# 2008 Projections

for Industries & Occupations in Wyoming

2008-2014



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## Projections

## for Industries & Occupations in Wyoming, 2004-2014

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#### Occupational and Industry Projections: Economic Context

by: Sara Saulcy, Senior Economist

Tyoming is in the midst of an economic expansion not seen since the 1970s and early 1980s. As with the last expansion, mineral extraction industries are the primary drivers. While extractive industries lead the state's economic growth, employment gains in other industries are more heavily influenced by the state's demographic characteristics. The health care industry in particular is influenced by the state's aging population. In this chapter we examine the demographic and economic

characteristics that impact Wyoming industry and occupational projections from 2004-2014. To understand how Wyoming compares to the U.S., we compare their historical

While extractive industries lead the state's economic growth, employment gains in other industries are more heavily influenced by the state's demographic characteristics.

employment and unemployment trends. Because of their influence, we discuss the state's extractive industries and their projected impact on the overall employment outlook. Other factors such as anticipated school construction are also discussed.

#### **Demographics**

Table 1.1 (see page 2) shows that Wyoming was tied with North Dakota for the ninth highest median population age. Wyoming's population is projected to grow by 39,456 people between 2000 and 2020 (8.0%; see Table 1.2, page 3). Individuals ages 60-69 will constitute more than three-fourths (77.6%; 30,634 people) of the state's population growth. In contrast, the number of individuals 40-49 is projected

to decline by 18,154, the largest decrease of any age group (Wyoming Department of Administration & Information, Economic Analysis Division, 2004). Gallagher & McVeigh (2003) note that:

The aging of Wyoming's population and the workforce is expected to intensify perceptions of labor shortages. The maturing baby boom generation falls into the age segment of property owners

who tend to be less mobile than younger members of the labor force. This makes jobrelated migration to or from any particular place in Wyoming less likely than in the previous decade. (p. xi)

An aging workforce has dual impacts. First, it affects the overall types of goods and services demanded. In particular, because older individuals consume more health services, the health care industry in particular is likely to see a huge increase in demand for its services (Gallagher & McVeigh, 2003). Second, as separations from employers increase due to older workers retiring, employment opportunities are impacted. For newer members of the labor force, openings due to retirements represent potentially favorable conditions for career advancement. For businesses, the loss of experienced workers may yield increased training costs for new workers and loss of institutional memory (that

is, understanding of the history of an organization, which contributes to its effectiveness). Furthermore, given the state's current labor shortage, retirements could increase pressure on wages as companies compete for the available labor supply.

Some organizations are developing ways to entice workers nearing retirement to stay longer. For example, under a proposal by the Wyoming Retirement Board, which oversees the State of Wyoming's retirement system, work restrictions on employees, other than federal requirements, would be removed. However, in order to protect the retirement system, employees would have to contribute to their retirement fund (Barron, 2006).

In addition to the aging population, net migration (births minus deaths and in- and out-migration) also impacts employment trends. Figure 1.1 (see page 3) shows net migration in Wyoming from 1971-2004. Net migration was at its highest levels during the 1970s and early '80s during the last expansion. From 1983 to 1990, the state endured negative net migration, meaning that

Table 1.1: Estimated State Median Population Age in Descending Order, 2005

Rank	State	Mediana	Margin of Error <sup>b</sup>
1	Maine	41.2	+/-0.2
2	Vermont	40.7	+/-0.3
2	West Virginia	40.7	+/-0.2
4	Montana	40.2	+/-0.3
5	Pennsylvania	39.7	+/-0.1
6	Florida	39.5	+/-0.2
6	New Hampshire	39.5	+/-0.2
8	Connecticut	39.3	+/-0.2
9	North Dakota	39.1	+/-0.3
9	Wyoming	39.1	+/-0.4
11	Iowa	38.6	+/-0.2
12	Hawaii	38.5	+/-0.3
13	Rhode Island	38.4	+/-0.2
14	Massachusetts	38.2	+/-0.1
	New Jersey	38.0	+/-0.2
	Delaware	37.9	+/-0.3
16	Wisconsin	37.9	+/-0.2
18	Ohio	37.6	+/-0.2
19	Kentucky	37.5	+/-0.2
19	New York	37.5	+/-0.1
21	Alabama	37.4	+/-0.1
21 23	Missouri	37.4	+/-0.1
23 24	Tennessee	37.3	+/-0.2
24 25	Virginia	37.2 37.1	+/-0.1
25 25	Maryland South Carolina	37.1	+/-0.1 +/-0.2
23 27	Arkansas	37.0	+/-0.2
27	Oregon	37.0 37.0	+/-0.1
27	South Dakota	37.0	+/-0.3
30	Michigan	36.9	+/-0.1
31	Minnesota	36.7	+/-0.2
31	Washington	36.7	+/-0.2
33	Oklahoma	36.5	+/-0.2
34	Nebraska	36.2	+/-0.2
34	New Mexico	36.2	+/-0.2
34	North Carolina	36.2	+/-0.1
37	Indiana	36.1	+/-0.1
37	Kansas	36.1	+/-0.2
39	District of Columbia	35.9	+/-0.2
40	Illinois	35.6	+/-0.2
41	Mississippi	35.5	+/-0.2
42	Louisiana	35.4	+/-0.1
43	Nevada	35.2	+/-0.2
44	Colorado	34.7	+/-0.2
45	Idaho	34.6	+/-0.2
46	Arizona	34.5	+/-0.2
47	California	34.4	+/-0.2
48	Georgia	34.3	+/-0.1
49	Alaska	33.9	+/-0.3
50	Texas	33.2	+/-0.2
51	Utah	28.5	+/-0.1
	TT-14-4 O4-4	06.4	

<sup>a</sup>This measure divides the age distribution in a stated area into two equal parts: half of the population falling below the median value and half above the median value.

<sup>b</sup>The margin of error refers to the difference between an estimate and its upper or lower confidence bounds. Confidence bounds can be created by adding the margin of error to the estimate (for an upper bound) and subtracting the margin of error from the estimate (for a lower bound). All published margins of error for the American Community Survey are based on a 90% confidence level.

Source: U.S. Census Bureau. (2005). 2005 American community survey. Retrieved August 16, head\_nbr=R0101&-ds\_name=ACS\_2005\_EST\_G00\_&-format=US-30

**United States** 

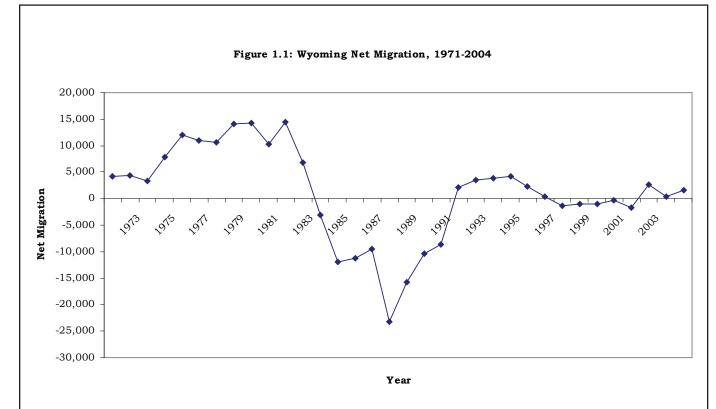
Table 1.2: Wyoming Projected Population Growth by Age Group, 2000 and 2020

	Population		Change, 2000-202		2020
Age Group	2000	Estimated 2020	n	%	% Net Growth
0-9	65,105	68,755	3,650	5.6%	9.3%
10-19	80,312	75,401	-4,911	-6.1%	-12.4%
20-29	63,543	59,765	-3,778	-5.9%	-9.6%
30-39	66,293	72,006	5,713	8.6%	14.5%
40-49	83,037	64,883	-18,154	-21.9%	-46.0%
50-59	58,340	62,216	3,876	6.6%	9.8%
60-69	36,288	66,922	30,634	84.4%	77.6%
70-79	26,596	41,726	15,130	56.9%	38.3%
80 and Over	14,564	21,860	7,296	50.1%	18.5%
Total	494,078	533,534	39,456	8.0%	100.0%

Source: Wyoming Department of Administration & Information, Economic Analysis Division. (2004, October 21). Wyoming and county population projections by age: 2003-2020. Retrieved May 18, 2006, from http://eadiv.state.wy.us/pop/agsx00\_20.htm

the combination of births minus deaths in addition to residents entering or leaving the state resulted in declining population. During most of the 1990s Wyoming saw positive net migration. In 1997, Wyoming again began to sustain negative net migration, and continued to do so until 2002. From 2002 to 2004, the state's net migration hovered near zero.

With total jobs projected to grow by 63,887 (see Table 2.1 of Chapter 2, page 21), it is unlikely that the resident



Source: Wyoming Department of Administration & Information, Economic Analysis Division. (n.d.) Wyoming births, deaths, and net migration by county of residence: 1971-2004. Retrieved May 18, 2006, from http://eadiv.state.wy.us/pop/BirthDeathMig.htm

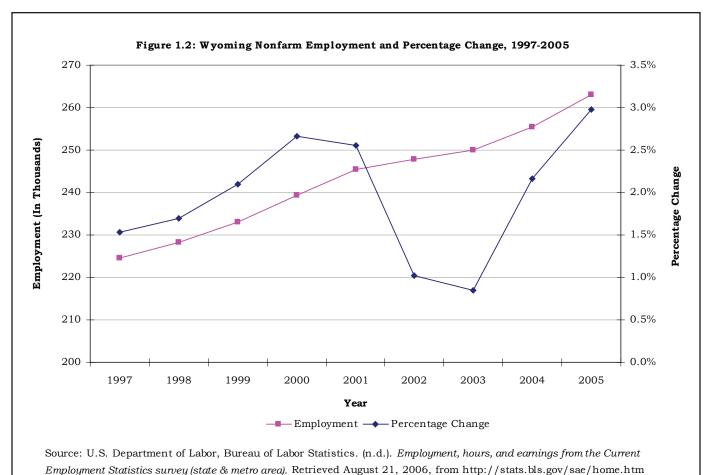
population will be able to supply all of the labor for Wyoming's economy. Nonresident workers are increasingly picking up the slack between labor supply and demand. Gallagher (2005) points out that, "Between 1994 and 2004 the number of nonresidents working at any time in the state grew by 43.5% while the number of Wyoming residents working grew by 10.6%. By 2004, 1 in 5 (17.8%) of those who worked in the state was a nonresident."

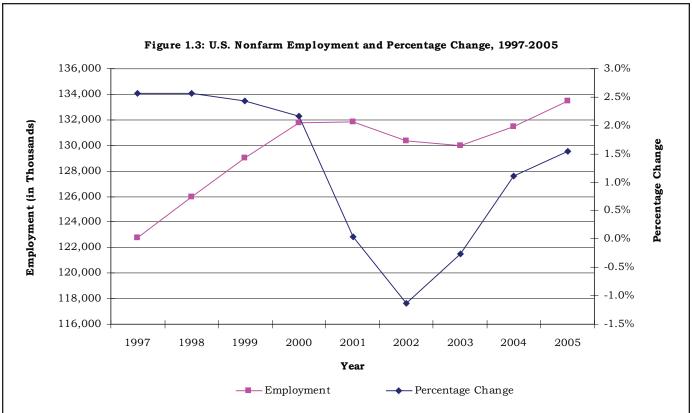
#### **Employment and Unemployment**

Employment in Wyoming rose steadily since 1997, increasing from 224,500 employees in 1997 to 263,000 in 2005 (see Figure 1.2). The lowest percentage increase over the time period occurred from 20022003 (0.8%), while the highest percentage increase was from 2004 to 2005 (3.0%).

During the same period, employment in the United States was much more volatile. From 1997 to 2001, the U.S. economy gained jobs, with the lowest percentage gain occurring from 2000 to 2001 (see Figure 1.3, page 5). Job losses of approximately 1.5 million and 342 thousand occurred during each of the next two years. In 2004, the economy rebounded with a gain of 1.4 million jobs.

The distributions of employment in 2005 by industry for Wyoming and the U.S. in are shown in Figure 1.4 (see page 6). Wyoming and the U.S. had similar concentrations of employment (a 1% difference or less)





Source: U.S. Department of Labor, Bureau of Labor Statistics. (n.d.). *Employment, hours, and earnings from the Current Employment Statistics survey (national)*. Retrieved August 21, 2006, from http://stats.bls.gov/ces/home.htm

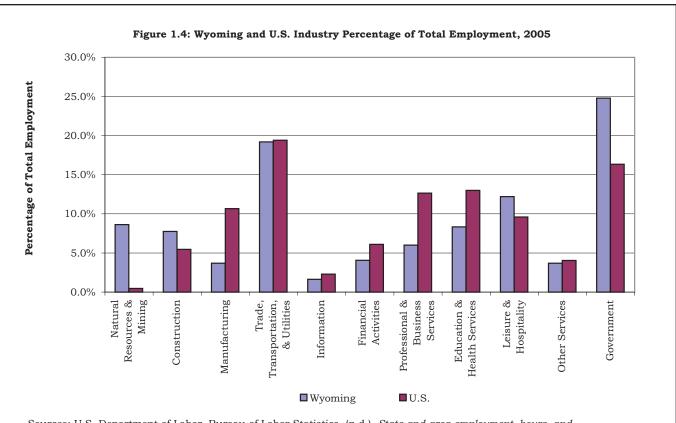
in trade, transportation, & utilities, information, and other services. Overall, the percentage of Wyoming employment (more than 1% difference) was greater than the U.S. in natural resources & mining (see the following section for a more detailed discussion of the mining industry), construction, leisure & hospitality, and government (government includes most educational institutions in the state). A higher percentage of U.S. employment was found in manufacturing, professional & business services, and education & health services.

Unemployment rates for Wyoming and the United States from 1996 to 2005 are displayed in Figure 1.5 (see page 8). Wyoming's unemployment rate remained

below that of the U.S. from 2000-2005. The highest unemployment rate for both the U.S. and Wyoming since 2000 came in 2003. At that time, the U.S. unemployment rate was 6.0%, while Wyoming posted a rate of 4.4%.

#### Natural Resources & Mining

Much of Wyoming's current economic fortunes are directly attributable to mining. Because of the diverse nature of the resources being extracted, many areas of the state are benefiting from the expansion. Maps 1.1, 1.2, and 1.3 on pages 7 and 8 illustrate that all Wyoming counties have energy resources of one type or another. However, Campbell, Sublette, and Sweetwater counties are experiencing



Sources: U.S. Department of Labor, Bureau of Labor Statistics. (n.d.). State and area employment, hours, and earnings. Retrieved September 26, 2006, from http://data.bls.gov/PDQ/outside.jsp?survey=sm; and U.S. Department of Labor, Bureau of Labor Statistics. (n.d.). Employment, hours, and earnings from the Current Employment Statistics survey (national). Retrieved September 26, 2006, from http://data.bls.gov/PDQ/outside.jsp?survey=ce

the greatest impacts from energy resource extraction (Barron, 2004).

Wyoming's economy has historically relied more heavily on natural resources extraction than the rest of the United States. Figure 1.6 (see page 9) indicates that the percentage of Wyoming employment in natural resources & mining from 1996-2005 ranged from a low of 6.6% in 1999 to a high of 8.6% in 2005 (U.S. Department of Labor, Bureau of Labor Statistics, n.d. a). By comparison, U.S. employment in the industry ranged from 0.4% to 0.5% of total employment (U.S. Department of Labor, Bureau of Labor Statistics, n.d. b).

Furthermore, Wyoming experienced greater volatility in employment in mining than did the U.S. Figure 1.7 (see page 9) reveals that while there were similar patterns in employment change between the U.S. and Wyoming, the magnitudes were different. For example, from 2000 to 2001, Wyoming employment in the industry grew by 12.9%, while U.S. employment grew by only 1.2%.

Bentonite, coal, crude oil, natural gas, trona, and uranium were the primary minerals extracted in Wyoming (Fuller and Hoffman, 2005). Figures 1.8 through 1.13 (see pages 10-12) show mineral commodity prices over varying lengths of time. U.S. coal prices declined throughout the 1990s,

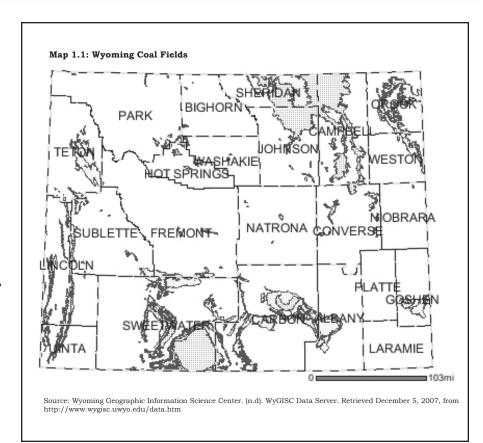
rebounding in 2001 and continuing to do so through 2006 (see Figure 1.8, page 10). Since the low point of \$6.67 per short ton in 2001, prices rose \$2.63 to \$9.30 per short ton in 2005.

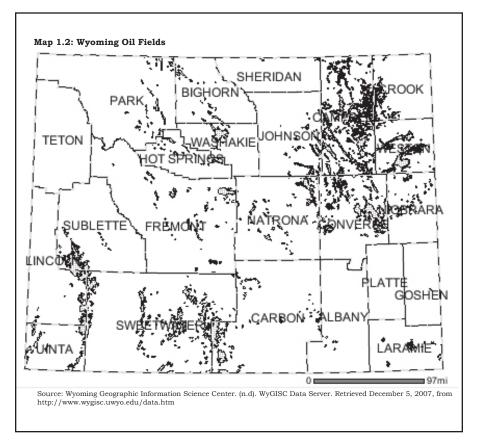
U.S. crude oil prices ranged from approximately \$11 per barrel to approximately \$36 per barrel from 1996 to 2003 (see Figure 1.9, page 10). In 2004, crude oil prices began their ascent, peaking at \$74.41 per barrel in July 2006. Prices since fell to \$58.89/barrel in October 2006, \$15.52 lower than in July 2006 but nearly five times higher than the December 1998 price of \$11.35/barrel.

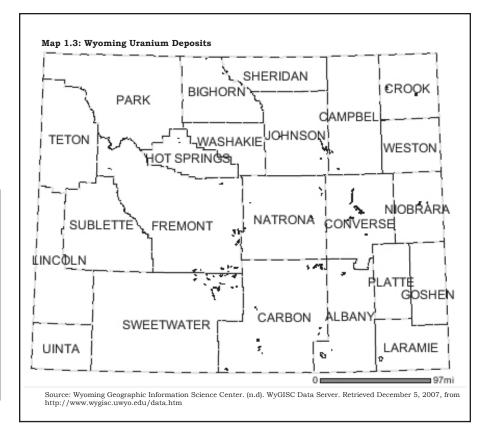
Natural gas prices were generally flat during the 1990s (see Figure 1.10, page 10). Prices spiked three times from 2000 to July 2006: first in January 2001, again in March 2003, and lastly in October 2005.

Figure 1.11 (see page 11) shows the Wyoming Baker Hughes oil and gas active rig count by month from January 2001 to December 2006. After steadily climbing to a record high of 109 rigs in September 2006, rig counts fell to 86 on December 23, 2006 (-23).

Uranium also plays an

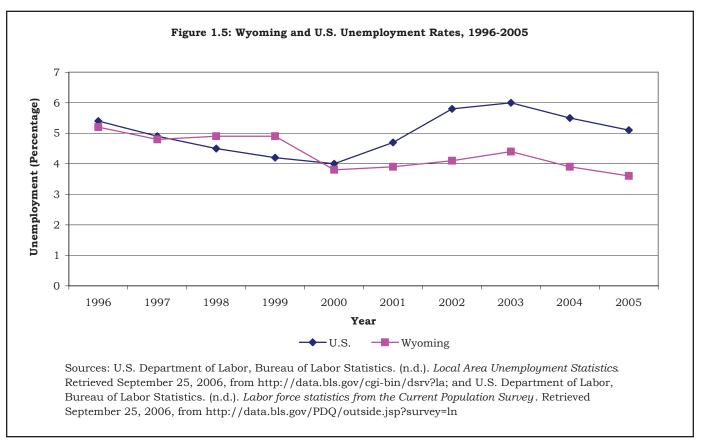


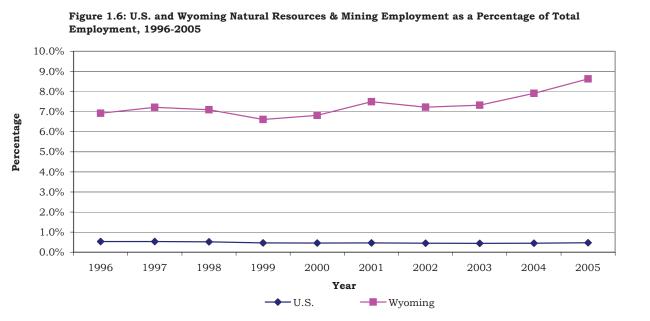




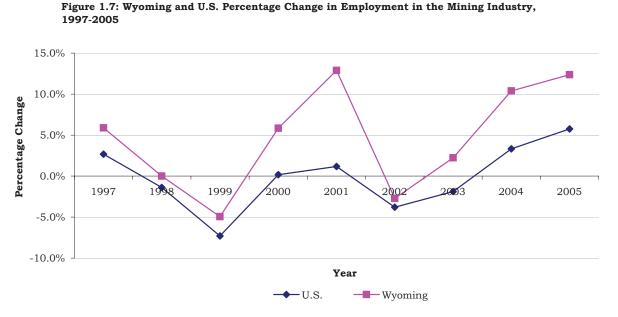
important role in the state. The history of uranium began in Wyoming in 1920 when uranium-bearing ore was first extracted from the Silver Cliff Mine near Lusk. Uranium production continued to increase until the malfunction of the Three Mile Island nuclear power plant in 1979, which resulted in the termination of most production contracts. Throughout the last century, Wyoming was among the top uranium producing states and presently ranks first in uranium production in the U.S. (Wyoming State

(Text continued on page 11)

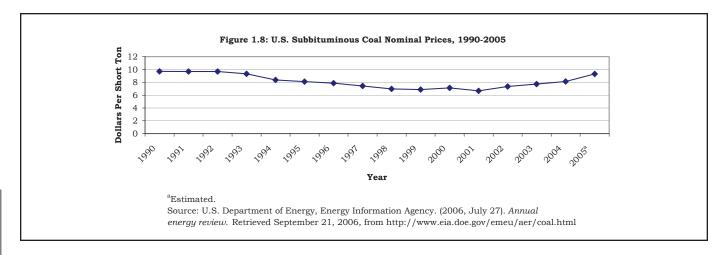


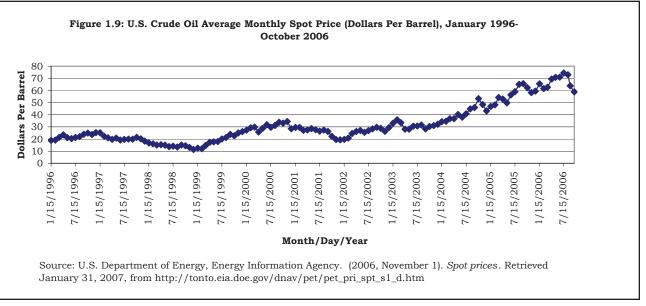


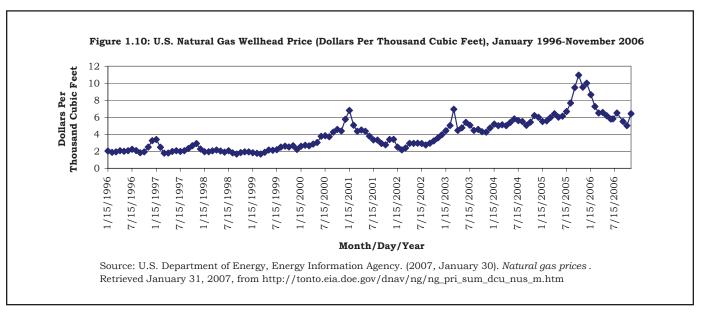
Sources: U.S. Department of Labor, Bureau of Labor Statistics. (n.d.). Employment, hours, and earnings from the Current Employment Statistics survey (state & metro area). Retrieved August 21, 2006, from http://stats.bls.gov/sae/home.htm; and U.S. Department of Labor, Bureau of Labor Statistics. (n.d.) Employment, hours, and earnings from the Current Employment Statistics survey (national). Retrieved August 21, 2006, from http://stats.bls.gov/ces/home.htm

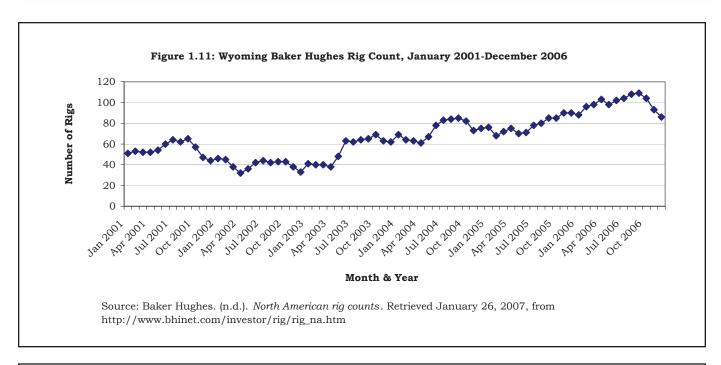


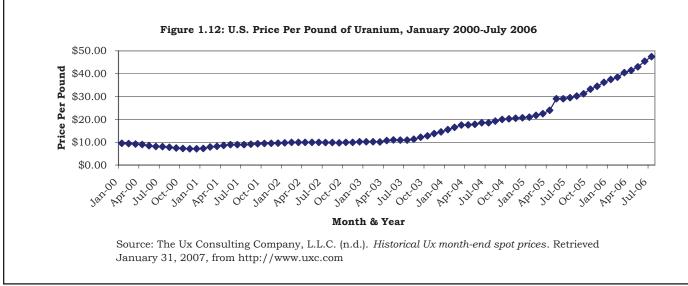
Sources: U.S. Department of Labor, Bureau of Labor Statistics. (n.d.). *Employment, hours, and earnings from the Current Employment Statistics survey (state & metro area)*. Retrieved August 21, 2006, from http://stats.bls.gov/sae/home.htm; and U.S. Department of Labor, Bureau of Labor Statistics. (n.d.). *Employment, hours, and earnings from the Current Employment Statistics survey (national)*. Retrieved August 21, 2006, from http://stats.bls.gov/ces/home.htm











(Text continued from page 8)

Geological Survey, 2005d).

Figure 1.12 shows uranium spot prices from January 2000 to July 2006. Prices were flat until 2002 when they began their steady escalation. By July 2006, prices were nearly five times their November 2002 level (\$47.50 compared to \$9.90). As

of January 29, 2007, The Ux Consulting Company, L.L.C., reports spot prices of \$75.00 per pound, \$27.50 more per pound than in July 2006.

Escalating uranium prices are causing firms to re-evaluate their plans. For example, Rio Tinto Energy America, Inc., called off plans to sell a uranium mill in the Green Mountain area of Wyoming.

Spokeswoman Heidi Lowe stated that because of the evolving uranium market, the firm decided to reconsider its options with regard to its holdings in the Green Mountain area and in Sweetwater County (Casper Star-Tribune, 2007).

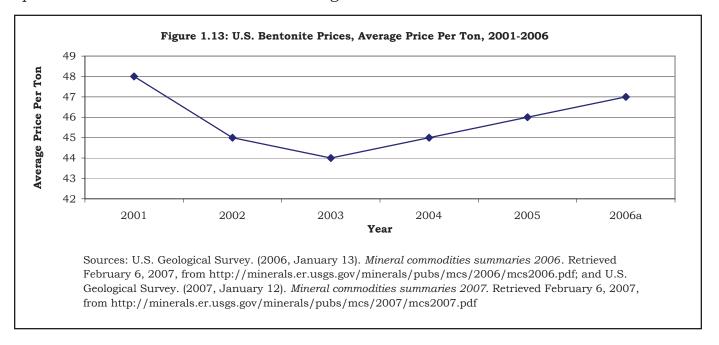
Bentonite and trona are the main nonenergy minerals mined in the state. Wyoming is the number one producer of both minerals in the U.S. (Wyoming State Geological Survey, 2005c). Bentonite is used in a wide variety of products including pet litter, drilling mud, and as a binding agent in foundry molds (Wyoming State Geological Survey, 2005a). Approximately half of all trona produced is used for making glass. Among trona's other uses are as ingredients in chemicals such as sodium silicate, in cleaning agents such as detergents, and in water treatment (Wyoming State Geological Survey, 2005b). Figure 1.13 shows that, after declining in the early part of the decade, bentonite prices have rebounded somewhat.

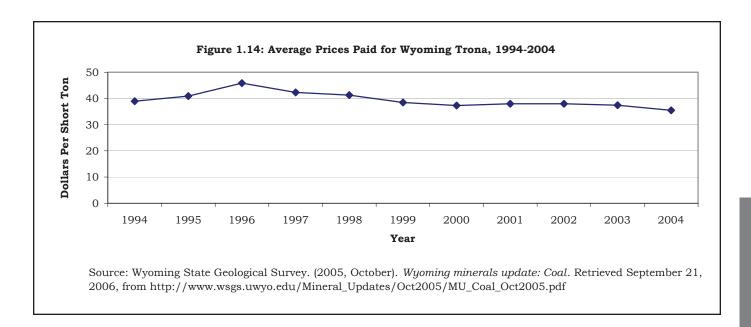
In contrast, after peaking in 1996, prices for trona have been flat to declining through most of the present decade (see Figure 1.14, page 13). Some of the decline may be a result of increased competition with trona producers in China. In an effort to help Wyoming producers better compete, the U.S. Congress reduced the federal royalty rate on trona from 6% to 2% for a period of five years (U.S. Geological Survey, 2007).

#### **Energy Prices**

For 2006 and 2007, the U.S. Department of Energy, Energy Information Administration (EIA; 2006c) projects that West Texas Intermediate (WTI) crude oil prices will average approximately \$70 per barrel. Over the long term (through 2014), EIA forecasts a gradual decline in prices (2006a).

EIA projects that natural gas prices will average \$7.51 per thousand cubic feet (mcf) through 2006 and \$8.30 per mcf in 2007 (2006c). Through 2016, however, prices are forecasted to gradually decline to \$4.46 per mcf (EIA, 2006a).





Prices for coal for electric power generation are projected to rise from the fall of 2006 through 2007, but at a slower rate than during 2005 and the first half of 2006 (EIA, 2006c). However, through 2021, prices per ton are expected to decline (EIA, 2006a).

Nuclear energy is expected to fill an increasing percentage of the world's energy needs through 2030 (International Atomic Energy Agency, 2006). In light of concerns about global warming, nuclear energy is increasingly being considered as an alternative because it does not emit harmful gasses, keeps waste isolated from the environment, and requires less area to produce the same amount of electricity as other power sources (Nuclear Energy Institute, n.d.). Additionally, the high price of petroleum is spurring new interest in nuclear energy (EIA, 2006b). Uranium prices have risen substantially in recent years, from \$10 per pound in June 2001 to \$43 per pound in May 2006. Provided that prices remain at commercially viable levels (\$30 per pound according to EIA), Wyoming could also capitalize on uranium as an

energy resource as well (Bleizeffer, 2006a).

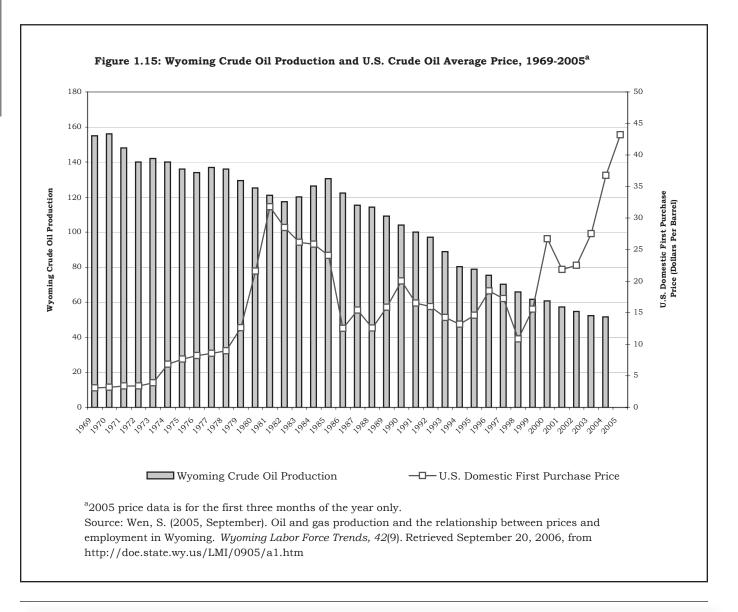
Projected rises or declines in energy prices will be affected by shocks, the implementation of new technologies, and new or improved transmission capacity. Price shocks occur as the result of unanticipated events. The discovery of a leak in the pipeline from the nation's largest field, Prudhoe Bay, which yielded a rise in gasoline prices in August 2006, is an example of a price shock (CBS News, 2006). New technologies such as the proposed coal-to-liquids plant proposed near Medicine Bow, Wyoming, can help reduce dependence on foreign crude oil, thus putting downward pressure prices (Bleizeffer, 2006b). Addition of transmission capacities, such as the BP natural gas pipeline due to come online in 2009 that will run from Wamsutter, Wyoming, to eastern Ohio, also will influence production incentives and hence the employment required to extract energy resources (Pipeline News, 2007).

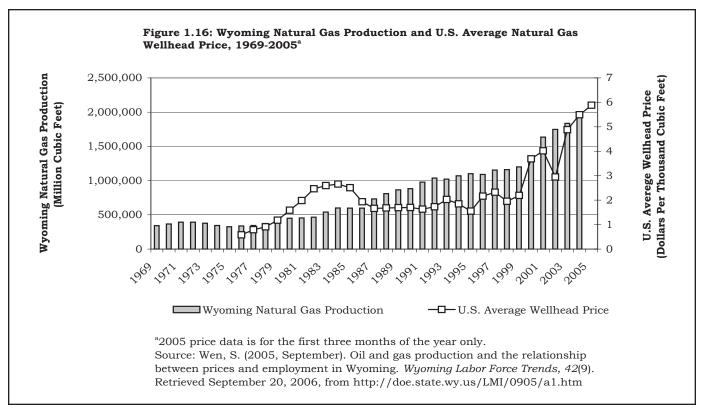
A general expectation is that price drives production in Mining. However,

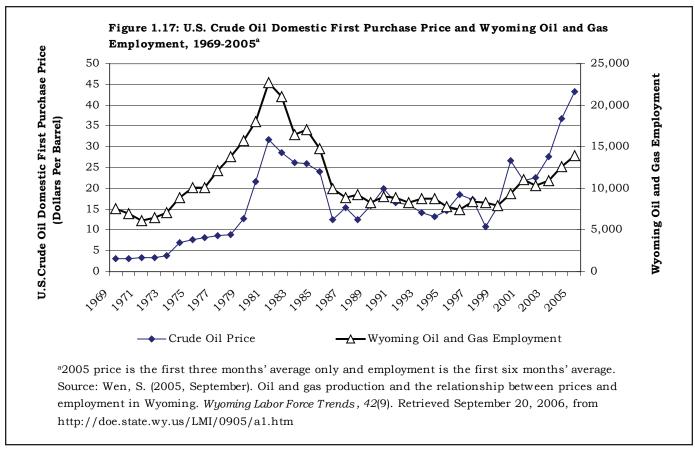
this is not necessarily the case. Wen (2005) found in the Mining subsector of oil and gas extraction that production was less sensitive to prices than employment. Production and employment are compared to oil and gas prices in Figures 1.15 through 1.18 (pages 14-16). Figure 1.15 shows Wyoming crude oil production and the U.S. average crude oil price for 1969 through 2005, while Figure 1.16 shows Wyoming natural gas production and the average natural gas wellhead price. Employment in oil & gas extraction is compared to the prices of crude oil and natural gas in Figures 1.17 and

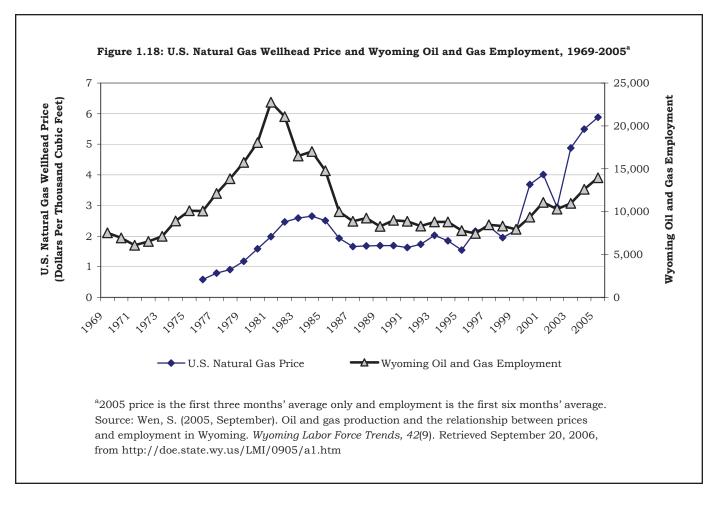
1.18, respectively. Figure 1.15 shows that, although crude oil prices were at record highs in 2004, production had declined to 51.6 million barrels, "the lowest level seen in the past 27 years and less than half of what was produced before the bust in the 1980s" (Wen, 2005, p.3). Natural gas production was relatively flat during the late 1980s and most of the 1990s (see Figure 1.16), despite rising prices during the mid to late 1990s. Only since 2001 have natural gas production increases more closely

(Text continued on page 16)









(Text continued from page 14)

corresponded to price increases. In contrast to production, changes in employment have more closely corresponded to crude oil and natural gas prices (see Figures 1.17 and 1.18). As prices of the commodities rise or decline, employment is more likely than production to follow the same pattern. Wen points out that:

> At first glance, it may seem odd for employment to be sensitive to price while production is not. Upon further examination we see why this paradox occurs. When prices are high, there is an incentive for firms not only to operate existing production facilities but to also drill new wells

and construct more production facilities. Expanding production requires more workers. In order for firms to continue to make a profit when prices are low, employers have to cut production costs. Reducing wage expenses by laying off workers would be the quickest and easiest way to reduce total production costs, while sustaining target production levels.... However, to some extent employment is probably also affected by expectations about future demand and future prices. (2005, p. 6)

#### Summary

As the average age of Wyoming's population increases, the types of goods and services demanded will change. The health care industry will likely experience the greatest impact of an older population. Furthermore, as the number of workers retiring increases, employment opportunities for younger members of the labor force will become available. However, because net population growth may not meet the demand for workers, nonresidents are anticipated to be an increasing segment of the state's labor force.

