was a difficult time for electronic manufacturers in the region.

Southwestern Idaho's Average Advanced Manufacturing Wage

	Average	Average	Annual Change	
Year	Employment	Wage	Employment	Wages
1993	30,543	$30,242	–	–
1994	32,585	$33,737	2,042	$3,495
1995	34,025	$38,204	1,440	$4,467
1996	35,787	$36,588	1,761	-$1,615
1997	36,965	$37,227	1,178	$639
1998	38,451	$37,776	1,486	$549
1999	37,834	$42,954	-617	$5,178
2000	38,511	$54,532	677	$11,579
2001	37,183	$42,990	-1,328	-$11,542
2002	34,651	$43,409	-2,532	$419
2003	32,390	$45,113	-2,261	$1,704
2004	32,289	$47,082	-101	$1,969
2005	32,631	$48,464	342	$1,382
2006	33,572	$52,453	941	$3,989
2007	33,038	$53,675	-534	$1,222
2008	30,211	$54,459	-2,826	$783

Location Quotient. The location quotient for advanced manufacturing in 2003 was 1.31 and dropped to 1.19 in 2008. The quotient will probably continue to drop in the next few years as the region struggles to rebound from the recession. Economic Modeling Specialists Inc. forecasts the location quotient to drop to 1.02 in 2018, which would make advanced manufacturing as important to the southwestern Idaho economy as it is nationally.

Size and Growth Over Time. Advanced manufacturing provided 10.3 percent of the region's employment in 2008 but 15.3 percent of its wages. This cluster was growing during the expansion of the 1990s until the economy began cooling late in the decade heading into the 2001 recession. Most of the change in employment can be attributed to the rise and fall of semiconductor manufacturing. Employment in 2008 has dropped to the same level as 1993. The loss of jobs reflects companies struggling with the changing market demand. As with high-tech, entrepreneurs are a good source for economic development. Many have worked in the manufacturing arena for a numbers of years and have ideas about improving the process.

Southwestern Idaho Advanced Manufacturing Employers and Employees

			Annual Change	
Year	Employers	Employees	Employers	Employees
1993	643	30,543	–	–
1994	680	32,585	37	2,042
1995	688	34,025	8	1,440
1996	716	35,787	28	1,761
1997	713	36,965	-3	1,178
1998	718	38,451	6	1,486
1999	738	37,834	20	-617
2000	738	38,511	0	677
2001	746	37,183	8	-1,328
2002	751	34,651	5	-2,532
2003	759	32,390	9	-2,261
2004	776	32,289	17	-101
2005	813	32,631	38	342
2006	842	33,572	29	941
2007	869	33,038	26	-534
2008	867	30,211	-2	-2,826

Need for Replacement Workers. Economic Modeling Specialists Inc. projects advanced manufacturing will continue to lose jobs through 2018. But this cluster provided over 30,000 jobs paying nearly $1.7 billion in wages in 2008 across southwestern Idaho. It is important to the region's economy, and there is potential to retain existing jobs and attract new ones if the cluster is targeted during the recovery, highlighting the region's skilled work force, available facilities and other resources.

Advanced Manufacturing Projections

	Jobs		Numeric	Percent
Area	2008	2018	Growth	Growth
Southwestern Idaho	32,497	25,469	-7,028	-21.63%
State of Idaho	65,828	57,452	-8,376	-12.72%
United States	12,286,491	10,410,773	-1,875,718	-15.27%

Source: EMSI

Of 20 selected occupations, only three are projected to grow over the decade. But with a projected location quotient in 2018 of just over one, advanced manufacturing will be slightly more important in southwestern Idaho than the rest of the nation, giving policymakers an edge in holding the cluster together and possibly building on it.

2008-2018 Advanced Manufacturing Job Projections

	Employment			2009	2008	Education
Occupation	2008	2018	Change	Applicants	Wage	Training
Electrical engineers	1,071	581	-490	65	$36.50	Bachelor's degree
Welders, cutters, solderers, brazers	1,068	722	-346	702	$14.02	Long-term on-the-job training
First-line supervisors/managers of production, operating workers	1,030	832	-198	595	$22.37	Work experience in a related field
Team assemblers	997	762	-235	521	$13.03	Moderate-term on-the-job training
Managers, all other	773	870	97		$38.40	Work experience in a related field
General, operations managers	766	541	-225	188	$58.45	Degree plus work experience
Electrical, electronic engineering technicians	713	376	-337	339	$26.00	Associate degree
Laborers ,freight, stock, material movers, hand	663	534	-129	2,992	$9.46	Short-term on-the-job training
Electrical, electronic equipment assemblers	602	302	-300	590	$11.77	Short-term on-the-job training
Computer hardware engineers	587	318	-269	44	$39.15	Bachelor's degree
Packaging, filling machine operators, tenders	572	631	59	85	$12.48	Short-term on-the-job training
Computer software engineers, systems software	565	341	-224	67	$41.79	Bachelor's degree
Maintenance, repair workers, general	516	468	-48	423	$13.81	Moderate-term on-the-job training
Truck drivers, heavy and tractor-trailer	503	451	-52	1,952	$14.37	Moderate-term on-the-job training
Inspectors, testers, sorters, samplers, weighers	482	349	-133	307	$13.38	Moderate-term on-the-job training
Mechanical engineers	460	328	-132	88	$44.37	Bachelor's degree
Machinists	437	340	-97	172	$15.15	Long-term on-the-job training
Sales representatives, wholesale and manufacturing	437	387	-50	376	$20.12	Moderate-term on-the-job training
Food batchmakers	427	567	140	84	$14.67	Short-term on-the-job training
Office clerks, general	414	329	-85	2,514	$12.03	Short-term on-the-job training
Production workers, all other	403	334	-69	1083	$13.40	Moderate-term on-the-job training
Woodworking machine setters, operators, tenders, ex. sawing	396	329	-67	138	$12.14	Moderate-term on-the-job training

Source: EMSI

Among the 850 southwestern Idaho employers in this cluster are Micron Technology, Hewlett-Packard, Plexus, other electronic manufacturers, J.R. Simplot Co., Image National, Yanke

Machine Shop, Pro-Team, Filler King, Rhodes International, Precision Craft, Woodgrain Millwork, Home-Style Industries, Hobson Fabricating, AC Graphics and Fiberglass Systems.

Components of High Technology Cluster

NAICS	Subsector
3111	Animal Food Manufacturing
3112	Grain and Oilseed Milling
3113	Sugar and Confectionery Product Manufacturing
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing
3115	Dairy Product Manufacturing
3116	Animal Slaughtering and Processing
3117	Seafood Product Preparation and Packaging
3118	Bakeries and Tortilla Manufacturing
3119	Other Food Manufacturing
3121	Beverage Manufacturing
3141	Textile Furnishings Mills
3149	Other Textile Product Mills
3152	Cut and Sew Apparel Manufacturing
3161	Leather and Hide Tanning and Finishing
3162	Footwear Manufacturing
3169	Other Leather and Allied Product Manufacturing
3211	Sawmills and Wood Preservation
3212	Veneer, Plywood and Engineered Wood Product Manufacturing
3219	Other Wood Product Manufacturing
3222	Converted Paper Product Manufacturing
3231	Printing and Related Support Activities
3251	Basic Chemical Manufacturing
3253	Pesticide, Fertilizer and Other Agricultural Chemical Manufacturing
3254	Pharmaceutical and Medicine Manufacturing
3256	Soap, Cleaning Compound and Toilet Preparation Manufacturing
3259	Other Chemical Product and Preparation Manufacturing
3261	Plastics Product Manufacturing
3262	Rubber Product Manufacturing
3271	Clay Product and Refractory Manufacturing
3272	Glass and Glass Product Manufacturing
3273	Cement and Concrete Product Manufacturing
3274	Lime and Gypsum Product Manufacturing
3279	Other Nonmetallic Mineral Product Manufacturing
3314	Nonferrous Metal (except Aluminum) Production and Processing
3315	Foundries
3321	Forging and Stamping
3322	Cutlery and Handtool Manufacturing
3323	Architectural and Structural Metals Manufacturing
3324	Boiler, Tank and Shipping Container Manufacturing
3327	Machine Shops; Turned Product; and Screw, Nut and Bolt Manufacturing
3328	Coating, Engraving, Heat Treating and Allied Activities
3329	Other Fabricated Metal Product Manufacturing
3331	Agriculture, Construction and Mining Machinery Manufacturing
3332	Industrial Machinery Manufacturing

NAICS	Subsector
3333	Commercial and Service Industry Machinery Manufacturing
3334	Ventilation, Heating, Air-Conditioning and Commercial Refrigeration Equipment Manufacturing
3335	Metalworking Machinery Manufacturing
3339	Other General Purpose Machinery Manufacturing
3341	Computer and Peripheral Equipment Manufacturing
3342	Communications Equipment Manufacturing
3344	Semiconductor and Other Electronic Component Manufacturing
3345	Navigational, Measuring, Electromedical and Control Instruments Manufacturing
3346	Manufacturing and Reproducing Magnetic and Optical Media
3362	Motor Vehicle Body and Trailer Manufacturing
3363	Motor Vehicle Parts Manufacturing
3364	Aerospace Product and Parts Manufacturing
3365	Railroad Rolling Stock Manufacturing
3366	Ship and Boat Building
3369	Other Transportation Equipment Manufacturing
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing
3372	Office Furniture (including Fixtures) Manufacturing
3391	Medical Equipment and Supplies Manufacturing
3399	Other Miscellaneous Manufacturing

Energy

Southwestern Idaho is posed for energy development. This cluster, based on research by Purdue University, is comprised of 74 subsectors of 10 major sectors of the economy. The region has the resources to produce energy using biomass, geothermal, wind, hydroelectric and nuclear material.

Seasonality. The energy sector has no significant seasonal patterns.

Exports. Exports from this cluster would involve manufactured equipment or services. Idaho Power Co., the region's electric utility, still imports power from its coal-fired plants in Montana, Oregon and Nevada and buys electricity on the open market to meet peak irrigation and air-conditioning demands.

Multiplier. The multiplier for energy, developed using a variety of industrial sectors, is 2.4, which means that for every 10 jobs created in advanced manufacturing another 14 jobs are created in other sectors. This comparatively high multiplier can positively impact the region's economy, especially since wages paid by employers in this cluster are well above average.

Wages and Benefits. The average wage in the energy cluster has been above the regional average for the 15-year period. Over half of the subsectors comprising this cluster posted average wages above the regional average in 2008, and 80 percent of the workers in the region's energy cluster were employed by those companies. The wage progression mirrors the volatility of the high technology sector in 2000 and 2001, when bonuses from the peak of the high-tech bubble evaporated the next year during the 2001 recession.

Southwestern Idaho's Energy Wage

Year	Average Employment	Average Wage	Annual Change Employment	Annual Change Wages
1993	14,933	$35,253	–	–
1994	16,247	$39,962	1,314	$4,710
1995	17,451	$45,725	1,204	$5,762
1996	18,377	$39,004	926	-$6,721
1997	19,538	$39,019	1,162	$15
1998	21,009	$38,530	1,471	-$490
1999	22,131	$45,176	1,122	$6,646
2000	24,024	$60,605	1,893	$15,429
2001	24,521	$45,288	497	-$15,317
2002	23,286	$45,837	-1,235	$549
2003	22,056	$45,915	-1,231	$78
2004	22,436	$50,001	380	$4,086
2005	23,513	$50,962	1,077	$961
2006	25,578	$55,781	2,065	$4,819
2007	25,713	$61,130	135	$5,349
2008	22,689	$59,983	-3,024	-$1,148

Location Quotient. The location quotient for the energy cluster in 2003 was 1.31, rising to 1.55 in 2008. But it is currently projected to plunge to 0.95 by 2018. While the location quotient is likely to drop from 2008 due to layoffs in the construction and computer chip manufacturing, it is unlikely to fall below one unless the cluster is abandoned.

Size and Growth Over Time. In 2008, the energy cluster provided less than 8 percent of all jobs in southwestern Idaho but nearly 13 percent of all wages. For the first eight years in the comparison period, employment grew significantly, averaging more than 1,000 new jobs a year. The two years of decline at the turn of the decade was primarily the result of layoffs in semiconductor production. Employment growth resumed during the heart of the expansion in the mid-2000s, but then the housing bubble burst in 2007 and high technology ran into more hard times as the recession took hold. As with high-tech, however, entrepreneurs are a good source for economic development. Public awareness of the environment is rising as is demand for energy efficient goods and services, which could be a stabilizing factor that provides time to take advantage of this cluster's potential.

Southwestern Idaho Energy Cluster Employers and Employees

Year	Employers	Employees	Annual Change Employers	Annual Change Employees
1993	959	14,933	–	–
1994	1,043	16,247	84	1,314
1995	1,093	17,451	50	1,204
1996	1,109	18,377	17	926
1997	1,134	19,538	24	1,162

			Annual Change	
Year	Employers	Employees	Employers	Employees
1998	1,175	21,009	41	1,471
1999	1,205	22,131	30	1,122
2000	1,213	24,024	8	1,893
2001	1,248	24,521	36	497
2002	1,252	23,286	3	-1235
2003	1,313	22,056	62	-1231
2004	1,339	22,436	26	380
2005	1,400	23,513	61	1,077
2006	1,465	25,578	65	2,065
2007	1,493	25,713	29	135
2008	1,480	22,689	-13	-3024

Need for Replacement Workers. Economic Modeling Specialists Inc. projects job losses through 2018. Just over a third of the 74 subsectors that make up the energy cluster are expected to contract. But energy is an economic sector on the move, the focus of increased attention as discussion of global climate change deepens. New ideas and technologies are going to be developed that will lead to jobs that require completely different skills from those in demand today.

Energy Cluster Projections

	Jobs		Numeric	Percent
Energy	2008	2018	Growth	Growth
Southwestern Idaho	26,506	22,660	-3,846	-14.51%
State of Idaho	57,858	55,347	-2,511	-4.34%
United States	9,635,833	10,116,383	480,550	4.99%

Among the 1,500 energy cluster employers in southwestern Idaho are Idaho Power Co., Intermountain Gas Co., Hiddleston Drilling & Pump, Pipeline Inspection Services, Bowman's Inc. of Mountain Home, Rocky Mountain Steel, Producers Supply Co-op, United Oil, Secesh Engineering, Knife River, Track Utilities, Washington Group, Romar Electric, A-1 Heating & Air Conditioning, Drill Pro International, Aatronics, Caribou Four Corners Oil, J-U-B Engineers, Materials Testing & Inspection, Idaho Public Utilities Commission and the U.S. Department of Energy.

Of 23 selected occupations, only four are projected to grow through 2018. But with the change occurring in this part of the economy, new occupations and new skills will emerge with advances.

2008-2018 Energy Cluster Job Projections

Occupation	Employment 2008	Employment 2018	Change	2009 Applicants	2008 Wage	Education Training
Electricians	1,234	1,208	-26	579	$21.66	Long-term on-the-job training
Electrical engineers	1,095	663	-432	65	$36.50	Bachelor's degree
Cashiers	1,035	936	-99	2,354	$8.79	Short-term on-the-job training
Plumbers, pipefitters, steamfitters	903	856	-47	354	$19.09	Long-term on-the-job training
General and operations managers	678	537	-141	188	$34.01	Degree plus work experience
Electrical and electronic engineering technicians	643	331	-312	339	$26.00	Associate degree
First-line supervisors/managers of construction trades, extraction workers	632	639	7	556	$24.24	Work experience in a related field
Electrical power-line installers, repairers	557	530	-27	78	$32.79	Long-term on-the-job training
Sheet metal workers	547	454	-93	84	$17.53	Long-term on-the-job training
Electrical, electronic equipment assemblers	510	241	-269	590	$11.77	Short-term on-the-job training
Heating, air conditioning, refrigeration mechanics, installers	502	533	31	455	$13.92	Long-term on-the-job training
Office clerks, general	454	433	-21	2514	$12.03	Short-term on-the-job training
Construction laborers	451	445	-6	1,526	$13.59	Moderate-term on-the-job training
Mechanical engineers	398	317	-81	88	$44.37	Bachelor's degree
Mechanical engineering technicians	393	270	-123	16	$15.39	Associate degree
Management analysts	388	505	117	97	$34.54	Degree plus work experience
Carpenters	386	379	-7	2253	$14.41	Long-term on-the-job training
Engineering managers	342	224	-118	34	$47.12	Degree plus work experience
Bookkeeping, accounting, auditing clerks	340	311	-29	1,008	$14.40	Moderate-term on-the-job training
Welders, cutters, solderers, brazers	329	257	-72	702	$14.02	Long-term on-the-job training
Construction managers	327	347	20	229	$28.44	Bachelor's degree
Semiconductor processors	325	150	-175	88	$13.95	Associate degree

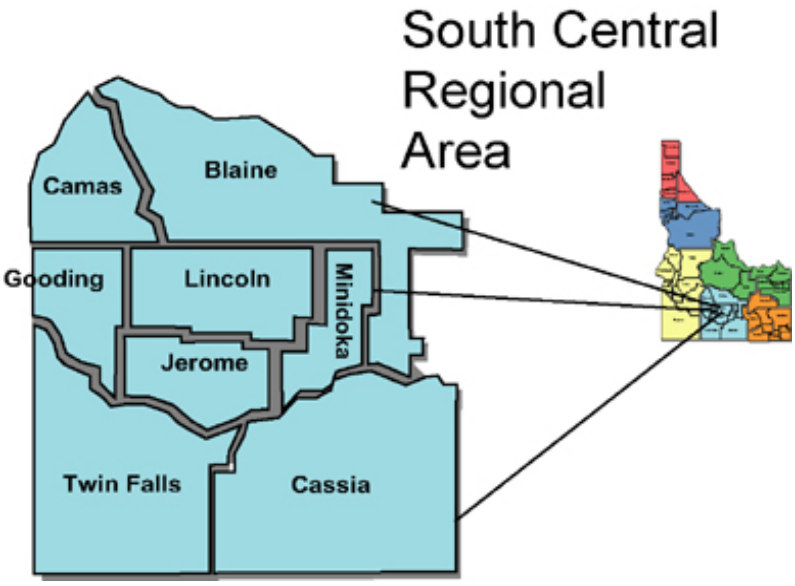
Occupation	Employment 2008	2018	Change	2009 Applicants	2008 Wage	Education Training
First-line supervisors/managers of production, operating workers	312	172	-140	595	$22.37	Work experience in a related field
Team assemblers	302	159	-143	521	$13.03	Moderate-term on-the-job training
Source: EMSI						