Natural resources extraction, particularly energy resources, continues to heavily impact the state's economy. Unlike much of the past two decades, however, high prices for several resources are yielding increased market incentives for extraction. Future energy resource extraction will depend on economic shocks, resource transmission capacity, and implementation of new technologies.

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#### **Statewide Industry Projections**

by: Sara Saulcy, Senior Economist

In this chapter we cover statewide industry projections for 2004 to 2014. First, we briefly discuss historical industry employment. We then provide an overview of projected employment by major industry. The remainder of the chapter examines projected employment within major industries (for a discussion of model and forecast selection, see Leonard, 2005).

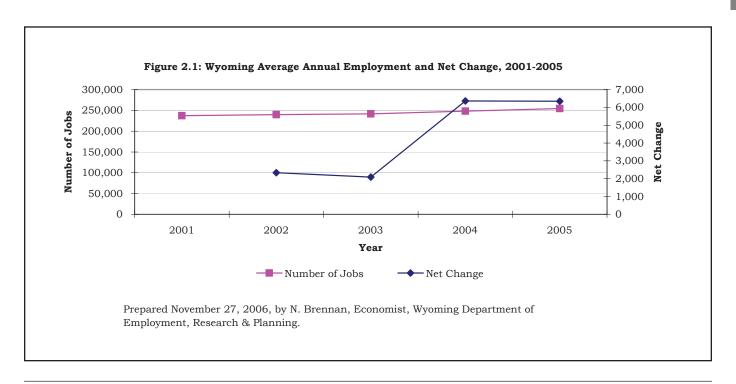
#### **Historical Employment**

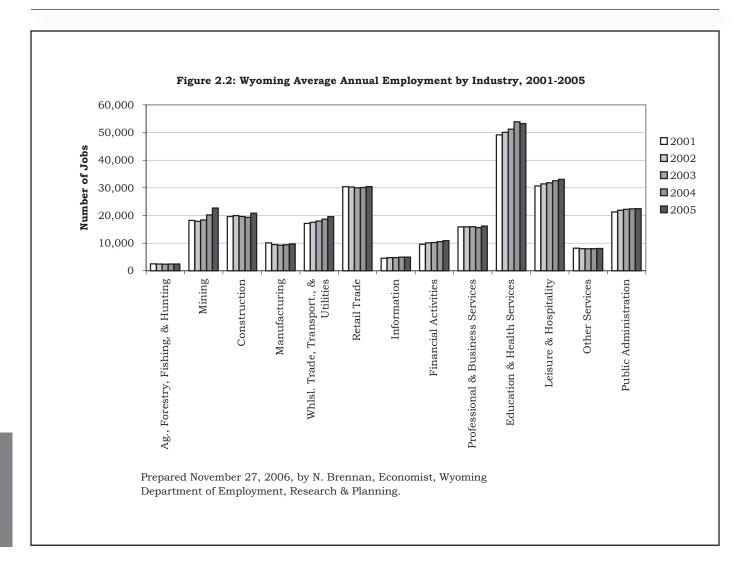
During the first two years of the decade, employment growth in Wyoming was relatively flat (see Figure 2.1). Employment growth in the state gained momentum in 2003 and has grown steadily since that time. Figure 2.2 (see page 20) illustrates industry employment from 2001-2005. Education & health services by far had the most jobs, ranging from a low of 49,187 jobs in 2001 to a high of 53,899 in 2004. Leisure & hospitality and retail trade had

the second and third most jobs, respectively. Employment in leisure & hospitality ranged from a low of 30,703 jobs in 2001 to a high of 33,044 jobs in 2005. Retail trade had slightly fewer jobs, with a range of 30,105 to 30,479 jobs. The fewest jobs were found in agriculture, forestry, fishing, & hunting (2,412 to 2,481 jobs); information (4,550 to 4,932 jobs); and other services (7,939 to 8,144 jobs).

#### **Statewide Industry Forecasts**

Wyoming's employment is projected to grow by a total of 25.8% over the decade, from 248,032 jobs in 2004 to 311,919 jobs in 2014 (63,887 jobs; see Table 2.1, page 21). By comparison, employment growth in the U.S. over the decade is projected to be 13.7%, from 134.3 million jobs in 2004 to 152.8 million jobs (18.5 million; see Table 2.2, page 21).





Among major industries in the state, the greatest projected net growth is in education & health care (11,435 jobs), followed by mining (11,219; see Table 2.1). However, the greatest percentage growth is projected in mining (55.8%), followed by construction (45.5%). The high projected growth in mining is attributable primarily to rising energy prices, while growth in education & health care is due mainly to the state's aging population (see Chapter 1, page 1, for further discussion of the impact of demographics on the health care industry). The rise in construction employment will largely result from repairs and replacements of schools as well as residential housing. Projected net growth is smallest for

agriculture, forestry, fishing, & hunting (469 jobs; 19.2%) and information (671 jobs; 13.6%).

While positive net employment growth is projected to occur in all major industries in Wyoming, projected growth in three industries in the U.S. is negative: agriculture, forestry, fishing, & hunting (-10.7%); mining (-8.8%); and manufacturing (-5.4%; see Table 2.2). Wyoming's projected percent growth in these industries is 19.2%, 55.8%, and 18.8%, respectively.

Dramatic changes in the state's industry

(Text continued on page 22)

Table 2.1: Wyoming Statewide Long-Term Employment Projections by Industry, 2004-2014

	En	Employment		Change, 2004-2014	
NAICS <sup>a</sup> Industry	2004	2014 (Projected)	Number	Total Percent	
Agriculture, Forestry, Fishing, & Hunting	2,440	2,909	469	19.2%	
Mining	20,089	31,308	11,219	55.8%	
Construction	19,177	27,904	8,727	45.5%	
Manufacturing	9,536	11,326	1,790	18.8%	
Wholesale Trade, Transportation, & Utilities	17,460	23,859	6,399	36.6%	
Retail Trade	29,951	34,468	4,517	15.1%	
nformation	4,938	5,609	671	13.6%	
Financial Activities	10,562	13,473	2,911	27.6%	
Professional & Business Services	15,699	21,131	5,432	34.6%	
Education & Health Care	53,861	65,296	11,435	21.2%	
Leisure & Hospitality	32,601	38,655	6,054	18.6%	
Other Services	7,970	9,447	1,477	18.5%	
Public Administration (Includes Postal Service)	23,748	26,534	2,786	11.7%	
Total	248,032	311,919	63,887	25.8%	

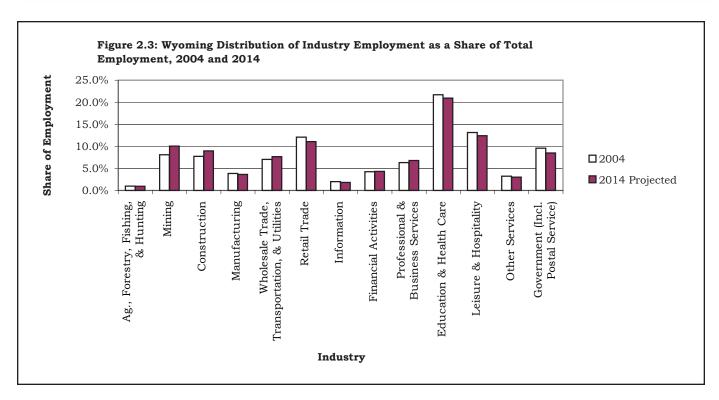
Table 2.2: U.S. Long-Term Employment Projections by Industry, 2004-2014

	<b>Employment in Thousands</b>		Change, 2004-2014	
NAICS <sup>a</sup> Industry	2004	2014 (Projected)	Number	Total Percent
Agriculture, Forestry, Fishing, & Hunting <sup>b</sup>	2,140	1,910	-230	-10.7%
Mining	523	477	-46	-8.8%
Construction	6,965	7,757	792	11.4%
Manufacturing	14,330	13,553	-777	-5.4%
Wholesale Trade, Transportation, & Utilities	10,475	11,450	975	9.3%
Retail Trade	15,035	16,683	1,648	11.0%
Information	3,138	3,502	364	11.6%
Financial Activities	8,052	8,901	849	10.5%
Professional & Business Services	16,414	20,980	4,566	27.8%
Education & Health Care	16,953	22,147	5,194	30.6%
Leisure & Hospitality	12,479	14,694	2,215	17.7%
Other Services	6,210	6,943	733	11.8%
Public Administration (Includes Postal Service)	21,619	23,790	2,171	10.0%
Total	134,333	152,787	18,454	13.7%

<sup>&</sup>lt;sup>a</sup>North American Industry Classification System.

<sup>b</sup>Includes Agriculture, Forestry, Fishing, & Hunting data from the Current Population Survey, except logging, which is from the Current Employment Statistics survey. Government wage and salary workers are excluded.

Source: U.S. Department of Labor, Bureau of Labor Statistics. (2005, December 7). Employment by major industry sector. Retrieved October 16, 2006, from http://stats.bls.gov/emp/empmajorindustry.htm



(Text continued from page 20)

composition are not anticipated at the supersector level during the forecast period (see Figure 2.3). Mining and construction are projected to increase their shares of employment the most (1.9% and 1.2%, respectively). Conversely, the shares of employment in government and retail trade are projected to decrease by 1.1% and 1.0%, respectively.

### Projected Employment — Agriculture, Forestry, Fishing, & Hunting

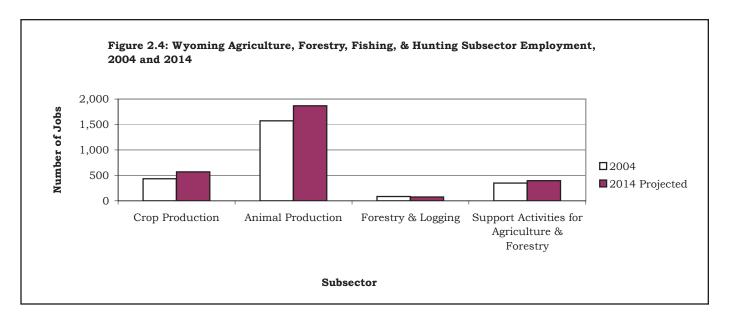
Agriculture, forestry, fishing, & hunting includes activities that primarily involve nonmineral natural resources such as cattle ranching, wheat production, and logging. Employment in the industry is highly seasonal (Leonard, 2003). Over the 2001-2005 period, employment in the industry did not change significantly (see Figure 2.2). We project that the industry will experience a 19.2% increase in employment from 2004

to 2014 (see Table 2.1), lower than the statewide average of 25.8%. The industry is expected to see its share of statewide employment decrease from 1.0% to 0.9% (see Figure 2.3).

Figure 2.4 (see page 23) shows that three of the four agriculture, forestry, fishing, & hunting subsectors will gain employment into 2014. However, only crop production is projected to increase its share of employment in the major industry (see Figure 2.5, page 23).

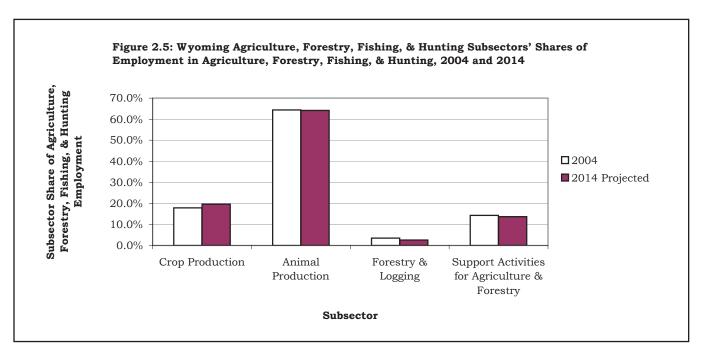
#### **Projected Employment — Mining**

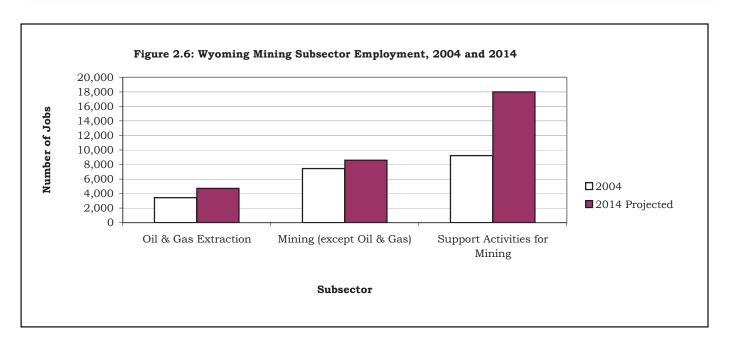
Mining has long played an important role in Wyoming's economy. The industry includes the production of "hard" minerals such as coal, uranium, and trona, as well as crude oil and natural gas (Leonard, 2003; for additional discussion of mining's impact on Wyoming's economy, see Chapter 1, page 5). The industry experienced declining employment from 2001-2002, but from

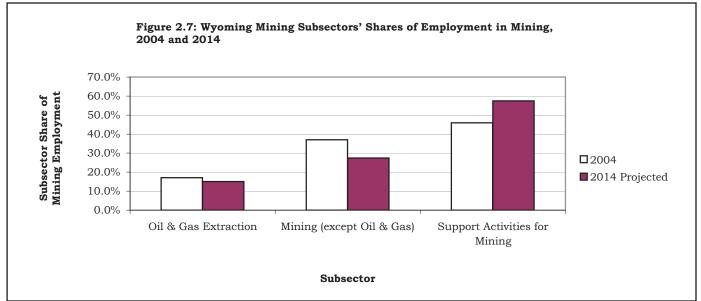


2003-2005, employment in the industry grew steadily, gaining a total of 4,474 jobs from 2001-2005. Employment in the industry is projected to increase by 11,219 jobs, from 20,089 jobs in 2004 to 31,308 jobs in 2014 (see Table 2.1). The industry's total growth of 55.8% leads all industries and is 30.0% higher than statewide total growth.

Among mining's subsectors, support activities for mining is projected to grow the most (see Figure 2.6, page 24). This subsector includes activities such as exploration, taking mineral samples, and oil and gas well maintenance activities (e.g., acidizing and chemically treating wells). Due to the large increase in employment for support activities for mining, its projected share of employment is expected to increase,







while the other two subsectors' shares are expected to decline (see Figure 2.7).

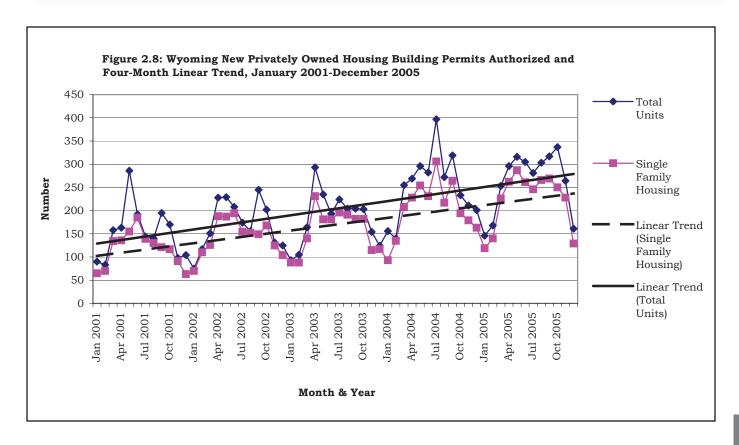
#### **Projected Employment — Construction**

Three subsectors comprise the construction industry: construction of buildings, heavy & civil engineering construction, and specialty trade contractors. The industry is heavily

influenced by population growth, as well as by federal and state spending for construction of highways and schools (Leonard, 2003). Employment in the industry did not grow substantially until 2005 (see Figure 2.2).

Wyoming new privately owned housing building permits authorized from January 2001 to December 2005 are shown in Figure 2.8 (see page 25). As the figure

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illustrates, housing construction is highly seasonal, peaking in the summer months and declining in the winter months. Overall, housing construction exhibited an upward trend to meet population increases, with both total units and single family units reaching their peak during July 2004.

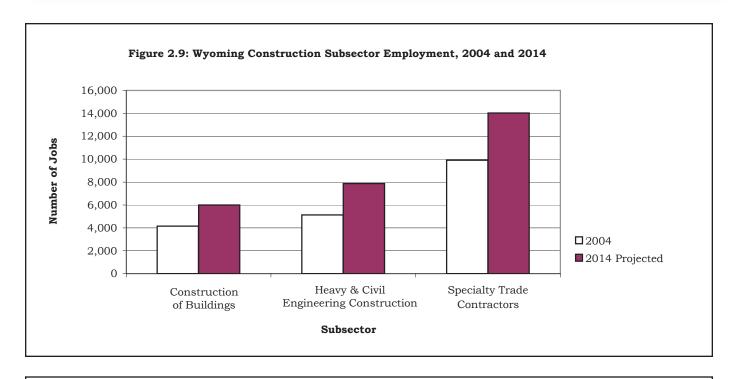
Further fueling the construction industry is an expansion in building and renovating schools (Groover, 2006). School construction is being led by the Wyoming School Facilities Commission, whose mission is to meet the Wyoming State Supreme Court's order that all school buildings must be equal regardless of the area's wealth. The state's billion-dollar budget surpluses are also a contributing factor.

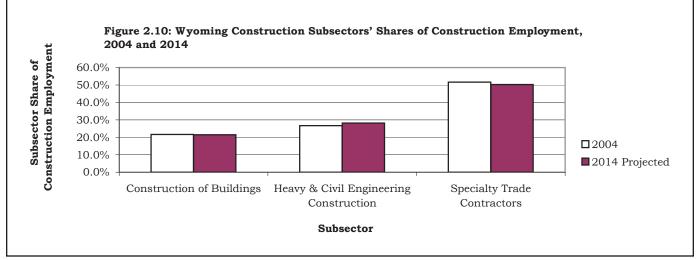
The convergence of increasing population and booming school construction means that employment in the construction industry will grow by 8,727 jobs, from

19,177 jobs in 2004 to 27,904 jobs in 2014 (see Table 2.1). The growth of 45.5% is the second highest behind mining. Specialty trade contractors is projected to experience the most growth among the Construction industry subsectors (4,133 jobs; see Figure 2.9, page 26). Specialty trade contractors includes contractors who perform framing, masonry, and electrical work. However, because of the projected growth in the other two construction industry subsectors of construction of buildings and heavy & civil engineering construction, the share of employment in specialty trade contractors will decline slightly (see Figure 2.10, page 26).

#### Projected Employment — Manufacturing

A wide variety of products are manufactured in Wyoming, such as food products, apparel, leather goods, and oil & gas field machinery & equipment. The



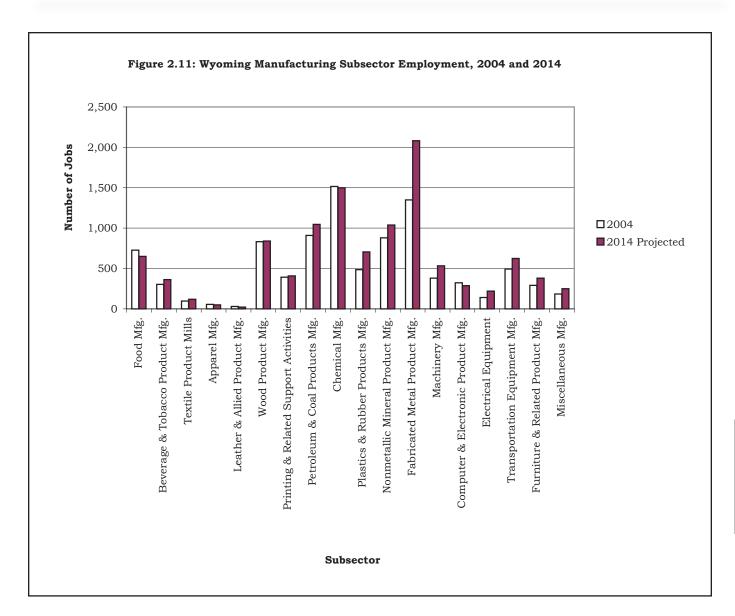


manufacturing industry is projected to grow by 1,790 jobs between 2004 and 2014 (see Table 2.1). Total growth in the industry of 18.8% is less than the statewide average of 25.8%.

The bulk of the growth will occur in the fabricated metal product manufacturing subsector, with a projected increase of 733 jobs (see Figure 2.11, page 27). Five subsectors are forecasted to experience

declining employment: food manufacturing (-78 jobs), apparel manufacturing (-7 jobs), leather & allied product manufacturing (-7 jobs), chemical manufacturing (-16 jobs), and computer & electronic product manufacturing (-36 jobs).

In addition to increasing total employment, fabricated metal product manufacturing will also increase its share of the manufacturing industry

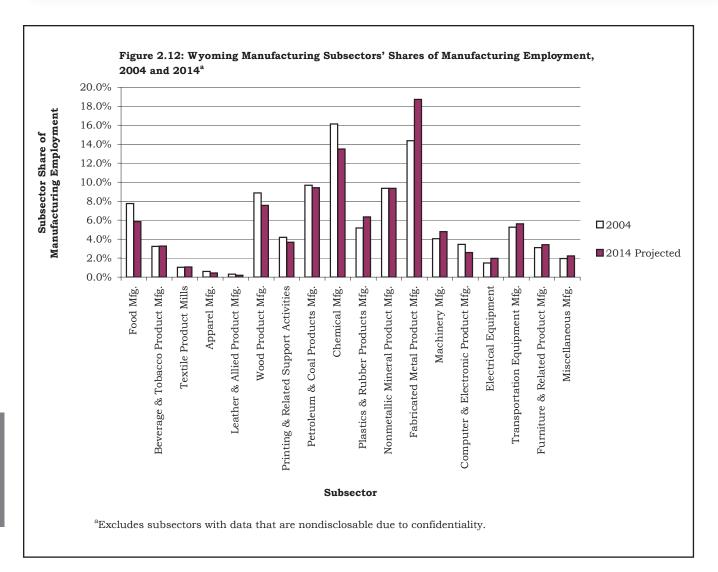


employment (see Figure 2.12, page 28). Shares of employment in the subsector will rise from 14.4% in 2004 to 18.7% in 2014. The subsectors of transportation equipment manufacturing and machinery manufacturing are also projected to increase their shares of industry employment. Transportation equipment manufacturing will increase its share from 5.3% to 5.6%, while shares in machinery manufacturing will rise from 4.0% to 4.8%. Other subsectors projected to experience rising shares of manufacturing employment are beverage & tobacco product manufacturing

(3.2% to 3.3%), textile product mills (1.0% to 1.1%), plastics & rubber products manufacturing (5.2% to 6.3%), electrical equipment (1.5% to 2.0%), furniture & related product manufacturing (3.1% to 3.4%), and miscellaneous manufacturing (2.0% to 2.2%).

# Projected Employment — Wholesale Trade, Transportation, & Utilities

Wholesale trade, transportation, & utilities experienced steady growth from 2001-2005, rising from 17,116 jobs in

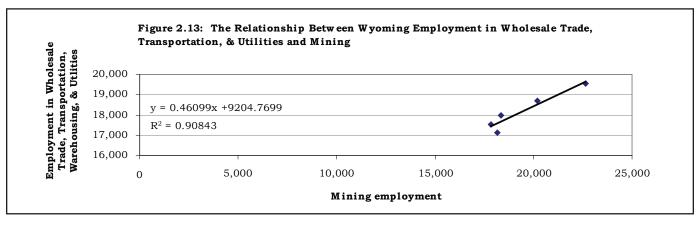


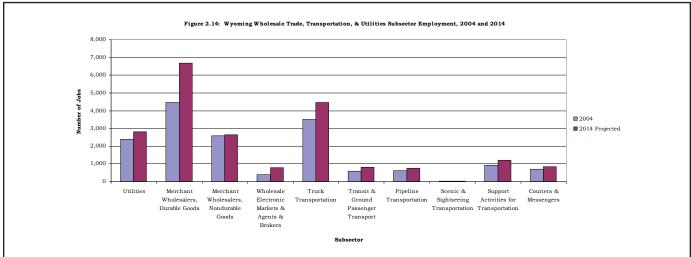
2001 to 19,573 in 2005 (see Figure 2.2). The industry is projected to grow by 36.6% over the 2004-2014 period, greater than the statewide average of 25.8% (see Table 2.1). Overall, the industry will grow by 4,517 jobs.

Figure 2.13 (see page 29) shows employment in wholesale trade, transportation, & utilities as a function of mining employment. The R<sup>2</sup> value of 0.90843 tells us that approximately 91% of the variation in wholesale trade, transportation, & utilities employment can be explained by variation in mining employment. Thought of another way, if

mining employment were zero, it is estimated that employment in wholesale trade, transportation, & utilities would be approximately 9,205, approximately 17,000 less than current employment.

Among the industry's subsectors, merchant wholesalers, durable goods is forecasted to see the most growth in jobs (2,241), more than double the next highest growth subsector of truck transportation (963; see Figure 2.14, page 29). The least growth will occur in scenic & sightseeing transportation (+2 jobs) and merchant wholesalers, nondurable goods (+49 jobs).





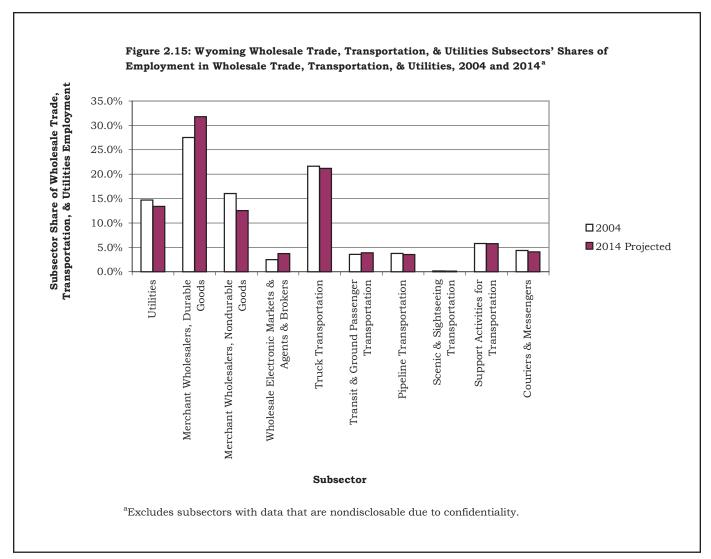
In addition to employment growth, merchant wholesalers, durable goods is also expected to see its shares of employment within the industry grow from 27.5% to 31.8% (see Figure 2.15, page 30). In fact, only two other subsectors, wholesale electronic markets & agents & brokers and transit & ground passenger transportation, will gain employment shares. Wholesale electronic markets & agents & brokers will see its shares of employment rise from 2.5% to 3.7%, while transit & ground passenger transportation will increase from 3.6% to 3.9%. Conversely, truck transportation, which is projected to grow by 963 jobs, is expected to experience declining shares of employment, from 21.6% to 21.2%. Merchant wholesalers, nondurable goods will have the largest drop in shares from 16.0% to 12.5%.

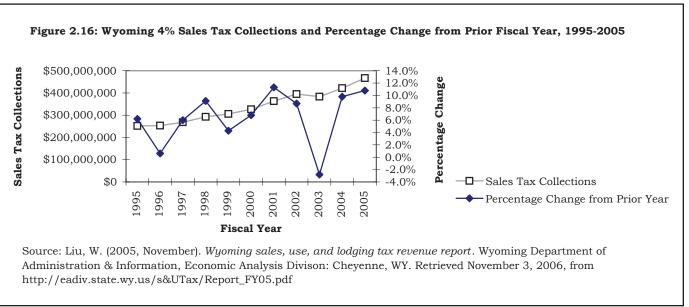
#### Projected Employment — Retail Trade

Employment growth in retail trade was flat from 2001 to 2005 with a total increase of 65 jobs (see Figure 2.2). Retail trade is projected to grow by 4,517 jobs between 2004 and 2014 (see Table 2.1). The industry's percentage growth of 15.1% will lag behind the statewide average of 25.8%.

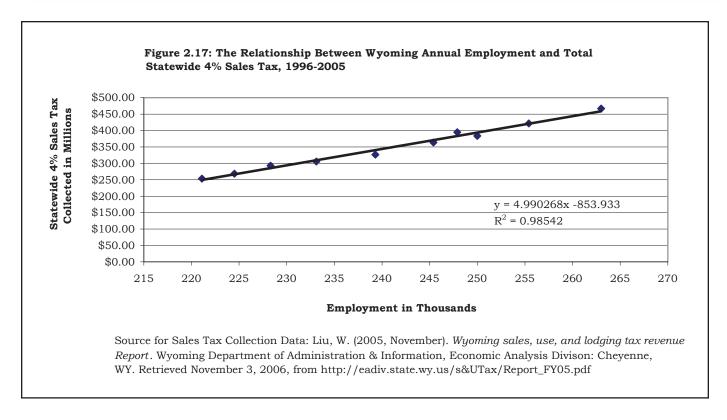
In Figure 2.16 (see page 30) we see that revenues from the state's 4% sales tax collections have generally grown since 1995. The exception was from 2002 to 2003 when revenues dipped from approximately \$395 million to approximately \$384 million.

(Text continued on page 31)





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(Text continued from page 29)

Employment in retail trade is related to sales tax collections in Figure 2.17 (see page 31). The figure shows a strong linear relationship between total Wyoming employment and total statewide 4% sales tax collections. The  $R^2$  value of 0.98542 tells us that nearly 99% of the variation in sales tax is explained by employment. The slope, 4.990268, tells us that for every 1,000 people hired in the state, sales tax revenue increases by approximately \$5,000 per year  $$4.990268 \times 1,000 = 4,990.268$ ).

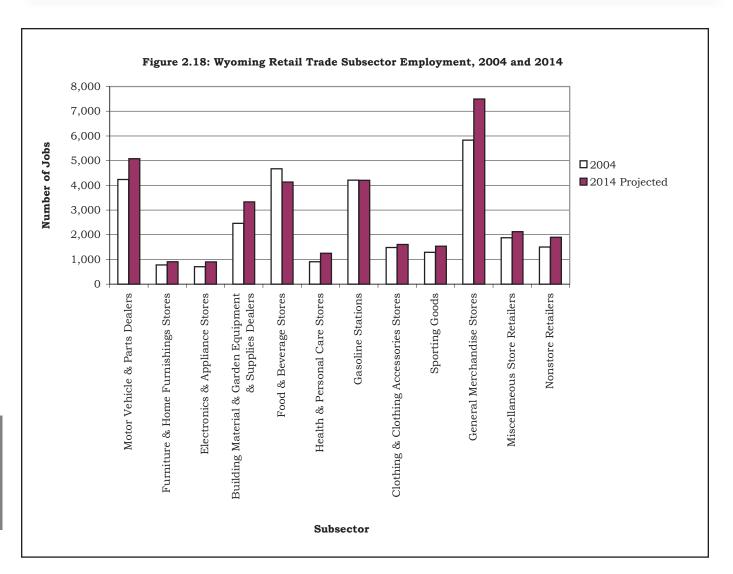
Among subsectors, general merchandise stores will experience the largest net gain with 1,663 jobs (see Figure 2.18, page 32). Other subsectors projected to see large increases (greater than 800 jobs) are motor vehicle & parts dealers (846 jobs) and building material & garden equipment & supplies dealers (869 jobs). Two subsectors are projected to see declining employment,

food & beverage stores (-535 jobs) and gasoline stations (-5 jobs).

In addition to experiencing large overall net growth, general merchandise stores will also see an increase in overall shares of employment in retail trade, from 19.5% of employment in the industry to 21.7% (see Figure 2.19). Motor vehicle & parts dealers and building material & garden equipment & supplies dealers will also see their shares of Retail Trade employment grow by 0.6% and 1.4%, respectively. In addition to declining employment, food & beverage stores will lose shares, declining from 15.6% to 12.0%, the largest decline in shares among retail trade subsectors.

## **Projected Employment — Information**

From 2001 to 2005, employment in information grew by a total of 382 jobs, or 8.4% (see Figure 2.2). Over the 2004-2014 period, the industry will grow by 13.6% (671



jobs; see Table 2.1). The percentage growth in information will be 12.2% lower than the statewide projected growth of 25.8%.

Internet service providers will grow the most among information's subsectors, with an increase of 213 jobs projected (see Figure 2.20, page 33). Only one of the industry's subsectors, broadcasting (except internet), is anticipated to decline, from 584 jobs in 2004 to 545 jobs in 2014.

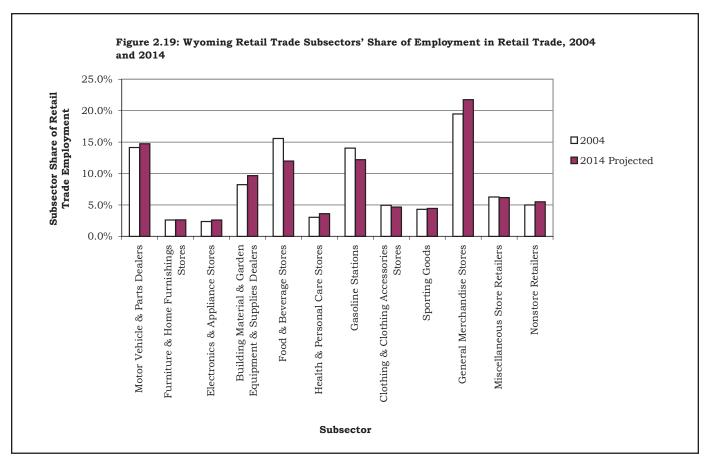
Shares of information employment will decline among three subsectors: publishing industries, broadcasting (except internet), and telecommunications (see Figure 2.21,

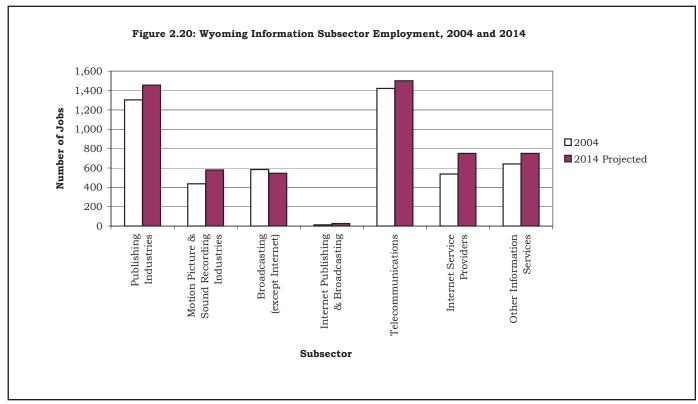
page 34). Both broadcasting (except internet) and telecommunications will see their shares decline by 2.1%, while publishing industries will decline by 0.4%.

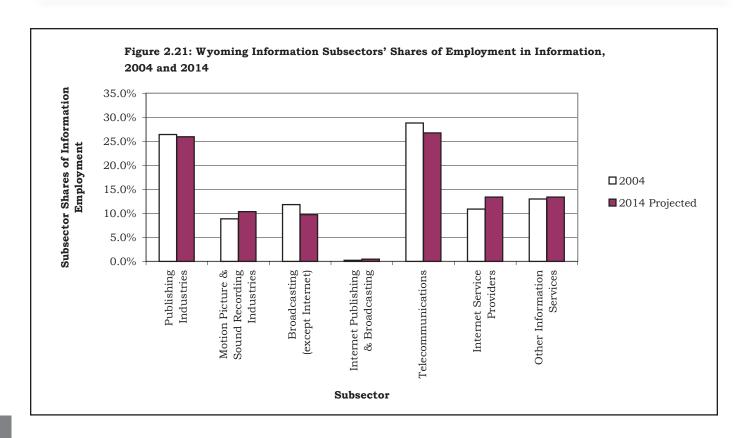
# Projected Employment — Financial Activities

Financial activities includes a range of personal and business financial services including commercial banking, insurance carriers, securities brokerages, and real estate investment trusts. From 2001 to 2005, financial activities sustained steady

(Text continued on page 34)







(Text continued from page 32)

growth, with total growth of 13.5% (1,296 jobs; see Figure 2.2). The industry is projected to grow by 27.6%, slightly higher than the statewide average (see Table 2.1). Employment will increase by 2,911 jobs.

As shown in Figure 2.22 (see page 35), employment in financial activities has a negative linear relationship with mortgage rates. The slope of the line tells us that for every 1% increase in 30-year fixed mortgage rates, employment in financial activities drops by approximately 704 jobs (0.01 x (-70.4154) x 1,000 = 704.15). The R<sup>2</sup> value of 0.680017 tells us that approximately 68% of the variation in financial activities employment can be explained by 30-year fixed mortgage rates.

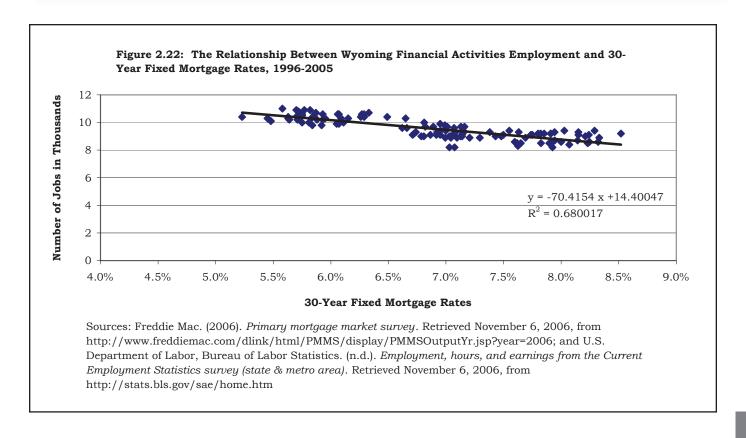
Each of the five financial activities subsectors is projected to grow (see Figure

2.23, page 36). Rental & leasing services will gain the most jobs (1,231), followed by credit intermediation & related activities (702 jobs). Securities, commodities, & other financial activities will gain the fewest jobs (108).

As a percentage of total financial activities, two subsectors will gain shares and two subsectors will lose shares of employment. Gains in employment shares will occur in real estate (0.4%) and rental & leasing services (5.6%). The subsectors that will experience declining shares are credit & intermediation & related activities (-4.0%) and insurance carriers & related activities (-2.0%). The fifth subsector, securities, commodities, & other financial activities, will see no change.

Projected Employment — Professional & Business Services

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Legal services, certified public accountants, engineering services, and computer programming services are among the types of firms included in professional & business services. Growth in the industry from 2001-2005 was flat to declining, with net growth of 246 jobs (1.5%). Professional & Business Services is anticipated to buck the 2001-2005 trend and grow by 34.6% (5,432 jobs) from 2004 to 2014, nearly 10% more than the statewide average of 25.8% (see Table 2.1).

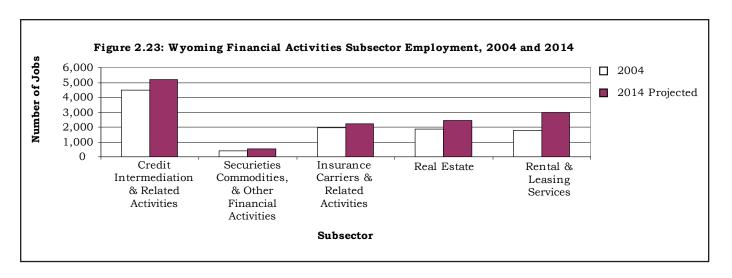
Each of the four subsectors of professional & business services are projected to gain jobs, with the most occurring in professional, scientific, & technical services (3,006 jobs; see Figure 2.25, page 37). An additional 2,012 jobs will be added in administrative & support services. The remaining job growth will occur in management of companies & enterprises (172 jobs) and waste

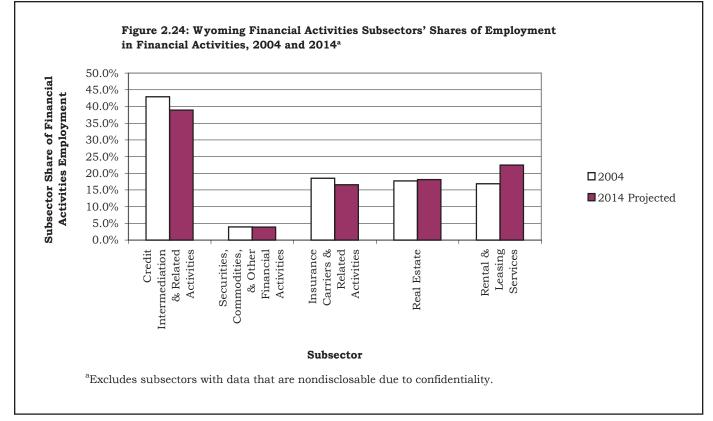
management & remediation services (242 jobs).

Professional, scientific, & technical services will see its shares of professional & business services employment grow from 50.9% to 52.1% (1.1%; see Figure 2.26, page 37). Shares of employment held by waste management & remediation services will rise from 3.5% to 3.8%. The other two subsectors, management of companies & enterprises and administrative & support services, will experience declining shares of employment (-0.4% and -0.9%, respectively).

# Projected Employment — Education & Health Services

Total employment in education & health services grew by 4,068 jobs (8.3%) from 2001 to 2005, second only to the net growth in the mining industry (see Figure 2.2). While the industry's projected growth of 21.2% is lower

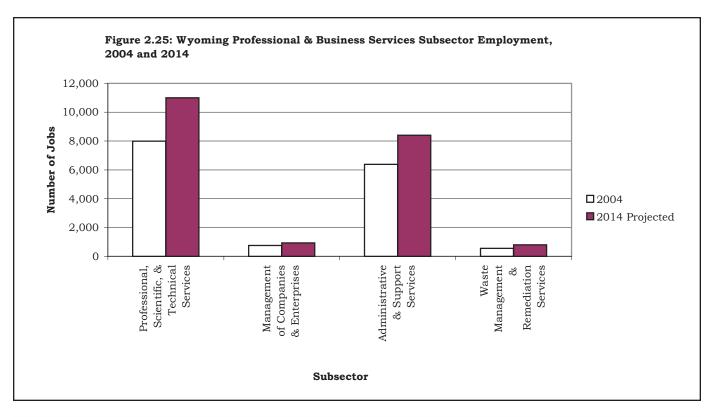


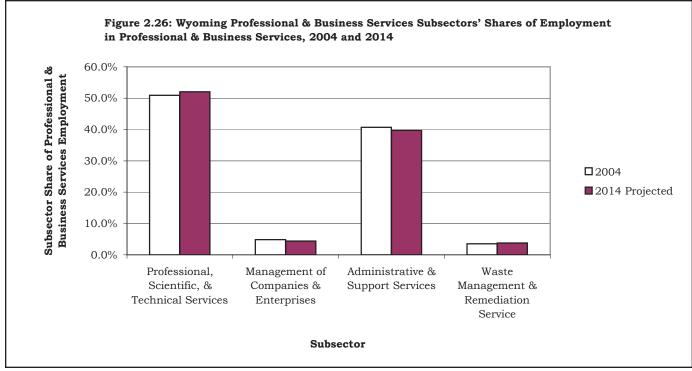


than the statewide average of 25.8%, its projected net growth of 11,435 is projected to be the highest of all industries (see Table 2.1).

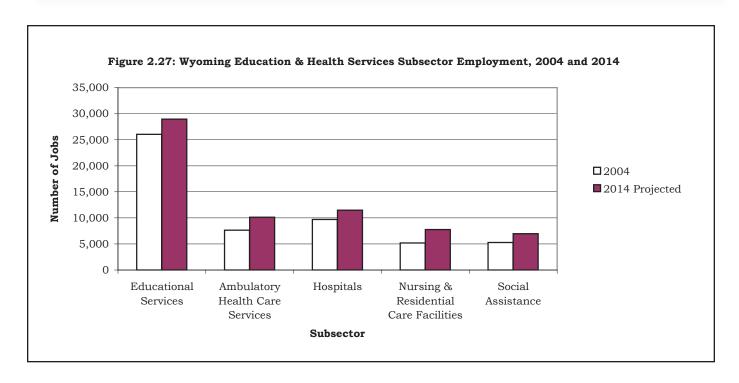
Educational services is projected to gain the most jobs of education & health services subsectors (2,919 jobs; see Figure

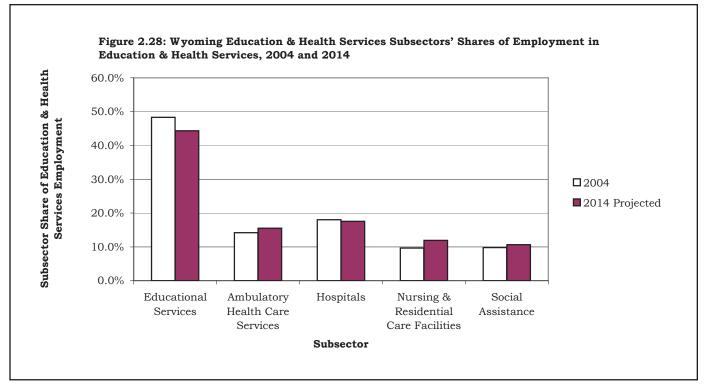
2.27, page 38). However, as a percentage, educational services will grow 11.2%, well below the percentage growth of nursing & residential care facilities (49.5%), which leads the education & health services subsectors in percentage growth. None of the subsectors will lose jobs; in fact, all five of them will grow by 1,600 or more jobs.





Three of the five education & health services subsectors will increase their shares of employment in the industry, while two will have reduced shares (see Figure 2.28, page 38). Just as it will experience the largest net employment gain, nursing & residential

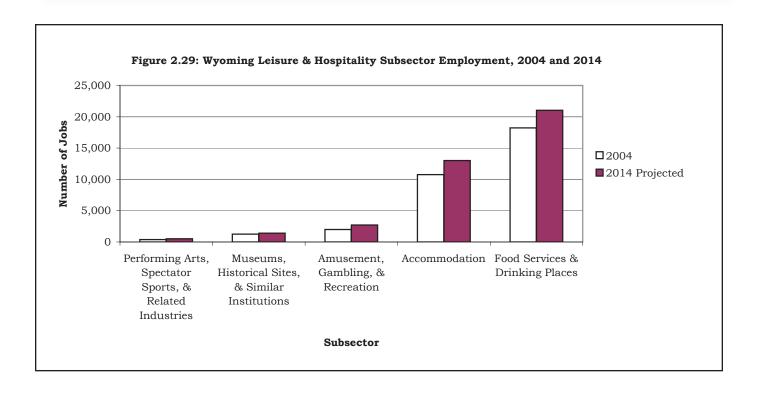




care facilities will increase its shares of employment the most, from 9.7% to 11.9% (2.2%). In addition, ambulatory health care services & social assistance will increase

their shares by 1.3% and 0.9%, respectively. Educational services and hospitals are projected to have declining employment shares (-4.0% and -0.5%, respectively).

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Projected Employment — Leisure & Hospitality

Firms in leisure & hospitality sustained steady growth from 2001-2005. Total employment growth in the industry was 2,342 jobs (7.6%; see Figure 2.2), the fourth largest net growth. From 2004-2014, leisure & hospitality is projected to have the fifth highest net growth (6,054 jobs). However, its total percent change of 18.6% will be lower than the 25.8% statewide average.

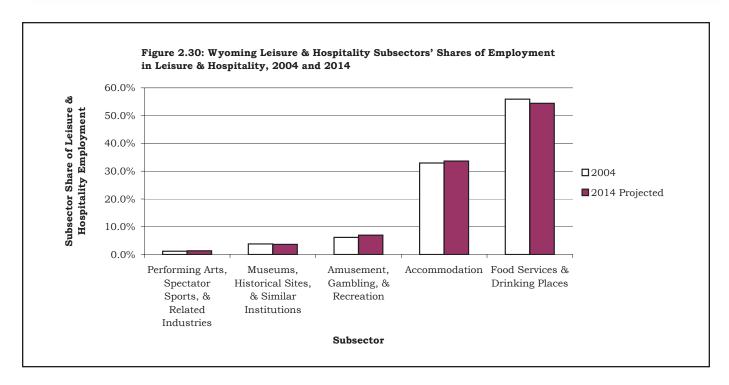
Two subsectors, accommodation and food services & drinking places, will account for more than 80% of total net growth in leisure & hospitality (see Figure 2.29). These subsectors will contribute 5,062 of the industry's 6,054 jobs. The remaining 992 jobs will be added by performing arts, spectator sports, & related industries; museums, historical sites, & similar institutions; and amusement, gambling, & recreation. Among these three subsectors, amusement, gambling, & recreation will add

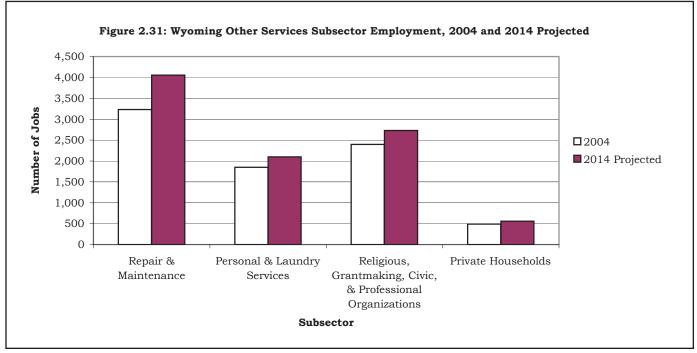
the most jobs (694).

Shares of employment by leisure & hospitality subsectors will not change dramatically (see Figure 2.30, page 40). The largest gain in shares of employment will be from amusement, gambling, & recreation (0.8%). Conversely, while food services & drinking places is projected to have the largest increase in jobs, its shares of employment will fall by 1.5% to 54.4%.

#### **Projected Employment — Other Services**

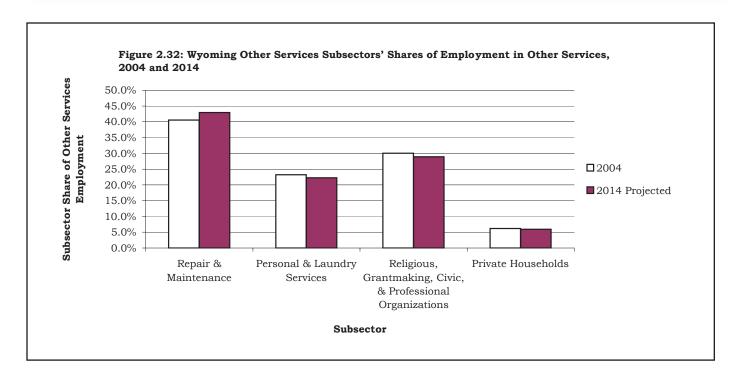
Among the firms in other services are general automotive repair, appliance repair & maintenance, barber shops, and private households. Employment in this industry was flat to declining from 2001 to 2005, with a net loss of 82 jobs (-1.0%; see Figure 2.2). Overall, employment will increase by 1,477 jobs over 2004 to 9,447 jobs in 2014 (see Table 2.1). The growth of 18.5% in the industry will lag behind the 25.8% statewide average.





A total of 824 jobs will be added to the other services subsector of repair & maintenance, the most among the industry's subsectors (see Figure 2.31). The subsectors of personal & laundry services; religious, grantmaking, civic, & professional organizations; and private households will add 251, 335, and 67 jobs, respectively.

Only repair & maintenance will see its shares of other services employment



grow, from 40.6% in 2004 to 42.9% in 2014 (see Figure 2.32). The remaining subsectors of personal & laundry services; religious, grantmaking, civic, & professional organizations; and private households will experience declining shares of 1.0%, 1.2%, and 0.3%, respectively.

# Projected Employment — Public Administration

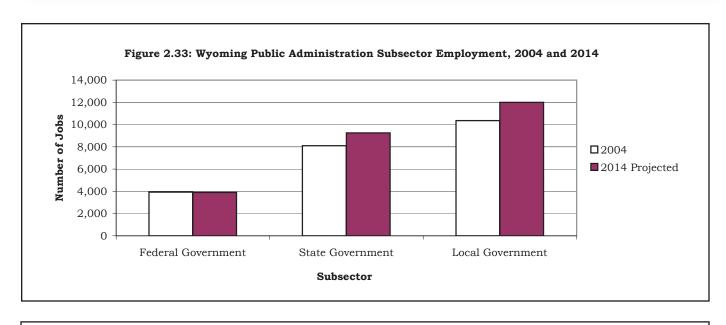
Public administration employment was relatively flat from 2001-2005, with an increase of 5.6% (1,188 jobs; see Figure 2.2), making it one of the slower growing industries. From 2004 to 2014, public administration is expected grow by 2,786 jobs (see Table 2.1). The growth of 11.7% makes it the slowest growing industry.

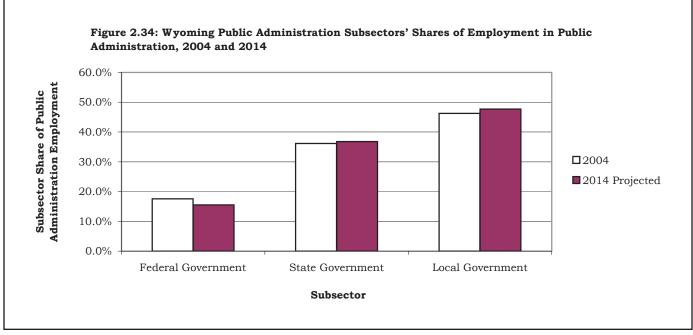
Local government is projected to grow the most with 1,642 jobs (15.9%), followed by state government with 1,151 jobs (14.2%; see Figure 2.33, page 42). Federal government will decline by 31 jobs (-0.8%).

The distribution of employment among federal, state, and local governments will not change substantially over the forecast period (see Figure 2.34, page 42). Local government and state government will increase their shares of public administration employment (1.4% and 0.6%, respectively). However, federal government shares will fall by 2.1% to 15.5% of industry employment.

### Summary

While mining garners a great deal of attention in Wyoming, education & health services is the economic powerhouse in the state, constituting 20.9% of total employment, compared to 8.9% in mining. Total employment is projected to grow by a total of 63,887 jobs during the 2004-2014 period. Mining and education & health services will sustain substantial gains, with each contributing more than 11,000 new jobs to the state. All but two industries, agriculture, forestry, fishing, & hunting and information, will add 1,000 or more jobs.





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# **Regional Industry Projections**

by: Sara Saulcy, Senior Economist

In this chapter we examine Wyoming industry projections on a regional basis. The regional projections are divided among five regions and two metropolitan statistical areas (MSAs), Casper and Cheyenne. Map 3.1 shows the counties included in each area. With the exception of the Northeast and North-Central regions, the substate areas are the same as those used for the Occupational Employment Statistics (OES) survey. The Northeast region is comprised of Campbell, Crook, and Weston counties, while Sheridan and Johnson counties make up the North-Central region. For the OES

survey, these two regions are combined into a single Northeast region. Projections using OES regions are available online at http://doe.state.wy.us/LMI/projections.htm.

Mining is presently the focus of attention because of its rapid expansion. However, with the exception of the Northeast and Southwest regions, education & health services is the top employing industry in all substate areas (see Table 3.1, page 44). In addition, net growth in education & health services will lead industry growth in all regions except the Northeast and the Southwest. As discussed in Chapter 1, the aging of the state's

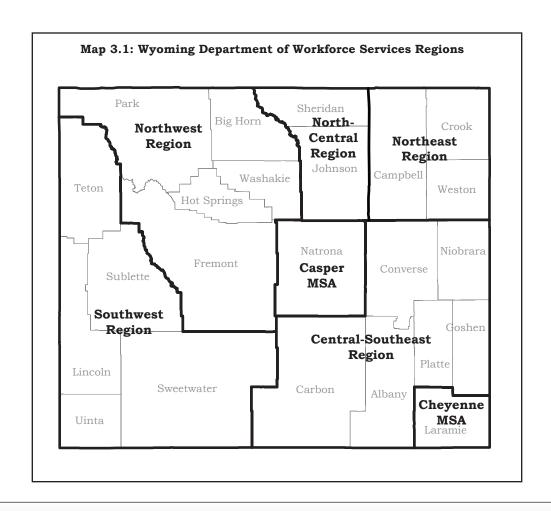


Table 3.1: Wyoming's Top Three Employing Industries by Region, 2004 and 2014 (Projected)

		Employment		Change, 2004-2014	
Region	NAICS <sup>a</sup> Industry	2004	2014 (Projected)	n	%
	Education & Health Care	53,861	65,296	11,435	21.2%
Statewide	Leisure & Hospitality	32,601	38,655	6,054	18.6%
	Retail Trade	29,951	34,468	4,517	15.1%
	Education & Health Care	12,105	13,506	1,401	11.6%
Central-Southeast	Leisure & Hospitality	4,165	4,518	353	8.5%
	Retail Trade	4,003	4,239	236	5.9%
	Education & Health Care	9,628	11,270	1,642	17.1%
Northwest	Leisure & Hospitality	5,515	6,660	1,145	20.8%
	Retail Trade	4,492	5,211	719	16.0%
	Education & Health Care	3,905	4,883	978	25.0%
North-Central	Leisure & Hospitality	1,970	2,424	454	23.0%
	Retail Trade	1,937	2,364	427	22.0%
	Mining	6,533	10,563	4,030	61.7%
Northeast	Education & Health Care	3,974	4,769	795	20.0%
	Retail Trade	2,379	2,875	496	20.8%
	Leisure & Hospitality	10,203	12,242	2,039	20.0%
Southwest	Education & Health Care	8,958	10,720	1,762	19.7%
	Retail Trade	6,429	7,358	929	14.5%
	Education & Health Care	7,166	9,240	2,074	28.9%
Casper MSAª	Retail Trade	4,819	5,700	881	18.3%
	Leisure & Hospitality	3,489	4,462	973	27.9%
	Education & Health Care	8,054	10,473	2,419	30.0%
Cheyenne MSA	Government	6,749	7,266	517	7.7%
	Retail Trade	5,540	6,506	966	17.4%

<sup>&</sup>lt;sup>b</sup>Metropolitan statistical area; see Map 3.1 for definitions of substate areas.

population is the primary driver of growth in education & health services.

#### Regional/Statewide Comparison

With the exception of the Central-Southeast region, employment from 2001-2005 was generally flat early in the decade, with increasing employment in 2004 and 2005. The rise in employment during 2004 and 2005 coincided with increasing energy prices, particularly natural gas.

On page 45, Table 3.2 and Figure 3.1 show statewide industry projections compared to regional projections. Overall, Wyoming's employment is projected to grow by a total of 25.8% (63,887 jobs) between 2004 and 2014. The greatest numeric increase in jobs will occur in the Southwest region (16,797 jobs) while the largest total percentage increase is forecasted for the Northeast region (42.7%). The Central-Southeast region will experience the lowest percentage growth (14.9%), while the NorthCentral region has the smallest projected net increase (4,816 jobs).

Table 3.2: Wyoming Regional Forecast, 2004-2014

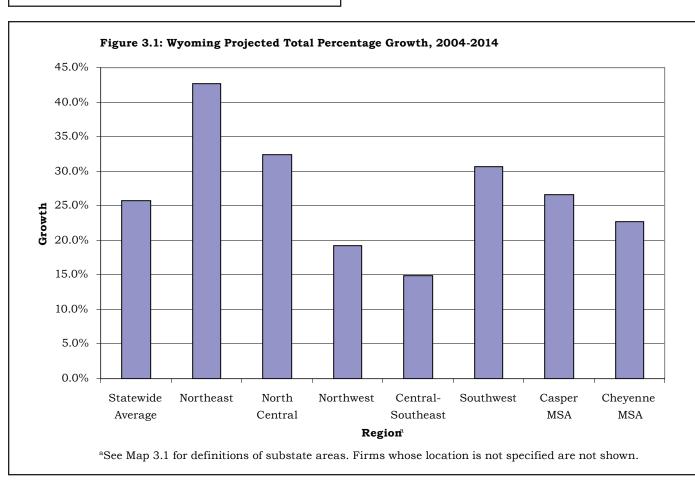
	Employment		Change, 2004- 2014	
Region	2004	2014 (Projected)	n	%
Statewide Average	248,032	311,919	63,887	25.8%
Northeast	25,618	36,554	10,936	42.7%
North-Central	14,892	19,708	4,816	32.3%
Northwest	37,334	44,492	7,158	19.2%
Central-Southeast	35,688	40,989	5,301	14.9%
Southwest	54,781	71,578	16,797	30.7%
Casper MSA <sup>a</sup>	35,270	44,658	9,388	26.6%
Cheyenne MSA	39,615	48,626	9,011	22.7%

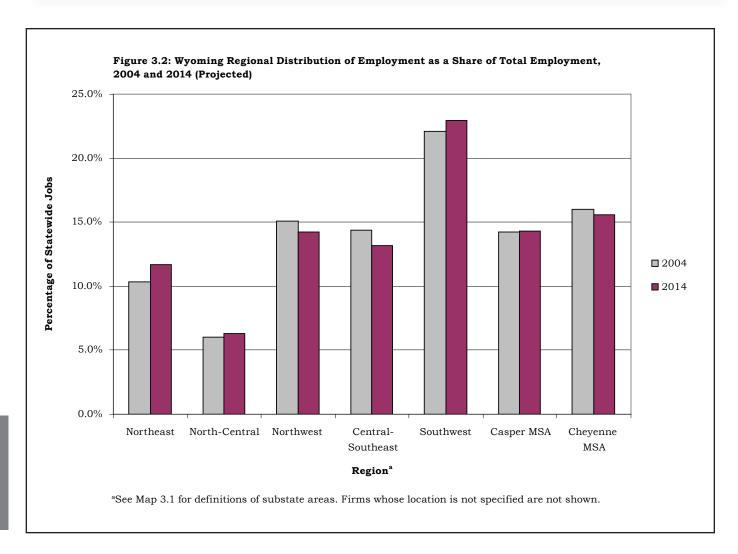
<sup>a</sup>Metropolitan statistical area; see Map 3.1 for definitions of substate areas.

The distribution of projected employment across regions is shown in Figure 3.2 (see page 46). Four of the regions, the Northeast, North-Central, Southwest, and Casper MSA, are all projected to increase their shares of employment. The remaining regions, the Northwest, Central-Southeast, and the Cheyenne MSA, are all forecasted to experience decreases in their shares of statewide employment. The Northeast region will see the largest gain in the share of employment with an increase of 1.4%. The Central-Southeast region is projected to experience the steepest drop in shares of employment at -1.2%.

## Southwest Region

Figure 3.3 (see page 47) shows that employment was flat from 2001 to 2002,





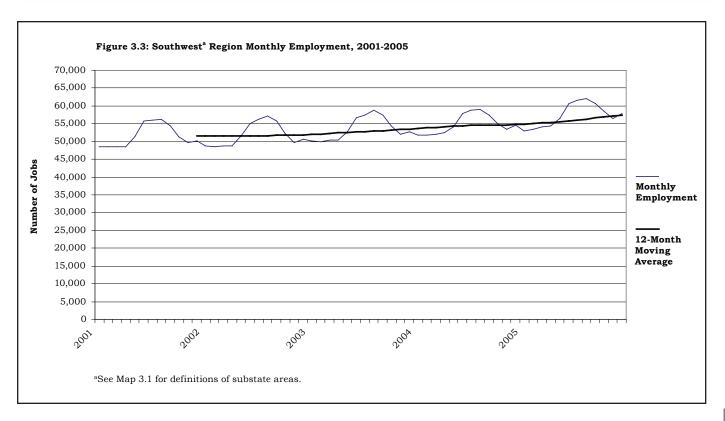
but began climbing steadily in 2003. This trend is projected to continue as shown in Table 3.3 (see page 47). From 2004-2014, the total percentage growth in the region of 30.7% is forecasted to be higher than the statewide average of 25.8%. Three industries are projected to experience total growth in excess of 40% over the forecast period: mining (75.4%); wholesale trade, transportation, & utilities (45.2%); professional & business services (42.0%); and financial activities (40.4%). Much of the growth in the region is forecasted to be a direct result of mineral extraction in Sublette County and surrounding areas.

Figure 3.4 (see page 48) reflects the

projected increased influence of the mining industry in the region. All industries are forecasted to experience at least some growth, but the biggest increase by far is projected in mining. Agriculture, forestry, fishing, & hunting is projected to have the smallest net growth in jobs (31). The smallest total percentage growth is in manufacturing at 9.8%.

#### **Central-Southeast Region**

Employment from 2001-2005 for the Central-Southeast region is shown in Figure 3.5 (see page 48). Employment in the region was relatively flat from 2001-2003, but experienced a surge during most of 2004.



From 2004-2005, employment declined slowly but steadily.

Compared to other regions, the Central-Southeast region is expected to have comparatively low employment growth, as reflected in Table 3.4 and Figure 3.6 (see page 49). Of the 7 regions, the Central-Southeast region is projected to have the lowest percentage growth at 14.9%, more than 10% lower than the statewide average of 25.8%. As in the Southwest region, growth is highest in the mining industry (43.9%). The Central-Southeast region is geographically situated between the two regions with the most mining activity, the Southwest and Northeast. This activity spills over into the northern half of Converse County and along

(Text continued on page 49)

Table 3.3: Wyoming Statewide and Southwest<sup>a</sup> Region Total Projected Percentage Growth, 2004-2014

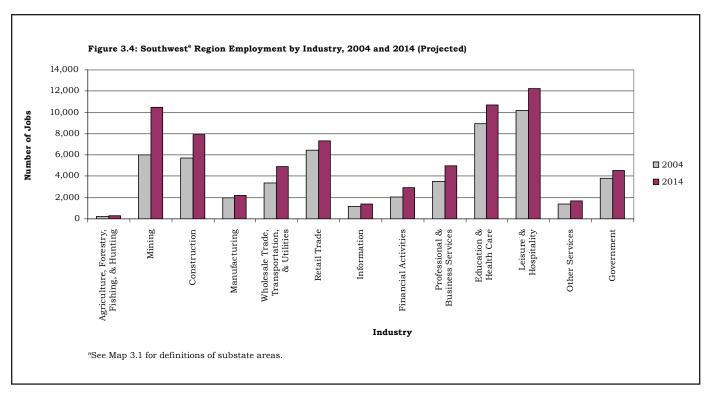
# Total Percentage Growth 2004-2014

Southwest

Agriculture, Forestry, Fishing, & Hunting Mining	19.2% 55.8%	13.7% 75.4%
Mining		75.4%
Construction	45.5%	39.5%
Manufacturing	18.8%	9.8%
Wholesale Trade, Transportation, & Utilities	36.6%	45.2%
Retail Trade	15.1%	14.5%
Information	13.6%	17.1%
Financial Activities	27.6%	40.4%
Professional & Business Services	34.6%	42.0%
Education & Health Care	21.2%	19.7%
Leisure & Hospitality	18.6%	20.0%
Other Services	18.5%	23.6%
Government (Includes Postal Service)	11.7%	18.8%
Total	25.8%	30.7%

<sup>&</sup>lt;sup>a</sup>See Map 3.1 for definitions of substate areas.

<sup>&</sup>lt;sup>b</sup>North American Industry Classification System.



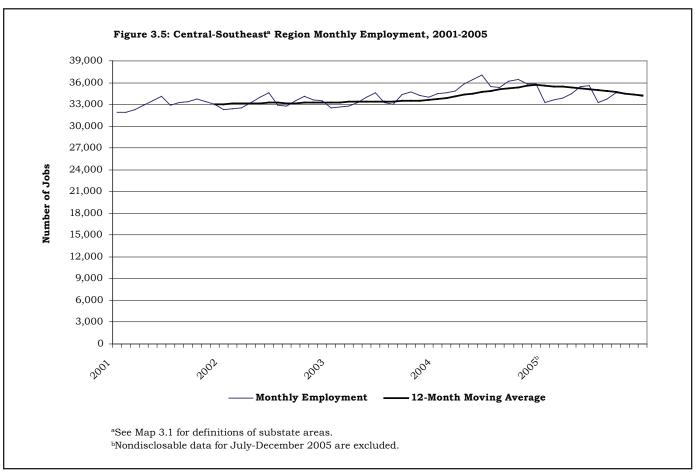


Table 3.4: Wyoming Statewide and Central-Southeast<sup>a</sup> Region Total Projected Percentage Growth, 2004-2014

Total Percentage Growth 2004-2014

NAICS <sup>b</sup> Industry	Statewide	Central- Southeast Region
Agriculture, Forestry, Fishing, & Hunting	19.2%	29.3%
Mining	55.8%	43.9%
Construction	45.5%	35.1%
Manufacturing	18.8%	1.1%
Wholesale Trade, Transportation, & Utilities	36.6%	21.7%
Retail Trade	15.1%	5.9%
Information	13.6%	-2.2%
Financial Activities	27.6%	23.7%
Professional & Business Services	34.6%	33.9%
Education & Health Care	21.2%	11.6%
Leisure & Hospitality	18.6%	8.5%
Other Services	18.5%	14.3%
Government (Includes Postal Service)	11.7%	15.3%
Total	25.8%	14.9%

<sup>a</sup>See Map 3.1 for definitions of substate areas.

(Text continued from page 47)

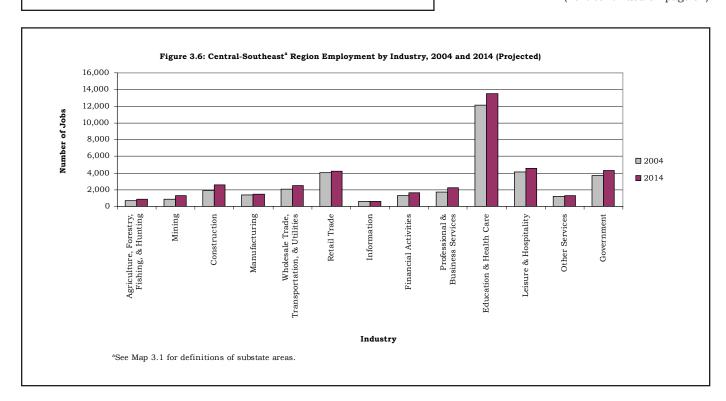
Carbon County's western border with Sweetwater County.

### **Northeast Region**

The Northeast region, which includes Campbell, Weston, and Crook counties, experienced somewhat flat employment growth from midway through 2003 and into early 2004 (see Figure 3.7, page 50). In the latter months of 2004 and throughout 2005, employment rose steadily.

Employment growth from 2004 to 2014 is expected to more closely mirror the trend seen in late 2004 and 2005 (see Table 3.5, page 50, and Figure 3.8, page 51). Construction leads all industries

(Text continued on page 51)



<sup>&</sup>lt;sup>b</sup>North American Industry Classification System.

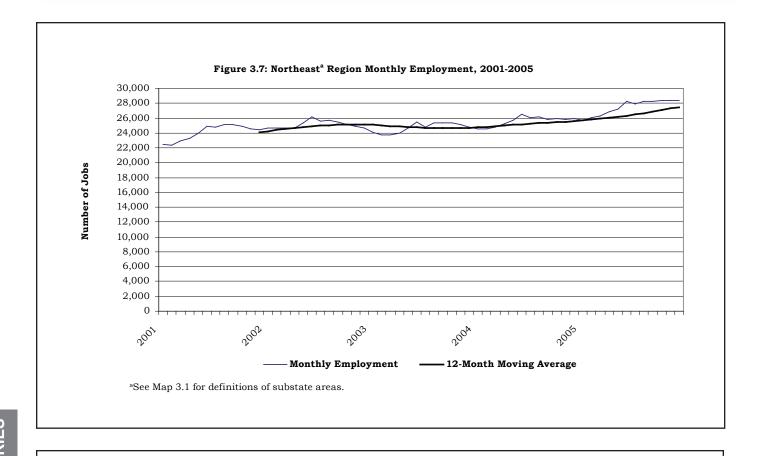
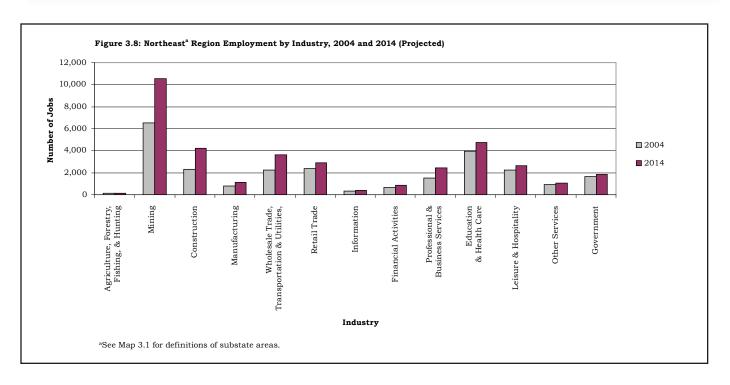


Table 3.5: Wyoming Statewide and Northeasta Region Projected Total Percentage Growth, 2004-2014

Total Percentage Growth 2004-2014

	2004-2014		
NAICS <sup>b</sup> Industry	Statewide	Northeast Region	
Agriculture, Forestry, Fishing, & Hunting	19.2%	28.0%	
Mining	55.8%	61.7%	
Construction	45.5%	83.1%	
Manufacturing	18.8%	35.3%	
Wholesale Trade, Transportation, & Utilities	36.6%	62.8%	
Retail Trade	15.1%	20.8%	
Information	13.6%	14.7%	
Financial Activities	27.6%	29.7%	
Professional & Business Services	34.6%	64.4%	
Education & Health Care	21.2%	20.0%	
Leisure & Hospitality	18.6%	18.9%	
Other Services	18.5%	18.9%	
Government (Includes Postal Service)	11.7%	10.6%	
Total	25.8%	42.7%	
<sup>a</sup> See Map 3.1 for definitions of substate areas.			
<sup>b</sup> North American Industry Classification System.			