Components of the Energy Cluster

NAICS	Subsector
211111	Crude Petroleum and Natural Gas Extraction
211112	Natural Gas Liquid Extraction
212111	Bituminous Coal and Lignite Surface Mining
212112	Bituminous Coal Underground Mining
212113	Anthracite Mining
212291	Uranium-Radium-Vanadium Ore Mining
213111	Drilling Oil and Gas Wells
213112	Support Activities for Oil and Gas Operations
213113	Support Activities for Coal Mining
213114	Support Activities for Metal Mining
221111	Hydroelectric Power Generation
221112	Fossil Fuel Electric Power Generation
221113	Nuclear Electric Power Generation
221119	Other Electric Power Generation
221121	Electric Bulk Power Transmission and Control
221122	Electric Power Distribution
221210	Natural Gas Distribution
221330	Steam and Air-Conditioning Supply
237110	Water and Sewer System Construction
237120	Oil and Gas Pipeline Construction
237130	Power and Communication System Construction
237990	All Other Heavy Construction
238210	Electrical Contractors
238220	Plumbing and HVAC Contractors
324110	Petroleum Refineries
324199	All Other Petroleum and Coal Products Manufacturing
325110	Petrochemical Manufacturing
325120	Industrial Gas Manufacturing
325191	Gum and Wood Chemical Manufacturing
325193	Ethyl Alcohol Manufacturing
332410	Power Boiler and Heat Exchanger Manufacturing
332420	Metal Tank (Heavy Gauge) Manufacturing
333131	Mining Machinery and Equipment Manufacturing
333132	Oil and Gas Field Machinery and Equipment Manufacturing
333414	Heating Equipment (except Warm Air Furnaces) Manufacturing
333611	Turbine and Turbine Generator Set Units Manufacturing
334413	Semiconductor and Related Device Manufacturing

NAICS	Subsector
334519	Other Measuring and Controlling Device Manufacturing
335311	Power, Distribution, and Specialty Transformer Manufacturing
335312	Motor and Generator Manufacturing
335313	Switchgear and Switchboard Apparatus Manufacturing
335314	Relay and Industrial Control Manufacturing
335911	Storage Battery Manufacturing
335912	Primary Battery Manufacturing
335929	Other Communication and Energy Wire Manufacturing
335931	Current-Carrying Wiring Device Manufacturing
335991	Carbon and Graphite Product Manufacturing
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing
423520	Coal and Other Mineral and Ore Wholesalers
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Construction Material Wholesalers
423690	Other Electronic Parts and Equipment Wholesalers
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Wholesalers
424710	Petroleum Bulk Stations and Terminals
424720	Petroleum and Petroleum Products Wholesalers (except Bulk Stations and Terminals)
447110	Gasoline Stations with Convenience Stores
447190	Other Gasoline Stations
454311	Heating Oil Dealers
454312	Liquefied Petroleum Gas (Bottled Gas) Dealers
454319	Other Fuel Dealers
486110	Pipeline Transportation of Crude Oil
486210	Pipeline Transportation of Natural Gas
486910	Pipeline Transportation of Refined Petroleum Products
486990	All Other Pipeline Transportation
523910	Miscellaneous Intermediation
523999	Miscellaneous Financial Investment Activities
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing
533110	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)
541330	Engineering Services
541360	Geophysical Surveying and Mapping Services
541380	Testing Laboratories
541620	Environmental Consulting Services
541690	Other Scientific and Technical Consulting Services
541710	Research and Development in the Physical, Engineering, and Life Sciences
926130	Regulation and Administration of Communications, Electric, Gas, and Other Utilities

South Central Idaho



Overview

South central Idaho's economic core has traditionally been agriculture. But value-added food processing fuels other industries, most directly transportation and warehousing with professional and business services a close second. Efforts to diversify have occurred over the last decade after two small communities each saw a major employer close, causing economic upheaval. The subsequent turmoil left community leaders questioning the overall value of big businesses and refocusing their development campaigns on small- to medium-sized companies.

Attracting new companies became a priority, spawning creation of the regional economic development umbrella called the Southern Idaho Economic Development Organization. Financial backing and professional support were provided by the College of Southern Idaho, private industry and area economic development professionals. Since its creation, the organization has come to recognize that it is the marketing arm for the area but must also respond to the expansion and work force challenges of existing businesses.

With the award of a $5 million, three-year Workforce Innovation in Regional Economic Development grant in 2007, businesses began developing new relationships – the Manufacturers Alliance being one of them.

Local leaders and developers began to focus attention on advanced manufacturing and energy as sectors ripe for future growth along with agriculture – the region's economic cornerstone – energy, tourism and construction.

In 2008, retail trade provided the largest percentage of jobs in south central Idaho followed by agriculture. But health care and manufacturing each provided one of every 10 jobs.

South Central Idaho Average Employment, Wages 2008

Sector	Jobs	% of Total	Average Wage
All South Central Jobs	82,718	100.0%	$29,659
Agriculture, Forestry, Fishing, Hunting	9,219	11.1%	$27,319
Mining	235	0.3%	$30,508
Utilities	460	0.6%	$41,104
Construction	6,169	7.5%	$34,911
Manufacturing	8,316	10.1%	$36,029
Wholesale Trade	3,365	4.1%	$38,110
Retail Trade	10,081	12.2%	$24,178
Transportation, Warehousing	3,999	4.8%	$34,198
Information	1,298	1.6%	$33,564
Finance, Insurance	1,971	2.4%	$47,323
Real Estate, Rental, Leasing	976	1.2%	$24,442
Professional, Scientific, Technical Services	2,834	3.4%	$44,725
Management of Companies	335	0.4%	$64,806
Administrative, Support, Waste Management, Remediation Services	4,459	5.4%	$20,124
Educational Services	6,285	7.6%	$27,996
Health Care, Social Assistance	8,474	10.2%	$30,979
Arts, Entertainment, Recreation	906	1.1%	$19,698
Accommodation, Food Services	6,915	8.4%	$14,303
Other Services except Government	2,288	2.8%	$24,163
Government	4,129	5.0%	$34,426

The industries with the largest growth over the past five years in the eight-county region include health care and education.

Sectors Posting Most Job Growth, 2003-2008

	Jobs		Change	
Sector	2003	2008	Numeric	Percent
Regional Total	73,901	82,718	8,817	11.9%
Health Care, Social Assistance	6,762	8,474	1,712	25.3%
Agriculture, Forestry, Fishing, Hunting	7,701	9,219	1,518	19.7%
Construction	4,951	6,169	1,218	24.6%
Manufacturing	7,601	8,316	716	9.4%
Retail Trade	9,424	10,081	657	7.0%
Transportation, Warehousing	3,345	3,999	654	19.6%
Accommodation, Food Services	6,434	6,915	481	7.5%
Educational Services	5,889	6,285	396	6.7%
Administrative, Support, Waste Management, Remediation Services	4,131	4,459	328	8.0%
Wholesale Trade	3,053	3,365	312	10.2%
Government	3,864	4,129	265	6.8%
Information	1,074	1,298	224	20.8%
Other Services except Government	2,080	2,288	208	10.0%
Finance, Insurance	1,785	1,971	187	10.5%
Mining	173	235	63	36.4%

Sector	Jobs 2003	Jobs 2008	Change Numeric	Change Percent
Management of Companies	300	335	35	11.7%
Arts, Entertainment, Recreation	875	906	32	3.6%
Utilities	455	460	5	1.1%
Real Estate, Rental, Leasing	1,062	976	-85	-8.0%
Professional, Scientific, Technical Services	2,936	2,834	-102	-3.5%

These industries are ranked by nominal job change, which is a better indicator of growth since percentage changes can skew perception, especially when they are calculated on a small base.

Payrolls in the region increased by 35 percent between 2003 and 2008, but again the magnitude of the improvements can be distorted on a percentage basis.

Total Wages for South Central Idaho by Sector

Sector	2003	2008	Change	% Chg
Regional Total	$1,814,321,261	$2,453,341,328	$639,020,067	35.2%
Agriculture, Forestry, Fishing, Hunting	$163,307,098	$251,863,232	$88,556,134	54.2%
Health Care, Social Assistance	$183,264,895	$262,506,108	$79,241,213	43.2%
Construction	$140,086,601	$215,379,069	$75,292,468	53.7%
Manufacturing	$231,725,050	$299,631,760	$67,906,710	29.3%
Retail Trade	$196,585,126	$243,732,525	$47,147,399	24.0%
Transportation, Warehousing	$94,399,423	$136,772,826	$42,373,403	44.9%
Wholesale Trade	$86,320,654	$128,252,345	$41,931,691	48.6%
Government	$109,607,647	$142,138,203	$32,530,556	29.7%
Professional, Scientific, Technical Services	$98,733,728	$126,769,412	$28,035,684	28.4%
Finance, Insurance	$67,337,245	$93,282,190	$25,944,945	38.5%
Educational Services	$150,009,195	$175,953,020	$25,943,825	17.3%
Accommodation, Food Services	$73,915,174	$98,910,628	$24,995,454	33.8%
Administrative, Support, Waste Management, Remediation Services	$67,501,153	$89,735,666	$22,234,513	32.9%
Other Services except Government	$40,320,845	$55,291,582	$14,970,737	37.1%
Information	$28,632,582	$43,580,441	$14,947,859	52.2%
Management of Companies	$15,224,374	$21,720,803	$6,496,429	42.7%
Utilities	$14,502,298	$18,900,848	$4,398,550	30.3%
Mining	$5,089,556	$7,177,015	$2,087,459	41.0%
Real Estate, Rental, Leasing	$22,716,271	$23,861,413	$1,145,142	5.0%
Arts, Entertainment, Recreation	$24,937,445	$17,853,155	-$7,084,290	-28.4%

An industry, which has steadily increased the number of employees over a 15-year period, is sustainable – economically sound through good and bad times. Agriculture, manufacturing and health care clearly meet that standard, each producing wage improvements of more than $150 million over the past 15 years. Retail trade and construction also performed solidly over the long haul.

It is clear that the majority of sectors have posted solid growth during the last 15 years. But despite their past, the future for construction and tourism is not as strong.

Health care has the highest growth projection at nearly 30 percent followed by energy and advanced manufacturing at around 21 percent and construction at 20.8 percent. Of these four, only construction has a distinct seasonal, and in the current atmosphere cyclical, pattern similar to agriculture and tourism.

Construction is unlikely to have a quick recovery in the wake of the bursting housing bubble. A huge housing inventory, the upside-down equity position too many homeowners and speculators still face and stringent loan requirements are all barriers. There will continue to be significant investment in commercial buildings, but building them takes fewer people than residential housing. A $5 million office building, for example, requires one roofing contractor, but $5 million invested in single family homes would mean work for several.

Alternative energy is on the upswing as conventional energy prices move higher and tax credits are approved, building consumer interest in more energy efficient options. Solar, wind, biomass, hydroelectricity and geothermal are all renewable energy sources that have considerable growth potential in south central Idaho. These resources could attract the engineering firms that draw up the plans for their development and the manufacturers of the equipment to turn those plans into energy.

As in the other regions of Idaho, health care will be driven by continued population expansion while tourism relies on the amounts of discretionary income the economy provides its workers. Advanced manufacturing is a common target for all regions of the state and nation, suggesting the choice is based on national trends rather than realistic options for Idaho.

10-Year Population Trend by Age in South Central Idaho

Age Group	2009	2019	% of 2009 Total	% of 2019 Total
Under 5 years	15,824	16,056	8.8%	8.4%
5 to 9 years	14,308	15,957	8.0%	8.4%
10 to 14 years	13,149	15,918	7.3%	8.3%
15 to 19 years	13,217	13,440	7.3%	7.0%
20 to 24 years	11,229	10,375	6.2%	5.4%
25 to 29 years	11,973	10,952	6.7%	5.7%
30 to 34 years	10,837	12,000	6.0%	6.3%
35 to 39 years	10,270	11,768	5.7%	6.2%
40 to 44 years	10,526	10,902	5.9%	5.7%
45 to 49 years	12,045	9,752	6.7%	5.1%
50 to 54 years	12,294	10,422	6.8%	5.5%
55 to 59 years	10,919	11,264	6.1%	5.9%
60 to 64 years	9,168	11,352	5.1%	5.9%
65 to 69 years	7,240	9,785	4.0%	5.1%
70 to 74 years	5,469	7,804	3.0%	4.1%
75 to 79 years	4,366	5,617	2.4%	2.9%
80 to 84 years	3,557	3,733	2.0%	2.0%

Age Group	2009	2019	% of 2009 Total	% of 2019 Total
85 years and over	3,597	3,793	2.0%	2.0%
All Age Groups	179,989	190,891	100.0%	100.0%

Agriculture

Agriculture has been the economic mainstay for south central Idaho, including the significant parts of Blaine County outside the tourism-focused stretch of the Wood River Valley between Bellevue and Ketchum. Almost one of every five jobs across the region is in agriculture, which along with the professional and business services supersector has shown solid growth based on average employment over the last 15 years. The two sectors are directly linked. Professional and business services include large employers such as staffing agencies, which in south central Idaho cater predominantly to agriculture operators needing seasonal labor rather than office or clerical jobs typical of larger metropolitan areas. The dairy industry has contributed the most dramatically to agricultural. In 2008 dairy receipts totaled $2.1 billion, 33 percent of total farm receipts in Idaho and 6 percent of the nation's total. That placed dairy fourth in the nation for exports and production. While individual dairies may not be unusually large employers, their payrolls are greater than most crop and livestock producers. South central Idaho's dairy industry has also provided stability to many who had previously been nomadic migrant seasonal farm workers. The average employment swings in the dairy counties of Gooding, Jerome and Lincoln are lower than in the region's other farm counties. These three counties have the highest concentration of dairy as a percent of agricultural employment.

2009 Average Employment

	State	Agriculture, Forestry, Fishing, Hunting	Dairy Cattle and Milk Production	Dairy % of All Agriculture	Dairy % of All Industry
State	613,738	22,293	5,903	26.5%	1.0%
South Central	78,675	9,226	4,451	48.2%	5.7%
Blaine	12,350	150	6	4.0%	0.0%
Camas	430	45	0	0.0%	0.0%
Cassia	9,690	1,327	509	38.4%	5.3%
Gooding	6,082	2,105	1,318	62.6%	*21.7%*
Jerome	8,906	2,150	1,068	49.7%	12.0%
Lincoln	1,410	240	178	*74.3%*	12.6%
Minidoka	6,665	1,262	341	27.0%	5.1%
Twin Falls	33,144	1,947	1,031	53.0%	3.1%

Seasonality. For agriculture, payrolls peak in the third quarter of the year to meet demand for landscape laborers, harvest workers, sorters, quality control personnel, irrigators, truck drivers and equipment operators. Agriculture depends on staffing agencies to fill its needs.

Average Quarterly Agriculture Employment In South Central Idaho 2008-2009

	First	Second	Third	Fourth
Blaine	115	157	164	143
Camas	37	48	56	47
Cassia	1,146	1,272	1,373	1,431
Gooding	2,008	2,168	2,187	2,181
Jerome	2,009	2,240	2,173	2,125
Lincoln	223	241	238	244
Minidoka	984	1,319	1,371	1,392
Twin Falls	1,736	1,979	2,053	1,962
Region	8,256	9,422	9,613	9,524

Exports. Since Idaho and south central Idaho produces substantially more commodities than it could possibly consume, agriculture is a major exporter, contributing to overall economic growth as it expands because it draws so much revenue from outside the state. This is especially true for value-added products such as cheese and dehydrated milk. Over $675 million in food and agricultural commodities was exported to foreign markets from Idaho in 2008 – 13.5 percent of all foreign exports. More than $200 million of the agricultural goods was in dairy products, much of that from south central Idaho. That is on top of the much greater amount that is sold in the United States outside of Idaho.

Multiplier. The agricultural support industry – particularly food processing, which is considered part of advanced manufacturing – is closely aligned with dairy and contributes to the high multiplier -- 6.63 for the dairy, which means that for every 10 jobs directly created in dairy, another 56 are created in other parts of the economy, and 2.41 for crop and animal production, which means that for every 10 jobs created on farms and ranches another 14 are created elsewhere in the economy. The region's raw milk goes directly to processers of not only fluid milk but also cheese, whey and dehydrated milk.

2008 Annual Average Wages for South Central Agriculture

All Regional Jobs	$29,659
All Agriculture	$27,320
Crop Production	$26,412
Animal Production	$26,996
Dry Pea, Bean Farming	$15,677
Wheat Farming	$27,892
Corn Farming	$23,335
All Other Grain Farming	$28,609
Potato Farming	$26,692
Hay Farming	$27,433
Sugar Beet Farming	$25,510
Beef Cattle Ranching, Farming	$28,605
Cattle Feedlots	$28,842
Dairy Cattle, Milk Production	$27,183
Sheep Farming	$20,125
Finfish Farming, Fish Hatcheries	$24,080

Wages and Benefits. Agriculture has the highest level of self employment of any sector, and typically most wages are not covered by the unemployment insurance program. Many workers who are covered typically are seasonal. But for covered employment, agricultural wages rank just above the bottom at an average of $27,313. Only tourism, with an even higher percentage of part-time workers, was lower at $14,040. The net cash income averaged per farm based on the 2007 Census of Agriculture was $33,827 and does not include such advantages as fuel tax exemptions and tax right-offs for passenger trucks considered farm equipment.

Location Quotient. Agriculture in south central Idaho has a location quotient of 6.06, which means it is six times more important to the regional economy than agriculture is to the national economy. This underscores the regional standing of commodities such as potatoes, milk, hay, trout, barley, sugar beets and corn. Four of Idaho's top five counties in agricultural sales are in south central Idaho. They accounted for 46 percent of the $5.7 billion Idaho commodities sold for in 2007, when milk prices were on the rise.

Size and Growth Over Time. Growth has slowed in the last eight to 10 years as environmental and quality-of-life concerns began taking firm root in the region. Moratoria on cattle and dairy operations and expansion in Gooding and Jerome counties have pushed growth east to Minidoka and Cassia counties. Just over 15 years ago, there were 78 dairy workers in the two eastern counties. Today, there are nearly 900.