(Text continued from page 49)

in the Northeast in total percentage growth at 83.1%. Other industries with projected total growth in excess of 50% are professional & business services (64.4%); wholesale trade, transportation, & utilities (62.8%); and mining (61.7%).

In terms of actual jobs, however, mining will contribute the most, with projected growth of 4,030 jobs. Note that the Northeast region includes the Powder River Basin, which has extensive reserves of both coal and coalbed methane. The construction and wholesale trade, transportation, & utilities industries are also each expected to add in excess of 1,000 jobs to the region (1,917 and 1,407, respectively).

### **North-Central Region**

The North-Central Region is comprised of Johnson and Sheridan counties. Steady growth was the hallmark of employment in the North-Central region from 2001-2005

(see Figure 3.9, page 52). Although the region had the smallest total employment, and will continue to do so into 2014, it is projected to have the second highest percentage growth (32.3%) behind the Northeast region (42.7%).

Coalbed methane is a major influence in the region's economy, and it is anticipated that this trend will continue. Table 3.6 (see page 52) and Figure 3.10 (see page 53) illustrate that employment in mining will more than double over the decade, from 391 jobs in 2004 to 1,187 in 2014 (203.6%). Other North-Central industries with projected growth greater than 50% are professional & business services (65.4%) and construction (56.9%).

### **Northwest Region**

The Northwest region of Wyoming experienced generally flat employment growth from 2001 to 2004 (see Figure 3.11, page 53). During late 2004 and early 2005,

(Text continued on page 54)

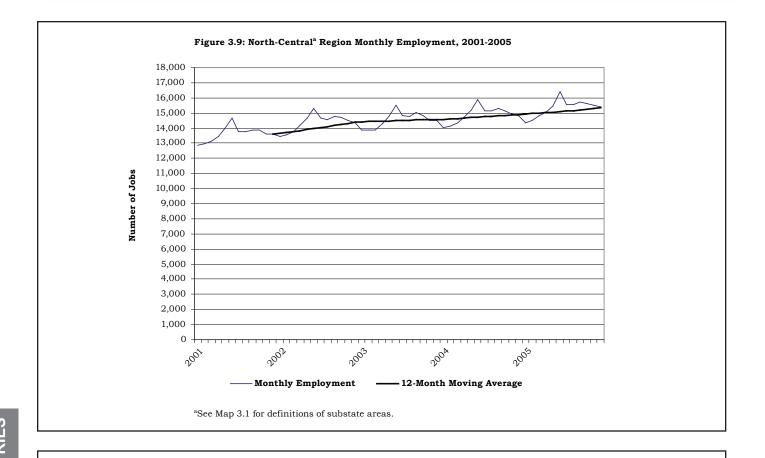
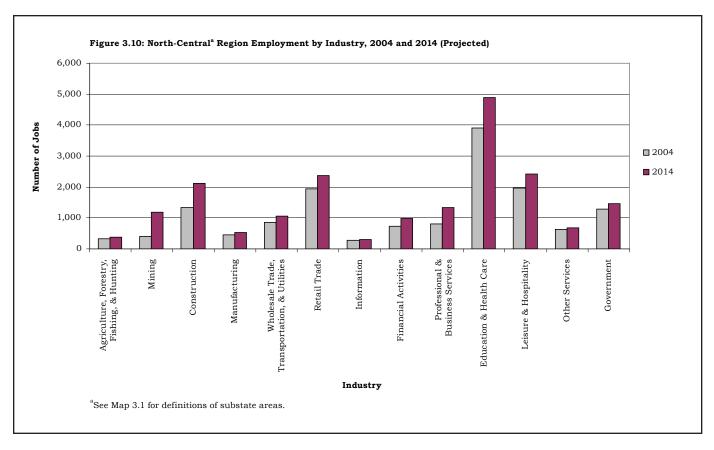


Table 3.6: Wyoming Statewide and North-Central<sup>a</sup> Region Projected Total Percentage Growth, 2004-2014

Total	Percentage	Growth
	2004-2014	1

NAICS <sup>b</sup> Industry	Statewide	North-Central Region
Agriculture, Forestry, Fishing, & Hunting	19.2%	18.7%
Mining	55.8%	203.6%
Construction	45.5%	56.9%
Manufacturing	18.8%	19.2%
Wholesale Trade, Transportation, & Utilities	36.6%	24.6%
Retail Trade	15.1%	22.0%
Information	13.6%	11.5%
Financial Activities	27.6%	33.3%
Professional & Business Services	34.6%	65.4%
Education & Health Care	21.2%	25.0%
Leisure & Hospitality	18.6%	23.0%
Other Services	18.5%	11.0%
Government (Includes Postal Service)	11.7%	13.2%
Total	25.8%	32.3%
<sup>a</sup> See Map 3.1 for definitions of substate areas.		
North American Industry Classification System.		



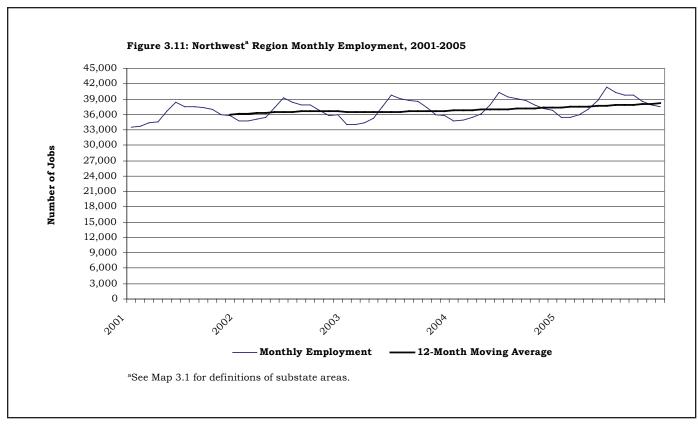


Table 3.7: Wyoming Statewide and Northwesta Region Projected Total Percentage Growth, 2004-2014

Total	Percentage	Growth
	2004-2014	L

19.2% 55.8% 45.5% 18.8% 36.6% 15.1% 13.6%	16.3% 34.0% 35.8% 5.5% 12.6% 16.0%
55.8% 45.5% 18.8% 36.6% 15.1%	34.0% 35.8% 5.5% 12.6%
45.5% 18.8% 36.6% 15.1%	35.8% 5.5% 12.6%
18.8% 36.6% 15.1%	5.5% 12.6%
36.6% 15.1%	12.6%
15.1%	
	16.0%
13.6%	
	21.3%
27.6%	24.1%
34.6%	35.5%
21.2%	17.1%
18.6%	20.8%
18.5%	12.3%
11.7%	10.8%
25.8%	19.2%

(Text continued from page 51)

greater employment gains occurred in the region.

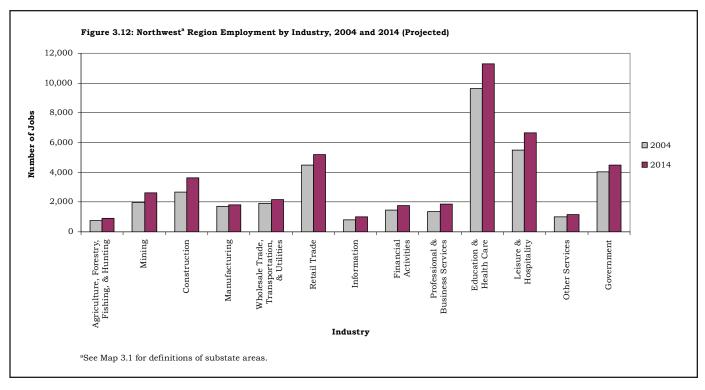
Steady increases in employment are projected through the forecast period. However, the Northwest region is projected to have lower than average total employment growth at 19.2%, compared to the average of 25.8% for the state (see Table 3.7). Whereas other regions will be dominated by growth in mining, employment growth is projected to be more balanced across the Northwest. Three industries are projected to grow in excess of 30% (see Figure 3.12, page 55): construction (35.8%); professional & business services (35.5%); and mining (34.0%). Forecasted growth is lowest in manufacturing (5.5%).

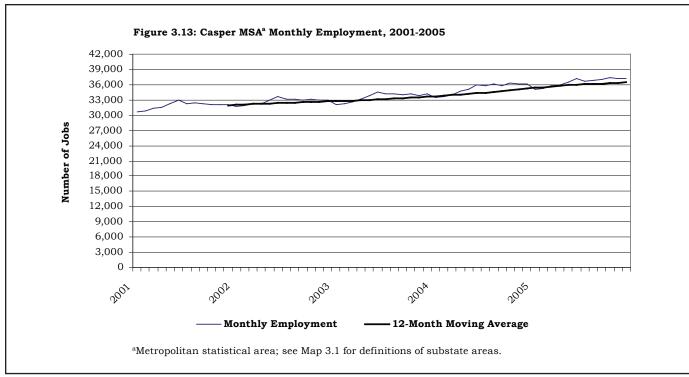
Two industries, education & health services and leisure & hospitality, which had the highest number of jobs (9,628 and 5,515, respectively) in 2004 in the Northwest, are also projected to have the highest net growth. Education & health services is projected to add 1,642 over the decade, while leisure & hospitality will contribute an additional 1,145 jobs.

#### Casper MSA

The Casper MSA experienced an employment trend similar to that of other substate areas from 2001-2005. Employment was flat to gradually increasing from 2001-2003 (see Figure 3.13, page 55). In 2004, however, employment began to make more pronounced gains.

Table 3.8 and Figure 3.14 (see page 56)





illustrate forecasted employment in the Casper MSA from 2004 to 2014. Mining will experience the largest percentage growth (44.8%). With the exception of

government and information, total growth in other industries is projected to range

(Text continued on page 57)

34.6%

21.2%

18.6%

18.5%

11.7%

25.8%

28.7%

28.9%

27.9%

15.9%

6.3%

26.6%

Table 3.8: Wyoming Statewide and Casper MSA<sup>a</sup> Total Projected Percentage Growth, 2004-2014 **Total Percentage Growth** 2004-2014 Casper MSA NAICS<sup>b</sup> Industry Statewide Agriculture, Forestry, Fishing, & Hunting 19.2% 30.6% 55.8% 44.8% Mining Construction 45.5% 37.3% Manufacturing 18.8% 22.6% Wholesale Trade, Transportation, & Utilities 36.6% 31.3% 15.1% 18.3% Retail Trade Information 13.6% 2.1% Financial Activities 27.6% 28.1%

<sup>a</sup>Metropolitan statistical area; see Map 3.1 for definitions of substate areas.

Professional & Business Services

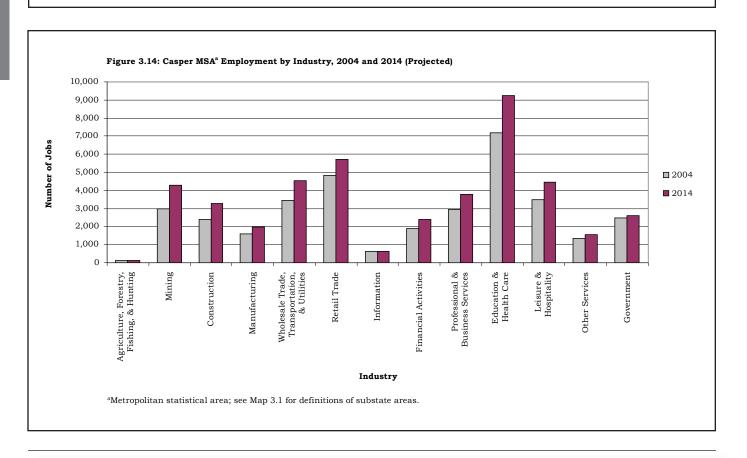
Government (Includes Postal Service)

Education & Health Care

Leisure & Hospitality

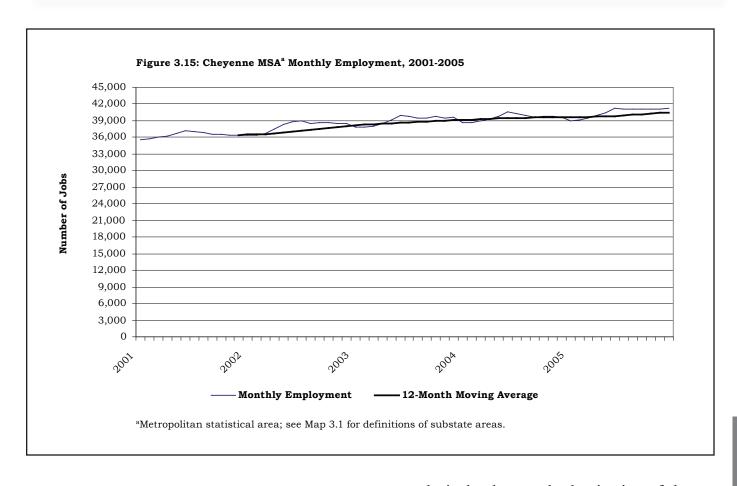
Other Services

**Total** 



<sup>&</sup>lt;sup>b</sup>North American Industry Classification System.

INDUSTRIES



(Text continued from page 55)

from 15.9% for other services to 31.3% for wholesale trade, transportation, & utilities. forecasted growth in government is 6.3%; for information, 2.1%.

The largest employing industry in the region, education & health services, is also anticipated to add the most jobs. Total employment in the industry is projected to grow from 7,166 jobs in 2004 to 9,240 jobs in 2014, an increase of 2,074 jobs. The projected net increase in jobs in the education & health services industry is one and a half times greater than the projected net increase in jobs for mining (1,330).

#### Cheyenne MSA

Whereas growth in the Casper MSA

was relatively slow at the beginning of the decade, the Cheyenne MSA experienced higher, steadier growth from 2001 to 2005 compared to other substate areas (see Figure 3.15). Several factors have contributed to the trend. First, military employment in the Chevenne MSA gives it a stable employment base. Second, mining has a relatively small presence. Consequently, the region is affected less by changing mineral prices than are other regions. Third, many employees of Colorado firms who need housing, groceries, and other goods and services reside in Chevenne. The outcome is that the Chevenne MSA sustained steady growth throughout the 2001-2005 period, while most regions did not begin to gain employment until approximately 2003.

The Cheyenne MSA is projected to have

Table 3.9: Wyoming Statewide and Cheyenne MSA<sup>a</sup> Total Projected Percentage Growth, 2004-2014

Total	Percentage	Growth
	2004-2014	ļ.

19.2% 55.8% 45.5% 18.8% 36.6% 15.1%	28.4% 26.7% 47.8% 26.3% 37.4% 17.4%
45.5% 18.8% 36.6% 15.1%	47.8% 26.3% 37.4% 17.4%
18.8% 36.6% 15.1%	26.3% 37.4% 17.4%
36.6% 15.1%	37.4% 17.4%
15.1%	17.4%
13.6%	10.00/
	12.3%
27.6%	13.2%
34.6%	29.7%
21.2%	30.0%
18.6%	19.1%
18.5%	14.8%
11.7%	7.7%
25.8%	22.7%
	18.6% 18.5% 11.7%

growth slightly lower than the statewide average (22.7% compared to 25.8%; see Table 3.9). Forecasted total percentage growth is highest in the construction industry (47.8%) and lowest in government (7.7%).

The industry with the most net growth, education & health services, is projected to experience nearly double that of the second highest net growth industry, construction. education & health services is projected to grow by 2,419 jobs, while construction is forecasted to grow by 1,244 jobs. Mining is projected to see the lowest net growth at 20 jobs.

### Summary

Education & health services will be the main driver of net employment growth in the majority of Wyoming's regions. The industry will gain the most jobs in the Cheyenne MSA (2,419 jobs) and the fewest in the Northeast (795 jobs). Among regions, net employment growth will be the highest in the Southwest, followed by the Northeast, with mining exerting the greatest influence in both regions. Growth in mining will impact all areas of the state. However, because of its geographic proximity to both regions, the Central-Southeast region will be most heavily impacted by the mining activity in the Southwest and Northeast. While mining is projected to wield a positive influence on employment in the state for the foreseeable future, a sustained downturn in mineral prices most likely would cause falling employment in those regions most impacted by mining.

<sup>&</sup>lt;sup>b</sup>North American Industry Classification System.

# Occupational Projections by Major Group, 2004-2014

by: Phil Ellsworth, Information Specialist

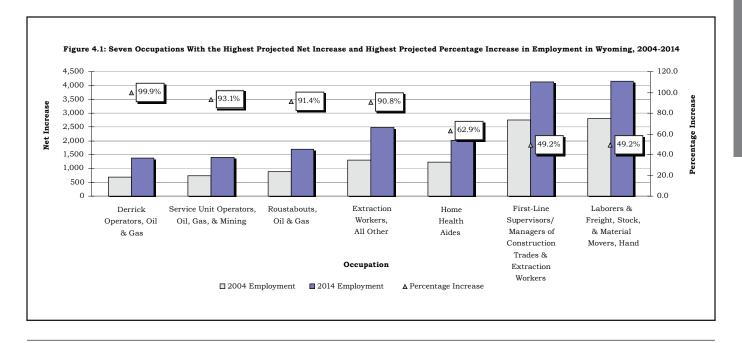
A s noted in the chapters addressing industry employment, Wyoming's economy is robust. Energy development is occurring at a level that is remarkable even for a state accustomed to the on-again, off-again nature of the energy business. Shortages of workers already are prevalent in occupations related to the extraction of natural resources, primarily natural gas, oil, coal, and uranium.

This document addresses both projected net changes and percentage changes in occupations. Figure 4.1 shows the projected net increase and projected percentage increase for each of the Standard Occupational Classification (SOC) major groups. Both percentage change and net change can be useful indicators. For example, 32 occupations have a projected net decrease in employment, including 12 office and administrative support occupations and 10 production occupations. Within the occupations with the highest projected net increase, substantial growth

is expected in transportation, retail sales, nursing, and construction & extraction. Of the occupations with the highest projected percentage change, a different picture emerges: strong growth in the construction & extraction occupations major group. The largest gains will be those occupations found in both the top percentage and top net lists — including many in the construction & extraction major group.

# Extraction Occupations Leading State's Economic Expansion

The SOC major group with the largest projected numeric change is construction & extraction occupations, which is expected to add 13,719 jobs in Wyoming. In addition to the paychecks these jobs provide in the state, Wyoming's economy and the wellbeing of its communities are tied to these occupations through the severance taxes generated by extraction industries. Growth in this major group is discussed in greater detail on page 85.



## A Key to Occupational Projections by Major Group

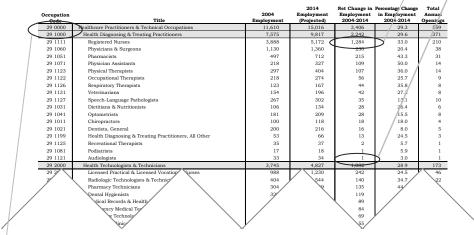
#### Registered Nurses

Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required. Includes advanced practice nurses such as: nurse practitioners, clinical nurse specialists, certified nurse midwives, and certified registered nurse anesthetists. Advanced practice nursing is practiced by RNs who have specialized formal, post-basic education and who function in highly autonomous and specialized roles. These jobs are typically filled by persons who have an associate's degree.

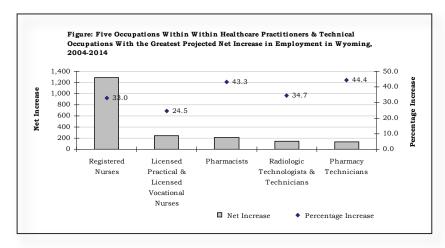
Source: http://online.onetcenter.org

This box lists the occupation within a particular major group with the largest projected net increase in employment and provides a description of that occupation.

Occupations within a particular minor group are shown sorted by net change in employment from largest to smallest.



Standard Occupational Classification major and minor groups are shown shaded.



A figure accompanying the descriptions of each major group shows the five occupations with the greatest projected net employment, or most jobs likely to be created, from 2004 to 2014 in Wyoming.

## 11-0000 Management Occupations

Management occupations, which had a 2004 employment of 15,967, are expected to increase in Wyoming by 26.4% by 2014, adding 722 jobs per year. Roughly 6% of all employment in the state is within management, a percentage that is not expected to change considerably. In a major group associated with some of the state's higher-paying occupations, all specific occupations are expected see double-digit growth, with three exceptions: funeral directors; education administrators, elementary & secondary school; and education

## General & Operations Managers

Plan, direct, or coordinate the operations of companies or public and private sector organizations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services. Includes owners and managers of small business establishments whose duties are primarily managerial. Excludes first-line supervisors/managers of retail sales workers and workers in other small establishments.

Source: http://online.onetcenter.org

Table 4.1: Wyoming Employment	Within the Management Occi	ipations Major Group, 2004-2014

occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percentage Changin Employment 2004-2014	
11 0000	Management Occupations	15,967	20,188	4,221	26.4	722
11 1000	Top Executives	5,825	7,747	1,922	33.0	301
11 1021	General & Operations Managers	5,093	6,894	1,801	35.4	276
11 1011	Chief Executives	476	588	112	23.5	20
11 2000	Advertising, Marketing, Promotions, Public Relations, & Sales Managers	778	1,038	260	33.4	40
11 2022	Sales Managers	528	729	201	38.1	30
11 2021	Marketing Managers	97	124	27	27.8	5
11 2011	Advertising & Promotions Managers	85	106	21	24.7	4
11 2031	Public Relations Managers	68	79	11	16.2	2
11 3000	Operations Specialties Managers	2,259	2,825	566	25.1	96
11 3031	Financial Managers	733	931	198	27.0	30
11 3011	Administrative Services Managers	659	790	131	19.9	26
11 3021	Computer & Information Systems Managers	258	336	78	30.2	13
11 3051	Industrial Production Managers	190	240	50	26.3	9
11 3071	Transportation, Storage, & Distribution Managers	148	198	50	33.8	8
11 3049	Human Resources Managers, All Other	123	146	23	18.7	4
11 3041	Compensation & Benefits Managers	61	80	19	31.2	3
11 3061	Purchasing Managers	54	65	11	20.4	2
11 3042	Training & Development Managers	33	39	6	18.2	1
11 9000	Other Management Occupations	7,105	8,578	1,473	20.7	285
11 9021	Construction Managers	1,039	1,451	412	39.7	60
11 9199	Managers, All Other	1,904	2,226	322	16.9	69
11 9141	Property, Real Estate, & Community Association Managers	576	739	163	28.3	27
11 9111	Medical & Health Services Managers	683	826	143	20.9	28
11 9081	Lodging Managers	390	480	90	23.1	16
11 9051	Food Service Managers	784	865	81	10.3	21
11 9151	Social & Community Service Managers	245	315	70	28.6	12
11 9041	Engineering Managers	211	267	56	26.5	10
11 9033	Education Administrators, Postsecondary	290	333	43	14.8	12
11 9032	Education Administrators, Elementary & Secondary School	425	457	32	7.5	14
11 9121	Natural Sciences Managers	214	238	24	11.2	7
11 9031	Education Administrators, Preschool & Child Care Center/Program	82	103	21	25.6	4
11 9061	Funeral Directors	74	78	4	5.4	3
11 9071	Gaming Managers	8	11	3	37.5	1
11 9039	Education Administrators, All Other	25	27	2	8.0	1

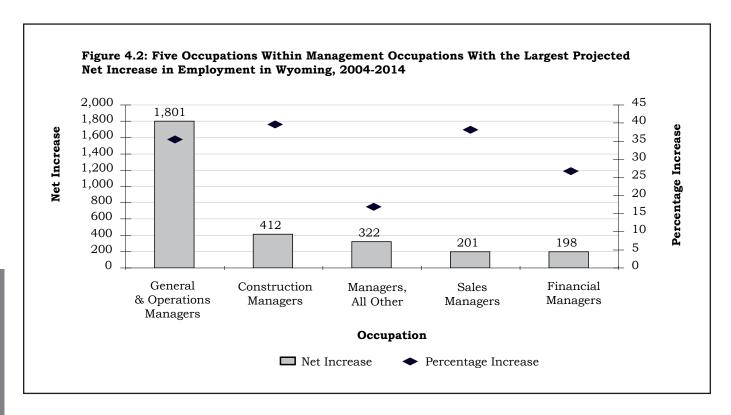
administrators, all other. Growth in employment for these three occupations would likely be more closely associated with population growth than with an overall expanding economy. According to U.S. Census estimates, Wyoming's population is expected to grow by 29,197 people from 2000 to 2030, a 5.9%

increase.1

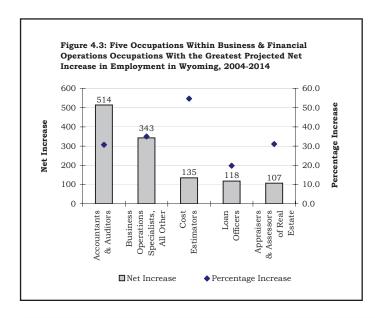
General & operations managers, the specific occupation that employs the most people, is expected to increase by 35.4%, adding 1,801 jobs through 2014.

Other occupations with projected high growth in management are

construction managers (39.7% increase; 412 jobs), sales managers (38.1% increase; 201 jobs), and financial managers (27% increase; 198 jobs). Of the 30 specific occupations within this major group, 17 have a typical educational/experience requirement of "bachelor's degree or higher, plus work experience."



## 13-0000 Business & Financial Operations Occupations



Accountants & auditors, the largest occupation within the business & financial operations major group, is projected to add 514 new jobs from 2004 to 2014, a 30.7% increase. With a 2004 employment level of 1,674, that occupation represents slightly more than one-fourth of all employment in the major group. The largest projected percentage change in the major group is a 54.7% increase in cost estimators, from 247 jobs to 382. Although nearly all occupations are expected to see double-digit percentage increases in employment, 19 of the 27 occupations are expected to add fewer than 10 jobs each per year.

Management analysts and financial analysts, the two occupations offering the highest 2005 mean wages, are expected to add 104 and 22 jobs, respectively, from 2004 to 2014. Seventeen of the occupations typically require a bachelor's degree.

#### Accountants & Auditors

Examine, analyze, and interpret accounting records for the purpose of giving advice or preparing statements. Install or advise on systems of recording costs or other financial and budgetary data.

2004-20 Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percentage Chan in Employment 2004-2014	
13 0000	Business & Financial Operations Occupations	6,414	8,251	1,837	28.6	300
13 1000	Business Operations Specialists	3,057	3,987	930	30.4	149
13 1199	Business Operations Specialists, All Other	980	1,323	343	35.0	51
13 1051	Cost Estimators	247	382	135	54.7	19
13 1111	Management Analysts	332	436	104	31.3	15
13 1073	Training & Development Specialists	249	314	65	26.1	10
13 1023	Purchasing Agents, Except Wholesale, Retail, & Farm Products	287	346	59	20.6	13
13 1071	Employment, Recruitment, & Placement Specialists	235	284	49	20.9	9
13 1079	Human Resources, Training, & Labor Relations Specialists,	139	180	41	29.5	7
13 1022	Wholesale & Retail Buyers, Except Farm Products	148	184	36	24.3	8
13 1041	Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation	147	175	28	19.1	6
13 1031	Claims Adjusters, Examiners, & Investigators	114	140	26	22.8	4
13 1072	Compensation, Benefits, & Job Analysis Specialists	60	77	17	28.3	3
13 1121	Meeting & Convention Planners	62	76	14	22.6	3
13 1061	Emergency Management Specialists	24	31	7	29.2	1
13 1011	Agents & Business Managers of Artists, Performers, & Athletes	21	25	4	19.1	1
13 1081	Logisticians	10	12	2	20.0	0
13 2000	Financial Specialists	3,357	4,264	907	27.0	152
13 2011	Accountants & Auditors	1,674	2,188	514	30.7	83
13 2072	Loan Officers	595	713	118	19.8	21
13 2021	Appraisers & Assessors of Real Estate	344	451	107	31.1	18
13 2052	Personal Financial Advisors	129	175	46	35.7	6
13 2099	Financial Specialists, All Other	187	233	46	24.6	8
13 2051	Financial Analysts	73	95	22	30.1	3
13 2082	Tax Preparers	98	118	20	20.4	4
13 2053	Insurance Underwriters	64	73	9	14.1	2
13 2031	Budget Analysts	65	73	8	12.3	2
13 2071	Loan Counselors	18	22	4	22.2	1
13 2081	Tax Examiners, Collectors, & Revenue Agents	39	42	3	7.7	1
13 2041	Credit Analysts	0	0	0	0.0	0

## 15-0000 Computer & Mathematical Occupations

Computer & mathematical occupations are projected to add 712 new jobs in Wyoming from 2004 to 2014. Nearly all of the 2,674 jobs projected for 2014 are expected to occur within the computer specialists minor group; only 30 new jobs are projected in the mathematical scientists minor group. Most of the occupations within the computer specialists minor group typically require a bachelor's degree, while all of the occupations projected in the mathematical sciences minor group typically require a master's degree. Employers in Wyoming offering computer science jobs could face stiff competition from employers outside the state. Network systems & data communications analysts, the

computer specialists occupation projected to have the most annual openings in the state, paid a median wage of \$20.16 per hour in Wyoming in 2005, compared to \$29.69 nationally<sup>2</sup>.

## Network Systems & Data Communications Analysts

Analyze, design, test, and evaluate network systems, such as local area networks (LAN), wide area networks (WAN), Internet, intranet, and other data communications systems. Perform network modeling, analysis, and planning. Research and recommend network and data communications hardware and software. Includes telecommunications specialists who deal with the interfacing of computer and communications equipment. May supervise computer programmers.

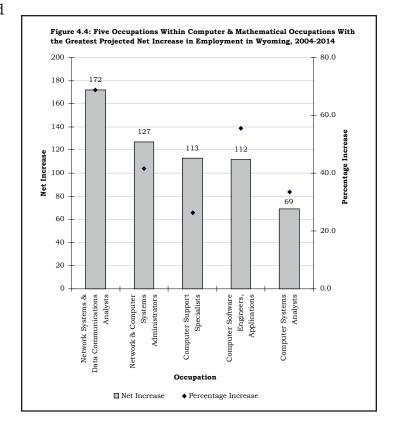


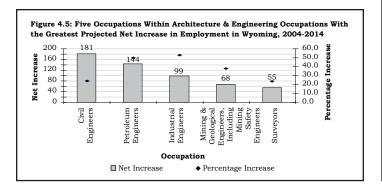
Table 4.3: Wyoming Employment Within the Computer & Mathematical Occupations Major Group, 2004-2014

			2014	Net Change in	Percentage Chang	ge Total
Occupation		2004	<b>Employment</b>	Employment	in Employment	Annual
Code	Title	Employment	(Projected)	2004-2014	2004-2014	Openings
15 0000	Computer & Mathematical Occupations	1,962	2,674	712	36.3	96
15 1000	Computer Specialists	1,935	2,644	709	36.6	95
15 1081	Network Systems & Data Communications Analysts	250	422	172	68.8	20
15 1071	Network & Computer Systems Administrators	306	433	127	41.5	16
15 1041	Computer Support Specialists	428	541	113	26.4	17
15 1031	Computer Software Engineers, Applications	202	314	112	55.5	13
15 1051	Computer Systems Analysts	206	275	69	33.5	9
15 1099	Computer Specialists, All Other	280	341	61	21.8	9
15 1032	Computer Software Engineers, Systems Software	49	68	19	38.8	2
15 1061	Database Administrators	44	63	19	43.2	2
15 1021	Computer Programmers	170	187	17	10.0	6
15 2000	Mathematical Scientists	27	30	3	11.1	1
15 2031	Operations Research Analysts	8	9	1	12.5	0
15 2041	Statisticians	14	14	0	0.0	0

## 17-0000 Architecture & Engineering Occupations

The architecture & engineering occupation with the largest projected numeric change is civil engineering, which is expected to add 181 jobs from 2004 to 2014. Like many high-growth occupations in the state, this growth is directly related to the same forces causing growth in the construction & extraction occupations. Within the engineers minor group, eight occupations have a projected percentage increase of 30% or more, including petroleum engineers and industrial engineers, which are expected to increase by 49.7% and 52.7%, respectively. And while employing fewer workers, the drafters, engineering, &

mapping technicians minor group is projected to see substantial gains in jobs, with double-digit percentage increases in all but one of 12 occupations.



#### Civil Engineers

Perform engineering duties in planning, designing, and overseeing construction and maintenance of building structures, and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, water and sewage systems, and waste disposal units. Include architectural, structural, traffic, ocean, and geo-technical engineers. Excludes hydrologists.

Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percentage Chang in Employment 2004-2014	
17 0000	Architecture & Engineering Occupations	3,732	4,837	1,105	29.6	19
17 1000	Architects, Surveyors, & Cartographers	424	529	105	24.8	22
17 1022	Surveyors	233	288	55	23.6	14
17 1011	Architects, Except Landscape & Naval	134	174	40	29.9	
17 1021	Cartographers & Photogrammetrists	35	43	8	22.9	2
17 1012	Landscape Architects	22	24	2	9.1	
17 2000	Engineers	2,186	2,934	748	34.2	123
17 2051	Civil Engineers	750	931	181	24.1	30
17 2171	Petroleum Engineers	290	434	144	49.7	24
17 2112	Industrial Engineers	188	287	99	52.7	14
17 2151	Mining & Geological Engineers, Including Mining Safety Engineers	179	247	68	38.0	12
17 2071	Electrical Engineers	167	221	54	32.3	ġ
17 2141	Mechanical Engineers	127	181	54	42.5	č
17 2081	Environmental Engineers	123	176	53	43.1	
17 2199	Engineers, All Other	138	191	53	38.4	8
17 2111	Health & Safety Engineers, Except Mining Safety Engineers	60	82	22	36.7	4
17 2041	Chemical Engineers	38	43	5	13.2	2
17 2072	Electronics Engineers, Except Computer	77	81	4	5.2	2
17 2061	Computer Hardware Engineers	12	13	1	8.3	(
17 2021	Agricultural Engineers	4	4	0	0.0	(
17 3000	Drafters, Engineering, & Mapping Technicians	1,122	1,374	252	22.5	54
17 3022	Civil Engineering Technicians	191	239	48	25.1	č
17 3023	Electrical & Electronic Engineering Technicians	221	268	47	21.3	ç
17 3031	Surveying & Mapping Technicians	210	244	34	16.2	11
17 3013	Mechanical Drafters	71	102	31	43.7	5
17 3011	Architectural & Civil Drafters	175	202	27	15.4	8
17 3029	Engineering Technicians, Except Drafters, All Other	128	155	27	21.1	
17 3025	Environmental Engineering Technicians	53	71	18	34.0	
17 3024	Electro-Mechanical Technicians	30	43	13	43.3	2
17 3027	Mechanical Engineering Technicians	12	15	3	25.0	
17 3012	Electrical & Electronics Drafters	13	15	2	15.4	
17 3026	Industrial Engineering Technicians	10	12	2	20.0	(
17 3019	Drafters, All Other	8	8	0	0.0	(

# 19-0000 Life, Physical, & Social Science Occupations

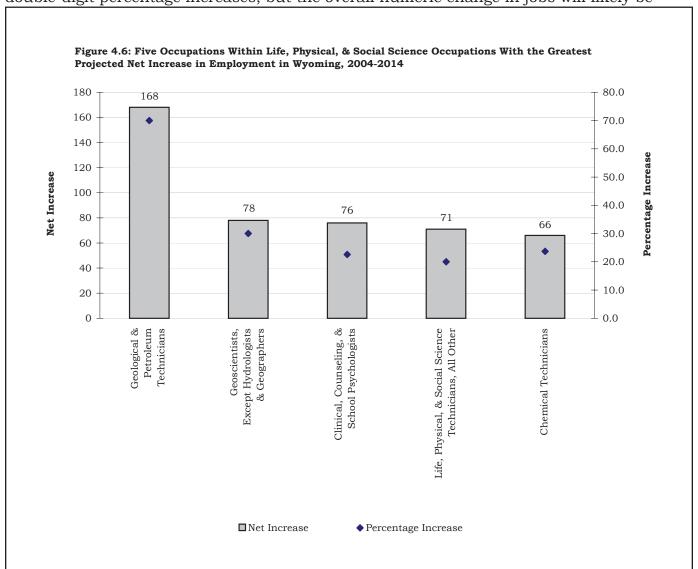
The occupation projected to add the most jobs within the major group is geological & petroleum technicians (168 jobs, a 70% increase). This occupation typically pays more in Wyoming than in other states: in 2005, a median wage of \$24.25 per hour, compared to \$21.03 nationally.<sup>3</sup> Because this occupation typically requires an associate's degree, Wyoming's community colleges could have a significant role in seeing that this need is filled. Within the life scientists minor group,

#### Geological & Petroleum Technicians

Assist scientists in the use of electrical, sonic, or nuclear measuring instruments in both laboratory and production activities to obtain data indicating potential sources of metallic ore, gas, or petroleum. Analyze mud and drill cuttings. Chart pressure, temperature, and other characteristics of wells or bore holes. Investigate and collect information leading to the possible discovery of new oil fields.

Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percentage Chang in Employment 2004-2014	e Total Annual Opening
19 0000	Life, Physical, & Social Science Occupations	3,832	4,667	835	21.8	175
19 1000	Life Scientists	668	748	80	12.0	27
19 1023	Zoologists & Wildlife Biologists	237	274	37	15.6	11
19 1029	Biological Scientists, All Other	124	141	17	13.7	6
19 1011	Animal Scientists	39	49	10	25.6	2
19 1013	Soil & Plant Scientists	74	82	8	10.8	2
19 1032	Foresters	61	63	2	3.3	2
19 1041	Epidemiologists	9	11	2	22.2	0
19 1099	Life Scientists, All Other	8	10	2	25.0	0
19 1022	Microbiologists	9	10	1	11.1	0
19 1031	Conservation Scientists	102	103	1	1.0	3
19 2000	Physical Scientists	800	1,008	208	26.0	38
19 2042	Geoscientists, Except Hydrologists & Geographers	260	338	78	30.0	12
19 2041	Environmental Scientists & Specialists, Including Health	222	272	50	22.5	9
19 2043	Hydrologists	118	162	44	37.3	7
19 2031	Chemists	145	171	26	17.9	7
19 2099	Physical Scientists, All Other	24	27	3	12.5	1
19 3000	Social Scientists & Related Workers	809	998	189	23.4	38
19 3031	Clinical, Counseling, & School Psychologists	336	412	76	22.6	15
19 3021	Market Research Analysts	194	251	57	29.4	11
19 3091	Anthropologists & Archeologists	96	119	23	24.0	4
19 3022	Survey Researchers	20	28	8	40.0	1
19 3051	Urban & Regional Planners	49	57	8	16.3	2
19 3011	Economists	40	47	7	17.5	2
19 3099	Social Scientists & Related Workers, All Other	45	50	5	11.1	2
19 3092	Geographers	12	15	3	25.0	1
19 3039	Psychologists, All Other	15	16	1	6.7	0
19 4000	Life, Physical, & Social Science Technicians	1,555	1,913	358	23.0	72
19 4041	Geological & Petroleum Technicians	240	408	168	70.0	23
19 4099	Life, Physical, & Social Science Technicians, All Other	355	426	71	20.0	16
19 4031	Chemical Technicians	278	344	66	23.7	14
19 4091	Environmental Science & Protection Technicians, Including Health	78	97	19	24.4	4
19 4061	Social Science Research Assistants	47	58	11	23.4	2
19 4093	Forest & Conservation Technicians	398	406	8	2.0	10
19 4021	Biological Technicians	138	145	7	5.1	3
19 4092	Forensic Science Technicians	13	19	6	46.2	1

the occupation projected to add the most jobs is zoologists & wildlife biologists, which is expected to add 37 jobs, nearly half of all jobs in the minor group. In the social scientists & related workers minor group, the occupation employing the most workers is clinical, counseling, & school psychologists. That occupation is projected to grow by 78 jobs from 2004 to 2014, a 22.6% increase. All but one of the occupations are projected to have double-digit percentage increases, but the overall numeric change in jobs will likely be



modest, adding 38 jobs annually.

## 21-0000 Community & Social Service Occupations

The occupation with the largest projected net change in employment in the community & social service major group, by far, is social & human service assistants. This occupation is projected to add 448 jobs from 2004 to 2014, a 35.4% increase. In Wyoming, the 2005 median hourly wage for this occupation was \$9.90, compared to \$12.03 for the nation<sup>4</sup>, and jobs are typically filled by people who have moderate on-the-job training. The highest projected percentage increases are expected for community & social service specialists, all other (46.8%),

and mental health & substance abuse social workers (46.6%). These occupations are expected to add 101 and 90 jobs, respectively, between 2004 and 2014. On the whole, this major group is projected to add 1,132 jobs, a 29.1% increase.

#### Social & Human Service Assistants

Assist professionals from a wide variety of fields, such as psychology, rehabilitation, or social work, to provide client services, as well as support for families. May assist clients in identifying available benefits and social and community services and help clients obtain them. May assist social workers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse, human relationships, rehabilitation, or adult daycare. Excludes rehabilitation counselors; personal & home care aides; eligibility interviewers, government programs; and psychiatric technicians.

Net Change in Percentage Change Total

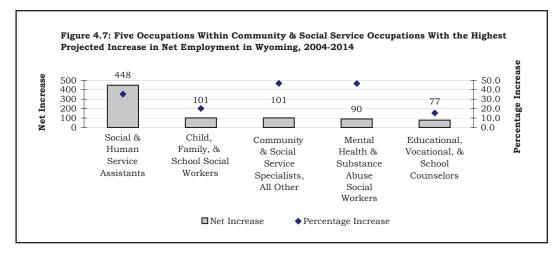


Table 4.6: Wyoming Employment Within the Community & Social Service Occupations Major Group, 2004-2014

			2014	Net Change in	Percentage Chang	ge rotar
Occupation		2004	Employment	Employment	in Employment	Annual
Code	Title	Employment	(Projected)	2004-2014	2004-2014	Openings
21 0000	Community & Social Services Occupations	3,885	5,017	1,132	29.1	187
21 1000	Counselors, Social Workers, & Other Community & Social Service Specialists	3,861	4,987	1,126	29.2	186
21 1093	Social & Human Service Assistants	1,267	1,715	448	35.4	67
21 1021	Child, Family, & School Social Workers	499	600	101	20.2	19
21 1099	Community & Social Service Specialists, All Other	216	317	101	46.8	14
21 1023	Mental Health & Substance Abuse Social Workers	193	283	90	46.6	12
21 1012	Educational, Vocational, & School Counselors	500	577	77	15.4	19
21 1011	Substance Abuse & Behavioral Disorder Counselors	174	244	70	40.2	11
21 1022	Medical & Public Health Social Workers	185	245	60	32.4	9
21 1014	Mental Health Counselors	169	214	45	26.6	8
21 1091	Health Educators	208	250	42	20.2	8
21 1015	Rehabilitation Counselors	173	209	36	20.8	8
21 1092	Probation Officers & Correctional Treatment Specialists	143	169	26	18.2	5
21 1019	Counselors, All Other	46	58	12	26.1	2
21 1013	Marriage & Family Therapists	49	59	10	20.4	2
21 1029	Social Workers, All Other	39	47	8	20.5	2
21 2000	Religious Workers	24	30	6	25.0	1
21 2011	Clergy	24	30	6	25.0	1

## 23-0000 Legal Occupations

The number of lawyers in Wyoming is projected to increase by 285 between 2004 and 2014, a 27.0% increase and the largest net increase in the major group. The largest percentage increase is projected to be in paralegals & legal assistants, expected to increase by 135 jobs, or 42.5%. However, the 2005 median hourly wage in Wyoming for paralegals and legal assistants was \$12.09, compared to \$19.79 nationally. This occupation typically requires an associate's degree.

#### Lawyers

Represent clients in criminal and civil litigation and other legal proceedings, draw up legal documents, and manage or advise clients on legal transactions. May specialize in a single area or may practice broadly in many areas of law.

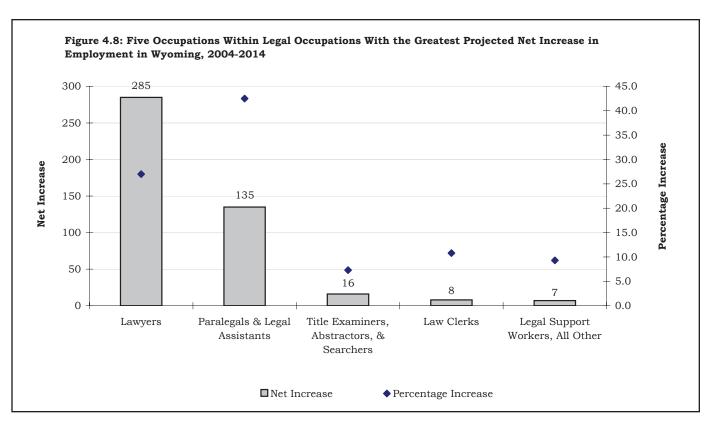


Table 4.7: Wyoming Employment Within the Legal Occupations Major Group, 2004-2014 2014 Net Change in Percentage Change Total Occupation Employment in Employment Annual Employment Title Employment (Projected) 2004-2014 2004-2014 Openings 23 0000 Legal Occupations 1,776 456 66 Lawyers, Judges, & Related Workers 23 1000 1.089 1.379 290 26.6 43 23 1011 1,057 1,342 285 27.0 42 23 1023 Judges, Magistrate Judges, & Magistrates 26 30 15.4 1 23 1021 Administrative Law Judges, Adjudicators, & Hearing Officers 16.7 0 23 2000 Legal Support Workers 687 853 166 24.2 23 2011 Paralegals & Legal Assistants 318 453 42.5 23 2093 Title Examiners, Abstractors, & Searchers 219 235 16 7.3 4 23 2092 Law Clerks 74 82 10.8 2 23 2099 Legal Support Workers, All Other 75 82 2

## 25-0000 Education, Training, & Library Occupations

As a major group, education, training, & library occupations are projected to add 2,321 jobs from 2004 to 2014, a 14.5% increase. The occupation within the major group with the largest projected net increase is teacher assistants, projected to add 528 jobs, a 14.7% increase. The largest projected numeric increase within the primary, secondary, & special education school teachers minor group is for preschool teachers, except special education (up 157 jobs, a 35.8% increase). Median annual wages for that occupation in Wyoming in 2005 were \$18,600, somewhat less than the national median of \$20,100, and jobs are typically filled by people who have shortterm, on-the-job training.

#### **Teacher Assistants**

Perform duties that are instructional in nature or deliver direct services to students or parents. Serve in a position for which a teacher or another professional has ultimate responsibility for the design and implementation of educational programs and services.

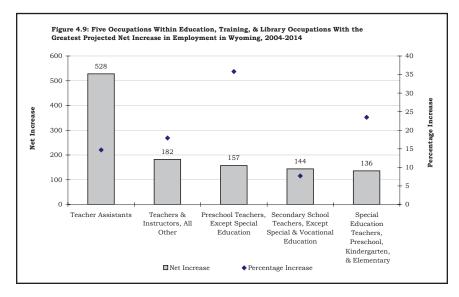


Table 4.8: Wyoming Employment Within the Education, Training, & Library Occupations Major Group, 2004-2014

			2017	Net Change in	Change in	Iotai
Occupation Code	Title	2004 Employment	Employment (Projected)	Employment 2004-2014	Employment 2004-2014	Annual Openings
25 0000	Education, Training, & Library Occupations	15,987	18,308	2,321	14.5	572
25 1000	Postsecondary Teachers	1,784	2,228	444	24.9	85
25 2000	Primary, Secondary, & Special Education School Teachers	7,686	8,570	884	11.5	266
25 2011	Preschool Teachers, Except Special Education	438	595	157	35.8	21
25 2031	Secondary School Teachers, Except Special & Vocational Education	1,882	2,026	144	7.7	67
25 2041	Special Education Teachers, Preschool, Kindergarten, & Elementary	579	715	136	23.5	27
25 2022	Middle School Teachers, Except Special & Vocational Education	1,181	1,242	61	5.2	32
25 2042	Special Education Teachers, Middle School	208	245	37	17.8	9
25 2043	Special Education Teachers, Secondary School	281	318	37	13.2	10
25 2012	Kindergarten Teachers, Except Special Education	275	311	36	13.1	7
25 2032	Vocational Education Teachers, Secondary School	229	246	17	7.4	8
25 2023	Vocational Education Teachers, Middle School	28	29	1	3.6	1
25 3000	Other Teachers & Instructors	1,432	1,693	261	18.2	44
25 3099	Teachers & Instructors, All Other	1,019	1,201	182	17.9	31
25 3021	Self-Enrichment Education Teachers	345	409	64	18.6	11
25 3011	Adult Literacy, Remedial Education, & GED Teachers & Instructors	68	83	15	22.1	2
25 4000	Librarians, Curators, & Archivists	996	1,094	98	9.8	37
25 4031	Library Technicians	330	370	40	12.1	16
25 4021	Librarians	380	402	22	5.8	11
25 4011	Archivists	108	121	13	12.0	4
25 4013	Museum Technicians & Conservators	87	99	12	13.8	3
25 4012	Curators	91	102	11	12.1	3
25 9000	Other Education, Training, & Library Occupations	4,089	4,723	634	15.5	140
25 9041	Teacher Assistants	3,599	4,127	528	14.7	122
25 9031	Instructional Coordinators	229	294	65	28.4	10
25 9099	Education, Training, & Library Workers, All Other	111	132	21	18.9	4
25 9021	Farm & Home Management Advisors	139	158	19	13.7	4
25 9011	Audio-Visual Collections Specialists	11	12	- 1	9.1	0

# 27-0000 Arts, Design, Entertainment, Sports, & Media Occupations

The occupation in this major group with the largest projected numeric increase is coaches & scouts, expected to add 168 jobs, an 18.2% increase. This occupation does not include those who are required to hold teaching degrees. Workers in the coaches & scouts occupation paid at the median annual wage in Wyoming in 2005 earned far less than those at the national median: \$14,800 compared to \$26,000. However, at the 10th and 90th percentiles, state wages were much closer to the national. At the 10th percentile, Wyoming coaches were paid \$11,900, compared to \$13,700

#### Coaches & Scouts

Instruct or coach groups or individuals in the fundamentals of sports. Demonstrate techniques and methods of participation. May evaluate athletes' strengths and weaknesses as possible recruits or to improve the athletes' technique to prepare them for competition.

Source: http://online.onetcenter.org

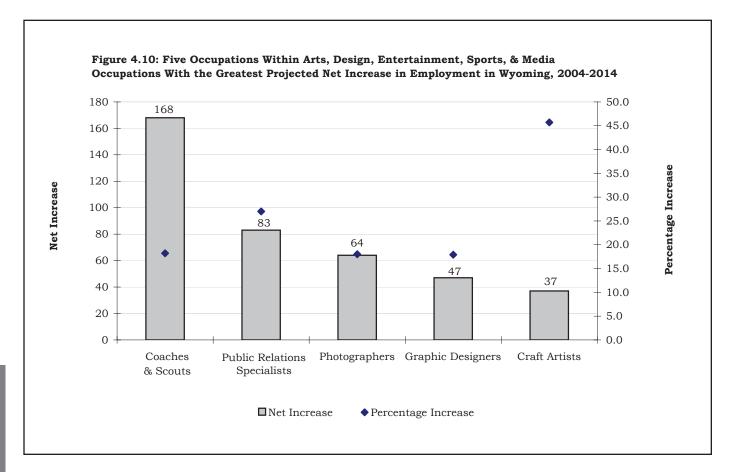
Net Change in Percentage Change Total

2014

Table 4.9: Wyoming Employment Within the Arts, Des	gn, Entertainment, Sports, & Media Occupations Major
Group, 2004-2014	

Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	in Employment 2004-2014	e Total Annua Openina
27 0000	Arts, Design, Entertainment, Sports, & Media Occupations	3,710	4,318	608	16.4	136
27 1000	Art & Design Workers	939	1,124	185	19.7	33
27 1024	Graphic Designers	263	310	47	17.9	8
27 1012	Craft Artists	81	118	37	45.7	5
27 1013	Fine Artists, Including Painters, Sculptors, & Illustrators	86	116	30	34.9	5
27 1029	Designers, All Other	60	81	21	35.0	3
27 1025	Interior Designers	56	73	17	30.4	2
27 1026	Merchandise Displayers & Window Trimmers	35	47	12	34.3	2
27 1023	Floral Designers	287	298	11	3.8	5
27 1021	Commercial & Industrial Designers	13	19	6	46.2	1
27 1011	Art Directors	15	17	2	13.3	1
27 1014	Multi-Media Artists & Animators	17	18	1	5.9	1
27 1019	Artists and Related Workers, All Other	8	9	1	12.5	(
27 1022	Fashion Designers	4	4	0	0.0	C
27 1027	Set & Exhibit Designers	14	14	0	0.0	C
27 2000	Entertainers & Performers, Sports & Related Workers	1,183	1,387	204	17.2	46
27 2022	Coaches & Scouts	924	1,092	168	18.2	35
27 2012	Producers & Directors	66	73	7	10.6	2
27 2023	Umpires, Referees, & Other Sports Officials	25	31	6	24.0	1
27 2032	Choreographers	88	94	6	6.8	$\epsilon$
27 2042	Musicians & Singers	26	32	6	23.1	1
27 2041	Music Directors & Composers	15	19	4	26.7	1
27 2099	Entertainers & Performers, Sports & Related Workers, All Other	28	32	4	14.3	
27 2021	Athletes and Sports Competitors	9	12	3	33.3	1
27 3000	Media & Communication Workers	998	1,121	123	12.3	35
27 3031	Public Relations Specialists	308	391	83	27.0	13
27 3043	Writers & Authors	149	183	34	22.8	$\epsilon$
27 3041	Editors	113	126	13	11.5	4
27 3091	Interpreters & Translators	42	52	10	23.8	2
27 3099	Media & Communication Workers, All Other	44	49	5	11.4	1
27 3022	Reporters & Correspondents	131	135	4	3.1	4
27 3042	Technical Writers	15	18	3	20.0	1
27 3021	Broadcast News Analysts	12	13	1	8.3	C
27 3012	Public Address System & Other Announcers	7	5	-2	-28.6	C
27 3011	Radio & Television Announcers	177	149	-28	-15.8	5
27 4000	Media & Communication Equipment Workers	590	686	96	16.3	22
27 4021	Photographers	355	419	64	18.0	14
27 4011	Audio & Video Equipment Technicians	54	71	17	31.5	3
27 4031	Camera Operators, Television, Video, & Motion Picture	25	34	9	36.0	1
27 4032	Film & Video Editors	7	11	4	57.1	1
27 4099	Media & Communication Equipment Workers, All Other	17	19	2	11.8	1
27 4012	Broadcast Technicians	113	113	0	0.0	3
27 4014	Sound Engineering Technicians	19	19	0	0.0	1

for the nation. At the 90th percentile, the difference was even less: \$56,200 for Wyoming coaches & scouts, compared to \$56,400 nationally. All four minor groups have projected double-digit percentage increases, and slight to moderate numeric increases are expected in most of the major group's occupations. Radio & television announcers, meanwhile, are projected to see a decrease of 28 jobs, a 15.8% decline. Jobs in the art & design workers minor group are projected to increase by 19.7%, slightly higher than the major group as a whole, in which jobs are expected to increase by 16.4%.



## 29-0000 Healthcare Practitioners & Technical Occupations

Few employment challenges in Wyoming have the potential to affect as many people as the challenge of meeting the state's health care needs. But for workers who have the necessary training, job opportunities in health care are abundant. Between 2004 and 2014, Wyoming is projected to add 1,284 registered nurses, 242 licensed practical and licensed vocational nurses, 230 physicians and surgeons, and 215 pharmacists. In all, the number of jobs in healthcare practitioners & technical occupations is expected to increase by nearly one-third if those openings can be filled. One issue — aging — is a doubly difficult challenge when it comes to health care in Wyoming. The percentage of older people in Wyoming is increasing (and faster than the national rate), which will have an impact on the availability of quality health care for all residents. Meanwhile, Wyoming's health care workers are aging, too. Research has shown that ambulatory health care

Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percentage Change in Employment 2004-2014	Total Annual Opening
29 0000	Healthcare Practitioners & Technical Occupations	11,610	15,016	3,406	29.3	559
29 1000	Health Diagnosing & Treating Practitioners	7,575	9,817	2,242	29.6	371
29 1111	Registered Nurses	3,888	5,172	1,284	33.0	210
29 1060	Physicians & Surgeons	1,130	1,360	230	20.4	38
29 1051	Pharmacists	497	712	215	43.3	31
29 1071	Physician Assistants	218	327	109	50.0	14
29 1123	Physical Therapists	297	404	107	36.0	14
29 1122	Occupational Therapists	218	274	56	25.7	9
29 1126	Respiratory Therapists	123	167	44	35.8	8
29 1131	Veterinarians	154	196	42	27.3	8
29 1127	Speech-Language Pathologists	267	302	35	13.1	10
29 1031	Dietitians & Nutritionists	106	134	28	26.4	6
29 1041	Optometrists	181	209	28	15.5	8
29 1011	Chiropractors	100	118	18	18.0	4
29 1021	Dentists, General	200	216	16	8.0	5
29 1199	Health Diagnosing & Treating Practitioners, All Other	53	66	13	24.5	3
29 1125	Recreational Therapists	35	37	2	5.7	1
29 1081	Podiatrists	17	18	1	5.9	1
29 1121	Audiologists	33	34	1	3.0	1
29 2000	Health Technologists & Technicians	3,745	4,827	1,082	28.9	173
29 2061	Licensed Practical & Licensed Vocational Nurses	988	1,230	242	24.5	46
29 2034	Radiologic Technologists & Technicians	404	544	140	34.7	22
29 2052	Pharmacy Technicians	304	439	135	44.4	18
29 2021	Dental Hygienists	329	448	119	36.2	15
29 2071	Medical Records & Health Information Technicians	300	389	89	29.7	13
29 2041	Emergency Medical Technicians & Paramedics	372	456	84	22.6	13
29 2056	Veterinary Technologists & Technicians	152	221	69	45.4	9
29 2011	Medical & Clinical Laboratory Technologists	257	312	55	21.4	12
29 2012	Medical & Clinical Laboratory Technicians	153	192	39	25.5	8
29 2055	Surgical Technologists	111	143	32	28.8	5
29 2032	Diagnostic Medical Sonographers	69	95	26	37.7	4
29 2031	Cardiovascular Technologists & Technicians	54	68	14	25.9	2
29 2081	Opticians, Dispensing	81	95	14	17.3	3
29 2053	Psychiatric Technicians	73	81	8	11.0	2
29 2051	Dietetic Technicians	25	30	5	20.0	1
29 2033	Nuclear Medicine Technologists	22	26	4	18.2	1
29 2054	Respiratory Therapy Technicians	40	43	3	7.5	1
29 2099	Health Technologists & Technicians, All Other	8	10	2	25.0	0
29 9000	Other Healthcare Practitioners & Technical Occupations	290	372	82	28.3	14
29 9011	Occupational Health & Safety Specialists	150	200	50	33.3	8
29 9099	Healthcare Practitioners & Technical Workers, All Other	48	62	14	29.2	2
29 9091	Athletic Trainers	46	59	13	28.3	2
29 9012	Occupational Health & Safety Technicians	46	51	5	10.9	2

& residential care facilities have grown increasingly reliant on older resident and nonresident labor to meet labor shortages (Harris, 2006). However, as other states face similar challenges, Wyoming employers may need to increase the wages they offer in order to compete for this labor. Table 4.11 shows a comparison of wages in Wyoming and surrounding states for five health care occupations with the greatest projected net increase in employment.

#### **Registered Nurses**

Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required. Includes advanced practice nurses such as: nurse practitioners, clinical nurse specialists, certified nurse midwives, and certified registered nurse anesthetists. Advanced practice nursing is practiced by RNs who have specialized formal, post-basic education and who function in highly autonomous and specialized roles. These jobs are typically filled by persons who have an associate's degree.

Source: http://online.onetcenter.org

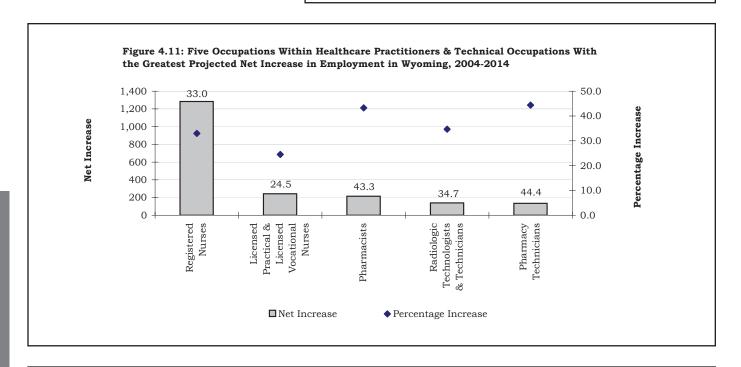


Table 4.11: Median Wages for Registered Nurses in Wyoming, Surrounding States, and the United States, 2005

Occupation Title	Net Change in Employment, 2004-2014	Wyoming	Colorado	Utah	Idaho	Montana	South Dakota	Nebraska	U.S. Median
Registered Nurses	1,284	\$22.68	\$26.91	\$24.83	\$23.58	\$22.99	\$21.70	\$23.03	\$26.28
Licensed Practical & Licensed Vocational Nurses	242	\$15.79	\$17.98	\$16.06	\$15.91	\$14.32	\$13.87	\$15.41	\$16.94
Pharmacists	215	\$39.95	\$43.59	\$43.01	\$40.97	\$38.53	\$39.11	\$39.27	\$43.18
Radiologic Technologists & Technicians	140	\$21.34	\$22.77	\$20.44	\$19.93	\$20.18	\$19.23	\$19.95	\$22.09
Pharmacy Technicians	135	\$12.67	\$13.51	\$13.42	\$12.43	\$12.47	\$11.29	\$11.08	\$11.73

Shaded area indicates highest wage for that occupation among states in comparison. Source: America's Career InfoNet. Retrieved January 31, 2007.

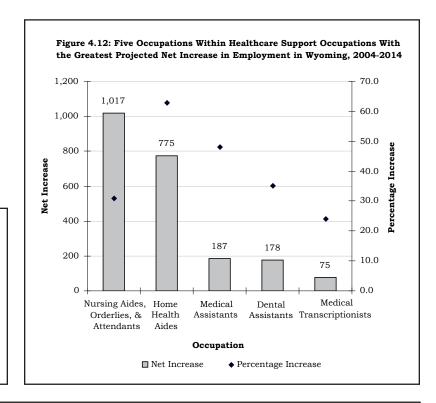
## 31-0000 Healthcare Support Occupations

Several occupations within the healthcare support occupations major group are projected to increase substantially between 2004 and 2014. The largest increase is seen in nursing aides, orderlies, & attendants, expected to increase by 1,017 jobs, a 30.9% rise. In 2005, the median hourly wage for that occupation was \$10.03, slightly lower than the national median of \$10.31. These jobs are typically filled by people who have short-term, on-the-job training. Home health aides are projected to increase by 775 jobs, or 62.9%.

These changes, like those projected in healthcare practitioners & technical occupations, may be due in large part to forecasted growth in Wyoming's aging population. According to U.S. Census Bureau projections<sup>6</sup>, the percentage of Wyoming's population age 65 and older is expected to rise from 11.7% in 2000 to 14.0% in 2010.

## Nursing Aides, Orderlies, & Attendants

Provide basic patient care under direction of nursing staff. Perform duties such as feed, bathe, dress, groom, or move patients, or change linens.



Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percentage Change in Employment 2004-2014	Total Annual Opening
31 0000	Healthcare Support Occupations	7,082	9,642	2,560	36.2	366
31 1000	Nursing, Psychiatric, & Home Health Aides	4,725	6,519	1,794	38.0	241
31 1012	Nursing Aides, Orderlies, & Attendants	3,287	4,304	1,017	30.9	145
31 1011	Home Health Aides	1,232	2,007	775	62.9	94
31 1013	Psychiatric Aides	206	208	2	1.0	3
31 2000	Occupational & Physical Therapist Assistants & Aides	237	331	94	39.7	13
31 2021	Physical Therapist Assistants	109	157	48	44.0	7
31 2022	Physical Therapist Aides	104	141	37	35.6	5
31 9000	Other Healthcare Support Occupations	2,120	2,792	672	31.7	111
31 9092	Medical Assistants	389	576	187	48.1	26
31 9091	Dental Assistants	506	684	178	35.2	32
31 9094	Medical Transcriptionists	312	387	75	24.0	13
31 9099	Healthcare Support Workers, All Other	367	442	75	20.4	14
31 9093	Medical Equipment Preparers	144	204	60	41.7	9
31 9096	Veterinary Assistants & Laboratory Animal Caretakers	166	221	55	33.1	9
31 9011	Massage Therapists	151	178	27	17.9	6
31 9095	Pharmacy Aides	85	100	15	17.7	3

## 33-0000 Protective Service Occupations

The largest projected net increase in protective service occupations is among police & sheriff's patrol officers, an increase of 165 jobs (17.2%). This occupation typically employs people who have had long-term, on-the-job training, and in 2005 paid a median hourly wage of \$18.24, compared to the national median of \$22.25. However, increases could be eclipsed by an increase in corrections workers not factored into the projections. A 690-bed, medium-security prison in Torrington is planned, and would employ a staff of 350. This addition, plus the 85 jobs already

projected to be added from 2004 to 2014, would make correctional officers & jailers the occupation with the largest increase.

## Police & Sheriff's Patrol Officers

Maintain order, enforce laws and ordinances, and protect life and property in an assigned patrol district. Perform a combination of following duties: patrol a specific area on foot or in a vehicle; direct traffic; issue traffic summonses; investigate accidents; apprehend and arrest suspects, or serve legal processes of courts.

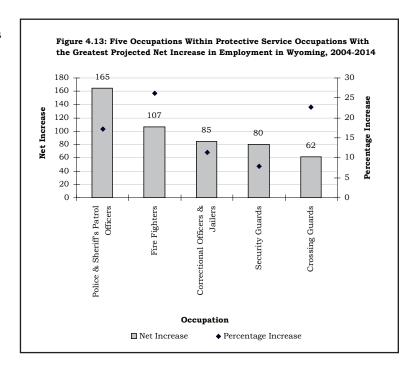


Table 4.13: Wyoming Employment Within the Protective Service Occupations Major Group, 2004-2014

Occupation Code	Title	2004 Employment	Employment (Projected)	Employment 2004-2014	in Employment 2004-2014	e Total Annual Openings
33 0000	Protective Service Occupations	4,893	5,612	719	14.7	226
33 1000	First-Line Supervisors/Managers, Protective Service Workers	436	505	69	15.8	21
33 1012	First-Line Supervisors/Managers of Police & Detectives	159	187	28	17.6	8
33 1021	First-Line Supervisors/Managers of Fire Fighting & Prevention Workers	79	96	17	21.5	5
33 1099	First-Line Supervisors/Managers, Protective Service Workers, All Other	131	145	14	10.7	5
33 1011	First-Line Supervisors/Managers of Correctional Officers	67	77	10	14.9	3
33 2000	Fire Fighting & Prevention Workers	432	539	107	24.8	23
33 2011	Fire Fighters	409	516	107	26.2	23
33 2021	Fire Inspectors & Investigators	20	20	0	0.0	1
33 3000	Law Enforcement Workers	1,961	2,255	294	15.0	76
33 3051	Police and Sheriff's Patrol Officers	957	1,122	165	17.2	41
33 3012	Correctional Officers & Jailers	748	833	85	11.4	24
33 3021	Detectives & Criminal Investigators	154	179	25	16.2	7
33 3031	Fish & Game Wardens	68	81	13	19.1	3
33 3011	Bailiffs	18	21	3	16.7	1
33 3041	Parking Enforcement Workers	16	19	3	18.8	1
33 9000	Other Protective Service Workers	2,064	2,313	249	12.1	106
33 9032	Security Guards	1,010	1,090	80	7.9	30
33 9091	Crossing Guards	274	336	62	22.6	15
33 9092	Lifeguards, Ski Patrol, & Other Recreational Protective Service	292	349	57	19.5	26
33 9099	Protective Service Workers, All Other	351	383	32	9.1	28
33 9011	Animal Control Workers	59	68	9	15.3	5
33 9031	Gaming Surveillance Officers & Gaming Investigators	40	46	6	15.0	2
33 9021	Private Detectives & Investigators	38	41	3	7.9	1

## 35-0000 Food Preparation & Serving Related Occupations

The major group of food preparation & serving related occupations is projected to increase by 3,895 workers in Wyoming, or 15.2%. Similar percentage increases are seen throughout the group. Of all occupations currently employing 10 or more workers, all but one is expected to increase at least 10%, and only one is projected to increase more than 20%. The former is a projected 7.8% increase in cooks, institution & cafeteria, an occupation that probably responds more slowly than other related occupations to population growth and an expanding

economy. The latter is a 23.8% increase (164 workers) in counter attendants, cafeteria, food concession, & coffee shop workers. This increase may be due to the recent rise in popularity of coffee shops, or could be related to rising wages in the state, which create additional disposable income for residents. The largest projected net change is an increase of 850 jobs (14.8%) in waiters & waitresses.

#### Waiters & Waitresses

Take orders and serve food and beverages to patrons at tables in dining establishments.

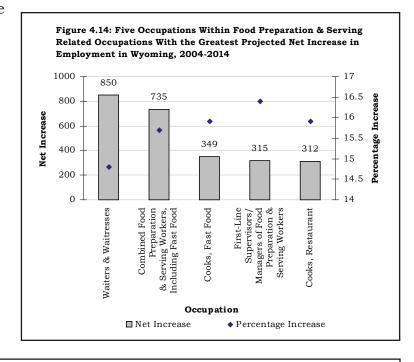


Table 4.14: Wyoming Employment Within the Food Preparation & Serving Related Occupations Major Group, 2004-2014

Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percentage Chang in Employment 2004-2014	e Total Annual Openings
35 0000	Food Preparation & Serving Related Occupations	25,663	29,558	3,895	15.2	1,397
35 1000	Supervisors, Food Preparation & Serving Workers	2,306	2,690	384	16.7	95
35 1012	First-Line Supervisors/Managers of Food Preparation & Serving Workers	1,927	2,242	315	16.4	77
35 1011	Chefs & Head Cooks	379	448	69	18.2	18
35 2000	Cooks & Food Preparation Workers	7,333	8,427	1,094	14.9	343
35 2011	Cooks, Fast Food	2,199	2,548	349	15.9	103
35 2014	Cooks, Restaurant	1,958	2,270	312	15.9	92
35 2021	Food Preparation Workers	1,526	1,815	289	18.9	83
35 2012	Cooks, Institution & Cafeteria	1,117	1,204	87	7.8	43
35 2015	Cooks, Short Order	517	573	56	10.8	22
35 2013	Cooks, Private Household	7	8	1	14.3	0
35 2019	Cooks, All Other	9	9	0	0.0	0
35 3000	Food & Beverage Serving Workers	12,995	14,992	1,997	15.4	816
35 3031	Waiters & Waitresses	5,748	6,598	850	14.8	381
35 3021	Combined Food Preparation & Serving Workers, Including Fast Food	4,671	5,406	735	15.7	276
35 3011	Bartenders	1,744	1,976	232	13.3	92
35 3022	Counter Attendants, Cafeteria, Food Concession, & Coffee Shop	689	853	164	23.8	61
35 3041	Food Servers, Nonrestaurant	143	159	16	11.2	6
35 9000	Other Food Preparation & Serving Related Workers	3,029	3,449	420	13.9	142
35 9021	Dishwashers	1,377	1,572	195	14.2	66
35 9011	Dining Room & Cafeteria Attendants & Bartender Helpers	856	972	116	13.6	40
35 9031	Hosts & Hostesses, Restaurant, Lounge, & Coffee Shop	786	894	108	13.7	36

## 37-0000 Building & Grounds Cleaning & Maintenance **Occupations**

All but one of the occupations in this major group have projected net increases in employment ranging from 20.9% to 26.2%. Vegetation pesticide handlers, sprayers, & applicators are the exception, projected to increase by 10.6%. The largest projected net increase in jobs is in janitors & cleaners, except maids & housekeeping cleaners, expected to rise by 939 jobs, a 21.4% increase. Maids & housekeeping cleaners, meanwhile, are projected to increase by 812 jobs, or 22.1%.

#### Janitors & Cleaners, Except Maids & Housekeeping Cleaners

Keep buildings in clean and orderly condition. Perform heavy cleaning duties, such as cleaning floors, shampooing rugs, washing walls and glass, and removing rubbish. Duties may include tending furnace and boiler, performing routine maintenance activities, notifying management of need for repairs, and cleaning snow or debris from sidewalk.