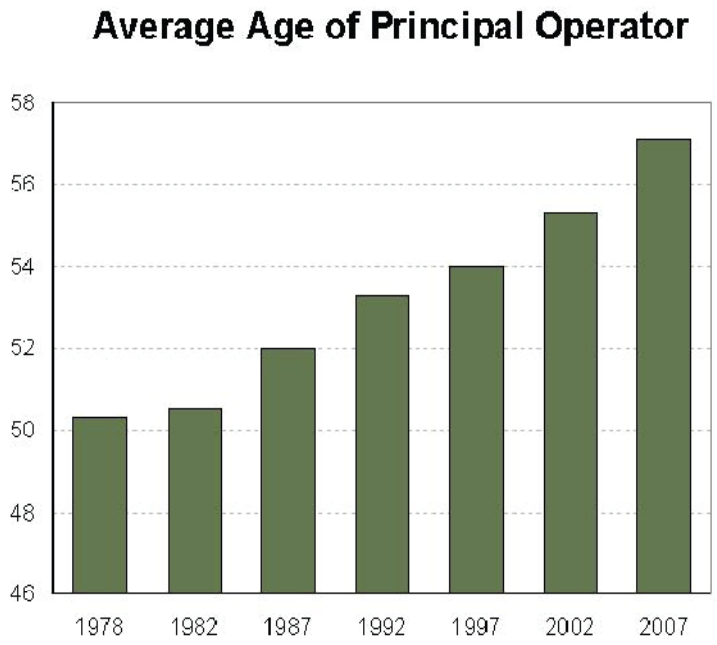
South Central Idaho Agriculture Jobs, 1993-2008

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
All Regional Jobs	56,713	66,908	73,901	82,718	45.9%	23.6%	11.9%
All Agriculture	4,866	6,230	7,701	9,219	89.5%	48.0%	19.7%
Crop Production	2,303	2,671	2,688	2,475	7.5%	-7.4%	-8.0%
Animal Production	1,537	2,534	4,154	5,853	280.8%	131.0%	40.9%
Dry Pea, Bean Farming	14	12	5	17	17.8%	34.5%	249.1%
Wheat Farming	25	36	66	179	617.1%	396.3%	171.7%
Corn Farming	5	4	31	88	1596.8%	2187.0%	182.8%
All Other Grain Farming	48	54	53	95	99.5%	74.1%	79.9%
Potato Farming	570	670	661	591	3.6%	-11.8%	-10.5%
Hay Farming	47	61	132	257	447.7%	322.8%	94.3%
Sugar Beet Farming	235	258	192	297	26.3%	15.2%	54.3%
Beef Cattle Ranching, Farming	133	183	413	679	411.0%	271.1%	64.3%
Cattle Feedlots	164	139	125	166	1.2%	19.3%	33.1%
Dairy Cattle, Milk Production	789	1,783	3,232	4,496	469.6%	152.1%	39.1%
Sheep Farming	22	20	15	29	35.4%	44.3%	98.9%
Finfish Farming, Fish Hatcheries	311	223	195	146	-52.9%	-34.6%	-25.0%

Agricultural practices, products and markets are dynamic. Organics, for example, could affect inputs such as fertilizer and herbicides, marketing strategies and land use if they take off. The consumer is fickle, and historically, higher prices of organic food products drop them off the average grocery list. Demand for chemicals can be affected by tillage and watering techniques.

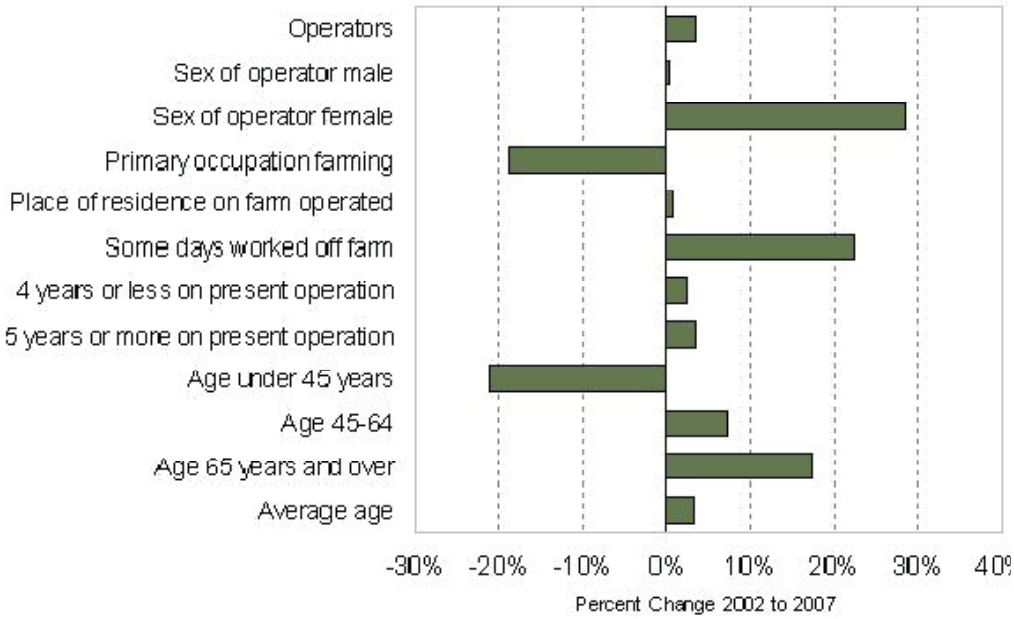
Biotech research may develop genetically engineered seeds resistant to disease, insects and herbicides. The dairy industry is dabbling in energy with development of methods to convert manure to methane gas. An ethanol plant in Cassia County dries the residual matter from corn fermentation and sells it as distillers' grain, a dairy feed with a high level of protein. Anaerobic digesters offer a sophisticated option for handling livestock manure, disposing of the waste while generating energy with it. Strip tillage, which reduces weeds for savings on herbicides, labor and fuel, expanded from 1,500 to 15,000 acres in just one year. Use of global positioning systems and geographic information system mapping technology for precision farming can improve crop yield, cut chemical and fertilizer costs and reduce pollution and waste from runoff of excess inputs.

Need for Replacement Workers. The biggest threat to agriculture is its aging work force – more so than other sectors that are also looking ahead to a surge of baby-boom retirements. The 2007 Agriculture Census found the average age of all farmers was 57.1 years, 65 percent work off the farm and those who started farming within the previous five years earned on average just $6,864 in net income. Farming has become a life-style choice rather than a way to make a living. Replacement demand will be huge in the coming years, but there is a real question about whether that demand can be met. Most younger people do not have the mindset that farming requires – the ability to look to a better year or delay fulfilling personal needs in order to meet the demands of farming or ranching. More importantly, for those willing to enter the agricultural fray, the cost of real estate and equipment is a barrier. The legacy of farm families includes not only material goods but also pride in heritage and generations of knowledge.



To agriculture's advantage in south central Idaho, interstate highways and railroads are reasonably convenient. There remains demand for an intermodal facility for packaging and shipping produ

Principal Operator Characteristics



Advanced Manufacturing

South central Idaho has felt the same pressures on manufacturing that the rest of the nation has over the last 15 years – cheap foreign labor, especially in China and India, that sent durable goods production outside the United States. But the region has benefited from some offsetting activity through the introduction of recreational vehicle manufacturing to the area, metal machining and fabrication activities in support of dairies and construction activity and a foundry and plastics production, which has doubled in two decades. Food processing, a manufacturing mainstay, has grown through the most recent recession due to construction of new milk and cheese plants and increased demand for milk and whey protein concentrates for energy drinks and protein bar coating. Milk – white oil to the region – is the top commodity, replacing the potato that had reigned throughout the 20th Century. To be sure, plastic, metal and recreational vehicle manufacturers did lay off workers to weather the grinding downshift in consumer buying during the recession, but most are steadily working their way back toward full employment levels.

The success of trailer maker Jayco has led to talk of adding production lines in the new Twin Falls industrial park. This should attract suppliers, creating efficiencies through shipping reductions. Jayco and RV maker Dutchmen now have their pick of skilled carpenters, people they had trouble finding when they began operations. These manufacturers benefit from travel demand in the West and an expanding snowbird population traveling south in winter and back north in summer. The industry is sensitive to the high fuel price fluctuations and has responded by designing lighter-weight models for efficiency.

The plastics industry has been hit by increasing criticism over the shopping bags it makes, and grocery and some retail stores are stocking reusable bags as an alternative. It is unclear whether this trend will continue or if the industry will regain public confidence with its own recycling options that ensure all used plastic bags are reprocessed into new bags or other products. Hilex Poly in Jerome is considering a partnership with another local company for the initial cost of a plastic recycling plant. Solo Cup, which makes plastic cups, straws and eating utensils for companies like Starbucks and Costco, has been using robotics in its plant for four years to reduce costs, cutting its work force by 20 percent. Solo Cup's progressive management implemented 15-minute work station changes so that the repetitive movements that lead to boredom and injury are reduced in evidence of its determination to remain an industry leader.

Seasonality. While increasingly efficient storage systems have removed some of the seasonality from handling commodities like potatoes, processing sugar beets and vegetables must be done relatively quickly after harvest to avoid loss of quality. The spring quarter generally has the smallest wage total, reflecting the slack period in food processing between the end of handling the previous year's commodities and the current year's harvest in the summer and fall. The seasonal labor force is typically less skilled although the wages can differ based on union involvement. Other types of manufacturing also experience lulls for maintenance. However, there are not big jumps quarter to quarter, and companies try to schedule maintenance around holidays when employees want time off anyway.

Average Quarterly Manufacturing Employment and Payroll

2008-2009								
	Employment				Payroll			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Blaine	404	443	448	432	$5,502,845	$5,407,035	$5,454,106	$5,839,990
Camas	Insignificant				Insignificant			
Cassia	1,144	1,190	1,180	1,149	$9,320,622	$9,388,938	$10,665,124	$11,020,906
Gooding	759	766	765	754	$8,770,563	$6,592,054	$7,907,001	$8,758,923
Jerome	1,276	1,257	1,274	1,292	$9,393,335	$9,734,520	$10,222,683	$11,544,061
Lincoln	128	125	128	127	$1,798,952	$1,228,215	$1,543,716	$1,425,702
Minidoka	940	953	952	1,080	$10,527,483	$9,513,672	$10,281,849	$12,488,237
Twin Falls	2,955	3,210	3,603	3,322	$27,062,331	$26,366,932	$30,856,462	$28,915,487
Region	7,603	7,942	8,348	8,155	$677,392,779	$649,196,407	$679,772,274	$744,842,047

Exports. Both durable and nondurable products made by companies in south central Idaho are primarily marketed outside the region so that growth in any of these industries will add wealth and jobs to the regional economy. Food processing, which adds value to local commodities, plays a huge role in economic expansion because of its export demand, which is more inelastic than for many durable goods.

Multiplier. The multipliers for manufacturing, particularly food processing, are high at 5.61, which means that for every 10 direct manufacturing jobs created another 46 jobs are generated in other areas of the economy

Wages and Benefits. Manufacturing offers the second highest wages in the economy behind energy. The increasing use of computer numerical control machines requires operators and machinists to have a higher skill set that commands better pay and benefits. Demand for even greater skill levels is creating a career ladder into management. Food processing as well offers a career ladder that enables experienced workers to take on more leadership as managers, supervisors or quality control monitors. These positions typically provide better wages because they oversee more staff than in other industries and are complicated by government regulation for food products and machinery and chemical safety. The average wage of $36,029 in 2008 reached that level most likely because the labor shortages during the 2004-2007 expansion put pressure on employer's looking for quality workers. Annualized over the last five years, wage growth was a strong 5.5 percent. That compares to 3.4 percent annualized growth between 1993 and 2008.

2008 Annual Average Wages, Employment in South Central Idaho Manufacturing

Sector	Jobs	Wage
All Regional Jobs	82,718	$29,659
All Manufacturing	8,316	$36,029
Primary Metal Manufacturing	143	$58,394
Fabricated Metal Product Manufacturing	487	$33,749
Machinery Manufacturing	264	$37,095
Transportation Equipment Manufacturing	498	$25,837
Furniture, Related Product Manufacturing	242	$32,573
Miscellaneous Manufacturing	240	$47,558
Wood Product Manufacturing	114	$27,370
Paper Manufacturing	279	$42,283
Printing, Related Support Activities	80	$28,172
Chemical Manufacturing	62	$35,685
Plastics, Rubber Products Manufacturing	664	$29,667
Nonmetallic Mineral Product Manufacturing	161	$40,983
Food Manufacturing	4,945	$36,899
Beverage, Tobacco Product Manufacturing	65	$33,010
Textile Product Mills	43	$32,285

Location Quotient. Advanced manufacturing has a location quotient of 2.22, indicating that there are nearly two and a quarter times as many manufacturing jobs in the region – compared to all jobs – as there is nationally. Regional competitiveness is cited as the reason for the high location quotient, which stems primarily from food processing and the growing trailer and transportation equipment sector.

Size and Growth Over Time. Manufacturing had an average of 8,300 workers for 2008. The past 15 years show how this sector has been evolving – food processing declined as a result of technological advances until recently when it began building on its new, more efficient foundation. The advent of the trailer and RV makers offered a significant boost in recent years as has metal manufacturing. Although manufacturing slumped behind the rest of the economy

in south central Idaho through the 1990s, it has picked up dramatically since the 201 recession and approached the region's overall job growth rate in the latest five-year period.

South Central Idaho Manufacturing Jobs, 1993-2008

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
All Jobs	56,713	66,908	73,901	82,718	45.9%	23.6%	11.9%
All Manufacturing	8,237	7,993	7,601	8,316	1.0%	4.1%	9.4%
Food Manufacturing	6,011	5,444	4,818	4,945	-17.7%	-9.2%	2.6%
Beverage, Tobacco Product Manufacturing	55	76	105	65	17.0%	-15.2%	-38.4%
Textile Product Mills	38	50	42	43	14.2%	-13.5%	1.4%
Wood Product Manufacturing	262	122	122	114	-56.6%	-6.7%	-6.9%
Paper Manufacturing	288	271	309	279	-3.0%	3.1%	-9.5%
Printing, Related Support Activities	328	289	147	80	-75.7%	-72.5%	-45.9%
Chemical Manufacturing	23	19	33	62	172.4%	230.0%	88.7%
Plastics, Rubber Products Manufacturing	283	392	596	664	134.4%	69.3%	11.3%
Nonmetallic Mineral Product Manufacturing	136	141	107	161	18.0%	14.0%	50.0%
Primary Metal Manufacturing	10	8	110	143	1325.0%	1593.1%	29.8%
Fabricated Metal Product Manufacturing	129	333	359	487	277.9%	46.2%	35.6%
Machinery Manufacturing	297	296	229	264	-11.1%	-11.1%	15.1%
Transportation Equipment Manufacturing	138	168	157	498	259.5%	195.6%	217.3%
Furniture, Related Product Manufacturing	126	211	271	242	92.0%	14.7%	-10.9%
Miscellaneous Manufacturing	98	151	176	240	146.4%	59.0%	36.6%

The growth trend over the last five to eight years has been promising for a sector that provides its workers with training, education in some cases and competitive benefits. As a strong export sector, growth will create regional wealth. A regional manufacturers' alliance has been created under the umbrella of the Twin Falls Chamber of Commerce, in part to sway public opinion away from the view that manufacturing is an industry in decline that offers no desirable career choices. The layoffs during the recession and continued overseas outsourcing make for a hard fight ahead. India, China, Mexico and even Canada have successfully landed some very traditional U.S. manufacturing jobs. The J.R. Simplot Co. moved potato processing operations from Idaho into eastern Canada to better serve high market demand in eastern Canada and the U.S. and to take advantage of Canadian potato production, 12th globally. But the competitive edge originally held in manufacturing by China is waning as the quality of products, materials, and even workmanship become suspect, and the labor force China currently employs has very little depth because of the country's 30-year-old population control policy.