Source: http://online.onetcenter.org

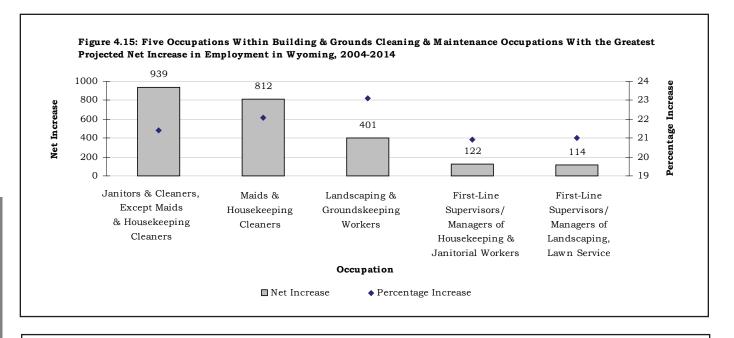
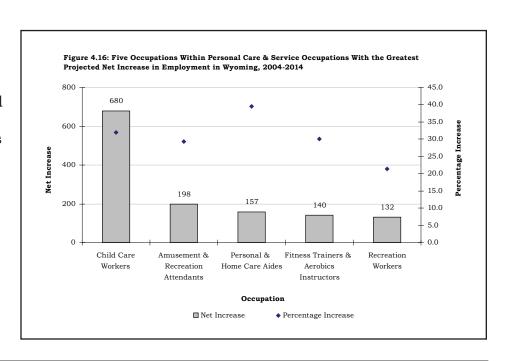


Table 4.15: Wyoming Employment Within the Building & Grounds Cleaning & Maintenance Occupations Major Group, 2004-2014

Occupation		2004	2014 Employment	Net Change in Employment	Percentage Chang in Employment	ge Total Annual
Code	Title	Employment	(Projected)	2004-2014	2004-2014	Openings
37 0000	Building & Grounds Cleaning & Maintenance Occupations	11,447	13,924	2,477	21.6	476
37 1000	Supervisors, Building & Grounds Cleaning & Maintenance Workers	1,127	1,363	236	20.9	42
37 1011	First-Line Supervisors/Managers of Housekeeping & Janitorial Workers	583	705	122	20.9	26
37 1012	First-Line Supervisors/Managers of Landscaping, Lawn Service	544	658	114	21.0	16
37 2000	Building Cleaning & Pest Control Workers	8,102	9,862	1,760	21.7	337
37 2011	Janitors & Cleaners, Except Maids & Housekeeping Cleaners	4,384	5,323	939	21.4	177
37 2012	Maids & Housekeeping Cleaners	3,678	4,490	812	22.1	158
37 2021	Pest Control Workers	23	28	5	21.7	1
37 2019	Building Cleaning Workers, All Other	17	21	4	23.5	1
37 3000	Grounds Maintenance Workers	2,218	2,699	481	21.7	96
37 3011	Landscaping & Groundskeeping Workers	1,739	2,140	401	23.1	78
37 3019	Grounds Maintenance Workers, All Other	181	223	42	23.2	8
37 3012	Pesticide Handlers, Sprayers, & Applicators, Vegetation	256	283	27	10.6	8
37 3013	Tree Trimmers & Pruners	42	53	11	26.2	2

## 39-0000 Personal Care & Service Occupations

Personal care & service occupations in Wyoming are projected to increase by 26.7%, which is higher than the national projected change of 21.0% and probably due to Wyoming's expanding economy. The single occupation within personal care & service with the largest projected change is child care workers, expected to increase by 680 jobs, or 32.0%. In Wyoming, the 2005 median hourly wage for child care workers was \$7.08, less than a dollar



Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percentage Chang in Employment 2004-2014	ge Total Annual Opening
39 0000	Personal Care & Service Occupations	7,361	9,327	1,966	26.7	383
39 1000	Supervisors, Personal Care & Service Workers	475	568	93	19.6	21
39 1021	First-Line Supervisors/Managers of Personal Service Workers	383	455	72	18.8	17
39 1011	Gaming Supervisors	59	73	14	23.7	3
39 1012	Slot Key Persons	33	40	7	21.2	1
39 2000	Animal Care & Service Workers	316	412	96	30.4	17
39 2021	Nonfarm Animal Caretakers	292	383	91	31.2	16
39 2011	Animal Trainers	24	29	5	20.8	1
39 3000	Entertainment Attendants & Related Workers	1,352	1,751	399	29.5	85
39 3091	Amusement & Recreation Attendants	674	872	198	29.4	39
39 3099	Entertainment Attendants & Related Workers, All Other	179	251	72	40.2	13
39 3012	Gaming & Sports Book Writers & Runners	183	232	49	26.8	11
39 3031	Ushers, Lobby Attendants, & Ticket Takers	166	203	37	22.3	13
39 3011	Gaming Dealers	79	109	30	38.0	6
39 3093	Locker Room, Coatroom, & Dressing Room Attendants	43	56	13	30.2	3
39 3021	Motion Picture Projectionists	28	28	0	0.0	1
39 4000	Funeral Service Workers	68	79	11	16.2	3
39 4021	Funeral Attendants	65	76	11	16.9	3
39 5000	Personal Appearance Workers	934	1,066	132	14.1	31
39 5012	Hairdressers, Hairstylists, & Cosmetologists	924	1,055	131	14.2	31
39 5092	Manicurists & Pedicurists	6	7	1	16.7	0
39 5094	Skin Care Specialists	4	4	0	0.0	0
39 6000	Transportation, Tourism, & Lodging Attendants	144	185	41	28.5	8
39 6021	Tour Guides & Escorts	55	75	20	36.4	4
39 6011	Baggage Porters & Bellhops	53	66	13	24.5	3
39 6031	Flight Attendants	24	28	4	16.7	1
39 9000	Other Personal Care & Service Workers	4,072	5,266	1,194	29.3	218
39 9011	Child Care Workers	2,128	2,808	680	32.0	126
39 9021	Personal & Home Care Aides	398	555	157	39.5	22
39 9031	Fitness Trainers & Aerobics Instructors	465	605	140	30.1	25
39 9032	Recreation Workers	620	752	132	21.3	27
39 9099	Personal Care & Service Workers, All Other	294	347	53	18.0	12
39 9041	Residential Advisors	167	199	32	19.2	7

lower than the national median of \$8.20. The number of personal & home care aides also is expected to increase, by 157 jobs (39.5%). In the entertainment attendants & related workers minor group, amusement & recreation attendants are expected to increase by 198, or 29.4%. Ski lift operators and community center recreation leaders would be included in this occupation.

#### **Child Care Workers**

Attend to children at schools, businesses, private households, and child care institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play. Excludes preschool teachers and teacher assistants.

## 41-0000 Sales & Related Occupations

More people in Wyoming are employed as retail salespersons than any other single occupation. In 2004, 8,376 worked in that occupation, and the number is expected to grow by 2,109, a 25.2% increase. Median hourly wages in 2005 for retail salespersons in Wyoming were \$8.32, lower than the national median of \$9.20 and lower than wages paid in Colorado, Utah, and Idaho, but comparable to wages paid in Montana, Nebraska, and South Dakota. Large increases in employment also are projected in sales representatives, wholesale & manufacturing. For that minor group, an increase of 1,092 (44.6%) is forecast. More modest employment growth is projected in supervisors, sales workers, a 10.8% increase. Telemarketers are projected to decline by 50 workers (-8.6%); the group is one of only a handful of occupations expected to decline in Wyoming between 2004 and 2014.

## Retail Salespersons

Sell merchandise, such as furniture, motor vehicles, appliances, or apparel in a retail establishment.

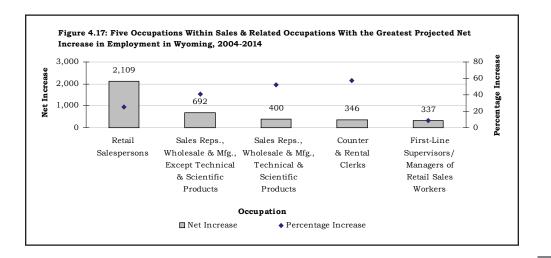


Table 4.17: Wyoming Employment Within the Sales & Related Occupations Major Group, 2004-2014

ed Occupations  \$, Sales Workers  \$ Supervisors/Managers of Retail Sales Workers  \$ Supervisors/Managers of Non-Retail Sales Workers  \$ Workers  Workers  Bespersons  & Rental Clerks  Bespersons  Change Persons & Booth Cashiers  Seentatives, Services  Be Sales Agents	25,730 4,405 3,821 584 15,423 8,376 601 5,702 728 16	30,426 4,879 4,158 721 18,079 10,485 947 5,860 768	4,696 474 337 137 2,656 2,109 346 158 40	18.3 10.8 8.8 23.5 17.2 25.2 57.6 2.8	1,314 127 102 25 892 515 58 293
Supervisors/Managers of Retail Sales Workers Supervisors/Managers of Non-Retail Sales Workers Workers Lespersons Rental Clerks Lange Persons & Booth Cashiers Lange Services	3,821 584 15,423 8,376 601 5,702 728 16	4,158 721 18,079 10,485 947 5,860 768	337 137 2,656 2,109 346 158 40	8.8 23.5 17.2 25.2 57.6 2.8	102 25 892 515 58
2 Supervisors/Managers of Non-Retail Sales Workers Workers lespersons & Rental Clerks espersons Change Persons & Booth Cashiers esentatives, Services	584 15,423 8,376 601 5,702 728 16	721 18,079 10,485 947 5,860 768	2,656 2,109 346 158 40	23.5 17.2 25.2 57.6 2.8	25 892 515 58
Workers lespersons & Rental Clerks espersons Change Persons & Booth Cashiers espentatives, Services	15,423 8,376 601 5,702 728 16	18,079 10,485 947 5,860 768	2,656 2,109 346 158 40	17.2 25.2 57.6 2.8	892 515 58
lespersons & Rental Clerks espersons Change Persons & Booth Cashiers esentatives, Services	8,376 601 5,702 728 16	10,485 947 5,860 768	2,109 346 158 40	25.2 57.6 2.8	515 58
& Rental Clerks  espersons  Change Persons & Booth Cashiers  esentatives, Services	601 5,702 728 16	947 5,860 768	346 158 40	57.6 2.8	58
espersons Change Persons & Booth Cashiers esentatives, Services	5,702 728 16	5,860 768	158 40	2.8	
Change Persons & Booth Cashiers esentatives, Services	728 16	768	40		293
Change Persons & Booth Cashiers esentatives, Services	16				
esentatives, Services		19		5.5	25
	1,416		3	18.8	1
e Salee Arente		1,642	226	16.0	52
c dates rigerres	622	708	86	13.8	24
presentatives, Services, All Other	116	172	56	48.3	8
s, Commodities, & Financial Services Sales Agents	240	295	55	22.9	8
ng Sales Agents	330	362	32	9.7	10
ents	108	105	-3	-2.8	2
esentatives, Wholesale & Manufacturing	2,451	3,543	1,092	44.6	174
presentatives, Wholesale & Manufacturing, Except Technical & Scientific Products	1,684	2,376	692	41.1	113
presentatives, Wholesale & Manufacturing, Technical & Scientific Products	767	1,167	400	52.2	60
and Related Workers	2,035	2,283	248	12.2	70
Related Workers, All Other	483	585	102	21.1	19
rators & Product Promoters	184	236	52	28.3	9
te Sales Agents	246	297	51	20.7	10
te Brokers	279	328	49	17.6	10
gineers	92	140	48	52.2	8
	166	162	-4	-2.4	4
Door Sales Workers, News & Street Vendors, & Related Workers	582	532	-50	-8.6	10
3	ate Sales Agents ate Brokers gineers Door Sales Workers, News & Street Vendors, & Related Workers teters	ate Brokers 279 gineers 92 Door Sales Workers, News & Street Vendors, & Related Workers 166	tate Brokers 279 328 gineers 92 140 Door Sales Workers, News & Street Vendors, & Related Workers 166 162	tate Brokers     279     328     49       gineers     92     140     48       Door Sales Workers, News & Street Vendors, & Related Workers     166     162     -4	tet Brokers 279 328 49 17.6 gineers 92 140 48 52.2 Door Sales Workers, News & Street Vendors, & Related Workers 166 162 -4 -2.4

## 43-0000 Office & Administrative Support Occupations

Only 32 occupations are projected to decline in Wyoming, so the fact that 12 of them are in the office & administrative support occupations major group is noteworthy. Overall, occupations in the major group are expected to increase by 5,235 jobs, or 14.5%. The occupation with the largest projected net gain (955 jobs) is bookkeeping, accounting, & auditing clerks. In 2005, this occupation had a median hourly wage of \$11.72 in Wyoming, compared to \$14.18 for the nation. However, the 18.9% increase in the number of these

Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percentage Chang in Employment 2004-2014	
43 0000	Office and Administrative Support Occupations	36,129	41,364	5,235	14.5	1,415
43 1000	Supervisors, Office & Administrative Support Workers	1,780	2,088	308	17.3	69
43 1011	First-Line Supervisors/Managers of Office & Administrative Support Workers	1,780	2,088	308	17.3	69
43 2000	Communications Equipment Operators	352	339	-13	-3.7	9
43 2021	Telephone Operators	13	9	-4	-30.8	0
43 2011	Switchboard Operators, Including Answering Service	333	325	-8	-2.4	9
43 3000	Financial Clerks	7,872	9,419	1,547	19.7	339
43 3031	Bookkeeping, Accounting, & Auditing Clerks	5,052	6,007	955	18.9	190
43 3071	Tellers	1,072	1,268	196	18.3	72
43 3011	Bill and Account Collectors	551	724	173	31.4	28
43 3051	Payroll & Timekeeping Clerks	374	512	138	36.9	24
43 3021	Billing and Posting Clerks & Machine Operators	666	736	70	10.5	18
43 3061	Procurement Clerks	124	133	9	7.3	4
43 3041	Gaming Cage Workers	33	39	6	18.2	2
43 4000	Information & Record Clerks	8,122	9,665	1,543	19.0	375
43 4051	Customer Service Representatives	1,694	2,321	627	37.0	88
43 4171	Receptionists & Information Clerks	1,471	1,875	404	27.5	77
43 4081	Hotel, Motel, & Resort Desk Clerks	1,027	1,241	214	20.8	68 30
43 4111	Interviewers, Except Eligibility & Loan	477	653	176	36.9	
43 4031	Court, Municipal, & License Clerks	406	493	87	21.4	18 30
43 4121 43 4161	Library Assistants, Clerical Human Resources Assistants, Except Payroll & Timekeeping	534 213	617 261	83 48	15.5 22.5	9
43 4131	Loan Interviewers & Clerks	344	378	34	9.9	8
43 4181	Reservation and Transportation Ticket Agents & Travel Clerks	185	196	11	6.0	6
43 4011	Brokerage Clerks	65	75	10	15.4	2
43 4151	Order Clerks	410	404	-6	-1.5	9
43 4061	Eligibility Interviewers, Government Programs	232	218	-14	-6.0	6
43 4199	Information & Record Clerks, All Other	596	538	-58	-9.7	9
43 4071	File Clerks	279	188	-91	-32.6	8
43 5000	Material Recording, Scheduling, Dispatching, & Distributing Workers	5,352	5,644	292	5.5	194
43 5071	Shipping, Receiving, & Traffic Clerks	887	1,078	191	21.5	37
43 5032	Dispatchers, Except Police, Fire, & Ambulance	320	375	55	17.2	12
43 5031	Police, Fire, & Ambulance Dispatchers	276	321	45	16.3	10
43 5061	Production, Planning, & Expediting Clerks	143	175	32	22.4	7
43 5081	Stock Clerks & Order Fillers	2,178	2,190	12	0.6	82
43 5011	Cargo & Freight Agents	31	32	1	3.2	1
43 5021	Couriers and Messengers	183	183	0	0.0	4
43 5111	Weighers, Measurers, Checkers, & Samplers, Recordkeeping	137	132	-5	-3.7	4
43 5041	Meter Readers, Utilities	165	101	-64	-38.8	5
43 6000	Secretaries & Administrative Assistants	7,791	8,786	995	12.8	249
43 6011	Executive Secretaries & Administrative Assistants	2,102	2,539	437	20.8	84
43 6014	Secretaries, Except Legal, Medical, & Executive	4,641	5,006	365	7.9	125
43 6013	Medical Secretaries	763	875	112	14.7	26
43 6012	Legal Secretaries	285	366	81	28.4	14
43 9000	Other Office & Administrative Support Workers	4,860	5,423	563	11.6	180
43 9061	Office Clerks, General	3,268	3,856	588	18.0	131
43 9199	Office & Administrative Support Workers, All Other	527	614	87	16.5	21
43 9041	Insurance Claims & Policy Processing Clerks	205	228	23	11.2	6
43 9021	Data Entry Keyers	184	196	12	6.5	6
43 9031	Desktop Publishers	27	34	7	25.9	1
43 9081	Proofreaders & Copy Markers	28	28	0	0.0	1
43 9022	Word Processors & Typists	104	93	-11	-10.6	2
43 9071	Office Machine Operators, Except Computer	83	69	-14	-16.9	2
43 9051	Mail Clerks & Mail Machine Operators, Except Postal Service	166	111	-55	-33.1	5
43 9011	Computer Operators	262	189	-73	-27.9	6

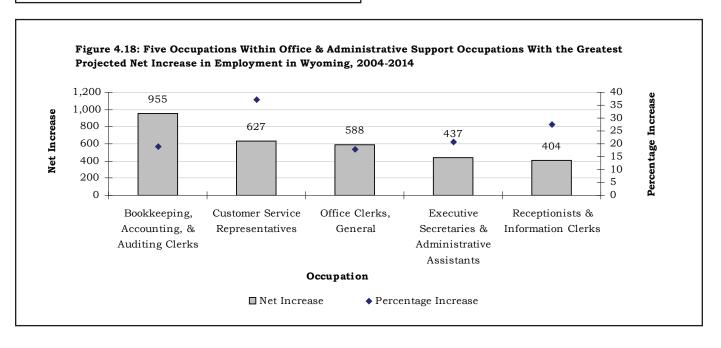
jobs in Wyoming is substantially higher than it is in most states. Meanwhile, declines of at least 50 jobs are projected in each of five occupations: file clerks (-91 jobs); computer operators (-73); meter readers, utilities (-64); information & record clerks, all other (-58); and mail clerks & mail machine operators, except postal service (-55). File clerks are expected to decline due to the number of office-related tasks that are now handled digitally and the consolidation of clerical duties. Likewise, the tasks typically performed by

## Bookkeeping, Accounting, & Auditing Clerks

Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.

Source: http://online.onetcenter.org

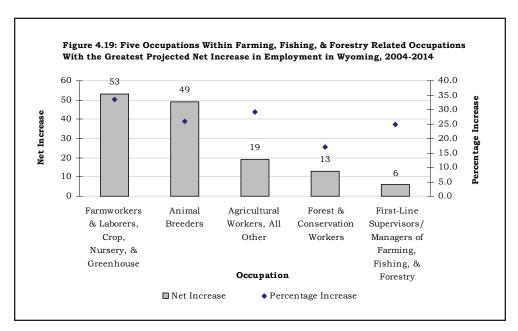
a computer operator (which might include loading disks, tapes, or punch cards into a computer) are declining as smaller computers become more sophisticated. People in these occupations with computer skills should find ample employment opportunities, however, in areas such as network operations and user support. The number of meter readers is expected to decline as utilities increasingly use automated meter-reading systems. Nearly all of the occupations projected to decline in this major group in Wyoming are projected to decline nationally.<sup>7</sup>



## 45-0000 Farming, Fishing, & Forestry Occupations

No significant changes are projected within the farming, fishing, & forestry occupations

major group. A net employment change of 150 jobs is forecast between 2004 and 2014, resulting in a 20.9% increase in employment. The largest sources for that increase are for farmworkers & laborers, crop, nursery, & greenhouse (up 53 jobs, or 33.5%) and for animal breeders (49 jobs, 25.9%). Small declines of 1 to 3 jobs are projected in loggingrelated occupations.



#### Farmworkers & Laborers, Crop, Nursery, & Greenhouse

Manually plant, cultivate, and harvest vegetables, fruits, nuts, horticultural specialties, and field crops. Use hand tools, such as shovels, trowels, hoes, tampers, pruning hooks, shears, and knives. Duties may include tilling soil and applying fertilizers; transplanting, weeding, thinning, or pruning crops; applying pesticides; and cleaning, grading, sorting, packing, and loading harvested products. May construct trellises, repair fences and farm buildings, or participate in irrigation activities. Excludes graders & sorters, agricultural products. Excludes forest, conservation, & logging workers.

Table 4.19: Wyoming Employment Within the Farming, Fishing, & Forestry Occupations Major Group, 2004-2014

			2014	Net Change in	Percentage Chang	ge Total
Occupation		2004	Employment	Employment	in Employment	Annual
Code	Title	Employment	(Projected)	2004-2014	2004-2014	Openings
45 0000	Farming, Fishing, & Forestry Occupations	717	867	150	20.9	33
45 1000	Supervisors, Farming, Fishing, & Forestry Workers	24	30	6	25.0	1
45 1011	First-Line Supervisors/Managers of Farming, Fishing, & Forestry	24	30	6	25.0	1
45 2000	Agricultural Workers	539	677	138	25.6	27
45 2092	Farmworkers & Laborers, Crop, Nursery, & Greenhouse	158	211	53	33.5	10
45 2021	Animal Breeders	189	238	49	25.9	8
45 2099	Agricultural Workers, All Other	65	84	19	29.2	4
45 2093	Farmworkers, Farm & Ranch Animals	60	66	6	10.0	2
45 2091	Agricultural Equipment Operators	23	27	4	17.4	1
45 4000	Forest, Conservation, & Logging Workers	154	160	6	3.9	5
45 4011	Forest & Conservation Workers	77	90	13	16.9	3
45 4021	Fallers	9	8	-1	-11.1	0
45 4022	Logging Equipment Operators	43	40	-3	-7.0	1
45 4029	Logging Workers, All Other	23	20	-3	-13.0	1

## 47-0000 Construction & Extraction Occupations

No other major occupational group in Wyoming has seen and is expected to see growth comparable to construction & extraction occupations. Of Wyoming's 50 occupations with the highest projected percentage increase in employment, 11 are construction & extraction occupations, including all of the top 8. Others in the 50, such as geological & petroleum technicians, petroleum engineers, and gas compressor & gas pumping station operators, fall into other occupational major groups, but clearly are associated with extractive industries in the state. Seven detailed occupations are found in both the 50 occupations with the highest net increase and 50 occupations with the highest percentage increase; of those, 5 are from the construction & extraction major group (see Figure 4.1, page 59).

According to the U.S. Energy Information Administration's Annual Energy Outlook 2007 (p. 98), prices of natural gas and crude oil are projected to decline gradually from 2006 levels until 2015. And although coal prices are projected to remain at 2005 levels through 2030, that price leveling may coincide with employment growth in Wyoming. "Greater price increases are avoided," the report states, "because lower cost production from surface mines in the West is projected to capture a growing share of the U.S. market." Wyoming produces more than two-thirds of all coal mined in the West, and most of it through surface mining.

The projected percentage change in employment for the top 10 occupations ranges from a 99.9% increase for derrick operators, oil & gas, to a 70.0% increase for geological & petroleum technicians. Within these 10 occupations, 5,248 new jobs are projected. Of those jobs, 1,179 are

#### First-Line Supervisors/Managers of Construction Trades & Extraction Workers

Directly supervise and coordinate activities of construction or extraction workers.

Source: http://online.onetcenter.org

(Text continued on page 87)

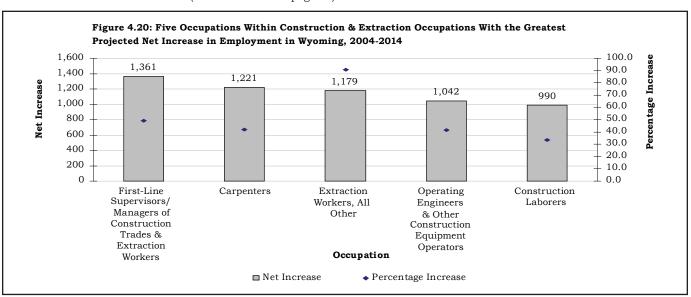


Table 4.20: Wyoming Employment Within the Construction & Extraction Occupations Major Group, 2004-2014

ccupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percentage Change in Employment 2004-2014	Total Annua Openin
47 0000	Construction & Extraction Occupations	27,264	40,983	13,719	50.3	1,983
47 1000	Supervisors, Construction & Extraction Workers	2,765	4,126	1,361	49.2	183
47 1011	First-Line Supervisors/Managers of Construction Trades & Extraction Workers	2,765	4,126	1,361	49.2	183
47 2000	Construction Trades Workers	16,072	22,449	6,377	39.7	949
47 2031	Carpenters	2,898	4,119	1,221	42.1	169
47 2073	Operating Engineers & Other Construction Equipment Operators	2,501	3,543	1,042	41.7	169
47 2061	Construction Laborers	2,971	3,961	990	33.3	139
47 2111	Electricians	2,182	3,030	848	38.9	12
47 2152	Plumbers, Pipefitters, & Steamfitters	1,162	1,695	533	45.9	8
47 2141	Painters, Construction & Maintenance	971	1,348	377	38.8	5
47 2051	Cement Masons & Concrete Finishers	585	851	266	45.5	3
47 2181	Roofers	370	545	175	47.3	2
47 2211	Sheet Metal Workers	298	427	129	43.3	2
47 2071	Paving, Surfacing, & Tamping Equipment Operators	240	352	112	46.7	1
47 2221	Structural Iron & Steel Workers	219	324	105	48.0	1
47 2021	Brickmasons & Blockmasons	234	324	90	38.5	1
47 2011	Boilermakers	333	405	72	21.6	1
47 2132	Insulation Workers, Mechanical	215	281	66	30.7	1
47 2044	Tile & Marble Setters	106	163	57	53.8	
47 2151	Pipelayers	150	205	55	36.7	
47 2121	Glaziers	84	118	34	40.5	
47 2131	Insulation Workers, Floor, Ceiling, & Wall	105	138	33	31.4	
47 2041	Carpet Installers	67	86	19	28.4	
47 2171	Reinforcing Iron & Rebar Workers	36	55	19	52.8	
47 2042	Floor Layers, Except Carpet, Wood, & Hard Tiles	45	62	17	37.8	
47 2022	Stonemasons	42	58	16	38.1	
47 2043	Floor Sanders & Finishers	38	52	14	36.8	
47 2161	Plasterers & Stucco Masons	35	47	12	34.3	
47 2082	Tapers	18	23	5	27.8	
47 3000	Helpers, Construction Trades	1,697	2,412	715	42.1	14:
47 3012	Helpers — Carpenters	635	924	289	45.5	5
	Helpers — Pipelayers, Plumbers, Pipefitters, & Steamfitters	342	513	171	50.0	3
47 3015			240	105		2
47 3015 47 3011	Helpers — Brickmasons, Blockmasons, Stonemasons, & Tile & Marble Setters	235	340	103	44.7	
		235 178	259	81	44.7	1
47 3011	Setters					
47 3011 47 3016	Setters Helpers — Roofers	178	259	81	45.5	1
47 3011 47 3016 47 3019	Setters Helpers — Roofers Helpers, Construction Trades, All Other	178 199	259 230	81 31	45.5 15.6	1
47 3011 47 3016 47 3019 47 3013	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians	178 199 90	259 230 120	81 31 30	45.5 15.6 33.3	1
47 3011 47 3016 47 3019 47 3013 47 3014	Setters  Helpers — Roofers  Helpers, Construction Trades, All Other  Helpers — Electricians  Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons	178 199 90 18	259 230 120 26	81 31 30 8	45.5 15.6 33.3 44.4	1 3
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers	178 199 90 18 626	259 230 120 26 838	81 31 30 8 212	45.5 15.6 33.3 44.4 33.9	1 2 3
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers	178 199 90 18 626 203	259 230 120 26 838 257	81 31 30 8 212 54	45.5 15.6 33.3 44.4 33.9 26.6	3
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051 47 4099	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other	178 199 90 18 626 203 155	259 230 120 26 838 257 203	81 31 30 8 212 54 48	45.5 15.6 33.3 44.4 33.9 26.6 31.0	3
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051 47 4099 47 4011	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other Construction & Building Inspectors	178 199 90 18 626 203 155 115	259 230 120 26 838 257 203 157	81 31 30 8 212 54 48 42	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5	3
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051 47 4099 47 4011 47 4071	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other Construction & Building Inspectors Septic Tank Servicers & Sewer Pipe Cleaners	178 199 90 18 626 203 155 115 60	259 230 120 26 838 257 203 157 91	81 31 30 8 212 54 48 42 31	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5 51.7	3
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051 47 4099 47 4011 47 4071 47 4031	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other Construction & Building Inspectors Septic Tank Servicers & Sewer Pipe Cleaners Fence Erectors	178 199 90 18 626 203 155 115 60 58	259 230 120 26 838 257 203 157 91 80	81 31 30 8 212 54 48 42 31 22	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5 51.7 37.9	1
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051 47 4099 47 4011 47 4071 47 4031 47 4021	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other Construction & Building Inspectors Septic Tank Servicers & Sewer Pipe Cleaners Fence Erectors Elevator Installers & Repairers	178 199 90 18 626 203 155 115 60 58	259 230 120 26 838 257 203 157 91 80 17	81 31 30 8 212 54 48 42 31 22 5	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5 51.7 37.9 41.7	3
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051 47 4099 47 4011 47 4071 47 4031 47 4091	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other Construction & Building Inspectors Septic Tank Servicers & Sewer Pipe Cleaners Fence Erectors Elevator Installers & Repairers Segmental Pavers	178 199 90 18 626 203 155 115 60 58 12	259 230 120 26 838 257 203 157 91 80 17	81 31 30 8 212 54 48 42 31 22 5	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5 51.7 37.9 41.7 44.4	3 3
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051 47 4099 47 4011 47 4071 47 4031 47 4021 47 4091 47 4061	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other Construction & Building Inspectors Septic Tank Servicers & Sewer Pipe Cleaners Fence Erectors Elevator Installers & Repairers Segmental Pavers Rail-Track Laying & Maintenance Equipment Operators	178 199 90 18 626 203 155 115 60 58 12 9	259 230 120 26 838 257 203 157 91 80 17 13 12	81 31 30 8 212 54 48 42 31 22 5 4	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5 51.7 37.9 41.7 44.4 33.3	3 3
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051 47 4099 47 4011 47 4071 47 4031 47 4091 47 4061 47 5000	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other Construction & Building Inspectors Septic Tank Servicers & Sewer Pipe Cleaners Fence Erectors Elevator Installers & Repairers Segmental Pavers Rail-Track Laying & Maintenance Equipment Operators Extraction Workers	178 199 90 18 626 203 155 115 60 58 12 9	259 230 120 26 838 257 203 157 91 80 17 13 12 11,158	81 31 30 8 212 54 48 42 31 22 5 4 3 3 5,054	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5 51.7 37.9 41.7 44.4 33.3 82.8	1 2 3
47 3011 47 3016 47 3019 47 3013 47 4000 47 4051 47 4099 47 4011 47 4071 47 4021 47 4091 47 4061 47 5000 47 5099	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other Construction & Building Inspectors Septic Tank Servicers & Sewer Pipe Cleaners Fence Erectors Elevator Installers & Repairers Segmental Pavers Rail-Track Laying & Maintenance Equipment Operators Extraction Workers Extraction Workers, All Other	178 199 90 18 626 203 155 115 60 58 12 9 9	259 230 120 26 838 257 203 157 91 80 17 13 12 11,158	81 31 30 8 212 54 48 42 31 22 5 4 3 5,054 1,179	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5 51.7 37.9 41.7 44.4 33.3 82.8 90.8	1 2 3 3 3 67 15
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47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051 47 4099 47 4011 47 4021 47 4091 47 4091 47 4061 47 5000 47 5099 47 5011 47 5013	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other Construction & Building Inspectors Septic Tank Servicers & Sewer Pipe Cleaners Fence Erectors Elevator Installers & Repairers Segmental Pavers Rail-Track Laying & Maintenance Equipment Operators Extraction Workers Extraction Workers, All Other Roustabouts, Oil & Gas Derrick Operators, Oil & Gas Service Unit Operators, Oil, Gas, & Mining Explosives Workers, Ordnance Handling Experts, & Blasters	178 199 90 18 626 203 155 115 60 58 12 9 9 6,104 1,299 892 693 727 609	259 230 120 26 838 257 203 157 91 80 17 13 12 11,158 2,478 1,707 1,385 1,404 1,109	81 31 30 8 212 54 48 42 31 22 5 4 3 5,054 1,179 815 692 677 500	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5 51.7 37.9 41.7 44.4 33.3 82.8 90.8 91.4 99.9 93.1 82.1	67 15 10 88 7
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051 47 4071 47 4071 47 4091 47 4061 47 5000 47 5099 47 5011 47 5013 47 5012	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other Construction & Building Inspectors Septic Tank Servicers & Sewer Pipe Cleaners Fence Erectors Elevator Installers & Repairers Segmental Pavers Rail-Track Laying & Maintenance Equipment Operators  Extraction Workers Extraction Workers, All Other Roustabouts, Oil & Gas Derrick Operators, Oil & Gas Service Unit Operators, Oil, Gas, & Mining Explosives Workers, Ordnance Handling Experts, & Blasters Rotary Drill Operators, Oil & Gas	178 199 90 18 626 203 155 115 60 58 12 9 9 6,104 1,299 892 693 727 609 482	259 230 120 26 838 257 203 157 91 80 17 13 12 11,158 2,478 1,707 1,385 1,404 1,109 936	81 31 30 8 212 54 48 42 31 22 5 4 3 5,054 1,179 815 692 677 500 454	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5 51.7 37.9 41.7 44.4 33.3 82.8 90.8 91.4 99.9 93.1 82.1 94.2	67 15 10 8 8 8 7 5 5
47 3011 47 3016 47 3019 47 3013 47 3014 47 4000 47 4051 47 4071 47 4071 47 4091 47 4091 47 4061 47 5000 47 5099 47 5011 47 5013 47 5012 47 5081	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Related Workers, All Other Construction & Building Inspectors Septic Tank Servicers & Sewer Pipe Cleaners Fence Erectors Elevator Installers & Repairers Segmental Pavers Rail-Track Laying & Maintenance Equipment Operators Extraction Workers  Extraction Workers All Other Roustabouts, Oil & Gas Derrick Operators, Oil & Gas Service Unit Operators, Oil, Gas, & Mining Explosives Workers, Ordnance Handling Experts, & Blasters Rotary Drill Operators, Oil & Gas Helpers — Extraction Workers	178 199 90 18 626 203 155 115 60 58 12 9 9 6,104 1,299 892 693 727 609 482 481	259 230 120 26 838 257 203 157 91 80 17 13 12 11,158 2,478 1,707 1,385 1,404 1,109 936 841	81 31 30 8 212 54 48 42 31 22 5 4 3 5,054 1,179 815 692 677 500 454 360	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5 51.7 37.9 41.7 44.4 33.3 82.8 90.8 91.4 99.9 93.1 82.1 94.2 74.8	1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 5 5 5 5 5
47 3011  47 3016  47 3019  47 3013  47 4000  47 4051  47 4099  47 4011  47 4071  47 4091  47 4061  47 5000  47 5099  47 5071  47 5011  47 5013  47 5012  47 5021	Setters Helpers — Roofers Helpers, Construction Trades, All Other Helpers — Electricians Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons Other Construction & Related Workers Highway Maintenance Workers Construction & Building Inspectors Septic Tank Servicers & Sewer Pipe Cleaners Fence Erectors Elevator Installers & Repairers Segmental Pavers Rail-Track Laying & Maintenance Equipment Operators Extraction Workers  Extraction Workers, All Other Roustabouts, Oil & Gas Derrick Operators, Oil & Gas Service Unit Operators, Oil, Gas, & Mining Explosives Workers, Ordnance Handling Experts, & Blasters Rotary Drill Operators, Oil & Gas Helpers — Extraction Workers Earth Drillers, Except Oil & Gas	178 199 90 18 626 203 155 115 60 58 12 9 9 6,104 1,299 892 693 727 609 482 481 452	259 230 120 26 838 257 203 157 91 80 17 13 12 11,158 2,478 1,707 1,385 1,404 1,109 936 841 784	81 31 30 8 212 54 48 42 31 22 5 4 3 5,054 1,179 815 692 677 500 454 360 332	45.5 15.6 33.3 44.4 33.9 26.6 31.0 36.5 51.7 37.9 41.7 44.4 33.3 82.8 90.8 91.4 99.9 93.1 82.1 94.2 74.8 73.5	67 15 10 8

(Text continued from page 85)

in extraction workers, all other. These jobs pay well in Wyoming, too. In extraction workers, all other, the median hourly wage for workers in 2005 was \$17.90 in Wyoming, compared to \$16.35 for the nation.

#### **Competition for Labor**

Worker shortages in extraction occupations likely mean competition for workers in other occupations. An article in the December 2005 issue of Wyoming Labor Force Trends (Harris) examined wagedriven movement of workers in occupations that might be technically separate but have overlapping skill sets. The article showed average hourly wages for rotary drill operators, oil & gas and average hourly wages for three occupations requiring similar skills: derrick operators, oil & gas; operating engineers & other construction equipment operators; and paving, surfacing, & tamping equipment operators. Of those, rotary drill operators, oil & gas, was the occupation with the highest average wages. The comparison suggested that workers in lower-paying occupations might be drawn away by higher pay. A year later, a comparison of the average hourly wages for those same occupations showed a similar situation, with higher wages for each occupation (see Table 4.21). Previous research has shown that construction and extraction occupations are more likely than other occupations to be filled by nonresident workers (Gallagher). When labor demand in source states increases, upward pressure is exerted on wages, and competition between technically unrelated occupations tightens further.