South Central Idaho Manufacturers

Company	Operation	Size
Rocky Mountain Hardware	Foundries - Brass	100-149
Big Wood Bread	Bakery - Commercial	1-49
Smith Sport Optics	Medical Equipment, Supplies	50-99
Eye Safety Systems	Medical Equipment, Supplies	1-49
Welding Hoods	Medical Equipment, Supplies	1-49
A1 Booth Manufacturing	Household, Institutional Furniture, Cabinets	1-49
Dutchmen Manufacturing	Motor Vehicle Body, Trailer Manufacturing	100-149

Company	Operation	Size
Streamline Precision Contracting	Industrial Machine Manufacturing	1-49
Pickett Equipment/River Valley Manufacturing	Agricultural, Construction, Mining Machinery Equipment	1-49
Mulholland Positioning Systems	Other Fabricated Metal Product Manufacturing	1-49
Memorial Monument & Vaults	Cement, Concrete Product Manufacturing	1-49
McCain Foods	Fruit, Vegetable, Specialty Preserving, Manufacturing	500+
Packaging Specialties	Printing, Related Support Activities	1-49
Boise Paper Holdings	Converted Paper Product Manufacturing	100-149
Hatfield Manufacturing	Architectural, Structural Metal Manufacturing	1-49
Ag Concepts	Pesticide, Fertilizer, Other Agricultural Chemical Manufacturing	1-49
Glanbia	Dairy Product Manufacturing	300-400
Clear Springs Foods	Seafood Product Preparation, Packaging	150-200
Valley Beef	Animal Slaughtering, Processing	1-49
Hilex Poly Co LLC	Plastics Product Manufacturing	100-149
Spears Manufacturing Co.	Plastics Product Manufacturing	300-400
Magic Valley Compost	Pesticide, Fertilizer, Other Agricultural Chemical Manufacturing	1-49
Westfarm Foods	Dairy Product Manufacturing	49-100
Jerome Cheese Co.	Dairy Product Manufacturing	250-300
Commercial Creamery	Dairy Product Manufacturing	49-100
Idaho Milk Products	Dairy Product Manufacturing	49-100
Bridon Cordage	Other Textile Products	1-49
Glanbia	Dairy Product Manufacturing	100-149
Shockey Sheet Metal & Welding	Industrial Machine Manufacturing	N/A
Idaho Equipment & Sheet Metal	Industrial Machine Manufacturing	N/A
Kodiak Northwest	Agricultural, Construction, Mining Machinery Manufacturing	49-100
Coast to Coast Carports	Architectural, Structural Metal Manufacturing	1-49
Triple C Concrete	Cement, Concrete Product Manufacturing	50-100
Gossner Foods	Dairy Product Manufacturing	50-100
Brewster West	Dairy Product Manufacturing	50-100
JR Simplot	Fruit, Vegetable, Specialty Preserving, Manufacturing	1-49
Idahoan Foods	Fruit, Vegetable, Specialty Preserving, Manufacturing	1-49
Amalgamated Sugar	Sugar, Confectionary Product Manufacturing	300-400
Arrowhead Potato Co	Other Food Manufacturing	1-49
Mabey's Pallets & Lumber	Other Wood Product Manufacturing	1-49
Cargill	Grain, Oilseed Milling	1-49
The Farmhouse Collection	Household, Institutional Furniture, Cabinets	1-49
Charmac Trailers	Motor Vehicle Body, Trailer Manufacturing	1-49
Jayco Inc	Motor Vehicle Body, Trailer Manufacturing	159-200
Magic Valley Heli-Arc	Other Fabricated Metal Product Manufacturing	1-49
Noffsinger Manufacturing	Other Fabricated Metal Product Manufacturing	1-49
Seastrom Manufacturing	Machine Shops, Turned Product, Screw, Nut, Bolt Manufacturing	50-100
K & T Steel Corp	Architectural, Structural Metal Manufacturing	1-49
Excel Fabrication	Architectural, Structural Metal Manufacturing	1-49
Superior Chain	Forging, Stamping	1-49
Jack B Parson	Cement, Concrete Product Manufacturing	1-49
Commercial Tire Inc.	Rubber Product Manufacturing	1-49
Northwest Foam Products	Plastics Product Manufacturing	1-49

Company	Operation	Size
Solo Cup Operating Co.	Plastics Product Manufacturing	50-100
Water Tech Inc.	Basic Chemical Manufacturing	1-49
Glanbia Foods	Dairy Product Manufacturing	150-200
Amalgamated Sugar	Sugar, Confectionary Product Manufacturing	300-400
Pepsi Bottling Ventures	Beverage Manufacturing	1-49
Mi Pueblo	Bakeries, Tortilla Manufacturing	1-49
Clear Springs Foods	Seafood Product Preparation, Packaging	1-49
Seapak of Idaho	Seafood Product Preparation, Packaging	50-100
Independent Meat Co.	Animal Slaughtering, Processing	150-200
Darling International	Animal Slaughtering, Processing	50-100
Blip Printers	Printing, Related Support Activities	1-49
Herrett's Stocks	Other Wood Product Manufacturing	1-49
HMI Hamilton Manufacturing	Other Wood Product Manufacturing	1-49
Precision Dental Arts	Medical Equipment, Supplies	1-49
Rangen	Animal Food Manufacturing	1-49

Need for Replacement Workers. Forty-five percent of south central Idaho's incumbent workforce is 45 and older. The replacement of these workers would have been a greater issue prior to the recession. Most workers on the verge of retirement are holding out a few more years to give their retirement funds a chance to rebound. The industry is increasingly concerned with the disinterest younger workers have in manufacturing jobs as careers and seeming inability of the current work force to attain the higher skill levels required in a sector where technology makes rapid advancements. The state's focus in education on science, technology, engineering and mathematics may plug that gap. In the past, manufacturing jobs were the premium jobs in the region's small communities, providing stability and benefits for workers who have not obtained higher education and who become extremely loyal to the employer. Today's younger workers are more demanding, more mobile and less appreciative of what employer's provide as they see benefit levels erode due to the cost.

Manufacturing Job Projections

Region	2009	2019	Change	Percent Change	2009 Wage
South Central Idaho	8,130	8,877	747	9%	$46,294
Idaho	53,071	51,347	-1,724	-3%	$52,663

Source: Economic Modeling Specialists Inc.

Subsector Components of Advanced Manufacturing By NAICS Code

3111-Animal Food Manufacturing
3112-Grain, Oilseed Milling
3113-Sugar, Confectionery Product Manufacturing
3114-Fruit, Vegetable Preserving, Specialty Food Manufacturing
3115-Dairy Product Manufacturing
3116-Animal Slaughtering, Processing
3117-Seafood Product Preparation, Packaging
3118-Bakeries, Tortilla Manufacturing
3119-Other Food Manufacturing

Subsector Components of Advanced Manufacturing By NAICS Code
3121-Beverage Manufacturing
3141-Textile Furnishings Mills
3149-Other Textile Product Mills
3152-Cut and Sew Apparel Manufacturing
3161-Leather, Hide Tanning, Finishing
3169-Other Leather, Allied Product Manufacturing
3211-Sawmills, Wood Preservation
3212-Veneer, Plywood, Engineered Wood Product Manufacturing
3219-Other Wood Product Manufacturing
3222-Converted Paper Product Manufacturing
3231-Printing, Related Support Activities
3251-Basic Chemical Manufacturing
3253-Pesticide, Fertilizer, Other Agricultural Chemical Manufacturing
3254-Pharmaceutical, Medicine Manufacturing
3256-Soap, Cleaning Compound, Toilet Preparation Manufacturing
3259-Other Chemical Product, Preparation Manufacturing
3261-Plastics Product Manufacturing
3262-Rubber Product Manufacturing
3271-Clay Product, Refractory Manufacturing
3272-Glass, Glass Product Manufacturing
3273-Cement, Concrete Product Manufacturing
3274-Lime, Gypsum Product Manufacturing
3279-Other Nonmetallic Mineral Product Manufacturing
3314-Nonferrous Metal (except Aluminum) Production, Processing
3315-Foundries
3321-Forging, Stamping
3322-Cutlery, Handtool Manufacturing
3323-Architectural, Structural Metals Manufacturing
3324-Boiler, Tank, Shipping Container Manufacturing
3327-Machine Shops, Turned Product, Screw, Nut, Bolt Manufacturing
3328-Coating, Engraving, Heat Treating, Allied Activities
3329-Other Fabricated Metal Product Manufacturing
3331-Agriculture, Construction, Mining Machinery Manufacturing
3332-Industrial Machinery Manufacturing
3333-Commercial, Service Industry Machinery Manufacturing
3334-Ventilation, Heating, Air-Conditioning, Commercial Refrigeration Equipment Manufacturing
3335-Metalworking Machinery Manufacturing
3339-Other General Purpose Machinery Manufacturing
3342-Communications Equipment Manufacturing
3344-Semiconductor, Other Electronic Component Manufacturing
3345-Navigational, Measuring, Electromedical, Control Instruments Manufacturing
3362-Motor Vehicle Body, Trailer Manufacturing
3363-Motor Vehicle Parts Manufacturing
3364-Aerospace Product, Parts Manufacturing
3371-Household, Institutional Furniture, Kitchen Cabinet Manufacturing
3372-Office Furniture (including Fixtures) Manufacturing
3391-Medical Equipment, Supplies Manufacturing
3399-Other Miscellaneous Manufacturing

Construction

For nearly two decades, construction was a major industry in south central Idaho as in the rest of the state. Marked by a large number of small employers, construction has only limited barriers to entry, and many young workers go into this sector while they are deciding on a long-range career course. While construction was a major economic engine during the expansion in the mid-2000s, activity came to an abrupt halt with the onset of the Great Recession. Unemployment in Lincoln and Blaine counties reached levels unseen since the 1981-1983 recession. The resort economy of Blaine County was a major construction driver, and it collapsed with the financial markets that forced second home owners, who make up a good share of Blaine County real estate activity, to pull back. Investment earnings to cover expenses were gone and so were the tourists who rented those second homes most of the year. Compounding the problem was the conclusion of major commercial projects to the south in Twin Falls County – a new regional hospital, a LEED-certified health science building at the College of Southern Idaho, a new high school, three new hotels and a new Walmart.

Seasonality. Construction is ruled by weather patterns. There are scheduling techniques that can be used to maintain some work through cold or wet conditions, but generally construction peaks in the third quarter during the favorable summer months and bottoms out during the winter quarter that begins each year.

Average Quarterly Construction Employment

2008-2009				
	First	Second	Third	Fourth
Region	3,915	5,325	5,496	5,185
Blaine	1,396	2,025	2,129	1,963
Camas	27	25	26	24
Cassia	377	498	478	428
Gooding	184	275	276	246
Jerome	318	365	413	412
Lincoln	106	159	171	284
Minidoka	297	342	365	344
Twin Falls	1,212	1,637	1,640	1,485

Exports. Construction provides comparatively good-paying jobs even if there is a seasonal component to the sector. But it is not an export sector. Even in the case of financing, most is handled locally.

Multiplier. Because of the higher wages, construction carriers a multiplier of 1.83, which means that for every 10 construction jobs, over eight more jobs are created in other areas of the economy. This is a moderate economic impact compared to some other sectors, but any growth in construction has a positive impact on the economy overall.

Wages and Benefits. Construction wages rank third among the sectors, depending on the county. The entry level wages are not desirable. But the training is often short term on the job or apprenticeships, and there are numerous opportunities when the economy is growing.

2008 Annual Average Wages, Employment in South Central Idaho Construction

Sector	Jobs	Wage
All Regional Jobs	82,718	$29,659
All Construction	6,169	$34,911
Residential Construction	1,266	$37,341
Nonresidential Construction	473	$37,005
Highway, Street, Bridge Construction	375	$32,687
All Other Heavy Construction	40	$32,152
Specialty Trade Contractors	3,781	$34,127

Location Quotient. In 2008, construction's location quotient was 1.34. That means the sector was a third more important to the Idaho economy than it was to the national economy. But much of the construction activity was centered on the resort economy of Blaine County.

Size and Growth Over Time. Construction grew rapidly over the past 15 years, responding to an expanding economy fueled by agriculture and manufacturing but also by a rising number of retirees moving into south central Idaho. The biggest growth spurt came during the first 10 years at an annualized rate of 4.5 percent. That compared to the five-year annualized rate of 3.9 percent and 2.3 percent a year from 2005 to 2008. Then the housing bubble burst and overall construction jobs plunged 25 percent in just a single year. Specialty trade contractors make up over half the work force and generally do not differentiate between commercial and residential, particularly in downturns when any work is better than none. It is clear that this sector has been the most impacted by the recession and will be the slowest to recover.

South Central Idaho Construction Jobs, 1993-2008

	Jobs				Percent Change From		
Sector	1993	1998	2003	2008	1993	1998	2003
All Jobs	56,713	66,908	73,901	82,718	45.9%	23.6%	11.9%
All Construction	3,104	4,201	4,951	6,169	98.8%	46.8%	24.6%
Residential Construction	688	828	1,124	1,266	84.0%	52.9%	12.6%
Nonresidential Construction	252	393	302	473	87.7%	20.4%	56.6%
Highway, Street, Bridge Construction	425	433	388	375	-11.8%	-13.4%	-3.4%
All Other Heavy Construction	63	86	45	40	-36.5%	-53.5%	-11.1%
Specialty Trade Contractors	1,464	2,208	2,833	3,781	158.3%	71.2%	33.5%

Need for Replacement Workers. The decline in construction jobs since the recession began will take a decade, possibly more, to make up even though the excess housing inventory is not as burdensome in south central Idaho as other parts of the state. But it is significant enough – combined with the recession putting the brakes on in-migration to the region or anywhere else for that matter – to slow any recovery in construction, which is also suffering from the tight

money policies banks have instituted. That dramatically curtails the need for replacement workers. The issue has been finding work for those idled by the slump. Manufacturing appears to be the winner, finding a new pool of workers who are good with their hands and competent at problem solving. Many of the skills are transferrable. The demand for rentals, maintenance workers and property managers will likely grow faster than originally projected as downgraded credit reports and tighter credit standards force one-time homeowners to become renters again. There is pent-up demand for national franchise retail stores and restaurants in Twin Falls, which draws from all eight counties in the region as well as northern Nevada – a pool of nearly a quarter of a million consumers. The emphasis on environmentally conscious – or green – jobs and energy efficiency fostered by tax credits should help construction recover, but it will still not be at the same rate as the rest of the economy.

2008 South Central Idaho Construction Jobs and 2018 Projections

Description	2008	2018	Median Wage	Education Level
All construction	8,115	8,228	$17.36	N/A
First-line supervisors/managers of construction trades, extraction workers	1,032	1,071	$19.97	Work experience
Brickmasons, blockmasons	125	126	$19.01	Long OJT training
Stonemasons	114	113	$15.33	Long OJT training
Carpenters	1,706	1,657	$18.74	Long OJT training
Carpet installers	40	40	$14.79	Moderate OJT training
Floor layers, except carpet, wood, hard tiles	32	33	$16.38	Moderate OJT training
Floor sanders, finishers	29	31	$16.50	Moderate OJT training
Tile, marble setters	46	47	$16.81	Long OJT training
Cement masons, concrete finishers	239	178	$15.34	Moderate OJT training
Terrazzo workers, finishers	10	11	$16.19	Long OJT training
Construction laborers	1,104	1,145	$14.07	Moderate OJT training
Paving, surfacing, tamping equipment operators	60	57	$14.34	Moderate OJT training
Pile-driver operators	27	29	$15.61	Moderate OJT training
Operating engineers, other construction equipment operators	443	436	$16.52	Moderate OJT training
Drywall, ceiling tile installers	116	103	$14.18	Moderate OJT training
Tapers	68	63	$18.03	Moderate OJT training
Electricians	629	704	$19.44	Long OJT training
Glaziers	51	46	$13.58	Long OJT training
Insulation workers, floor, ceiling, wall	52	44	$13.12	Moderate OJT training
Insulation workers, mechanical	11	12	$16.14	Moderate OJT training
Painters, construction, maintenance	557	570	$15.86	Moderate OJT training
Paperhangers	14	14	$16.49	Moderate OJT training
Pipelayers	118	122	$14.84	Moderate OJT training
Plumbers, pipefitters, steamfitters	410	447	$20.81	Long OJT training
Plasterers, stucco masons	82	70	$15.34	Long OJT training
Reinforcing iron, rebar workers	17	15	$16.96	Long OJT training
Roofers	130	133	$14.58	Moderate OJT training
Sheet metal workers	94	95	$15.85	Long OJT training
Structural iron, steel workers	52	47	$17.89	Long OJT training

Description	2008	2018	Median Wage	Education Level
Helpers, brickmasons, blockmasons, stonemasons, tile, marble setters	44	44	$13.74	Short OJT training
Helpers, carpenters	31	30	$12.15	Short OJT training
Helpers, electricians	18	22	$15.91	Short OJT training
Helpers, painters, paperhangers, plasterers, stucco masons	15	13	$10.16	Short OJT training
Helpers, pipelayers, plumbers, pipefitters, steamfitters	39	44	$10.27	Short OJT training
Helpers, roofers	20	17	$10.46	Short OJT training
Helpers, construction trades, all other	13	12	$12.00	Short OJT training
Construction, building inspectors	55	63	$18.44	Work experience
Fence erectors	24	24	$13.41	Moderate OJT training
Hazardous materials removal workers	21	20	$19.68	Moderate OJT training
Highway maintenance workers	200	216	$17.75	Moderate OJT training
Construction, related workers, all other	72	75	$26.52	Moderate OJT training

Energy

Energy is an amalgam of industries from half of the supersectors identified by the North American Industrial Classification System. It combines the obvious utilities sector with some manufacturing, finance, professional services, sales and transportation. Economic development professionals recognize its potential and have begun focusing on energy amid heightened concern about costs and the environment. South central Idaho has a foothold beyond the long-standing hydropower plants on the Snake River.

- Raft River in Cassia County has the only commercial geothermal generating plant, which has aggressive plans for expansion.
- Wind turbine farms are growing in Gooding County.
- A 150,000 solar panel farm is planned for Jerome County.
- Anaerobic digesters throughout the region are converting dairy waste to methane gas.

The dairy industry has been infatuated with converting waste to energy, especially in the last several years as it copes with low milk prices and public concern over the environmental impact of its operations. Dairymen are looking for every opportunity to cut costs or augment receipts. Biomass offers them one.

Industries Included in the Energy Sector

Crude Petroleum, Natural Gas Extraction
Natural Gas Liquid Extraction
Bituminous Coal, Lignite Surface Mining
Bituminous Coal Underground Mining
Anthracite Mining
Uranium-Radium-Vanadium Ore Mining

Industries Included in the Energy Sector
Drilling Oil, Gas Wells
Support Activities for Oil, Gas Operations
Support Activities for Coal Mining
Support Activities for Metal Mining
Hydroelectric Power Generation
Fossil Fuel Electric Power Generation
Nuclear Electric Power Generation
Other Electric Power Generation
Electric Bulk Power Transmission, Control
Electric Power Distribution
Natural Gas Distribution
Steam, Air-Conditioning Supply
Water, Sewer System Construction
Oil, Gas Pipeline Construction
Power, Communication System Construction
All Other Heavy Construction
Electrical Contractors
Plumbing, HVAC Contractors
Petroleum Refineries
All Other Petroleum, Coal Products Manufacturing
Petrochemical Manufacturing
Industrial Gas Manufacturing
Gum, Wood Chemical Manufacturing
Ethyl Alcohol Manufacturing
Power Boiler, Heat Exchanger Manufacturing
Metal Tank (Heavy Gauge) Manufacturing
Mining Machinery, Equipment Manufacturing
Oil, Gas Field Machinery, Equipment Manufacturing
Heating Equipment (except Warm Air Furnaces) Manufacturing
Turbine, Turbine Generator Set Units Manufacturing
Semiconductor, Related Device Manufacturing
Other Measuring, Controlling Device Manufacturing
Power, Distribution, Specialty Transformer Manufacturing
Motor, Generator Manufacturing
Switchgear, Switchboard Apparatus Manufacturing
Relay, Industrial Control Manufacturing
Storage Battery Manufacturing
Primary Battery Manufacturing
Other Communication, Energy Wire Manufacturing
Current-Carrying Wiring Device Manufacturing
Carbon, Graphite Product Manufacturing
All Other Miscellaneous Electrical Equipment, Component Manufacturing
Coal, Other Mineral, Ore Wholesalers
Electrical Apparatus, Equipment, Wiring Supplies, Construction Material Wholesalers
Other Electronic Parts, Equipment Wholesalers
Plumbing, Heating Equipment, Supplies (Hydronics) Wholesalers
Petroleum Bulk Stations, Terminals
Petroleum, Petroleum Products Wholesalers (except Bulk Stations, Terminals)
Gasoline Stations with Convenience Stores

Industries Included in the Energy Sector
Other Gasoline Stations
Heating Oil Dealers
Liquefied Petroleum Gas (Bottled Gas) Dealers
Other Fuel Dealers
Pipeline Transportation of Crude Oil
Pipeline Transportation of Natural Gas
Pipeline Transportation of Refined Petroleum Products
All Other Pipeline Transportation
Miscellaneous Intermediation
Miscellaneous Financial Investment Activities
Construction, Mining, Forestry Machinery, Equipment Rental, Leasing
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)
Engineering Services
Geophysical Surveying, Mapping Services
Testing Laboratories
Environmental Consulting Services
Other Scientific, Technical Consulting Services
Research, Development in the Physical, Engineering, Life Sciences
Research, Development in Biotechnology
Research, Development in Physical, Engineering, Life Sciences
Regulation, Administration of Communications, Electric, Gas, Other Utilities

Seasonality. There appears to be no identifiable seasonal trends for this sector. What might inhibit one segment from operating at a peak would not necessarily inhibit operations of other segments.

Exports. There is an opportunity for exporting energy, but at this point Idaho Power Co., the region's major utility, still imports power from its coal-fired plants in Montana, Oregon and Nevada and buys electricity on the open market to meet peak irrigation and air-conditioning demand.

Multiplier. Energy industries have a high multiplier of 3.27, indicating that for every 10 jobs created directly, nearly 23 more are generated in other parts of the economy.

Wages and Benefits. Energy wages are substantially higher than the average wage in south central Idaho and slightly higher than the average wage in manufacturing. Overall the wage range is significantly greater in energy than in other sectors.

Annual Average Wages, Employment in South Central Idaho Energy

Sector	Jobs	Wage
All Regional Jobs	82,718	$29,659
All Energy Jobs	3,938	$36,883
Hydroelectric Power Generation	35	$78,015
Fossil Fuel Electric Power Generation	11	$70,100
Electric Power Distribution	74	$54,829
Natural Gas Distribution	36	$59,993

Sector	Jobs	Wage
Water, Sewer System Construction	144	$29,703
Power, Communication System Construction	64	$40,386
All Other Heavy Construction	40	$32,152
Residential Electrical Contractors	393	$41,736
Nonresidential Electrical Contractors	193	$37,544
Residential Plumbing, HVAC Contractors	603	$37,686
Nonresidential Plumbing, HVAC Contractors	123	$35,332
Mining Machinery, Equipment Manufacturing	22	$27,724
Electrical Apparatus, Equipment, Wiring Supplies, Construction Material Wholesalers	75	$46,551
Other Electronic Parts, Equipment Wholesalers	30	$35,061
Plumbing, Heating Equipment, Supplies (Hydronics) Wholesalers	52	$34,731
Petroleum Bulk Stations, Terminals	32	$38,531
Petroleum, Petroleum Products Wholesalers (except Bulk Stations, Terminals)	34	$27,573
Gasoline Stations with Convenience Stores	1,120	$15,243
Other Gasoline Stations	95	$19,360
Heating Oil Dealers	29	$33,870
Liquefied Petroleum Gas (Bottled Gas) Dealers	22	$36,972
Other Fuel Dealers	2	$11,800
Miscellaneous Financial Investment Activities	8	$96,877
Engineering Services	452	$74,890
Testing Laboratories	71	$39,906
Environmental Consulting Services	8	$68,341
Other Scientific, Technical Consulting Services	40	$42,005
Research, Development in Biotechnology	17	$50,074
Research, Development in Physical, Engineering, Life Sciences	106	$49,663
Regulation, Administration of Communications, Electric, Gas, Other Utilities	10	$90,133

Location Quotient. Energy has a location quotient of just 0.68, indicating that jobs in this sector are a third less important to the local economy as they are to the national economy. But with the alternative energy resources in south central Idaho and the mounting concern over the environment and costs, the location quotient is likely to rise.

Size and Growth Over Time. As an emerging sector of the economy, energy jobs have increased faster than jobs overall in south central Idaho over the last 15 years. But much of this growth was fueled by the demand for housing, which has dropped off drastically. Energy has posted annual growth as high as 7.3 percent since 1993, but it was still outperformed by construction at 8.5 percent and agriculture at 8.8 percent. Growth over the next decade is projected at 21 percent. That rate may be tempered by the absence of a four-year university in the region. But the College of Southern Idaho recently initiated a wind and renewable energy program, and General Electric recently partnered with Exergy of Boise to complete construction of a wind farm in Hagerman. The region is recognizing the relationship between industry and knowledge – research and development being an example. The resulting diversity of occupations – on top of good wages – offers opportunities for young people to remain in the region and gives daring entrepreneurs the chance to succeed.

South Central Idaho Energy Jobs, 1993-2008

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
All Jobs	56,713	66,908	73,901	82,718	45.90%	23.60%	11.90%
All Energy Jobs	2,561	2,885	3,355	3,875	51.3%	34.3%	15.5%
Hydroelectric Power Generation	36	37	28	35	-3.3%	-6.3%	22.0%
Electric Bulk Power Transmission, Control	68	58	7	0	-100.0%	-100.0%	-100.0%
Electric Power Distribution	42	43	72	74	77.5%	71.7%	3.7%
Natural Gas Distribution	34	36	37	36	5.6%	0.2%	-2.5%
Water, Sewer System Construction	135	146	126	144	6.7%	-1.2%	14.6%
Power, Communication System Construction	33	67	104	64	92.8%	-4.3%	-38.2%
All Other Heavy Construction	63	86	45	40	-36.1%	-53.1%	-10.4%
Residential Electrical Contractors	190	282	325	393	106.8%	39.5%	20.7%
Nonresidential Electrical Contractors	88	122	169	193	118.1%	57.7%	14.2%
Residential Plumbing, HVAC Contractors	102	238	355	603	494.3%	153.5%	69.8%
Nonresidential Plumbing, HVAC Contractors	194	139	133	123	-36.4%	-11.6%	-7.7%
Electrical Apparatus, Equipment, Wiring Supplies, Construction Material Wholesalers	25	12	13	75	195.7%	522.1%	497.4%
Other Electronic Parts, Equipment Wholesalers	29	20	28	30	0.6%	50.6%	6.6%
Plumbing, Heating Equipment, Supplies (Hydronics) Wholesalers	63	71	66	52	-17.9%	-26.6%	-21.5%
Petroleum Bulk Stations, Terminals	34	33	32	32	-4.2%	-2.8%	2.1%
Petroleum, Petroleum Products Wholesalers (except Bulk Stations, Terminals)	46	48	56	34	-26.4%	-29.4%	-39.0%
Gasoline Stations with Convenience Stores	712	810	827	1,120	57.4%	38.3%	35.5%
Other Gasoline Stations	27	43	152	95	252.5%	119.5%	-37.6%
Heating Oil Dealers	25	33	30	29	16.8%	-11.7%	-2.0%
Liquefied Petroleum Gas (Bottled Gas) Dealers	55	32	29	22	-60.1%	-31.4%	-24.3%
Miscellaneous Intermediation	18	11	3	3	-81.7%	-70.0%	8.3%
Engineering Services	359	290	388	452	25.7%	55.7%	16.3%
Construction, Mining, Forestry Machinery, Equipment Rental, Leasing	6	8	23	0	-100.0%	-100.0%	-100.0%

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
Testing Laboratories	77	90	71	71	-7.5%	-21.1%	0.4%
Other Scientific, Technical Consulting Services	0	0	17	40	N/A	N/A	134.0%
Research, Development in the Physical, Engineering, Life Sciences	49	66	95	0	-100.0%	-100.0%	-100.0%
Research, Development in Physical, Engineering, Life Sciences	40	54	117	106	162.0%	94.5%	-9.9%
Regulation, Administration of Communications, Electric, Gas, Other Utilities	12	11	10	10	-15.2%	-11.4%	-2.5%

Need for Replacement Workers. Energy sector jobs do not generally come in large numbers like they often do in manufacturing, and that has resulted in less attention – both from the media and some community leaders. But this emerging sector has solid prospects in south central Idaho.

- Tax credits can motivate businesses in this area, and federal endorsement of energy – green – jobs expansion makes the sector attractive to investors.
- Energy sector wages are historically among the highest in the region.
- Solar and wind power have the potential of attracting suppliers, developing a sector chain that can have substantial impact on the regional economy overall. Relocating close to wind farms is becoming favored by manufacturers of the 200' turbine blades and the precast concrete towers. Solar panel manufacturers are also congregating in areas that are mapped as high in solar radiation. Locations close to transportation such as interstates and rail – both among the region's assets – are considered ideal.
- Energy development lends itself to multiple use of the land. Wind farms can graze livestock or grow crops.

Health Care

Health care in south central Idaho has gone through a period of consolidation. Short of that, larger providers have moved in to handle management services as smaller hospitals look to cut operating expenses. But as the population ages, demand for health care continues to grow. Providers have been working with the College of Southern Idaho to ensure there are sufficient training programs to maintain quality staffs at the health care facilities throughout the region. In some cases, providers have helped pay for equipment, simulation staff, space and teachers.

Seasonality. There is no seasonal component to health care.

Exports. Health care is almost exclusively consumed within the region by its residents so there is little if any attraction of new resources into the local economy.

Multiplier. Health care has a comparatively modest multiplier of 1.93, which means that for every 10 jobs generated directly in health care, another nine are created in other sectors of the economy.

Wages and Benefits. The current average wage for health care is just over $33,300, reflecting the relatively lower pay earned by the large staff supporting the higher paid physicians.

Annual Average Wages, Employment in South Central Idaho Health Care

Sector	Jobs	Wage
All Regional Jobs	82,718	$29,659
All Health Care	7,220	$33,312
Offices of Physicians	763	$64,167
Offices of Dentists	490	$32,911
Offices of Other Health Practitioners	382	$24,663
Outpatient Care Centers	140	$33,289
Medical, Diagnostic Laboratories	23	$37,945
Home Health Care Services	401	$18,228
Other Ambulatory Health Care Services	23	$36,115
General Medical, Surgical Hospitals	3,011	$37,896
Specialty (except Psychiatric, Substance Abuse) Hospitals	64	$23,130
Nursing Care Facilities	1,044	$21,167
Residential Mental Retardation, Mental Health, Substance Abuse Facilities	140	$16,623
Community Care Facilities for the Elderly	680	$16,566
Other Residential Care Facilities	59	$17,875

Location Quotient. Health care, like energy, has a low location quotient of 0.85, which means it is less important to the region's economy than to the national economy. Community leaders believe the opening of the new hospital in Twin Falls in 2011 will draw more physicians to the region, boosting the location quotient while alleviating travel for patients with serious health issues.

Size and Growth Over Time. South central Idaho has experienced the same explosive growth in health care that the state and the rest of the nation has. Average annualized growth over the last 15 years has been about 3.7 percent and significantly higher for the last three- and five-year periods. However, some of the most recent spike is reflects the designation of local government hospital personnel to private hospital staff with the sale of the Twin Falls County hospital to St. Luke's Health System. Still this level of growth should continue as the population ages.

South Central Idaho Health Care Jobs, 1993-2008

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
All Regional Jobs	56,713	66,908	73,901	82,718	45.9%	23.6%	11.9%
All Health Care	4,443	5,287	5,706	7,157	61.1%	35.4%	25.4%
Offices of Physicians	713	949	725	763	7.1%	-19.6%	5.3%
Offices of Dentists	283	386	474	490	73.4%	27.1%	3.4%
Offices of Other Health Practitioners	215	227	258	382	77.5%	68.1%	48.2%
Outpatient Care Centers	15	31	121	140	832.8%	356.3%	16.0%
Medical, Diagnostic Laboratories	47	49	42	23	-50.5%	-52.6%	-44.6%
Home Health Care Services	210	267	312	401	91.5%	50.6%	28.8%
Other Ambulatory Health Care Services	3	5	15	23	743.7%	373.7%	53.4%
General Medical, Surgical Hospitals	1,897	2,007	2,392	3,011	58.7%	50.0%	25.9%
Nursing Care Facilities	493	864	814	1,044	111.6%	20.8%	28.3%
Residential Mental Retardation, Mental Health, Substance Abuse Facilities	160	159	112	140	-12.5%	-11.7%	25.4%
Community Care Facilities for the Elderly	348	250	364	680	95.7%	172.3%	87.1%
Other Residential Care Facilities	59	94	79	59	-1.3%	-37.3%	-26.0%

Need for Replacement Workers. The health care work force in south central Idaho is aging. Forty-one percent of the work force is 45 or older. With the region's population aging relatively rapidly, the need for replacement and additional workers will be significant over the coming decade. Rural areas like south central Idaho find it difficult to recruit doctors, who tend to stay close to their residencies, and physicians are steering clear of general practice anyway because the money is not as lucrative as it is in specialties such as surgery, cardiac care and anesthesia. Spouses influence location from the perspective of lifestyle and professional opportunities for themselves. Training that relies more on extensive job shadowing for interested high school students and medical students and less classroom work could shift some student focus away from large cities. The lack of a residency program in the region inhibits recruiting. Studies show that many interns remain in the same area where they carried out their residency, and this has been the experience with the Family Practice Residency Programs in both Boise and Pocatello. Rural areas have experienced dismal results in recruiting and retaining physicians, especially the general practitioners who are needed most. Complicating the future is the implementation of health care reform and its impact on existing services, institutions, providers and patients.

2008 South Central Idaho Health Care Jobs and 2018 Projections

Description	2008	2018	Median Wage	Education Level
Health Care	6,287	8,233	$19.85	
Health care practitioners, technical occupations	3,624	4,831	$26.53	
Health care support occupations	2,663	3,402	$10.75	
Chiropractors	42	48	$22.43	Professional degree
Dentists, general	74	76	$60.41	Professional degree
Dietitians, nutritionists	31	40	$17.59	Bachelor's degree
Optometrists	32	42	$38.06	Professional degree

Description	2008	2018	Median Wage	Education Level
Pharmacists	123	162	$48.95	Professional degree
Physicians, surgeons	270	312	$62.54	Professional degree
Physician assistants	62	77	$36.57	Bachelor's degree
Podiatrists	19	26	$16.31	Professional degree
Registered nurses	1,165	1,729	$25.89	Associate degree
Occupational therapists	45	62	$25.11	Master's degree
Physical therapists	80	111	$30.07	Master's degree
Radiation therapists	17	26	$20.15	Associate degree
Recreational therapists	11	15	$14.55	Bachelor's degree
Respiratory therapists	50	79	$17.94	Associate degree
Speech-language pathologists	52	68	$23.69	Master's degree
Therapists, all other	43	60	$15.24	Bachelor's degree
Veterinarians	101	99	$31.00	Professional degree
Health diagnosing, treating practitioners, all other	46	62	$16.01	Bachelor's degree
Medical, clinical laboratory technologists	66	85	$26.58	Bachelor's degree
Medical, clinical laboratory technicians	24	30	$13.93	Associate degree
Dental hygienists	57	66	$24.63	Associate degree
Cardiovascular technologists, technicians	20	32	$19.18	Associate degree
Diagnostic medical sonographers	21	28	$22.84	Associate degree
Radiologic technologists, technicians	65	88	$23.32	Associate degree
Emergency medical technicians, paramedics	109	129	$14.18	Postsecondary vocational award
Dietetic technicians	40	54	$9.79	Moderate-term OJT
Pharmacy technicians	147	210	$12.09	Moderate-term OJT
Psychiatric technicians	14	19	$11.29	Moderate-term OJT
Respiratory therapy technicians	18	24	$16.26	Associate degree
Surgical technologists	55	84	$15.74	Postsecondary vocational award
Veterinary technologists, technicians	70	58	$12.25	Associate degree
Licensed practical, licensed vocational nurses	409	518	$16.40	Postsecondary vocational award
Medical records, health information technicians	110	140	$14.28	Associate degree
Opticians, dispensing	20	21	$8.84	Long-term OJT
Health care technologists, technicians, all other	10	13	$14.43	Postsecondary vocational award
Occupational health, safety specialists	14	17	$21.86	Bachelor's degree
Athletic trainers	11	17	$21.27	Bachelor's degree
Health care practitioners, technical workers, all other	30	40	$24.60	Postsecondary vocational award
Home health aides	686	930	$8.72	Short-term OJT
Nursing aides, orderlies, attendants	1,124	1,473	$10.58	Postsecondary vocational award

Description	2008	2018	Median Wage	Education Level
Psychiatric aides	60	81	$9.51	Short-term OJT
Physical therapist assistants	25	34	$21.20	Associate degree
Physical therapist aides	31	44	$9.75	Short-term OJT
Massage therapists	75	87	$13.89	Postsecondary vocational award
Dental assistants	230	265	$13.06	Moderate-term OJT
Medical assistants	154	170	$12.45	Moderate-term OJT
Medical equipment preparers	33	45	$11.43	Short-term OJT
Medical transcriptionists	96	106	$14.73	Postsecondary vocational award
Pharmacy aides	20	21	$8.52	Short-term OJT
Veterinary assistants, laboratory animal caretakers	59	49	$8.85	Short-term OJT
Health care support workers, all other	58	79	$11.91	Short-term OJT

Tourism

Tourism, like energy, is not a recognized industry sector but an amalgam of industries from various sectors focused on leisure and hospitality. It has experienced average growth over the past 15 years – about 2.3 percent a year – although there has been a surge in the last three despite the onset of the recession to boost the average annual rate to 3.7 percent over that brief period, fueled by hotel and other construction. Tourism is a mainstay for Blaine County especially with the nationally recognized destination of Sun Valley ski resort that has moved toward year-round operation as a conference locale.

Seasonality. Average tourism employment spikes in the second and third quarters – the spring and summer – in Twin Falls County, the region's largest county – and during the first, or winter, quarter in Blaine County, the home of the Sun Valley ski resort. The second smallest county in the state, Camas, also shows a tourism impact in winter with the Soldier Mountain ski area, running counter to the typical summer tourism. Sector employment is just under 9 percent of the regional total.

Average Quarterly Tourism Employment

2008-2009 averages				
	First	Second	Third	Fourth
Blaine	3,200	2,674	3,101	2,712
Camas	72	44	39	35
Cassia	541	542	504	487
Gooding	270	298	294	278
Jerome	399	487	527	476
Lincoln	42	51	52	42
Minidoka	476	529	548	503
Twin Falls	2,580	2,909	2,939	2,690
Region	7,579	7,532	8,003	7,223

Exports. Because tourism draws people from outside the region, it adds to the region's economy in the same way, but not to as great an extent comparatively, as manufacturing.

Multiplier. The multiplier for tourism is 1.81, meaning that for every 10 jobs directly created in tourism, another eight are created in other sectors of the economy. Beyond that specific number, tourism businesses provide at least some of the support to other businesses not directly aligned such as grocery and convenience stores. In areas where vacation homes are popular like Sun Valley, a wide range of businesses get some additional support because of tourism.