Growth in the extraction occupations also is a likely factor in Wyoming's

Table 4.21: Wyoming ANSWERS<sup>a</sup> Related Occupations for Rotary Drill Operators, Oil & Gas (SOC 47-5012)

Standar	d Occupational Classification (SOC) Code and Title	Average Hourly Wage
47 5012	Rotary Drill Operators, Oil & Gas	\$19.25
47 5011	Derrick Operators, Oil & Gas	\$18.60
47 2073	Operating Engineers & Other Construction Equipment Operators	\$18.17
47 2071	Paving, Surfacing, & Tamping Equipment Operators	\$16.45
<sup>a</sup> See http	://doe.state.wy.us/ANSWERS	

population growth. According to U.S. Census Bureau estimates released in December, Wyoming's population hit an all-time high of 515,004. Wenlin Liu, senior economist with the economic analysis division of the state Department of Administration and Information, said the population growth was "almost purely driven by the mining sector" (Barron, 2006).

#### **Construction Trades Workers**

The SOC minor group with the largest numeric change is construction trades workers, which is expected to add 6,377 jobs. At the detailed occupation level, the occupation with the largest projected numeric growth is truck drivers, heavy & tractor-trailer, which is projected to add 2,410 jobs. The projected expansion in this single occupation exceeds the growth projected for many SOC minor groups such as food & beverage serving workers, which currently employs more than twice as many people as truck drivers, heavy & tractor-trailer.

## 49-0000 Installation, Maintenance & Repair Occupations

Increases in net employment ranging from 125 to 801 jobs are projected in 10 of 43 occupations in this major group. These increases represent percentage gains from 22.3% to 42.5% within those occupations. Overall, net employment within the installation, maintenance &

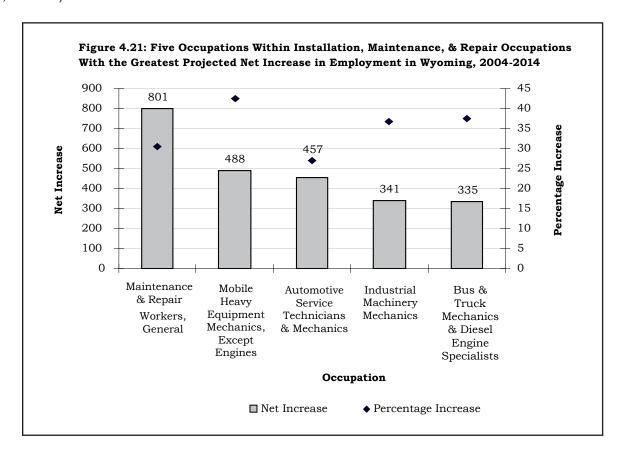
#### Maintenance & Repair Workers, General

Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of an establishment in repair. Duties may involve pipefitting; boilermaking; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs.

Table 4.22: Wyoming Employm	ent Within the Installation,	Maintenance, & Repa	ir Occupations Maj	or Group, 2004-2014

Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Change in Employment 2004-2014	Total Annual Openings
49 0000	Installation, Maintenance, & Repair Occupations	14,653	18,905	4,252	29.0	772
49 1000	Supervisors of Installation, Maintenance, & Repair Workers	1,197	1,528	331	27.7	63
49 1011	First-Line Supervisors/Managers of Mechanics, Installers, & Repairers	1,197	1,528	331	27.7	63
49 2000	Electrical & Electronic Equipment Mechanics, Installers, & Repairers	1,375	1,626	251	18.3	52
49 2094	Electrical & Electronics Repairers, Commercial & Industrial Equipment	186	247	61	32.8	10
49 2011	Computer, Automated Teller, & Office Machine Repairers	219	272	53	24.2	8
49 2097	Electronic Home Entertainment Equipment Installers & Repairers	169	217	48	28.4	8
49 2022	Telecommunications Equipment Installers & Repairers, Except Line Installers	553	597	44	8.0	16
49 2096	Electronic Equipment Installers & Repairers, Motor Vehicle	58	74	16	27.6	3
49 2098	Security & Fire Alarm Systems Installers	31	41	10	32.3	2
49 2021	Radio Mechanics	59	64	5	8.5	2
49 2092	Electric Motor, Power Tool, & Related Repairers	8	11	3	37.5	1
49 2093	Electrical & Electronics Installers & Repairers, Transportation Equipment	7	9	2	28.6	0
49 3000	Vehicle & Mobile Equipment Mechanics, Installers	5,123	6,694	1.571	30.7	289
49 3042	Mobile Heavy Equipment Mechanics, Except Engines	1,148	1,636	488	42.5	74
49 3023	Automotive Service Technicians & Mechanics	1,689	2,146	457	27.1	91
49 3031	Bus and Truck Mechanics & Diesel Engine Specialists	895	1,230	335	37.4	57
49 3021	Automotive Body & Related Repairers	397	478	81	20.4	16
49 3021	Tire Repairers & Changers	356	392	36	10.1	19
	-	82	112	30	36.6	5
49 3041	Farm Equipment Mechanics	104			28.9	5
49 3043	Rail Car Repairers		134	30		
49 3053	Outdoor Power Equipment & Other Small Engine Mechanics	73	103	30	41.1	5
49 3052	Motorcycle Mechanics	121	148	27	22.3	6
49 3022	Automotive Glass Installers & Repairers	80	100	20	25.0	4
49 3011	Aircraft Mechanics & Service Technicians	101	120	19	18.8	4
49 3092	Recreational Vehicle Service Technicians	49	60	11	22.5	3
49 3051	Motorboat Mechanics	19	25	6	31.6	1
49 3091	Bicycle Repairers	9	10	1	11.1	1
49 9000	Other Installation, Maintenance, & Repair Occupations	6,958	9,057	2,099	30.2	368
49 9042	Maintenance & Repair Workers, General	2,622	3,423	801	30.6	130
49 9041	Industrial Machinery Mechanics	927	1,268	341	36.8	53
49 9051	Electrical Power-Line Installers & Repairers	648	842	194	29.9	40
49 9098	Helpers — Installation, Maintenance, & Repair Workers	496	678	182	36.7	35
49 9021	Heating, Air Conditioning, & Refrigeration Mechanics & Installers	274	405	131	47.8	17
49 9099	Installation, Maintenance, & Repair Workers, All Other	533	658	125	23.5	25
49 9043	Maintenance Workers, Machinery	421	516	95	22.6	19
49 9012	Control & Valve Installers & Repairers, Except Mechanical Door	161	210	49	30.4	9
49 9052	Telecommunications Line Installers & Repairers	186	222	36	19.4	9
49 9095	Manufactured Building & Mobile Home Installers	120	152	32	26.7	6
49 9062	Medical Equipment Repairers	34	52	18	52.9	3
49 9045	Refractory Materials Repairers, Except Brickmasons	31	44	13	41.9	2
49 9091	Coin, Vending, & Amusement Machine Servicers & Repairers	95	107	12	12.6	4
49 9044	Millwrights	191	202	11	5.8	6
49 9069	Precision Instrument & Equipment Repairers, All Other	53	63	10	18.9	3
49 9094	Locksmiths & Safe Repairers	31	37	6	19.4	2
49 9031	Home Appliance Repairers	50	53	3	6.0	2
17 9001	Musical Instrument Repairers & Tuners	10	11	1	10.0	0
49 9063						

repair occupations major group is projected to grow by 4,252 jobs, or 29.0%. The largest projected net increase is for maintenance & repair workers, general, an increase of 801 jobs. This occupation generally requires moderate on-the-job training, and in 2005 in Wyoming paid a median hourly wage of \$16.31, which is higher than the U.S. median hourly wage of \$15.01 for this job. Five other occupations have projected net increases of more than 300 jobs: mobile heavy equipment mechanics, except engines (488 jobs, 42.5% increase); automotive service technicians & mechanics (457 jobs, 27.1%); industrial machinery mechanics (341 jobs, 36.8%); bus & truck mechanics & diesel engine specialists (335, 37.4%); and first-line supervisors/managers of mechanics, installers, & repairers (331, 27.7%).



## **51-0000 Production Occupations**

Within the production occupations major group are some of Wyoming's fastest growing and fastest declining occupations. Among the fastest growing are machinists (up 56.2%); inspectors, testers, sorters, samplers, & weighers (52%); and structural metal fabricators & fitters (49.5%). The largest projected net increase, however, is for welders, cutters, solderers, & brazers (619 jobs; 45.5% increase). The increasing demand in this occupation is likely related to growth in the mining industry in the state. This occupation typically

requires long-term on-the-job training, and in 2005 paid a median hourly wage of \$15.91 in Wyoming, compared to the national median of \$14.90. That disparity, combined with the fact that this occupation is expected to grow nationally at a slower-than-average pace, may signal an opportunity for Wyoming employers to attract nonresident workers. Meanwhile, the production occupations major group contains 10 of the 32 occupations projected to decline between 2004 and 2014. And while most of these are slight declines, most mirror projected declines at the national

level. Three examples: sawing machine setters, operators, & tenders, wood (-25 jobs, -12.8%); butchers & meat cutters (-25 jobs, -10.6%); and photographic processing machine operators (-17 jobs, -19.5%). The first two examples reflect occupational decentralization and increasing imports, while the latter is likely related to shifting technology, as photographic product consumers switch from film-based photography to digital.

## Welders, Cutters, Solderers, & Brazers

Use hand-welding, flame-cutting, hand soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.

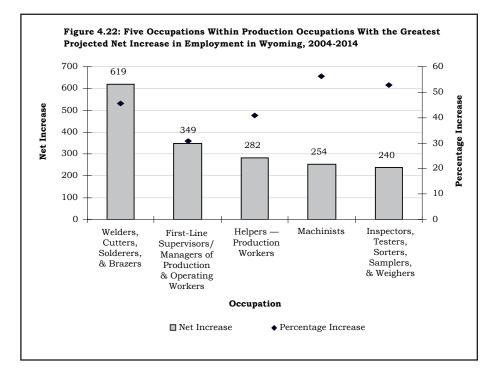


Table 4.23: Wyoming Employment Within the Production Occupations Major Group, 2004-2014

ccupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Change in Employment 2004-2014	Ann Oper
51 0000	Production Occupations	12,302	15,553	3,251	26.4	6
51 1000	Supervisors, Production Workers	1,130	1,479	349	30.9	
51 1011	First-Line Supervisors/Managers of Production & Operating	1,130	1,479	349	30.9	
51 2000	Assemblers & Fabricators	988	1,327	339	34.3	
51 2092	Team Assemblers	443	569	126	28.4	
51 2041	Structural Metal Fabricators & Fitters	194	290	96	49.5	
51 2099	Assemblers & Fabricators, All Other	245	330	85	34.7	
51 2022	Electrical & Electronic Equipment Assemblers	43	62	19	44.2	
51 2091	Fiberglass Laminators & Fabricators	9	13	4	44.4	
51 2023	Electromechanical Equipment Assemblers	14	11	-3	-21.4	
51 3000	Food Processing Workers	853	878	25	2.9	
51 3011	Bakers	450	495	45 1	10.0	
51 3091	Food & Tobacco Roasting, Baking, & Drying Machine Operators	15	16		6.7	
51 3022	Meat, Poultry, & Fish Cutters & Trimmers Food Batchmakers	43	43	0	0.0	
51 3092 51 3023	Slaughterers & Meat Packers	46 47	46 46	-1	0.0 -2.1	
51 3023	Butchers & Meat Cutters	235	210	-25	-10.6	
51 4000	Metal Workers & Plastic Workers	2,388	3,451	1,063	44.5	1
51 4121	Welders, Cutters, Solderers, & Brazers	1,360	1,979	619	45.5	1
51 4121	Machinists	452	706	254	45.5 56.2	1
51 4072	Molding, Coremaking, & Casting Machine Setters, Operators, & Tenders, Metal & Plastic	100	135	35	35.0	
51 4122		52	78	26	50.0	
51 4031	Welding, Soldering, & Brazing Machine Setters, Operators, & Tenders, Metal & Plastic Cutting, Punching, & Press Machine Setters, Operators, & Tenders, Metal & Plastic	44	53	9	20.5	
51 4031	Grinding, Lapping, Polishing, & Buffing Machine Tool Setters	21	29	8	38.1	
51 4033	Foundry Mold & Coremakers	24	30	6	25.0	
51 4111	Tool & Die Makers	16	22	6	37.5	
51 4111	Metal Workers & Plastic Workers, All Other	17	20	3	17.7	
51 4194	Tool Grinders, Filers, & Sharpeners	14	15	1	7.1	
51 5000	Printing Workers	363	403	40	11.0	
51 5023	Printing Machine Operators	194	230	36	18.6	
51 5023	Job Printers	41	48	7	17.1	
51 5022	Prepress Technicians & Workers	79	80	1	1.3	
51 5012	Bookbinders	12	12	0	0.0	
51 5011	Bindery Workers	37	33	-4	-10.8	
51 6000	Textile, Apparel, & Furnishings Workers	1,066	1,191	125	11.7	
51 6011	Laundry & Dry-Cleaning Workers	706	816	110	15.6	
51 6062	Textile Cutting Machine Setters, Operators, & Tenders	21	29	8	38.1	
51 6021	Pressers, Textile, Garment, & Related Materials	68	72	4	5.9	
51 6031	Sewing Machine Operators	100	102	2	2.0	
51 6051	Sewers, Hand	7	9	2	28.6	
51 6052	Tailors, Dressmakers, & Custom Sewers	11	12	1	9.1	
51 6041	Shoe & Leather Workers & Repairers	39	39	0	0.0	
51 6093	Upholsterers	15	15	0	0.0	
51 6099	Textile, Apparel, & Furnishings Workers, All Other	99	97	-2	-2.0	
51 7000	Woodworkers	501	525	24	4.8	
51 7011	Cabinetmakers & Bench Carpenters	175	229	54	30.9	
51 7021	Furniture Finishers	24	24	0	0.0	
51 7099	Woodworkers, All Other	10	10	0	0.0	
51 7042	Woodworking Machine Setters, Operators, & Tenders, Except Sawing	97	92	-5	-5.2	
51 7041	Sawing Machine Setters, Operators, & Tenders, Wood	195	170	-25	-12.8	
51 8000	Plant & System Operators	1,939	2,330	391	20.2	1
51 8092	Gas Plant Operators	362	518	156	43.1	
51 8093	Petroleum Pump System Operators, Refinery Operators, & Gauges	468	577	109	23.3	
51 8031	Water & Liquid Waste Treatment Plant & System Operators	300	375	75	25.0	
51 8013	Power Plant Operators	281	334	53	18.9	
51 8021	Stationary Engineers & Boiler Operators	122	140	18	14.8	
51 8099	Plant & System Operators, All Other	106	119	13	12.3	
51 8012	Power Distributors & Dispatchers	22	23	1	4.6	
51 8091	Chemical Plant & System Operators	278	244	-34	-12.2	
51 9000	Other Production Occupations	3,074	3,969	895	29.1	1
51 9198	Helpers — Production Workers	693	975	282	40.7	
51 9061	Inspectors, Testers, Sorters, Samplers, and Weighers	455	695	240	52.8	
51 9021	Crushing, Grinding, & Polishing Machine Setters, Operators	320	406	86	26.9	
51 9199	Production Workers, All Other	383	448	65	17.0	
51 9023	Mixing & Blending Machine Setters, Operators, & Tenders	114	160	46	40.4	
51 9111	Packaging & Filling Machine Operators & Tenders	308	350	42	13.6	
51 9012	Separating, Filtering, Clarifying, Precipitating, & Still Machine Setters, Operators, & Tenders	197	223	26	13.2	
51 9032	Cutting & Slicing Machine Setters, Operators, & Tenders	47	66	19	40.4	
51 9051	Furnace, Kiln, Oven, Drier, & Kettle Operators & Tenders	88	105	17	19.3	
51 9122	Painters, Transportation Equipment	38	52	14	36.8	
51 9123	Painting, Coating, & Decorating Workers	45	58	13	28.9	
51 9081	Dental Laboratory Technicians	21	30	9	42.9	
51 9121	Coating, Painting, & Spraying Machine Setters, Operators, & Tenders	20	28	8	40.0	
51 9195	Molders, Shapers, & Casters, Except Metal & Plastic	46	54	8	17.4	
51 9022	Grinding & Polishing Workers, Hand	15	22	7	46.7	
51 9192	Cleaning, Washing, & Metal Pickling Equipment Operators & Tenders	26	32	6	23.1	
51 9196	Paper Goods Machine Setters, Operators, & Tenders	36	40	4	11.1	
51 9071	Jewelers & Precious Stone & Metal Workers	18	21	3	16.7	
51 9082	Medical Appliance Technicians	4	6	2	50.0	
51 9194	Etchers & Engravers	6	7	1	16.7	
	Chemical Equipment Operators & Tenders	9	9	0	0.0	
51 9011 51 9131 51 9132	Photographic Process Workers Photographic Processing Machine Operators	37 87	36 70	-1 -17	-2.7 -19.5	

## 53-0000 Transportation & Material Moving Occupations

With a projected net increase of 7,516 jobs, this major group ranks second among all major groups, behind the construction & extraction occupations major group. The largest

projected increase — and one of the state's largest overall — is for truck drivers, heavy & tractortrailer (2,410 jobs, 39.6% increase). This increase represents nearly one-third of the total projected net increase in the major group. This job typically requires moderate on-the-job training and in 2005 paid a median hourly wage of \$16.14 in Wyoming, slightly lower than the national median of \$16.48. Another huge increase is forecast for laborers & freight, stock, & material movers, hand (1,373 jobs, 49.2% increase). Employment in the rail transportation workers minor group is

expected to expand by 50.7%, or 75 jobs. Like much of the increase projected in this major group, the increase in rail transportation jobs is related to growth in the mining industry. Gains of 400 jobs or more are projected in three other occupations: truck drivers, light or delivery services (611 jobs, 38.5% increase); excavating & loading machine & dragline operators (544 jobs, 21.8% increase); and first-line supervisors/managers of transportation & materialmoving machine & vehicle operators (403 jobs, 48.1% increase).

#### Truck Drivers, Heavy & Tractor-Trailer

Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 gross vehicle weight (GVW) to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form. May be required to unload truck. May require use of automated routing equipment. Requires commercial drivers' license.

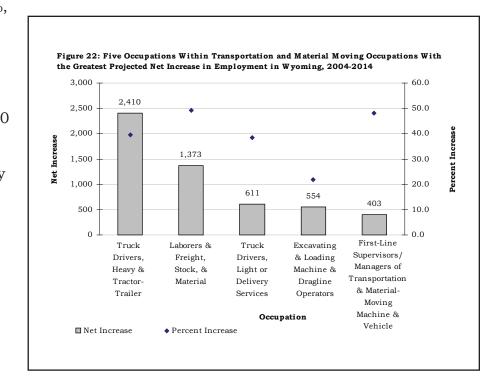


Table 4.23: Wyoming Employment Within the Transportation & Material Moving Occupations Major Group, 2004-2014

Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percent Change in Employment 2004-2014	Total Annual Opening
530000	Transportation and Material Moving Occupations	24,139	31,655	7,516	31.1	1,281
531000	Supervisors, Transportation and Material Moving Workers	1,231	1,774	543	44.1	83
531031	First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	838	1,241	403	48.1	60
531021	First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	384	522	138	35.9	23
531011	Aircraft Cargo Handling Supervisors	9	11	2	22.2	0
532000	Air Transportation Workers	541	661	120	22.2	26
532011	Airline Pilots, Copilots, and Flight Engineers	437	521	84	19.2	20
532012	Commercial Pilots	72	105	33	45.8	5
532021	Air Traffic Controllers	31	34	3	9.7	1
533000	Motor Vehicle Operators	11,741	15,463	3,722	31.7	561
533032	Truck Drivers, Heavy and Tractor-Trailer	6,089	8,499	2,410	39.6	340
533033	Truck Drivers, Light or Delivery Services	1,587	2,198	611	38.5	76
533031	Driver/Sales Workers	1,590	1,820	230	14.5	49
533022	Bus Drivers, School	1,308	1,488	180	13.8	47
533021	Bus Drivers, Transit and Intercity	688	846	158	23.0	31
533041	Taxi Drivers and Chauffeurs	335	456	121	36.1	15
533011	Ambulance Drivers and Attendants, Except Emergency Medical Technicians	47	53	6	12.8	1
533099	Motor Vehicle Operators, All Other	97	103	6	6.2	2
534000	Rail Transportation Workers	148	223	75	50.7	11
534010	Locomotive Engineers and Operators	103	174	71	68.9	10
534021	Railroad Brake, Signal, and Switch Operators	40	41	1	2.5	1
535000	Water Transportation Workers	22	24	2	9.1	1
535011	Sailors and Marine Oilers	5	6	1	20.0	0
535021	Captains, Mates, and Pilots of Water Vessels	13	14	1	7.7	1
536000	Other Transportation Workers	669	774	105	15.7	36
536031	Service Station Attendants	353	411	58	16.4	22
536099	Transportation Workers, All Other	143	170	27	18.9	7
536051	Transportation Inspectors	121	146	25	20.7	5
536041	Traffic Technicians	4	4	0	0.0	0
536021	Parking Lot Attendants	48	43	-5	-10.4	1
537000	Material Moving Workers	9,787	12,736	2,949	30.1	563
537062	Laborers and Freight, Stock, and Material Movers, Hand	2,791	4,164	1,373	49.2	229
537032	Excavating and Loading Machine and Dragline Operators	2,544	3,098	554	21.8	125
537073	Wellhead Pumpers	783	1,060	277	35.4	46
537051	Industrial Truck and Tractor Operators	629	905	276	43.9	40
537061	Cleaners of Vehicles and Equipment	478	626	148	31.0	31
537071	Gas Compressor and Gas Pumping Station Operators	273	403	130	47.6	19
537072	Pump Operators, Except Wellhead Pumpers	456	520	64	14.0	17
537081	Refuse and Recyclable Material Collectors	250	299	49	19.6	11
537033	Loading Machine Operators, Underground Mining	152	179	27	17.8	7
537021	Crane and Tower Operators	49	72	23	46.9	3

Occupation Code	Title	2004 Employment	2014 Employment (Projected)	Net Change in Employment 2004-2014	Percent Change in Employment 2004-2014	Total Annual Openings
537064	Packers and Packagers, Hand	965	969	4	0.4	19
537041	Hoist and Winch Operators	18	21	3	16.7	1
537031	Dredge Operators	4	4	0	0.0	0
537063	Machine Feeders and Offbearers	82	80	-2	-2.4	2

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2005

# Occupational Projections by Typical Educational/Experience Requirement, 2004-2014

by: Phil Ellsworth, Information Specialist tables by: Sylvia Jones, Senior Research Analyst

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
Asso	ciate's Degree						
	Registered Nurses	3,888	5,172	1,284	33.0	210	\$23.41
19-4041	Geological & Petroleum Technicians	240	408	168	70.0	23	\$25.91
29-2034	Radiologic Technologists & Technicians	404	544	140	34.7	22	\$21.18
23-2011	Paralegals & Legal Assistants	318	453	135	42.5	16	\$13.78
29-2021	Dental Hygienists	329	448	119	36.2	15	\$25.81
15-1041	Computer Support Specialists	428	541	113	26.4	17	\$17.56
29-2071	Medical Records & Health Information Technicians	300	389	89	29.7	13	\$13.21
19-4099	Life, Physical, & Social Science Technicians, All Other	355	426	71	20.0	16	\$19.44
29-2056	Veterinary Technologists & Technicians	152	221	69	45.4	9	\$12.94
19-4031	Chemical Technicians	278	344	66	23.7	14	\$15.39
15-1099	Computer Specialists, All Other	280	341	61	21.8	9	\$22.96
17-3022	Civil Engineering Technicians	191	239	48	25.1	9	\$18.24
31-2021	Physical Therapist Assistants	109	157	48	44.0	7	\$17.28
17-3023	Electrical & Electronic Engineering Technicians	221	268	47	21.3	9	\$22.46
29-1126	Respiratory Therapists	123	167	44	35.8	8	\$19.88
29-2012	Medical & Clinical Laboratory Technicians	153	192	39	25.5	8	\$13.90
17-3029	Engineering Technicians, Except Drafters, All Other	128	155	27	21.1	6	\$20.99
29-2032	Diagnostic Medical Sonographers	69	95	26	37.7	4	\$25.01
19-4091	Environmental Science & Protection Technicians, Including Health	78	97	19	24.4	4	\$16.26
17-3025	Environmental Engineering Technicians	53	71	18	34.0	3	\$18.82
49-9062	Medical Equipment Repairers	34	52	18	52.9	3	\$18.56
29-2031	Cardiovascular Technologists & Technicians	54	68	14	25.9	2	\$19.74
17-3024	Electro-Mechanical Technicians	30	43	13	43.3	2	N/A
19-4093	Forest & Conservation Technicians	398	406	8	2.0	10	\$13.37
19-4021	Biological Technicians	138	145	7	5.1	3	\$14.17
19-4092	Forensic Science Technicians	13	19	6	46.2	1	\$13.97
29-2033	Nuclear Medicine Technologists	22	26	4	18.2	1	\$25.78
11-9061	Funeral Directors	74	78	4	5.4	3	\$25.68
17-3027	Mechanical Engineering Technicians	12	15	3	25.0	1	\$17.41
17-3026	Industrial Engineering Technicians	10	12	2	20.0	0	N/A
27-4012	Broadcast Technicians	113	113	0	0.0	3	\$12.89

N/A - Not Available. Includes rollups (i.e., multiple occupations within an occupational group).

6-Digit SOC		2004	2014 (Brainstad)	Net	% Changa	Annual	2005 Median Hourly
Code	Occupational Title	2004	(Projected)	Cnange	Change	Openings	Wage
Bach	elor's Degree						
	Accountants & Auditors	1,674	2,188	514	30.7	83	\$21.96
11-9021	Construction Managers	1,039	1,451	412	39.7	60	\$31.16
13-1199	Business Operations Specialists, All Other	980	1,323	343	35.0	51	\$21.92
	Teachers & Instructors, All Other	1,019	1,201	182	17.9	31	\$14.31
	Civil Engineers	750	931	181	24.1	30	\$25.86
15-1081	Network Systems & Data Communications Analysts	250	422	172	68.8	20	\$22.22
11-9141	Property, Real Estate, & Community Association Managers	576	739	163	28.3	27	\$15.11
	Secondary School Teachers, Except Special & Vocational Education	1,882	2,026	144	7.7	67	\$41,818ª
17-2171	Petroleum Engineers	290	434	144	49.7	24	\$34.85
25-2041	Special Education Teachers, Preschool, Kindergarten, & Elementary	579	715	136	23.5	27	\$37,983ª
39-9032	Recreation Workers	620	752	132	21.3	27	\$10.99
15-1071	Network & Computer Systems Administrators	306	433	127	41.5	16	\$21.57
13-2072	Loan Officers	595	713	118	19.8	21	\$22.65
15-1031	Computer Software Engineers, Applications	202	314	112	55.5	13	\$26.22
29-1071	Physician Assistants	218	327	109	50.0	14	\$28.03
21-1021	Child, Family, & School Social Workers	499	600	101	20.2	19	\$16.40
17-2112	Industrial Engineers	188	287	99	52.7	14	\$35.61
41-3021	Insurance Sales Agents	622	708	86	13.8	24	\$0.00
53-2011	Airline Pilots, Copilots, & Flight Engineers	437	521	84	19.2	20	N/A
27-3031	Public Relations Specialists	308	391	83	27.0	13	\$18.79
11-9151	Social & Community Service Managers	245	315	70	28.6	12	\$22.15
15-1051	Computer Systems Analysts	206	275	69	33.5	9	\$25.13
17-2151	Mining & Geological Engineers, Including Mining Safety Engineers	179	247	68	38.0	12	\$32.31
13-1073	Training & Development Specialists	249	314	65	26.1	10	\$18.96
25-2022	Middle School Teachers, Except Special & Vocational Education	1,181	1,242	61	5.2	32	\$42,390ª
21-1022	Medical & Public Health Social Workers	185	245	60	32.4	9	\$20.18
41-3099	Sales Representatives, Services, All Other	116	172	56	48.3	8	\$25.21
29-1122	Occupational Therapists	218	274	56	25.7	9	\$23.56
41-3031	Securities, Commodities, & Financial Services Sales Agents	240	295	55	22.9	8	\$32.69
29-2011	Medical & Clinical Laboratory Technologists	257	312	55	21.4	12	\$22.37
17-1022	Surveyors	233	288	55	23.6	14	\$21.12
17-2071	Electrical Engineers	167	221	54	32.3	9	\$33.76
17-2141	Mechanical Engineers	127	181	54	42.5	9	\$32.36
17-2081	Environmental Engineers	123	176	53	43.1	7	\$32.85

 $\mbox{N/A}$  – Not Available. Includes rollups (i.e., multiple occupations within an occupational group).  $^a2005$  Median Annual Wage.

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
17-2199	Engineers, All Other	138	191	53	38.4	8	\$26.08
11-3051	Industrial Production Managers	190	240	50	26.3	9	\$37.78
13-1071	Employment, Recruitment, & Placement Specialists	235	284	49	20.9	9	\$16.28
41-9031	Sales Engineers	92	140	48	52.2	8	\$27.02
27-1024	Graphic Designers	263	310	47	17.9	8	\$12.77
13-2099	Financial Specialists, All Other	187	233	46	24.6	8	\$18.77
13-2052	Personal Financial Advisors	129	175	46	35.7	6	\$0.00
13-1079	Human Resources, Training, & Labor Relations Specialists, All Other	139	180	41	29.5	7	\$21.76
17-1011	Architects, Except Landscape & Naval	134	174	40	29.9	6	\$26.18
25-2042	Special Education Teachers, Middle School	208	245	37	17.8	9	\$42,845ª
25-2043	Special Education Teachers, Secondary School	281	318	37	13.2	10	\$41,912ª
19-1023	Zoologists & Wildlife Biologists	237	274	37	15.6	11	\$21.93
25-2012	Kindergarten Teachers, Except Special Education	275	311	36	13.1	7	\$38,387ª
27-3043	Writers & Authors	149	183	34	22.8	6	\$17.25
29-1031	Dietitians & Nutritionists	106	134	28	26.4	6	\$20.06
19-2031	Chemists	145	171	26	17.9	7	\$23.12
21-1092	Probation Officers & Correctional Treatment Specialists	143	169	26	18.2	5	\$17.95
13-2051	Financial Analysts	73	95	22	30.1	3	\$28.99
17-2111	Health & Safety Engineers, Except Mining Safety Engineers	60	82	22	36.7	4	\$26.94
27-1029	Designers, All Other	60	81	21	35.0	3	\$18.63
25-9099	Education, Training, & Library Workers, All Other	111	132	21	18.9	4	\$15.06
15-1032	Computer Software Engineers, Systems Software	49	68	19	38.8	2	\$28.72
15-1061	Database Administrators	44	63	19	43.2	2	\$23.42
25-9021	Farm & Home Management Advisors	139	158	19	13.7	4	\$22.22
19-1029	Biological Scientists, All Other	124	141	17	13.7	6	\$26.44
27-1025	Interior Designers	56	73	17	30.4	2	\$24.64
13-1072	Compensation, Benefits, & Job Analysis Specialists	60	77	17	28.3	3	\$19.21
15-1021	Computer Programmers	170	187	17	10.0	6	\$17.89
25-3011	Adult Literacy, Remedial Education, & GED Teachers & Instructors	68	83	15	22.1	2	\$14.32
29-9099	Healthcare Practitioners & Technical Workers, All Other	48	62	14	29.2	2	\$16.45
13-1121	Meeting & Convention Planners	62	76	14	22.6	3	\$14.98
29-9091	Athletic Trainers	46	59	13	28.3	2	\$44,891a
29-1199	Health Diagnosing & Treating Practitioners, All Other	53	66	13	24.5	3	\$62.70
27-3041	Editors	113	126	13	11.5	4	\$16.35
13-2053	Insurance Underwriters	64	73	9	14.1	2	\$16.55
13-2031	Budget Analysts	65	73	8	12.3	2	\$27.02
21-1029	Social Workers, All Other	39	47	8	20.5	2	\$19.01

 $\mbox{N/A}$  – Not Available. Includes rollups (i.e., multiple occupations within an occupational group).  $^a2005$  Median Annual Wage.

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
17-1021	Cartographers & Photogrammetrists	35		8	22.9	2	\$16.55
23-2092	Law Clerks	74	82	8	10.8	2	\$12.41
27-1021	Commercial & Industrial Designers	13	19	6	46.2	1	\$19.53
17-2041	Chemical Engineers	38	43	5	13.2	2	\$31.39
13-2071	Loan Counselors	18	22	4	22.2	1	N/A
27-4032	Film & Video Editors	7	11	4	57.1	1	N/A
17-2072	Electronics Engineers, Except Computer	77	81	4	5.2	2	\$31.08
13-2081	Tax Examiners, Collectors, & Revenue Agents	39	42	3	7.7	1	\$27.84
19-2099	Physical Scientists, All Other	24	27	3	12.5	1	\$27.72
27-3042	Technical Writers	15	18	3	20.0	1	\$20.91
13-1081	Logisticians	10	12	2	20.0	0	N/A
19-1099	Life Scientists, All Other	8	10	2	25.0	0	N/A
29-2099	Health Technologists & Technicians, All Other	8	10	2	25.0	0	N/A
17-1012	Landscape Architects	22	24	2	9.1	1	\$26.22
19-1032	Foresters	61	63	2	3.3	2	\$24.41
29-1125	Recreational Therapists	35	37	2	5.7	1	\$17.08
17-2061	Computer Hardware Engineers	12	13	1	8.3	0	N/A
27-1014	Multi-Media Artists & Animators	17	18	1	5.9	1	N/A
19-1031	Conservation Scientists	102	103	1	1.0	3	\$27.12
17-2021	Agricultural Engineers	4	4	0	0.0	0	N/A
27-1022	Fashion Designers	4	4	0	0.0	0	N/A
27-1027	Set & Exhibit Designers	14	14	0	0.0	0	N/A
13-2041	Credit Analysts	0	0	0	0.0	0	\$20.87
Bach	elor's or Higher Degree, Plus W	ork Ez	xperien	ce			
11-1021	General & Operations Managers	5,093	6,894	1,801	35.4	276	\$33.00
11-2022	Sales Managers	528	729	201	38.1	30	\$27.80
11-3031	Financial Managers	733	931	198	27.0	30	\$32.61
11-9111	Medical & Health Services Managers	683	826	143	20.9	28	\$31.63
11-3011	Administrative Services Managers	659	790	131	19.9	26	\$21.65
11-1011	Chief Executives	476	588	112	23.5	20	\$45.83
13-1111	Management Analysts	332	436	104	31.3	15	\$32.97
11-3021	Computer & Information Systems Managers	258	336	78	30.2	13	\$29.48
11-9041	Engineering Managers	211	267	56	26.5	10	\$39.42
11-9033	Education Administrators, Postsecondary	290	333	43	14.8	12	\$43.62
11-9032	Education Administrators, Elementary & Secondary School	425	457	32	7.5	14	\$64,393ª
11-2021	Marketing Managers	97	124	27	27.8	5	\$38.37
11-9121	Natural Sciences Managers	214	238	24	11.2	7	\$29.38

 $\mbox{N/A}$  – Not Available. Includes rollups (i.e., multiple occupations within an occupational group).  $^a2005$  Median Annual Wage.

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
11-2011	Advertising & Promotions Managers	85	106	21	24.7	4	\$29.62
11-9031	Education Administrators, Preschool & Child Care Center/Program	82	103	21	25.6	4	\$14.64
25-2032	Vocational Education Teachers, Secondary School	229	246	17	7.4	8	\$44,103ª
11-3061	Purchasing Managers	54	65	11	20.4	2	\$30.97
11-2031	Public Relations Managers	68	79	11	16.2	2	\$28.18
11-1031	Legislators	256	265	9	3.5	4	N/A
27-2012	Producers & Directors	66	73	7	10.6	2	\$44,133ª
27-2041	Music Directors & Composers	15	19	4	26.7	1	N/A
23-1023	Judges, Magistrate Judges, & Magistrates	26	30	4	15.4	1	\$20.84
13-1011	Agents & Business Managers of Artists, Performers, & Athletes	21	25	4	19.1	1	\$11.51
27-1011	Art Directors	15	17	2	13.3	1	N/A
11-9039	Education Administrators, All Other	25	27	2	8.0	1	\$33.78
23-1021	Administrative Law Judges, Adjudicators, & Hearing Officers	6	7	1	16.7	0	N/A
25-2023	Vocational Education Teachers, Middle School	28	29	1	3.6	1	\$44,123ª
Doct	oral Degree						
19-3031	Clinical, Counseling, & School Psychologists	336	412	76	22.6	15	\$26.00
19-1022	Microbiologists	9	10	1	11.1	0	N/A
First	Professional Degree						
23-1011	Lawyers	1,057	1,342	285	27.0	42	\$32.69
29-1051	Pharmacists	497	712	215	43.3	31	\$39.83
29-1131	Veterinarians	154	196	42	27.3	8	\$26.77
29-1041	Optometrists	181	209	28	15.5	8	\$45.86
29-1011	Chiropractors	100	118	18	18.0	4	\$37.70
21-2011	Clergy	24	30	6	25.0	1	\$18.62
29-1081	Podiatrists	17	18	1	5.9	1	\$57.14
Long	-Term, On-The-Job Training						
47-2031	Carpenters	2,898	4,119	1,221	42.1	169	\$17.14
47-2111	Electricians	2,182	3,030	848	38.9	128	\$21.24
51-4121	Welders, Cutters, Solderers, & Brazers	1,360	1,979	619	45.5	100	\$16.67
47-2152	Plumbers, Pipefitters, & Steamfitters	1,162	1,695	533	45.9	80	\$20.52
49-9041	Industrial Machinery Mechanics	927	1,268	341	36.8	53	\$20.79
35-2014	Cooks, Restaurant	1,958	2,270	312	15.9	92	\$8.78
51-4041	Machinists	452	706	254	56.2	36	\$18.19
49-9051	Electrical Power-Line Installers & Repairers	648	842	194	29.9	40	\$23.14

 $\mbox{N/A}$  – Not Available. Includes rollups (i.e., multiple occupations within an occupational group).  $^a2005$  Median Annual Wage.