Wages and Benefits. Tourism is one of the lowest-paying sectors of the economy, reflecting the part-time nature of the labor force where many rely on tips to augment their minimum-wage or slightly higher paychecks. Using entertainment, recreation, hotels, bars and restaurants as representative of the sector, the average wage in 2008 was just under $15,000, the lowest by at least $5,000 a year of any of the region's major economic sectors. In her 2001 book "Nickel and Dimed: On (Not) Getting By in America," Barbara Ehrenreich wrote about the contribution these workers make to society by not requiring sufficient income to live on. Ehrenreich called them the greatest philanthropists in our society for in effect lowering their standard of living to raise that of others.

Annual Average Wages, Employment in South Central Idaho Tourism

Sector	Jobs	Wage
All South Central	82,718	$29,659
Leisure, Hospitality	7,822	$14,928
Arts, Entertainment, Recreation	906	$19,698
Accommodation, Food Services	6,915	$14,303
Performing Arts Companies	45	$48,598
Spectator Sports	42	$15,044
Promoters of Performing Arts, Sports, Similar Events	25	$49,435
Independent Artists, Writers, Performers	29	$33,625
Museums, Historical Sites, Similar Institutions	24	$27,768
Amusement Parks, Arcades	6	$20,912
Other Amusement, Recreation Industries	732	$15,816
Traveler Accommodation	1,800	$20,696
RV Parks, Recreational Camps	18	$9,148
Full-Service Restaurants	2,540	$13,896
Limited-Service Eating Places	2,236	$10,022
Special Food Services	75	$14,281
Drinking Places (Alcoholic Beverages)	244	$10,656

Location Quotient. The location quotient is 0.92, which makes tourism about as important to south central Idaho as it is to the national economy.

Size and Growth Over Time. While tourism is the lifeblood of Blaine County, the northernmost county in the region, it has taken a backseat to other sectors of the economy over the past two decades. Growth has been below the overall south central Idaho economy although there has been a surge recently with the addition of six new hotels and the Church of Jesus Christ of Latter-day Saints' Temple in Twin Falls.

South Central Idaho Tourism Jobs, 1993-2008

	Jobs				Percent Change From		
Sector	**1993**	**1998**	**2003**	**2008**	**1993**	**1998**	**2003**
All South Central	56,713	66,908	73,901	82,718	45.9%	23.6%	11.9%
Leisure, Hospitality	5,934	7,155	7,309	7,822	31.8%	9.3%	7.0%
Arts, Entertainment, Recreation	517	713	875	906	75.5%	27.1%	3.6%
Accommodation, Food Services	5,418	6,442	6,434	6,915	27.6%	7.3%	7.5%
Performing Arts Companies	9	10	18	45	408.6%	352.5%	141.6%
Spectator Sports	9	20	52	42	362.7%	113.9%	-18.4%
Promoters of Performing Arts, Sports, Similar Events	11	9	23	25	134.6%	175.9%	8.8%
Independent Artists, Writers, Performers	13	20	23	29	133.1%	44.3%	25.3%
Museums, Historical Sites, Similar Institutions	11	22	25	24	127.6%	7.4%	-2.0%
Amusement Parks, Arcades	17	14	14	6	-64.3%	-58.5%	-56.4%
Other Amusement, Recreation Industries	448	617	719	732	63.3%	18.5%	1.8%
Traveler Accommodation	1,673	1,707	1,502	1,800	7.5%	5.4%	19.8%
RV Parks, Recreational Camps	4	35	30	18	309.4%	-48.1%	-40.4%
Full-Service Restaurants	2,756	2,819	2,520	2,540	-7.8%	-9.9%	0.8%
Limited-Service Eating Places	750	1,608	2,065	2,236	198.0%	39.1%	8.3%
Special Food Services	3	17	45	75	2718.8%	344.3%	66.1%
Drinking Places (Alcoholic Beverages)	229	257	271	244	6.2%	-5.3%	-10.3%

Need for Replacement Workers. Leisure and hospitality has the youngest work force of any sector. Only 22 percent of the workers in accommodations and food service, by far the largest component, are 45 or older so replacement workers are not a major concern. A labor pool sufficient for anticipated expansion is a consideration. The new airport being contemplated for Blaine County could bring additional airlines to the region, which would increase demand for tourist services. The pace of the economic recovery will determine when the developers break ground on several hotels well into the planning stages in the Ketchum area. The region's seven other counties are pursing tourism with recreational opportunities enhanced by new businesses like the Duck Tour amphibious vehicle tours of the Snake River canyon and historical sites. Only slow growth is anticipated over the next decade – about 3 percent unless the proposed hotel developments actually materialize.

Selected South Central Idaho Sector, 1991-2008

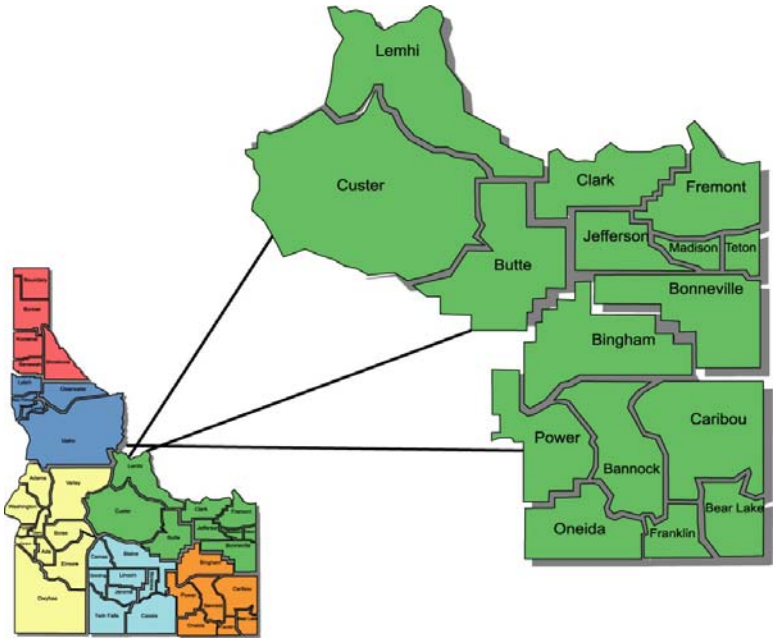
	Energy	Manufacturing	Construction	Agriculture	Tourism	Health Care
			Average Employment			
1991	6,956	8,694	2,852	4,125	5,619	4,355
1992	7,088	8,141	2,818	4,300	5,744	4,614
1993	7,453	8,141	3,104	4,671	5,934	4,884
1994	8,169	7,986	3,641	5,044	6,419	5,083
1995	8,972	7,849	4,177	5,380	7,042	5,319
1996	9,273	7,901	4,249	5,694	7,159	5,645
1997	9,163	7,900	4,166	6,009	7,207	5,778
1998	9,295	7,836	4,201	6,216	7,155	5,931
			Average Employment			
1999	9,844	8,033	4,537	6,512	7,116	6,188
2000	10,133	8,272	4,752	6,785	7,246	6,323
2001	10,319	8,042	4,809	6,873	7,298	6,464
2002	10,161	8,131	4,979	7,310	7,358	6,494
2003	10,206	7,390	4,951	7,690	7,308	6,762
2004	10,530	7,218	5,047	7,785	7,169	6,937
2005	11,323	7,501	5,604	8,019	7,462	7,319
2006	12,297	7,815	6,208	8,588	7,552	7,838
2007	13,140	8,053	6,371	9,020	7,638	8,182
2008	13,075	8,208	6,169	9,195	7,822	8,474
			Total Wages			
1991	$151,563,092	$187,381,252	$56,452,168	$63,608,663	$45,682,993	$84,417,437
1992	$158,525,381	$174,491,476	$57,044,443	$68,142,849	$48,592,819	$92,595,079
1993	$170,434,060	$178,223,899	$64,471,090	$74,195,728	$51,765,244	$99,048,687
1994	$193,298,843	$190,300,171	$78,423,236	$82,561,427	$57,842,757	$105,497,584
1995	$219,506,612	$190,128,479	$94,097,642	$88,408,979	$62,767,905	$112,753,745
1996	$228,220,138	$192,005,818	$97,277,154	$99,696,062	$67,111,428	$125,166,956
1997	$229,198,411	$202,348,243	$95,645,106	$106,973,071	$69,976,922	$133,719,965
1998	$244,245,764	$211,597,030	$102,400,751	$112,996,654	$73,281,745	$139,446,672
1999	$266,738,481	$219,207,178	$115,788,581	$120,955,097	$91,139,727	$146,910,391
2000	$292,220,712	$229,192,841	$129,520,274	$134,981,816	$102,592,784	$157,183,835
2001	$304,153,905	$233,978,877	$134,439,712	$140,454,943	$93,777,582	$171,305,493
2002	$311,272,659	$240,124,211	$144,185,980	$151,951,934	$126,764,956	$175,149,577
2003	$312,800,184	$226,450,382	$140,086,601	$162,986,247	$98,852,619	$183,264,895
2004	$337,808,759	$235,008,416	$150,986,395	$174,970,779	$93,516,304	$190,358,917
2005	$374,578,929	$250,121,997	$171,296,328	$185,194,681	$94,808,022	$202,259,813
2006	$419,272,713	$281,703,610	$193,410,255	$203,536,169	$102,630,141	$221,945,174
2007	$467,878,598	$287,540,006	$210,564,445	$229,001,858	$109,411,937	$243,225,662
2008	$488,211,094	$295,594,014	$215,379,069	$251,145,037	$116,763,783	$262,506,108
			Employers			
1991	1,032	223	579	342	395	329
1992	1,077	205	607	370	399	344
1993	1,125	210	645	387	405	355
1994	1,206	211	722	415	440	363
1995	1,290	202	779	443	468	386
1996	1,352	209	822	463	489	391

	Energy	Manufacturing	Construction	Agriculture	Tourism	Health Care
			Employers			
1997	1,408	214	859	505	509	415
1998	1,455	212	900	547	507	441
1999	1,472	217	912	582	507	458
2000	1,494	227	920	594	504	491
2001	1,352	209	822	463	489	391
2002	1,408	214	859	505	509	415
2003	1,455	212	900	547	507	441
2004	1,472	217	912	582	507	458
2005	1,494	227	920	594	504	491
2006	1,791	265	1,124	618	523	569
2007	1,892	272	1,185	647	519	575
2008	1,926	279	1,204	656	522	589
			Average Employment			
1-yr Chg	-0.5%	1.9%	-5.9%	1.9%	8.9%	3.6%
5-yr Chg	28.1%	11.1%	21.1%	19.6%	13.8%	25.3%
10-yr Chg	40.7%	4.7%	42.7%	47.9%	16.2%	42.9%
15-yr Chg	75.4%	0.8%	93.1%	96.1%	40.1%	73.5%
			Total Wages			
1-yr Chg	4.3%	2.8%	2.3%	7.9%	2.6%	7.9%
5-yr Chg	56.1%	30.5%	55.1%	89.8%	29.3%	43.2%
10-yr Chg	99.9%	39.7%	113.2%	144.5%	39.3%	88.2%
15-yr Chg	186.5%	65.9%	241.9%	255.0%	65.9%	165.0%
			Employers			
1-yr Chg	1.8%	2.6%	1.6%	1.4%	0.6%	2.4%
5-yr Chg	19.8%	14.8%	19.6%	12.1%	-3.5%	17.3%
10-yr Chg	32.4%	31.6%	33.8%	19.9%	3.0%	33.6%
15-yr Chg	71.2%	32.9%	86.7%	69.5%	28.9%	65.9%

Indicators for Selected South Central Idaho Industries

	2009 LQ	Average Wage	Growth 2009-19	Sales (000)	State Multiplier	% of Workers Over 44
Crop, Animal Production	6.06	$27,313	15.20%	$1,832,343	2.41	37.00%
Tourism	0.92	$14,040	3.00%	$465,412	1.81	23.20%
Construction	1.34	$35,083	20.80%	$786,426	2.83	36.60%
Manufacturing	2.22	$36,013	20.90%	$2,759,882	3.92	45.30%
Food Processing	5.06	$36,899	17.40%	$2,074,100	5.61	N/A
Energy/Power Generation, Supply	0.62	$37,339	21.00%	$164,374	3.27	65.20%
Health Care	0.85	$30,978	29.60%	$700,969	1.93	40.90%

Eastern Idaho



Overview

The largest sectors of the regional economy in 2008 were professional and business services with 20,700 jobs, private education at 14,600, health care and social assistance at 13,900, leisure and hospitality at 13,300 and construction at 10,100.

Total payroll employment grew 37 percent between 1993 and 2008. The sectors with faster growth were transportation and warehousing at 124 percent, health care and social assistance at 96 percent, construction at 92 percent, information at 86 percent, professional and business services at 65 percent, financial activities at 44 percent, and leisure and hospitality at 42 percent.

The sectors with the highest job multipliers are mining with 3.86; agriculture, forestry, fishing and hunting with 3.72; manufacturing with 3.7; utilities with 3.03; construction with 2.8 and professional and business services with 2.24.

The three sectors that experienced fast job growth had relatively high wages and significant multipliers were professional and business services, financial services and construction. Unfortunately, construction has declined considerably since 2008 and is unlikely to return to pre-recession levels for a decade or more. Financial services will likely see increased employment demand as more baby boomers enter retirement and seek personal finance advice and planning. Professional and business services' largest and highest-paying components are in high technology.

Four other sectors offer growth prospects for eastern Idaho – transportation and warehousing, health care, high technology and energy.

Eastern Idaho Jobs by Economic Sector, 2008

	Total	Chg From 1993	Loc. Quot.	Wage	Multiplier
Total Regional Jobs	145,745	37.2%	N/A	$32,333	N/A
Agriculture, Forestry, Fishing	4,453	-3.9%	3.58	$26,653	3.72
Mining	952	13.3%	1.25	$59,123	3.86
Construction	10,063	91.9%	1.31	$33,400	2.83
Manufacturing	11,839	-10.5%	0.83	$41,291	3.7
Wholesale Trade	8,114	17.4%	1.28	$36,420	2.21
Transportation, Warehousing	3,731	124.3%	0.78	$29,428	1.89
Utilities	478	-6.8%	0.8	$60,747	3.03
Financial Activities	5,747	44.3%	0.66	$34,948	1.97
Professional, Business Services	20,712	64.6%	1.1	$47,495	2.24
Information	2,641	86.3%	0.83	$31,657	1.98
Education	14,559	26.0%	3.56	$30,559	1.51
Health Care, Social Assistance	13,886	96.4%	0.98	$30,634	1.93
Leisure, Hospitality	13,269	42.1%	0.93	$11,336	1.81
Other Services	3,510	22.3%	0.6	$22,935	1.3

Source: EMSI

Transportation and Warehousing

Seasonality. Transportation and warehousing has a marked, but not extreme, seasonal pattern.

Exports. This sector is not a primary exporter, but it is vital to the core exporting economy. These businesses handle and move the goods of other sectors that drive the regional economy. Improving services to this sector could make it stronger and more cost-effective, which could allow core industries to increase their exports.

Multiplier. Transportation and warehousing has a relatively low multiplier of 1.89 in Idaho, which means that for every 10 jobs created in the sector 8.9 jobs are created in the rest of the economy. It does not have the same potential to create jobs as many other sectors, which pay higher wages or have more local suppliers.

Average Annual 2008 Wage in Transportation

All Sectors of Eastern Idaho	$32,333
Transportation, Warehousing	$29,428
Air Transportation	$32,494
Truck Transportation	$34,373
Ground Passenger Transportation	$14,840
Pipeline Transportation	$88,371
Scenic, Sightseeing Transportation	$25,922
Support Activities for Transportation	$21,568
Couriers, Messengers	$28,530
Warehousing, Storage	$25,035

Wages and Benefits. This sector pays wages below the average wage for all sectors in eastern Idaho. While many of the jobs offer health care and retirement benefits, many do not.

Location Quotient. While transportation and warehousing jobs made up 2.56 percent of all jobs in eastern Idaho in 2008, they accounted for 3.29 percent of all jobs in the U.S. So the location quotient for the sector was 0.78, indicating that in eastern Idaho this industry exhibits a slightly lower demand for labor compared to the U.S. average. A higher concentration of rail transportation employment would contribute to decreased demand for labor in other more labor intensive transportation areas. In 2008 eastern Idaho rail transportation in has a location quotient of 3.03, according to Economic Modeling Specialists Inc.

Size and Growth Over Time. Transportation and warehousing jobs grew 124 percent — nearly twice as fast as jobs in all sectors in eastern Idaho between 1993 and 2008. This does not include railroad jobs, which are not covered by the unemployment insurance program. Railroad jobs play a significant role in the Pocatello area at just over 600. There are about 850 railroad jobs in eastern Idaho.

Eastern Idaho Transportation, Warehousing Employers, Jobs, 1993-2008

	1993		1998		2003		2008		Growth '93-'08	
Sectors	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**
Total Eastern Idaho	186	1,664	265	2,376	355	2,914	417	3,731	124%	124%
Air	12	112	10	90	8	92	10	105	-15%	-6%
Truck	109	916	176	1,449	250	1,693	293	2,014	170%	120%
Ground Passenger	15	141	17	173	20	252	30	534	100%	279%
Pipeline	3	29	2	25	2	26	2	30	-20%	3%
Scenic, Sightseeing	5	4	1	1	6	55	1	48	-81%	1139%
Support Activities	21	111	30	179	31	173	41	246	96%	122%
Couriers, Messengers	14	232	16	305	21	271	19	352	38%	51%
Warehousing, Storage	7	116	11	149	16	347	17	396	143%	243%

Need for Replacement Workers. Workers 55 and older hold 16.6 percent of the jobs in eastern Idaho but 24.1 percent of employment in transportation and warehousing. Replacement needs, therefore, are likely to be high over the next few years. Younger drivers will especially be needed for physically demanding over-the-road routes, which require greater stamina than local driving jobs that allow drivers to return home nightly.

Economic Modeling Specialists Inc. projects that transportation and warehousing employment in eastern Idaho will grow 10 percent between 2008 and 2018, and all sectors will grow 17 percent. This projection is not alone in its optimistic assessment of the transportation sector. The American Trucking Association, the industry's primary organization, predicts serious shortages of truck drivers across the United States in the years to come. Transportation is the lifeblood of the area in many respects. Eastern Idaho outside Idaho Falls and Pocatello is rural

but generally close to state highways or federal interstates. Both metro areas have major roadways running through them for easy access by many companies moving goods and services through and out of the region. The railroad has always been heavily used for shipping agricultural commodities. The steady population growth of the past is expected to continue, creating new opportunities for charter bus and passenger transportation services and the need to move goods for wholesalers, manufacturers and retailers. The Yellowstone Business Partnership has a grant to integrate the various modes of transportation in southeastern Idaho, which will carry into counties to the north and Wyoming. With the economy finally pulling out of the recession, transportation will ramp up.

The 50 most common occupations in this sector and their projected growth in the industry, according to Economic Modeling Specialists Inc. are:

Occupation	Employment		Percent	2008 Hourly
	2008	2018	Change	Earnings
Truck drivers, heavy, tractor-trailer	1,814	2,041	13%	$15.75
Truck drivers, light or delivery services	489	592	21%	$13.07
Driver/sales workers	341	421	23%	$15.30
Postal service mail carriers	334	385	15%	$22.80
Laborers, freight, stock, material movers	321	338	5%	$9.37
Couriers, messengers	214	256	20%	$8.18
Postal service mail sorters, processing operators	150	161	7%	$20.26
Office clerks, general	148	145	-2%	$10.77
Bus drivers, transit, intercity	136	189	39%	$9.25
Managers, all other	132	163	23%	$18.97
Taxi drivers, chauffeurs	132	183	39%	$8.30
Bus, truck mechanics, diesel engine specialists	121	130	7%	$17.60
First-line supervisors, transportation, material-moving	121	126	4%	$20.96
Bus drivers, school	121	165	36%	$12.84
Industrial truck, tractor operators	104	114	10%	$13.16
Dispatchers, except police, fire, ambulance	103	100	-3%	$13.20
Postal service clerks	100	116	16%	$21.99
Customer service representatives	89	102	15%	$10.60
General, operations managers	85	85	0%	$26.70
Transportation, storage, distribution managers	72	80	11%	$24.48
First-line supervisors, mechanics, installers, repairers	72	50	-31%	$21.79
Airline pilots, copilots, flight engineers	71	82	15%	$52.88
Postmasters, mail superintendents	62	71	15%	$23.97
Railroad conductors, yardmasters	62	49	-21%	$20.96
First-line supervisors, office, administrative support	52	56	8%	$16.87
Cargo, freight agents	50	40	-20%	$16.76
Bookkeeping, accounting, auditing clerks	49	56	14%	$11.68
Machinists	48	28	-42%	$16.39
Refuse, recyclable material collectors	48	47	-2%	$13.59
Maintenance, repair workers, general	47	43	-9%	$14.45
Sales representatives, services, all other	43	52	21%	$16.05
Chief executives	41	53	29%	$21.47
Locomotive engineers, operators	40	30	-25%	$19.60
Welders, cutters, solderers, brazers	39	24	-38%	$14.30

Occupation	Employment		Percent	2008 Hourly
	2008	2018	Change	Earnings
Business operation specialists, all other	33	31	-6%	$24.75
Tour guides, escorts	33	55	67%	$12.11
Railroad brake, signal, switch operators	33	21	-36%	$19.18
Stock clerks, order fillers	30	35	17%	$9.43
Packers, packagers, hand	29	27	-7%	$8.49
Shipping, receiving, traffic clerks	28	33	18%	$11.92
Computer programmers	27	13	-52%	$18.62
Executive secretaries, administrative assistants	27	27	0%	$13.95
Aircraft mechanics, service technicians	27	26	-4%	$16.28
Secretaries, except legal, medical, executive	25	26	4%	$13.27
Commercial pilots	25	24	-4%	$25.35
Billing, posting clerks, machine operators	21	20	-5%	$12.34
First-line supervisors, construction trades	21	12	-43%	$18.54
Sheet metal workers	20	11	-45%	$16.79
Airfield operations specialists	20	24	20%	$17.52

Between 2005 and 2009, transportation and warehousing employers in the sector listed an average of 414 job openings per year with the Idaho Department of Labor offices in Blackfoot, Idaho Falls, Pocatello, Rexburg, Salmon and Soda Springs. The sector had 3.1 percent of the area job openings listed with the six local offices.

Transportation, Warehousing Subsectors With the Highest Growth Potential

Sector	Jobs 2003	Jobs 2008	Growth 03-'08	Earnings	Location Quotient
Transportation, Warehousing Overall	5,680	7,037	24%	$49,458	1.04
Charter Bus Industry	86	188	119%	$15,000-$33,000	3.3
Other Ground Passenger Transportation	<10	156	N/A*	*$23,000-$31,000*	N/A*
Pipeline Transportation of Natural Gas	14	52	271%	$75,000-$113,000	3.54

*N/A indicates the growth and location quotient cannot be calculated because the number of jobs in 2003 was minimal.

Health Care and Social Services

Seasonality. Health care and social assistance employment has no significant seasonal pattern.

Exports. This sector primarily serves the local population, keeping its economic activity within the region.

Multiplier. Health care and social assistance has a relatively low jobs multiplier of 1.93 in Idaho, which means that for every 10 jobs created in health care and social assistance another 9.3 jobs are created in the rest of the economy. It does not have the same potential to create jobs as many other sectors, which pay higher wages nor have more local suppliers.

Wages and Benefits. Wages in the health care sector are a little lower than the average wage for the entire eastern Idaho economy. Large employers in this industry generally offer health care and retirement benefits.

Average Annual 2008 Wage in Health Care and Social Assistance

All Sectors of Eastern Idaho	$32,333
Health Care, Social Assistance	$30,635
Offices of Physicians	$58,955
Offices of Dentists	$32,195
Offices of Other Health Practitioners	$23,387
Outpatient Care Centers	$34,519
Medical, Diagnostic Laboratories	$47,562
Home Health Care Services	$19,748
Other Ambulatory Health Care Services	$26,520
General Medical, Surgical Hospitals	$41,956
Psychiatric, Substance Abuse Hospitals	$21,521
Specialty Hospitals	$24,007
Nursing Care Facilities	$19,103
Other Residential Facilities	$17,697
Community Care Facilities for the Elderly	$16,614
Other Residential Care Facilities	$12,868
Individual, Family Services	$17,452
Community Food, Housing, Emergency Services	$13,386
Vocational Rehabilitation Services	$15,667
Child Day Care Services	$12,250

Location Quotient. Health care and social assistance is one of the largest sectors in both eastern Idaho and the nation. But while jobs in this sector made up 9.53 percent of all jobs in eastern Idaho in 2008, the sector accounted for 9.71 percent of all jobs in the U.S. The location quotient is 0.98, indicating that compared to the rest of the United States, eastern Idaho has roughly the same demand for health care jobs.

Size and Growth Over Time. Health care jobs nearly doubled between 1993 and 2008 — growing 96 percent, more than twice as fast as jobs in all sectors, which were up 37 percent.

Eastern Idaho Health Care, Social Assistance Employers and Jobs, 1993-2008

	1993		1998		2003		2008		Growth '93-'08	
Sectors	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**
Health Care, Social Assistance	598	7,069	755	8,872	906	10,797	1,101	13,886	84%	96%
Offices of Physicians	201	1,322	225	1,627	248	2,043	266	2,238	32%	69%
Offices of Dentists	116	841	131	1,057	143	1,198	167	1,362	44%	62%
Other Health Practitioners	90	367	116	507	159	702	230	926	155%	152%
Outpatient Care Centers	6	77	15	143	27	476	36	903	472%	1066%
Medical, Diagnostic Laboratories	11	57	15	92	16	82	13	48	18%	-17%

	1993		1998		2003		2008		Growth '93-'08	
Sectors	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**
Home Health Care Services	5	335	23	388	30	666	44	1,002	780%	199%
General Medical, Surgical Hospitals	4	1,826	4	1,898	4	1,497	10	1,918	144%	5%
Psychiatric, Substance Abuse Hospitals	1	95	5	81	5	120	4	93	300%	-2%
Nursing Care Facilities	9	723	8	656	11	679	16	988	80%	37%
Other Residential Facilities	26	229	25	473	26	591	25	499	-2%	118%
Elderly Com-munity Care	7	231	15	372	17	547	26	673	252%	192%
Other Residential Care Facilities	2	12	4	47	9	111	10	230	388%	1756%
Individual, Family Services	45	239	67	627	94	1,030	129	1,634	187%	583%
Community Food, Relief Services	22	126	26	129	27	130	25	103	10%	-19%
Vocational-Rehab-ilitation Services	9	272	14	323	15	410	19	519	111%	91%
Child Day Care	37	295	56	411	68	459	69	518	86%	76%

Need for Replacement Workers. While workers 55 and older hold 16.6 percent of the jobs in eastern Idaho, they account for 15.3 percent of employment in health care and social assistance. The need for workers to handle turnover through retirements, therefore, is likely to be moderate over the next few years. However, replacing experienced nurses, many of whom are in their 50s and 60s, poses a challenge.

Economic Modeling Specialists Inc. projects that health care and social assistance employment in eastern Idaho will grow 45 percent between 2008 and 2018 compared to 17 percent for all jobs. The growth is driven by Pocatello and Idaho Falls as health care for people within a 200-mile radius of each. The population is also aging, increasing the need for health care and living assistance facilities. Even rural areas are expanding their hospital and clinical services and social assistance facilities to deal with steady population growth.

Of the 10 industries expected to grow fastest in the United States between 2008 and 2018, four are in the health care and social assistance sector. They include physician offices, home health care, services for the elderly and disabled and nursing care facilities.

Eastern Idaho's population is projected to grow 11 percent from 358,222 in 2008 to 396,591 in 2018. The U.S. Bureau of Labor Statistic projects U.S. employment in health care and social assistance will increase 25 percent between 2008 and 2018 while it expects the U.S. population to grow 8 percent. Since its population is projected to grow faster than the nation, eastern Idaho is likely to have even faster growth in health care and social assistance jobs. Eastern

Idaho's population 65 and older is projected to grow by 37 percent from 37,853 in 2008 to 51,988 in 2018.

The 50 most common occupations in this sector and their projected growth in the industry, according to Economic Modeling Specialists Inc. are:

Occupation	Employment		Percent	2008 Hourly
	2008	2018	Change	Earnings
Child care workers	1,495	1,673	12%	$7.42
Registered nurses	1,105	1,683	52%	$25.84
Nursing aides, orderlies, attendants	986	1,527	55%	$9.92
Personal, home care aides	912	1,532	68%	$7.76
Physicians, surgeons	666	875	31%	$58.03
Home health aides	622	1,035	66%	$9.85
Licensed practical, licensed vocational nurses	612	895	46%	$16.38
Office clerks, general	548	806	47%	$10.77
Dental assistants	482	680	41%	$13.64
Rehabilitation counselors	404	661	64%	$13.11
Receptionists, information clerks	337	483	43%	$10.31
Dental hygienists	309	439	42%	$30.04
Social, human service assistants	263	489	86%	$10.48
Maids, housekeeping cleaners	257	381	48%	$7.54
Medical, health services managers	249	362	45%	$25.11
First-line supervisors, office administrative support	243	327	35%	$16.87
Preschool teachers, except special education	240	312	30%	$8.25
Mental health counselors	231	368	59%	$21.31
Billing, posting clerks, machine operators	228	300	32%	$12.34
Medical secretaries	217	293	35%	$11.79
Teacher assistants	207	303	46%	$13.00
Physical therapists	199	293	47%	$28.04
Clinical, counseling, school psychologists	185	270	46%	$21.93
Medical assistants	165	256	55%	$11.32
General, operations managers	162	226	40%	$26.70
Substance abuse, behavioral disorder counselors	162	259	60%	$16.39
Dentists, general	157	185	18%	$55.21
Child, family, school social workers	155	254	64%	$16.60
Executive secretaries, administrative assistants	153	227	48%	$13.95
Secretaries, except legal, medical, executive	143	184	29%	$13.27
Bookkeeping, accounting, auditing clerks	137	200	46%	$11.68
Mental health, substance abuse social workers	131	206	57%	$15.83
Janitors, cleaners	131	201	53%	$10.64
Medical, public health social workers	126	207	64%	$19.85
Community, social service specialists, all other	124	221	78%	$20.83

Occupation	Employment		Percent	2008 Hourly
	2008	2018	Change	Earnings
Psychologists, all other	104	143	38%	$18.58
Psychiatric aides	124	175	41%	$9.76
Medical transcriptionists	114	151	32%	$13.65
Emergency medical technicians, paramedics	103	133	29%	$13.14
Industrial-organizational psychologists	101	138	37%	$17.20
Physician assistants	101	151	50%	$31.95
Health diagnosing/treating practitioners, all other	101	137	36%	$19.56
Medical, clinical laboratory technologists	100	124	24%	$20.00
Optometrists	99	135	36%	$28.45
Radiologic technologists, technicians	98	129	32%	$18.42
Food servers, nonrestaurant	95	152	60%	$8.58
Medical records, health information technicians	93	135	45%	$13.45
Health care practitioners/technical workers, all other	91	135	48%	$23.75
File clerks	89	62	-30%	$10.96
Psychiatric technicians	87	78	-10%	$12.22

Between 2005 and 2009, health care employers listed an average of 1,464 job openings per year with the Idaho Department of Labor offices in Blackfoot, Idaho Falls, Pocatello, Rexburg, Salmon and Soda Springs. The sector had 10.9 percent of the region's job openings listed with the six local offices.

Health Care and Social Assistance Subsectors With the Highest Growth Potential

Sector	Jobs 2003	Jobs 2008	Growth 03-'08	Earnings	Location Quotient
Outpatient Mental Health Centers	10,126	17,746	26%	$35,297	0.91
Freestanding Emergency Medical Centers	107	278	160%	$30,000-$43,000	1.49
Child, Youth Services	333	606	82%	$47,000-$69,000	2.68
Vocational Rehabilitation Services	142	269	89%	$26,000-$31,000	1.25

High Technology

High technology is an amalgamation of industries from other various sectors identified by the U.S. Department of Labor's Bureau of Labor Statistics as having a substantially higher than normal percentage of technology oriented jobs. Components of the mining, manufacturing, information and professional, technical and scientific sectors are involved. High-tech generally requires constant improvement in the education and training levels of workers so they remain on the leading edge of innovation.

Seasonality. High technology has no significant seasonal pattern.

Exports. High-tech industries are almost exclusively exporters and therefore major contributors to a region's economic strength.

Multiplier. The jobs multiplier for high-tech companies is high at 3.32 in Idaho, which means that for every 10 jobs a high-tech company creates, 23.2 more jobs are created in the rest of the economy. Growth in this sector can have a significant impact on the rest of the economy, in part because of the comparatively high wages these companies pay and because these businesses tend to breed development of new and related businesses.

Wages and Benefits. High technology companies pay very high wages and generally offer generous medical, retirement and other benefits. Some subsectors have been so small, however, that their wage data cannot be disclosed.

Average Annual 2008 Wage in High Technology

All Sectors of Eastern Idaho	$32,333
Total High-Tech	$71,324
Oil, Gas Extraction	$16,820
Electric Power Generation/Transmission/Distribution	$106,400
Basic Chemical Manufacturing	$55,027
Pesticide, Fertilizer, Other Agricultural Chemical Manufacturing	$84,318
Other Chemical Product, Preparation Manufacturing	$106,989
Industrial Machinery Manufacturing	$43,344
Industrial Machinery Manufacturing	$71,235
Other General Purpose Machinery Manufacturing	$52,622
Computer, Peripheral Equipment Manufacturing	$53,021
Communications Equipment Manufacturing	$50,242
Semiconductor, Electronics Manufacturing	$68,985
Navigational, Control Instruments Manufacturing	$51,523
Electrical Equipment Manufacturing	$59,717
Aerospace Product, Parts Manufacturing	$188,333
Professional/Commercial Equipment/Supplies Wholesale	$63,345
Pipeline Transportation of Natural Gas	$74,573
Wired Telecommunications Carriers	$41,682
Wireless Telecommunications Carriers	$28,568
Telecommunications Resellers	$17,144
ISPs, Web Search Portals	$16,634
Data Processing, Related Services	$31,655
Architectural, Engineering, Related Services	$62,647
Computer Systems Design, Related Services	$47,937
Management/Scientific/Technical Consulting Services	$49,746
Scientific Research, Development Services	$89,122
Management of Companies, Enterprises	$72,788
Facilities Support Services	$19,144
Electronic/Precision Equipment Repair/Maintenance	$36,188

Location Quotient. The location quotient for eastern Idaho ranges from less than 1.0 to 3.99. This is some indication that eastern Idaho holds a higher concentration of high-tech-related jobs compared to the U.S. average.

Size and Growth Over Time. High-tech jobs increased 22 percent between 2003 and 2008, significantly more than eastern Idaho's 16 percent for all jobs.

Eastern Idaho High Technology Employers, Jobs 2003-2008

	2003		2008		Growth '03-'08	
Sectors	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**
Total High-Tech	622	14,700	942	17,961	51%	22%
Electric Power Generation/Transmission/Distribution.	24	315	23	343	-4%	9%
Basic Chemical Manufacturing	5	41	6	64	20%	56%
Pesticide, Fertilizer, Other Agricultural Chemical Manufacturing	15	810	19	733	25%	-10%
Other Chemical Product, Preparation Manufacturing	3	319	5	374	67%	17%
Industrial Machinery Manufacturing	5	113	5	111	0%	-2%
Commercial/Service Industry Machinery Manufacturing	3	48	2	258	-33%	438%
Other General Purpose Machinery Manufacturing	4	43	8	103	113%	140%
Computer, Peripheral Equipment Manufacturing	0	0	2	13	NC	NC
Communications Equipment Manufacturing	1	39	2	42	100%	8%
Semiconductor, Electronics Manufacturing	1	941	3	815	200%	-13%
Navigational, Control Instruments Manufacturing	4	68	9	89	125%	31%
Electrical Equipment Manufacturing	3	76	3	171	20%	125%
Aerospace Product, Parts Manufacturing	0	0	2	22	NC	NC
Professional/Commercial Equipment/Supplies Wholesale	26	158	33	126	26%	-20%
Pipeline Transportation of Natural Gas	1	14	1	52	0%	271%
Software Publishers	4	<10	11	47	159%	840%
Wired Telecommunications Carriers	26	584	22	1,192	-16%	104%
Wireless Telecommunications Carriers	16	134	15	241	-5%	80%
Telecommunications Resellers	1	25	11	68	1000%	172%
ISPs, Web Search Portals	7	56	4	36	-43%	-36%
Data Processing, Related Services	9	61	14	128	65%	110%
Architectural, Engineering, Related Services	147	1,457	222	2,319	51%	59%
Computer Systems Design, Related Services	94	709	143	822	53%	16%
Management/ Scientific/Technical Consulting Services	116	866	233	1,611	100%	86%
Scientific Research, Development Services	35	6,967	41	7,056	18%	1%
Management of Companies, Enterprises	36	495	45	606	27%	22%
Facilities Support Services	1	53	1	56	0%	6%
Electronic/Precision Equipment Repair/Maintenance	14	117	23	164	70%	40%

Need for Replacement Workers. Although statistics for high-tech are not available, workers 55 and older hold 16.6 percent of employment in eastern Idaho, suggesting a relatively strong need for workers to replace retirees and others in the next decade. The Idaho National Laboratory especially has a large component of older workers in its labor force who will be retiring over the next five years. A major challenge in eastern Idaho will be the retention graduates in science, mathematics, engineering and technology to fill vacant and new positions at the Idaho National Laboratory and other employers needing talented employees with those backgrounds.

Economic Modeling Specialists Inc. projects high-tech employment in eastern Idaho will grow 15 percent between 2008 and 2018, just short of the region's 17 percent total job growth. Eastern Idaho fosters high technology with the INL and INL-related companies, health care, utilities, mining, telecommunications, computer and software development, distribution and manufacturing. With steady population growth, high-tech opportunities should expand. Nationally, management, scientific and technical consulting services are projected to add more than 750,000 jobs and grow faster than any other industry between 2008 and 2018.

The 50 most common occupations in this sector and their projected growth in the industry, according to Economic Modeling Specialists Inc. are:

Occupation	Employment		Percent	2008 Hourly
	2008	2018	Change	Earnings
Management analysts	705	1,084	54%	$22.14
General, operations managers	649	654	1%	$26.72
Office clerks, general	511	610	19%	$10.85
Managers, all other	493	556	13%	$19.01
Customer service representatives	403	600	49%	$10.64
Business operation specialists, all other	374	439	17%	$25.10
Sales representatives, services, all other	343	532	55%	$15.81
Mechanical engineers	335	303	-10%	$44.15
Engineering managers	322	323	0%	$58.06
Computer software engineers, systems software	313	379	21%	$37.67
Computer programmers	306	345	13%	$18.44
Engineers, all other	299	300	0%	$38.08
Executive secretaries, administrative assistants	277	322	16%	$14.20
Chief executives	271	334	23%	$20.96
Network systems, data communications analysts	262	450	72%	$17.13
Team assemblers	256	212	-17%	$15.15
Nuclear engineers	246	234	-5%	$48.19
First-line supervisors/managers of production/operating workers	243	228	-6%	$21.11
Bookkeeping, accounting, auditing clerks	232	278	20%	$11.72
Maintenance, repair workers, general	231	243	5%	$14.48
Computer software engineers, applications	219	272	24%	$34.14
Secretaries, except legal, medical, executive	202	209	3%	$13.41
First-line supervisors/managers of office/administrative support workers	200	245	23%	$16.98
Electrical engineers	188	170	-10%	$38.59

Occupation	Employment		Percent	2008 Hourly
	2008	2018	Change	Earnings
Administrative services managers	179	191	7%	$30.05
Industrial engineers	177	200	13%	$41.69
Chemists	168	124	-26%	$40.94
Electrical, electronic engineering technicians	162	143	-12%	$28.86
Security guards	161	155	-4%	$17.26
Computer systems analysts	160	197	23%	$28.60
Biological technicians	150	115	-23%	$13.95
Computer support specialists	147	185	26%	$17.09
Production, planning, expediting clerks	142	153	8%	$22.58
Civil engineers	141	167	18%	$26.27
Industrial engineering technicians	139	142	2%	$22.26
Financial managers	139	154	11%	$21.93
Surveying, mapping technicians	135	147	9%	$17.69
Computer specialists, all other	132	152	15%	$20.89
Forest, conservation technicians	130	123	-5%	$13.93
Inspectors, testers, sorters, samplers, weighers	130	120	-8%	$13.73
Training, development specialists	130	168	29%	$22.86
Accountants, auditors	128	164	28%	$18.78
Architects, except landscape, naval	127	171	35%	$27.11
Electrical power-line installers, repairers	124	103	-17%	$27.25
Telecommunications equipment installers, repairers	123	176	43%	$21.27
Industrial production managers	116	107	-8%	$34.43
First-line supervisors/managers of non-retail sales workers	113	164	45%	$18.40
Computer, information systems managers	106	125	18%	$34.82
Surveyors	105	117	11%	$19.48
Mechanical drafters	100	106	6%	$24.11

High Technology Subsectors With the Highest Growth Potential

Sector	Jobs 2003	Jobs 2008	Growth 03-'08	Earnings	Location Quotient
Natural Gas Liquid Extraction	0	78	N/A	$15,000 to $116,000	1.32
All Other Metal Ore Mining	118	381	223%	$128,000 to $75,000	3.59
All Other Basic Organic Chemical Manufacturing	0	15	N/A	$42,000 to $105,000	3.01
All Other Commercial/Service Machine Manufacturing	35	245	600%	$72,000 to $68,000	1.49
Welding/Soldering Equipment Manufacturing	23	48	109%	$44,000 to $72,000	4.37
Fluid Power Cylinder/Actuator Manufacturing	12	20	67%	$55,000 to $62,000	2.38
Electric Power/Specialty Transformer Manufacturing	70	154	120%	$60,000 to $70,000	2.02
Pipeline Transportation of Natural Gas	14	52	271%	$75,000 to $118,000	3.54
Wired Telecommunications Carriers	584	1,192	104%	$42,000 to $83,000	1.17
Cellular, Other Wireless Carriers	134	235	75%	$29,000 to $78,000	2.09
Engineering Services	1,095	1,773	62%	$71,000 to $88,000	1.44
Environmental Consulting Services	300	661	120%	$56,000 to $56,000	1.79

*N/A indicates the growth and location quotient cannot be calculated because the number of jobs in 2003 was minimal.

Energy

As described by the Center for Regional Development, energy encompasses various industries in various sectors involving considerable research, testing, development and production, characterized by high levels of professional and technical employment. These jobs generally require constant improvement in education and training to stay on the leading edge of technology.

Seasonality. Overall, energy has no significant seasonal patterns since mining, manufacturing and distribution are constant. Usage does change.

Exports. Energy is an exporter so it is a primary driver of the region's economy.

Wages and Benefits. Energy businesses pay high wages and generally offer generous medical, retirement and other benefits.

Average Annual 2008 Wage In Energy

All Sectors of Eastern Idaho	$32,333
Total Energy	$65,292
Crude Petroleum/Natural Gas Extraction	$18,646
Natural Gas Liquid Extraction	$14,664
Uranium/Radium/Vanadium Ore Mining	N/A
Drilling Oil, Gas Wells	$97,472
Support Activities for Oil/Gas Operations	N/A
Support Activities for Coal Mining	$53,946
Hydroelectric Power Generation	N/A
Electric Power Distribution	$108,096
Water/Sewer System Construction	$39,321
Oil/Gas Pipeline Construction	$42,589
Power/Communication System Construction	$53,719
Other Heavy Construction	$55,607
Electrical Contractors	$42,566
Plumbing, HVAC Contractors	$42,572
Metal Tank/Heavy Gauge Manufacturing	$75,186
Mining Machinery/Equipment Manufacturing	$30,716
Semiconductors/Related Device Manufacturing	$69,141
Other Measuring/Controlling Device Manufacturing	$52,205
Electric Power/Specialty Transformer Manufacturing	$59,750
Relay/Industrial Control Manufacturing	N/A
Electric Equipment/Wiring Merchant Wholesalers	$58,075
Other Electric Parts Merchant Wholesalers	$51,500
Plumbing Equipment Merchant Wholesalers	$57,302
Petroleum Bulk Stations/Terminals	$33,017

Average Annual 2008 Wage In Energy	
Other Petroleum Merchant Wholesalers	$28,143
Gasoline Stations With Convenience Stores	$21,221
Other Gasoline Stations	$22,644
Heating Oil Dealers	N/A
Liquefied Petroleum Gas/Bottled Gas Dealers	$36,060
Pipeline Transportation of Natural Gas	$74,573
Miscellaneous Intermediation	N/A
Miscellaneous Financial Investment Activities	$9,500
Other Heavy Machinery Rental/Leasing	$46,181
Lessors of Nonfinancial Intangible Assets	$62,205
Engineering Services	$70,582
Geophysical Surveying/Mapping Services	N/A
Testing Laboratories	$41,191
Environmental Consulting Services	$55,817
Other Technical Consulting Services	$42,084
Physical, Engineering, Biological Research	$89,226

N/A means there is too little employment to disclose information

Location Quotient. The location quotient in eastern Idaho ranges from below 1 to 4.01. This is some indication that eastern Idaho holds a higher concentration of energy related jobs compared to the U.S. average. The presence of Idaho National Laboratory and access to wind and hydroelectric resources contribute to higher concentration in this sector.

Size and Growth Over Time. Energy sector jobs increased 13 percent between 2003 and 2008, slightly less than the 16 percent increase for all jobs in eastern Idaho. Moving an energy enterprise from the drawing board to operation is generally costly and time consuming – one reason the growth to date has been comparatively low. Energy sector employment growth in the Pocatello area may even be more pronounced as interest the in "rare earth" resources increases.

Eastern Idaho Energy Employers, Jobs 2003-2008

	2003		2008		Growth '03-'08	
Sectors	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**
Total Energy	815	13,940	950	15,350	17%	10%
Uranium/Radium/Vanadium Ore Mining	1	21	1	10	0%	-52%
Drilling Oil, Gas Wells	3	2	2	1	-33%	-19%
Support Activities for Oil/Gas Operations	1	5	3	13	200%	184%
Support Activities for Coal Mining	N/A	N/A	2	32	N/A	N/A
Hydroelectric Power Generation	3	11	3	8	0%	-28%
Electric Power Distribution	21	250	19	275	-10%	10%
Water/Sewer System Construction	29	218	27	255	-9%	17%
Oil/Gas Pipeline Construction	4	165	3	115	-20%	-30%
Power/Communication System Construction	11	69	9	25	-20%	-64%
Other Heavy Construction	13	270	19	207	40%	-23%

	2003		2008		Growth '03-'08	
Sectors	**Emps**	**Jobs**	**Emps**	**Jobs**	**Emps**	**Jobs**
Electrical Contractors	143	885	164	948	15%	7%
Plumbing, HVAC Contractors	147	1,049	195	1,206	33%	15%
Metal Tank/Heavy Gauge Manufacturing	1	9	2	59	100%	547%
Mining Machinery/Equipment Manufacturing	1	8	2	13	100%	57%
Semiconductors/Related Device Manufacturing	1	1,043	2	783	100%	-25%
Other Measuring/Controlling Device Manufacturing	3	57	4	79	17%	39%
Electric Power/Specialty Transformer Manufacturing	2	53	1	177	-33%	232%
Relay/Industrial Control Manufacturing	1	7	1	1	0%	-80%
Electric Equipment/Wiring Merchant Wholesalers	15	98	23	139	57%	43%
Other Electric Parts Merchant Wholesalers	5	31	5	32	0%	3%
Plumbing Equipment Merchant Wholesalers	20	124	23	135	15%	10%
Petroleum Bulk Stations/Terminals	10	78	11	101	10%	29%
Other Petroleum Merchant Wholesalers	9	98	7	34	-22%	-66%
Gasoline Stations With Convenience Stores	153	1,394	155	1,556	1%	12%
Other Gasoline Stations	16	155	9	116	-42%	-25%
Heating Oil Dealers	3	33	2	7	-33%	-79%
Liquefied Petroleum Gas/Bottled Gas Dealers	17	125	14	110	-19%	-13%
Pipeline Transportation of Natural Gas	1	19	1	21	0%	10%
Miscellaneous Intermediation	1	2	1	1	0%	-46%
Miscellaneous Financial Investment Activities	2	3	8	12	300%	289%
Other Heavy Machinery Rental/Leasing	1	0	9	58	800%	N/A
Lessors of Nonfinancial Intangible Assets	2	13	2	11	0%	-9%
Engineering Services	88	906	123	1,620	41%	79%
Geophysical Surveying/Mapping Services	1	0	3	6	200%	N/A
Testing Laboratories	9	31	9	41	6%	33%
Environmental Consulting Services	19	160	26	226	33%	41%
Other Technical Consulting Services	32	41	40	60	26%	44%
Physical, Engineering, Biological Research	29	6,510	22	6,859	-23%	5%

N/A means there is too little employment to disclose information

Economic Modeling Specialists Inc. projects that energy employment in eastern Idaho will grow at least 55 percent between 2008 and 2018, much faster than the 17 percent growth rate for all sectors of the regional economy. Energy is showing more activity since 2008 as in wind generation especially. Hoku starts operation in 2010, and geothermal is becoming a buzzword. Nuclear research is continuing and new development may be on the horizon. The Idaho National Laboratory has helped eastern Idaho stay in the energy spotlight.

Occupation	Employment		Percent	2008 Hourly
	2008	2018	Change	Earnings
Electricians	815	987	21%	$18.32
Construction laborers	336	401	19%	$13.51
First-line supervisors/managers of construction trades/extraction workers	291	348	20%	$18.53
Sheet metal workers	198	192	-3%	$16.79
Plumbers, pipefitters, steamfitters	197	219	11%	$17.25
HVAC mechanics, installers	195	241	24%	$17.61
Carpenters	172	206	20%	$15.80

Occupation	Employment		Percent	2008 Hourly
	2008	2018	Change	Earnings
Team assemblers	164	97	-41%	$15.15
General, operations managers	151	140	-7%	$26.72
Electrical power-line installers, repairers	148	135	-9%	$27.25
Construction managers	148	180	22%	$17.35
Operating engineers, other construction equipment operators	146	177	21%	$18.29
Office clerks, general	129	140	9%	$10.85
Managers, all other	83	106	28%	$19.01
Bookkeeping, accounting, auditing clerks	81	88	9%	$11.72
Mobile heavy equipment mechanics, except engines	73	92	26%	$18.82
Chief executives	72	86	19%	$20.96
Pipelayers	71	74	4%	$14.73
First-line supervisors/managers of production/operating workers	65	48	-26%	$21.11
Truck drivers, heavy, tractor-trailer	65	72	11%	$15.78
Painters, construction, maintenance	63	75	19%	$15.89
Sales representatives, wholesale/manufacturing, except technical/scientific products	62	61	-2%	$20.78
First-line supervisors/managers of mechanics/installers/repairers	56	61	9%	$22.09
Customer service representatives	54	48	-11%	$10.64
Inspectors, testers, sorters, samplers, weighers	49	27	-45%	$13.73
Helpers, pipelayers, plumbers, pipefitters, steamfitters	49	56	14%	$11.12
Maintenance, repair workers, general	49	49	0%	$14.48
Secretaries, except legal, medical, executive	48	51	6%	$13.41
Welders, cutters, solderers, brazers	47	45	-4%	$14.27
Laborers, freight, stock, material movers, hand	46	42	-9%	$9.43
Executive secretaries, administrative assistants	43	42	-2%	$14.20
Electrical, electronic engineering technicians	39	22	-44%	$28.86
Cost estimators	39	50	28%	$20.17
Computer programmers	38	16	-58%	$18.44
First-line supervisors/managers of office/administrative support workers	34	34	0%	$16.98
Millwrights	34	39	15%	$20.54
Computer software engineers, systems software	33	20	-39%	$37.67
Engineers, all other	32	34	6%	$38.08
Separating/filtering/clarifying/precipitating/still machine setters/operators/tenders	31	43	39%	$18.81
Industrial machinery mechanics	29	28	-3%	$18.86
Sales representatives, services, all other	29	33	14%	$15.81
Helpers, electricians	28	38	36%	$11.67
Excavating, loading machine, dragline operators	28	33	18%	$15.53
Helpers--Installation, maintenance, repair workers	28	32	14%	$10.55
Boilermakers	26	32	23%	$19.18
Machinists	25	19	-24%	$16.39
Production workers, all other	24	13	-46%	$11.57
Electrical engineers	24	19	-21%	$38.59
First-line supervisors/managers of non-retail sales workers	23	22	-4%	$18.40
Accountants, auditors	22	21	-5%	$18.78

Energy Subsectors With the Highest Growth Potential

Sector	Jobs 2003	Jobs 2008	Growth 03-'08	2008 Earnings	Location Quotient
Natural Gas Liquid Extraction	0	78	N/A	$15,000 to $116,000	1.32
Support Activities for Coal Mining	0	32	N/A	$54,000 to $68,000	1.06
Electric Power/Specialty Transformer Manufacturing	53	177	234%	$60,000 to $70,000	2.02
Other Heavy Machinery Rental/Leasing	0	58	N/A	$46,000 to $84,000	1.27
Engineering Services	906	1620	79%	$71,000 to $88,000	1.30
Environmental Consulting Services	160	226	41%	$56,000 to $56,000	1.79

Methodology

The report is based on past trends, existing conditions and future projections. Average employment by sector data were derived from the Quarterly Census of Employment and Wages. Population trends were obtained from the U.S. Census Bureau's American Community Surveys. Forecasts or projections were from Economic Modeling Specialists Inc. data. Industries were identified as most promising by analyzing in terms of job multipliers and location quotients to determine those with the most potential for sustaining economic growth in the region.

Economic growth is primarily determined by population and job growth along with increases in wages. Demographic trends are also a key indicator of viable industries.

Location quotient tells a much different story than job numbers or job growth. It can identify which industries make the regional economy unique, the export orientation of an industry, emerging export industries that are beginning to bring money into the region and endangered export industries that can erode the region's economic base.

Industries with high quotients are typically, though not always, export-oriented and bring money into the region. Industries which have both high quotients and relatively high total jobs typically form a region's economic base. Economic developers and government officials need to pay particular attention to these industries not only for the jobs they provide but also for their multiplier effect – the jobs they create in other dependent industries like retail trade and food services.

Location quotient is augmented by number of jobs and percent change in the quotient over time. An industry with a high quotient but a small number of jobs may be export-oriented but not vital to the regional economy. A large industry with a high quotient that has been declining over time could be endangering the regional economy.