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
27-2022	Coaches & Scouts	924	1,092	168	18.2	35	\$27,179ª
33-3051	Police & Sheriff's Patrol Officers	957	1,122	165	17.2	41	\$18.50
51-8092	Gas Plant Operators	362	518	156	43.1	27	\$25.40
49-9021	Heating, Air Conditioning, & Refrigeration Mechanics & Installers	274	405	131	47.8	17	\$17.24
51-8093	Petroleum Pump System Operators, Refinery Operators, & Gaugers	468	577	109	23.3	25	\$20.42
33-2011	Fire Fighters	409	516	107	26.2	23	\$16.49
47-2221	Structural Iron & Steel Workers	219	324	105	48.0	15	\$13.26
47-2021	Brickmasons & Blockmasons	234	324	90	38.5	13	\$16.36
49-3021	Automotive Body & Related Repairers	397	478	81	20.4	16	\$17.04
51-8031	Water & Liquid Waste Treatment Plant & System Operators	300	375	75	25.0	18	\$17.39
47-2011	Boilermakers	333	405	72	21.6	19	N/A
27-4021	Photographers	355	419	64	18.0	14	\$14.53
47-2044	Tile & Marble Setters	106	163	57	53.8	7	\$14.98
51-7011	Cabinetmakers & Bench Carpenters	175	229	54	30.9	10	\$15.26
51-8013	Power Plant Operators	281	334	53	18.9	13	\$25.84
51-3011	Bakers	450	495	45	10.0	15	\$10.57
49-2022	Telecommunications Equipment Installers & Repairers, Except Line Installers	553	597	44	8.0	16	\$23.85
27-1012	Craft Artists	81	118	37	45.7	5	\$10.48
49-9052	Telecommunications Line Installers & Repairers	186	222	36	19.4	9	\$13.77
47-2121	Glaziers	84	118	34	40.5	5	\$13.28
49-3043	Rail Car Repairers	104	134	30	28.9	5	\$18.17
27-1013	Fine Artists, Including Painters, Sculptors, & Illustrators	86	116	30	34.9	5	\$0.00
13-1041	Compliance Officers, Except Agriculture, Construction, Health & Safety, & Transportation	147	175	28	19.1	6	\$23.78
49-3052	Motorcycle Mechanics	121	148	27	22.3	6	\$12.90
13-1031	Claims Adjusters, Examiners, & Investigators	114	140	26	22.8	4	\$19.77
49-3022	Automotive Glass Installers & Repairers	80	100	20	25.0	4	\$11.43
47-2171	Reinforcing Iron & Rebar Workers	36	55	19	52.8	3	N/A
51-8021	Stationary Engineers & Boiler Operators	122	140	18	14.8	4	\$23.44
27-4011	Audio & Video Equipment Technicians	54	71	17	31.5	3	\$14.43
47-2022	Stonemasons	42	58	16	38.1	2	\$20.03
29-2081	Opticians, Dispensing	81	95	14	17.3	3	\$12.05
51-8099	Plant & System Operators, All Other	106	119	13	12.3	5	\$21.93
33-3031	Fish & Game Wardens	68	81	13	19.1	3	\$19.80
47-2161	Plasterers & Stucco Masons	35	47	12	34.3	2	N/A
49-9044	Millwrights	191	202	11	5.8	6	\$18.79
49-3092	Recreational Vehicle Service Technicians	49	60	11	22.5	3	\$12.51

 $\mbox{N/A}$  – Not Available. Includes rollups (i.e., multiple occupations within an occupational group).  $^a2005$  Median Annual Wage.

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
49-9069	Precision Instrument & Equipment Repairers, All Other	53	63	10	18.9	3	\$31.23
27-3091	Interpreters & Translators	42	52	10	23.8	2	\$15.87
51-9081	Dental Laboratory Technicians	21	30	9	42.9	1	\$18.11
51-5021	Job Printers	41	48	7	17.1	2	\$14.41
27-2023	Umpires, Referees, & Other Sports Officials	25	31	6	24.0	1	N/A
27-2042	Musicians & Singers	26	32	6	23.1	1	N/A
51-4111	Tool & Die Makers	16	22	6	37.5	1	N/A
49-3051	Motorboat Mechanics	19	25	6	31.6	1	\$16.39
47-4021	Elevator Installers & Repairers	12	17	5	41.7	1	N/A
27-3099	Media & Communication Workers, All Other	44	49	5	11.4	1	\$15.00
39-6031	Flight Attendants	24	28	4	16.7	1	N/A
27-2099	Entertainers & Performers, Sports & Related Workers, All Other	28	32	4	14.3	1	\$0.00
27-2021	Athletes & Sports Competitors	9	12	3	33.3	1	N/A
53-2021	Air Traffic Controllers	31	34	3	9.7	1	\$32.44
49-9031	Home Appliance Repairers	50	53	3	6.0	2	\$17.54
51-9082	Medical Appliance Technicians	4	6	2	50.0	0	N/A
27-1019	Artists & Related Workers, All Other	8	9	1	12.5	0	N/A
35-2013	Cooks, Private Household	7	8	1	14.3	0	N/A
51-8012	Power Distributors & Dispatchers	22	23	1	4.6	1	N/A
51-9194	Etchers & Engravers	6	7	1	16.7	0	N/A
49-9063	Musical Instrument Repairers & Tuners	10	11	1	10.0	0	\$11.06
51-6052	Tailors, Dressmakers, & Custom Sewers	11	12	1	9.1	0	\$10.31
51-5022	Prepress Technicians & Workers	79	80	1	1.3	2	\$0.00
49-9064	Watch Repairers	4	4	0	0.0	0	N/A
51-6093	Upholsterers	15	15	0	0.0	0	N/A
51-6041	Shoe & Leather Workers & Repairers	39	39	0	0.0	1	\$13.08
51-7021	Furniture Finishers	24	24	0	0.0	1	\$0.00
51-3021	Butchers & Meat Cutters	235	210	-25	-10.6	5	\$12.89
51-8091	Chemical Plant & System Operators	278	244	-34	-12.2	9	N/A
Mast	er's Degree						
29-1123	Physical Therapists	297	404	107	36.0	14	\$29.57
21-1023	Mental Health & Substance Abuse Social Workers	193	283	90	46.6	12	\$12.03
19-2042	Geoscientists, Except Hydrologists & Geographers	260	338	78	30.0	12	\$32.37
21-1012	Educational, Vocational, & School Counselors	500	577	77	15.4	19	\$20.11
21-1011	Substance Abuse & Behavioral Disorder Counselors	174	244	70	40.2	11	\$16.85
25-9031	Instructional Coordinators	229	294	65	28.4	10	\$23.46
19-3021	Market Research Analysts	194	251	57	29.4	11	\$18.78

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
19-2041	Environmental Scientists & Specialists, Including Health	222	272	50	22.5	9	\$23.07
21-1014	Mental Health Counselors	169	214	45	26.6	8	\$18.01
19-2043	Hydrologists	118	162	44	37.3	7	\$26.70
21-1091	Health Educators	208	250	42	20.2	8	\$18.71
21-1015	Rehabilitation Counselors	173	209	36	20.8	8	\$15.71
29-1127	Speech-Language Pathologists	267	302	35	13.1	10	\$23.56
19-3091	Anthropologists & Archeologists	96	119	23	24.0	4	\$20.81
25-4021	Librarians	380	402	22	5.8	11	\$21.05
21-1019	Counselors, All Other	46	58	12	26.1	2	\$17.36
19-4061	Social Science Research Assistants	47	58	11	23.4	2	N/A
21-1013	Marriage & Family Therapists	49	59	10	20.4	2	\$20.44
19-3022	Survey Researchers	20	28	8	40.0	1	N/A
19-3051	Urban & Regional Planners	49	57	8	16.3	2	\$22.33
19-3011	Economists	40	47	7	17.5	2	\$24.67
19-3099	Social Scientists & Related Workers, All Other	45	50	5	11.1	2	\$23.58
19-3092	Geographers	12	15	3	25.0	1	\$15.21
19-1041	Epidemiologists	9	11	2	22.2	0	\$20.64
15-2031	Operations Research Analysts	8	9	1	12.5	0	N/A
19-3039	Psychologists, All Other	15	16	1	6.7	0	\$29.29
29-1121	Audiologists	33	34	1	3.0	1	\$23.18
15-2041	Statisticians	14	14	0	0.0	0	\$17.71
Mode	erate-Term, On-The-Job Training						
	Truck Drivers, Heavy & Tractor-Trailer	6,089	8,499	2,410	39.6	340	\$17.54
47-5099	Extraction Workers, All Other	1,299	2,478	1,179	90.8	150	\$18.41
47-2073	Operating Engineers & Other Construction Equipment Operators	2,501	3,543	1,042	41.7	169	\$18.38
47-2061	Construction Laborers	2,971	3,961	990	33.3	139	\$12.19
43-3031	Bookkeeping, Accounting, & Auditing Clerks	5,052	6,007	955	18.9	190	\$12.28
47-5071	Roustabouts, Oil & Gas	892	1,707	815	91.4	106	\$16.18
49-9042	Maintenance & Repair Workers, General	2,622	3,423	801	30.6	130	\$17.20
47-5011	Derrick Operators, Oil & Gas	693	1,385	692	99.9	89	\$18.80
41-4012	Sales Representatives, Wholesale & Manufacturing, Except Technical & Scientific Products	1,684	2,376	692	41.1	113	\$18.57
47-5013	Service Unit Operators, Oil, Gas, & Mining	727	1,404	677	93.1	89	\$16.25
43-4051	Customer Service Representatives	1,694	2,321	627	37.0	88	\$11.43
53-7032	Excavating & Loading Machine & Dragline Operators	2,544	3,098	554	21.8	125	\$19.29
47-5031	Explosives Workers, Ordnance Handling Experts, & Blasters	609	1,109	500	82.1	73	\$23.04
47-5012	Rotary Drill Operators, Oil & Gas	482	936	454	94.2	59	\$19.45

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
21-1093	Social & Human Service Assistants	1,267	1,715	448	35.4	67	\$10.50
43-6011	Executive Secretaries & Administrative Assistants	2,102	2,539	437	20.8	84	\$15.16
41-4011	Sales Representatives, Wholesale & Manufacturing, Technical & Scientific Products	767	1,167	400	52.2	60	\$29.77
47-2141	Painters, Construction & Maintenance	971	1,348	377	38.8	53	\$15.44
43-6014	Secretaries, Except Legal, Medical, & Executive	4,641	5,006	365	7.9	125	\$10.92
47-5021	Earth Drillers, Except Oil & Gas	452	784	332	73.5	43	\$16.66
53-7073	Wellhead Pumpers	783	1,060	277	35.4	46	\$19.97
47-2051	Cement Masons & Concrete Finishers	585	851	266	45.5	38	\$13.65
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers	455	695	240	52.8	34	\$15.37
31-9092	Medical Assistants	389	576	187	48.1	26	\$10.68
31-9091	Dental Assistants	506	684	178	35.2	32	\$12.29
47-2181	Roofers	370	545	175	47.3	26	\$14.94
53-3021	Bus Drivers, Transit & Intercity	688	846	158	23.0	31	\$14.87
43-3051	Payroll & Timekeeping Clerks	374	512	138	36.9	24	\$13.70
29-2052	Pharmacy Technicians	304	439	135	44.4	18	\$13.09
53-7071	Gas Compressor & Gas Pumping Station Operators	273	403	130	47.6	19	\$23.38
47-2211	Sheet Metal Workers	298	427	129	43.3	20	\$16.54
51-2092	Team Assemblers	443	569	126	28.4	24	\$10.87
49-9099	Installation, Maintenance, & Repair Workers, All Other	533	658	125	23.5	25	\$17.52
47-2071	Paving, Surfacing, & Tamping Equipment Operators	240	352	112	46.7	15	\$16.62
51-6011	Laundry & Dry-Cleaning Workers	706	816	110	15.6	30	\$8.40
41-9099	Sales & Related Workers, All Other	483	585	102	21.1	19	\$11.83
21-1099	Community & Social Service Specialists, All Other	216	317	101	46.8	14	\$12.02
51-2041	Structural Metal Fabricators & Fitters	194	290	96	49.5	14	\$15.34
43-9199	Office & Administrative Support Workers, All Other	527	614	87	16.5	21	\$12.08
35-2012	Cooks, Institution & Cafeteria	1,117	1,204	87	7.8	43	\$9.31
51-9021	Crushing, Grinding, & Polishing Machine Setters, Operators, & Tenders	320	406	86	26.9	17	\$20.13
33-3012	Correctional Officers & Jailers	748	833	85	11.4	24	\$14.97
51-2099	Assemblers & Fabricators, All Other	245	330	85	34.7	15	\$12.10
43-3021	Billing & Posting Clerks & Machine Operators	666	736	70	10.5	18	\$11.96
51-9199	Production Workers, All Other	383	448	65	17.0	16	\$14.81
53-7072	Pump Operators, Except Wellhead Pumpers	456	520	64	14.0	17	\$19.51
43-5032	Dispatchers, Except Police, Fire, & Ambulance	320	375	55	17.2	12	\$17.46
47-2151	Pipelayers	150	205	55	36.7	9	\$14.06
47-4051	Highway Maintenance Workers	203	257	54	26.6	8	\$16.06
41-9011	Demonstrators & Product Promoters	184	236	52	28.3	9	\$9.42
45-2021	Animal Breeders	189	238	49	25.9	8	N/A
49-9012	Control & Valve Installers & Repairers, Except Mechanical	161	210	49	30.4	9	\$19.15

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
47-4099	Construction & Related Workers, All Other	155	203	48	31.0	7	\$12.73
51-9023	Mixing & Blending Machine Setters, Operators, & Tenders	114	160	46	40.4	8	\$13.70
43-5031	Police, Fire, & Ambulance Dispatchers	276	321	45	16.3	10	\$13.08
41-2022	Parts Salespersons	728	768	40	5.5	25	\$12.19
51-5023	Printing Machine Operators	194	230	36	18.6	8	\$11.62
51-4072	Molding, Coremaking, & Casting Machine Setters, Operators, & Tenders, Metal & Plastic	100	135	35	35.0	6	\$10.59
17-3031	Surveying & Mapping Technicians	210	244	34	16.2	11	\$15.25
49-9095	Manufactured Building & Mobile Home Installers	120	152	32	26.7	6	\$13.37
39-9041	Residential Advisors	167	199	32	19.2	7	\$12.79
41-3011	Advertising Sales Agents	330	362	32	9.7	10	\$12.78
47-4071	Septic Tank Servicers & Sewer Pipe Cleaners	60	91	31	51.7	5	\$15.02
49-3053	Outdoor Power Equipment & Other Small Engine Mechanics	73	103	30	41.1	5	\$13.38
53-7033	Loading Machine Operators, Underground Mining	152	179	27	17.8	7	N/A
37-3012	Pesticide Handlers, Sprayers, & Applicators, Vegetation	256	283	27	10.6	8	\$11.74
51-9012	Separating, Filtering, Clarifying, Precipitating, & Still Machine Setters, Operators, & Tenders	197	223	26	13.2	9	\$24.61
51-4122	Welding, Soldering, & Brazing Machine Setters, Operators, & Tenders, Metal & Plastic	52	78	26	50.0	4	\$11.63
47-5049	Mining Machine Operators, All Other	102	126	24	23.5	5	\$17.22
53-7021	Crane & Tower Operators	49	72	23	46.9	3	\$19.59
43-9041	Insurance Claims & Policy Processing Clerks	205	228	23	11.2	6	\$11.79
47-4031	Fence Erectors	58	80	22	37.9	3	N/A
47-5041	Continuous Mining Machine Operators	142	162	20	14.1	6	\$21.82
39-6021	Tour Guides & Escorts	55	75	20	36.4	4	\$14.04
13-2082	Tax Preparers	98	118	20	20.4	4	\$12.01
47-2041	Carpet Installers	67	86	19	28.4	3	\$12.56
51-9032	Cutting & Slicing Machine Setters, Operators, & Tenders	47	66	19	40.4	3	\$9.41
47-2042	Floor Layers, Except Carpet, Wood, & Hard Tiles	45	62	17	37.8	2	N/A
51-9051	Furnace, Kiln, Oven, Drier, & Kettle Operators & Tenders	88	105	17	19.3	4	\$21.30
23-2093	Title Examiners, Abstractors, & Searchers	219	235	16	7.3	4	\$14.97
47-2043	Floor Sanders & Finishers	38	52	14	36.8	2	N/A
51-9122	Painters, Transportation Equipment	38	52	14	36.8	2	\$20.39
45-4011	Forest & Conservation Workers	77	90	13	16.9	3	N/A
49-9045	Refractory Materials Repairers, Except Brickmasons	31	44	13	41.9	2	N/A
47-5042	Mine Cutting & Channeling Machine Operators	74	86	12	16.2	3	N/A
49-9091	Coin, Vending, & Amusement Machine Servicers & Repairers	95	107	12	12.6	4	\$11.19
43-9021	Data Entry Keyers	184	196	12	6.5	6	\$10.65
27-1026	Merchandise Displayers & Window Trimmers	35	47	12	34.3	2	\$9.14

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
27-1023	Floral Designers	287	298	11	3.8	5	\$8.21
43-4011	Brokerage Clerks	65	75	10	15.4	2	N/A
27-4031	Camera Operators, Television, Video, & Motion Picture	25	34	9	36.0	1	\$15.98
33-9011	Animal Control Workers	59	68	9	15.3	5	\$14.51
51-4031	Cutting, Punching, & Press Machine Setters, Operators, & Tenders, Metal & Plastic	44	53	9	20.5	2	\$0.00
29-2053	Psychiatric Technicians	73	81	8	11.0	2	N/A
51-6062	Textile Cutting Machine Setters, Operators, & Tenders	21	29	8	38.1	1	N/A
51-4033	Grinding, Lapping, Polishing, & Buffing Machine Tool Setters	21	29	8	38.1	1	\$12.91
51-9121	Coating, Painting, & Spraying Machine Setters, Operators, & Tenders $$	20	28	8	40.0	1	\$12.69
51-9195	Molders, Shapers, & Casters, Except Metal & Plastic	46	54	8	17.4	2	\$11.39
51-9022	Grinding & Polishing Workers, Hand	15	22	7	46.7	1	N/A
23-2099	Legal Support Workers, All Other	75	82	7	9.3	2	\$19.47
33-9031	Gaming Surveillance Officers & Gaming Investigators	40	46	6	15.0	2	N/A
51-4071	Foundry Mold & Coremakers	24	30	6	25.0	1	N/A
51-9192	Cleaning, Washing, & Metal Pickling Equipment Operators & Tenders	26	32	6	23.1	1	N/A
49-9094	Locksmiths & Safe Repairers	31	37	6	19.4	2	\$13.05
53-3011	Ambulance Drivers & Attendants, Except Emergency Medical Technicians	47	53	6	12.8	1	\$6.27
29-2051	Dietetic Technicians	25	30	5	20.0	1	N/A
39-2011	Animal Trainers	24	29	5	20.8	1	N/A
47-2082	Tapers	18	23	5	27.8	1	\$16.16
37-2021	Pest Control Workers	23	28	5	21.7	1	\$15.41
45-2091	Agricultural Equipment Operators	23	27	4	17.4	1	N/A
47-4091	Segmental Pavers	9	13	4	44.4	1	N/A
51-2091	Fiberglass Laminators & Fabricators	9	13	4	44.4	1	N/A
51-9196	Paper Goods Machine Setters, Operators, & Tenders	36	40	4	11.1	1	N/A
47-4061	Rail-Track Laying & Maintenance Equipment Operators	9	12	3	33.3	1	N/A
51-4199	Metal Workers & Plastic Workers, All Other	17	20	3	17.7	1	N/A
53-7041	Hoist & Winch Operators	18	21	3	16.7	1	N/A
33-3011	Bailiffs	18	21	3	16.7	1	\$12.81
27-4099	Media & Communication Equipment Workers, All Other	17	19	2	11.8	1	\$22.63
51-6031	Sewing Machine Operators	100	102	2	2.0	1	\$8.87
43-5011	Cargo & Freight Agents	31	32	1	3.2	1	N/A
49-3091	Bicycle Repairers	9	10	1	11.1	1	N/A
25-9011	Audio-Visual Collections Specialists	11	12	1	9.1	0	\$16.72
51-4194	Tool Grinders, Filers, & Sharpeners	14	15	1	7.1	1	\$13.93
51-5012	Bookbinders	12	12	0	0.0	0	N/A

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
51-7099	Woodworkers, All Other	10	10	0	0.0	0	N/A
53-7031	Dredge Operators	4	4	0	0.0	0	N/A
51-9011	Chemical Equipment Operators & Tenders	9	9	0	0.0	0	\$20.14
45-4021	Fallers	9	8	-1	-11.1	0	N/A
51-9131	Photographic Process Workers	37	36	-1	-2.7	1	\$11.50
51-3023	Slaughterers & Meat Packers	47	46	-1	-2.1	1	\$9.41
45-4029	Logging Workers, All Other	23	20	-3	-13.0	1	N/A
45-4022	Logging Equipment Operators	43	40	-3	-7.0	1	\$15.09
51-7042	Woodworking Machine Setters, Operators, & Tenders, Except Sawing	97	92	-5	-5.2	3	\$11.95
43-9022	Word Processors & Typists	104	93	-11	-10.6	2	\$13.74
43-4061	Eligibility Interviewers, Government Programs	232	218	-14	-6.0	6	\$17.18
51-7041	Sawing Machine Setters, Operators, & Tenders, Wood	195	170	-25	-12.8	6	\$11.40
	Computer Operators	262	189	-73	-27.9	6	\$12.14
49-3023 49-3031	Mobile Heavy Equipment Mechanics, Except Engines Automotive Service Technicians & Mechanics Bus & Truck Mechanics & Diesel Engine Specialists Licensed Practical & Licensed Vocational Nurses	1,148 1,689 895	1,636 2,146 1,230	488 457 335	42.5 27.1 37.4	74 91 57	\$21.01 \$16.12 \$19.80
	Licensed Practical & Licensed Vocational Nurses	988	1,230	242	24.5	46	\$16.01
	Preschool Teachers, Except Special Education	438	595	157	35.8	21	\$9.17
	Fitness Trainers & Aerobics Instructors	465	605	140	30.1	25	\$11.72
	Hairdressers, Hairstylists, & Cosmetologists	924	1,055	131	14.2	31	\$9.87
	Medical Secretaries	763	875	112	14.7	26	\$12.13
	Appraisers & Assessors of Real Estate	344	451	107	31.1	18	\$23.25
	Emergency Medical Technicians & Paramedics	372	456	84	22.6	13	\$12.82
	Legal Secretaries	285	366	81	28.4	14	N/A
	Medical Transcriptionists  Electrical & Electronics Repairers, Commercial & Industrial Equipment	312 186	387 247	75 61	24.0 32.8	13 10	\$11.37 \$21.14
49-2011	Computer, Automated Teller, & Office Machine Repairers	219	272	53	24.2	8	\$13.73
	Real Estate Sales Agents	246	297	51	20.7	10	\$0.00
	Gaming & Sports Book Writers & Runners	183	232	49	26.8	11	N/A
	Electronic Home Entertainment Equipment Installers & Repairers	169	217	48	28.4	8	N/A
53-2012	Commercial Pilots	72	105	33	45.8	5	\$0.00
29-2055	Surgical Technologists	111	143	32	28.8	5	\$15.69
17-3013	Mechanical Drafters	71	102	31	43.7	5	\$19.02
39-3011	Gaming Dealers	79	109	30	38.0	6	N/A
49-3041	Farm Equipment Mechanics	82	112	30	36.6	5	\$14.88

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
31-9011	Massage Therapists	151	178	27	17.9	6	\$18.31
17-3011	Architectural & Civil Drafters	175	202	27	15.4	8	\$16.80
49-3011	Aircraft Mechanics & Service Technicians	101	120	19	18.8	4	\$20.74
49-2096	Electronic Equipment Installers & Repairers, Motor Vehicle	58	74	16	27.6	3	\$18.16
49-2098	Security & Fire Alarm Systems Installers	31	41	10	32.3	2	\$17.27
39-1012	Slot Key Persons	33	40	7	21.2	1	N/A
43-9031	Desktop Publishers	27	34	7	25.9	1	\$13.80
49-2021	Radio Mechanics	59	64	5	8.5	2	\$18.51
49-2092	Electric Motor, Power Tool, & Related Repairers	8	11	3	37.5	1	N/A
51-9071	Jewelers & Precious Stone & Metal Workers	18	21	3	16.7	1	\$17.73
29-2054	Respiratory Therapy Technicians	40	43	3	7.5	1	\$13.25
49-2093	Electrical & Electronics Installers & Repairers, Transportation Equipment	7	9	2	28.6	0	N/A
17-3012	Electrical & Electronics Drafters	13	15	2	15.4	1	\$14.35
39-5092	Manicurists & Pedicurists	6	7	1	16.7	0	N/A
27-4014	Sound Engineering Technicians	19	19	0	0.0	1	N/A
39-5094	Skin Care Specialists	4	4	0	0.0	0	N/A
17-3019	Drafters, All Other	8	8	0	0.0	0	\$22.75
41-3041	Travel Agents	108	105	-3	-2.8	2	\$14.02
Shor	t-Term, On-The-Job Training						
41-2031	Retail Salespersons	8,376	10,485	2,109	25.2	515	\$9.82
53-7062	Laborers & Freight, Stock, & Material Movers, Hand	2,791	4,164	1,373	49.2	229	\$10.39
31-1012	Nursing Aides, Orderlies, & Attendants	3,287	4,304	1,017	30.9	145	\$10.43
37-2011	Janitors & Cleaners, Except Maids & Housekeeping Cleaners	4,384	5,323	939	21.4	177	\$9.76
35-3031	Waiters & Waitresses	5,748	6,598	850	14.8	381	\$6.78
37-2012	Maids & Housekeeping Cleaners	3,678	4,490	812	22.1	158	\$8.06
31-1011	Home Health Aides	1,232	2,007	775	62.9	94	\$9.52
35-3021	Combined Food Preparation & Serving Workers, Including Fast Food	4,671	5,406	735	15.7	276	\$7.28
39-9011	Child Care Workers	2,128	2,808	680	32.0	126	\$7.77
53-3033	Truck Drivers, Light or Delivery Services	1,587	2,198	611	38.5	76	\$12.03
43-9061	Office Clerks, General	3,268	3,856	588	18.0	131	\$10.54
25-9041	Teacher Assistants	3,599	4,127	528	14.7	122	\$19,228ª
43-4171	Receptionists & Information Clerks	1,471	1,875	404	27.5	77	\$9.53
37-3011	Landscaping & Groundskeeping Workers	1,739	2,140	401	23.1	78	\$10.34
47-5081	Helpers — Extraction Workers	481	841	360	74.8	50	\$12.59
35-2011	Cooks, Fast Food	2,199	2,548	349	15.9	103	\$6.59
41-2021	Counter & Rental Clerks	601	947	346	57.6	58	\$8.82

 $\mbox{N/A}$  – Not Available. Includes rollups (i.e., multiple occupations within an occupational group).  $^a2005$  Median Annual Wage.

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
47-3012	Helpers — Carpenters	635	924	289	45.5	55	\$10.99
35-2021	Food Preparation Workers	1,526	1,815	289	18.9	83	\$7.83
51-9198	Helpers — Production Workers	693	975	282	40.7	48	\$11.38
53-7051	Industrial Truck & Tractor Operators	629	905	276	43.9	40	\$17.14
35-3011	Bartenders	1,744	1,976	232	13.3	92	\$7.36
53-3031	Driver/Sales Workers	1,590	1,820	230	14.5	49	\$8.54
43-4081	Hotel, Motel, & Resort Desk Clerks	1,027	1,241	214	20.8	68	\$8.67
39-3091	Amusement & Recreation Attendants	674	872	198	29.4	39	\$8.12
43-3071	Tellers	1,072	1,268	196	18.3	72	\$9.34
35-9021	Dishwashers	1,377	1,572	195	14.2	66	\$6.97
43-5071	Shipping, Receiving, & Traffic Clerks	887	1,078	191	21.5	37	\$12.59
49-9098	Helpers — Installation, Maintenance, & Repair Workers	496	678	182	36.7	35	\$10.48
53-3022	Bus Drivers, School	1,308	1,488	180	13.8	47	\$10.24
43-4111	Interviewers, Except Eligibility & Loan	477	653	176	36.9	30	\$9.90
43-3011	Bill & Account Collectors	551	724	173	31.4	28	\$11.89
47-3015	Helpers — Pipelayers, Plumbers, Pipefitters, & Steamfitters	342	513	171	50.0	31	\$10.16
35-3022	Counter Attendants, Cafeteria, Food Concession, & Coffee Shop	689	853	164	23.8	61	\$6.57
41-2011	Cashiers	5,702	5,860	158	2.8	293	\$8.14
39-9021	Personal & Home Care Aides	398	555	157	39.5	22	\$9.32
53-7061	Cleaners of Vehicles & Equipment	478	626	148	31.0	31	\$8.71
53-3041	Taxi Drivers & Chauffeurs	335	456	121	36.1	15	\$8.66
35-9011	Dining Room & Cafeteria Attendants & Bartender Helpers	856	972	116	13.6	40	\$7.79
35-9031	Hosts & Hostesses, Restaurant, Lounge, & Coffee Shop	786	894	108	13.7	36	\$6.77
47-3011	Helpers — Brickmasons, Blockmasons, Stonemasons, & Tile & Marble Setters	235	340	105	44.7	20	\$13.09
49-9043	Maintenance Workers, Machinery	421	516	95	22.6	19	\$27.48
39-2021	Nonfarm Animal Caretakers	292	383	91	31.2	16	\$8.81
43-4031	Court, Municipal, & License Clerks	406	493	87	21.4	18	\$12.11
43-4121	Library Assistants, Clerical	534	617	83	15.5	30	\$9.77
47-3016	Helpers — Roofers	178	259	81	45.5	16	\$9.10
33-9032	Security Guards	1,010	1,090	80	7.9	30	\$10.75
31-9099	Healthcare Support Workers, All Other	367	442	75	20.4	14	\$16.48
39-3099	Entertainment Attendants & Related Workers, All Other	179	251	72	40.2	13	\$8.06
33-9091	Crossing Guards	274	336	62	22.6	15	\$11.07
31-9093	Medical Equipment Preparers	144	204	60	41.7	9	\$11.11
53-6031	Service Station Attendants	353	411	58	16.4	22	\$8.09
33-9092	Lifeguards, Ski Patrol, & Other Recreational Protective Service Workers	292	349	57	19.5	26	\$6.77
35-2015	Cooks, Short Order	517	573	56	10.8	22	\$8.63

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
31-9096	Veterinary Assistants & Laboratory Animal Caretakers	166	221	55	33.1	9	\$7.94
45-2092	Farmworkers & Laborers, Crop, Nursery, & Greenhouse	158	211	53	33.5	10	\$8.22
39-9099	Personal Care & Service Workers, All Other	294	347	53	18.0	12	\$8.11
53-7081	Refuse & Recyclable Material Collectors	250	299	49	19.6	11	\$12.91
43-4161	Human Resources Assistants, Except Payroll & Timekeeping	213	261	48	22.5	9	\$15.03
51-9111	Packaging & Filling Machine Operators & Tenders	308	350	42	13.6	10	\$13.47
37-3019	Grounds Maintenance Workers, All Other	181	223	42	23.2	8	\$9.39
25-4031	Library Technicians	330	370	40	12.1	16	\$12.30
31-2022	Physical Therapist Aides	104	141	37	35.6	5	\$10.02
39-3031	Ushers, Lobby Attendants, & Ticket Takers	166	203	37	22.3	13	\$6.67
49-3093	Tire Repairers & Changers	356	392	36	10.1	19	\$9.53
43-4131	Loan Interviewers & Clerks	344	378	34	9.9	8	\$11.30
43-5061	Production, Planning, & Expediting Clerks	143	175	32	22.4	7	\$17.30
33-9099	Protective Service Workers, All Other	351	383	32	9.1	28	\$15.30
47-3019	Helpers, Construction Trades, All Other	199	230	31	15.6	11	\$10.03
47-3013	Helpers — Electricians	90	120	30	33.3	7	\$12.70
53-6099	Transportation Workers, All Other	143	170	27	18.9	7	\$11.07
51-2022	Electrical & Electronic Equipment Assemblers	43	62	19	44.2	3	\$18.16
45-2099	Agricultural Workers, All Other	65	84	19	29.2	4	\$13.76
35-3041	Food Servers, Nonrestaurant	143	159	16	11.2	6	\$7.97
31-9095	Pharmacy Aides	85	100	15	17.7	3	\$10.31
39-3093	Locker Room, Coatroom, & Dressing Room Attendants	43	56	13	30.2	3	N/A
51-9123	Painting, Coating, & Decorating Workers	45	58	13	28.9	3	\$11.65
39-6011	Baggage Porters & Bellhops	53	66	13	24.5	3	\$8.41
43-5081	Stock Clerks & Order Fillers	2,178	2,190	12	0.6	82	\$10.65
37-3013	Tree Trimmers & Pruners	42	53	11	26.2	2	\$12.60
43-4181	Reservation & Transportation Ticket Agents & Travel Clerks	185	196	11	6.0	6	\$11.02
39-4021	Funeral Attendants	65	76	11	16.9	3	\$10.16
43-3061	Procurement Clerks	124	133	9	7.3	4	\$15.22
47-3014	Helpers — Painters, Paperhangers, Plasterers, & Stucco Masons	18	26	8	44.4	2	\$10.69
43-3041	Gaming Cage Workers	33	39	6	18.2	2	N/A
45-2093	Farmworkers, Farm & Ranch Animals	60	66	6	10.0	2	\$14.34
53-3099	Motor Vehicle Operators, All Other	97	103	6	6.2	2	\$0.00
37-2019	Building Cleaning Workers, All Other	17	21	4	23.5	1	N/A
51-6021	Pressers, Textile, Garment, & Related Materials	68	72	4	5.9	2	\$8.62
53-7064	Packers & Packagers, Hand	965	969	4	0.4	19	\$6.87
41-2012	Gaming Change Persons & Booth Cashiers	16	19	3	18.8	1	N/A

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
33-3041	Parking Enforcement Workers	16	19	3	18.8	1	\$13.70
51-6051	Sewers, Hand	7	9	2	28.6	0	N/A
31-1013	Psychiatric Aides	206	208	2	1.0	3	\$11.50
51-3091	Food & Tobacco Roasting, Baking, & Drying Machine Operators	15	16	1	6.7	1	N/A
53-5011	Sailors & Marine Oilers	5	6	1	20.0	0	N/A
43-5021	Couriers & Messengers	183	183	0	0.0	4	N/A
43-9081	Proofreaders & Copy Markers	28	28	0	0.0	1	N/A
53-6041	Traffic Technicians	4	4	0	0.0	0	N/A
51-3022	Meat, Poultry, & Fish Cutters & Trimmers	43	43	0	0.0	1	\$11.18
51-3092	Food Batchmakers	46	46	0	0.0	1	\$10.93
35-2019	Cooks, All Other	9	9	0	0.0	0	\$10.89
39-3021	Motion Picture Projectionists	28	28	0	0.0	1	\$8.04
53-7063	Machine Feeders & Offbearers	82	80	-2	-2.4	2	\$19.59
51-6099	Textile, Apparel, & Furnishings Workers, All Other	99	97	-2	-2.0	2	\$8.29
51-2023	Electromechanical Equipment Assemblers	14	11	-3	-21.4	0	N/A
41-9091	Door-To-Door Sales Workers, News & Street Vendors, & Related Workers	166	162	-4	-2.4	4	N/A
43-2021	Telephone Operators	13	9	-4	-30.8	0	\$15.32
	Bindery Workers	37	33	-4	-10.8	1	\$9.86
43-5111	Weighers, Measurers, Checkers, & Samplers, Recordkeeping	137	132	-5	-3.7	4	\$12.65
53-6021	Parking Lot Attendants	48	43	-5	-10.4	1	\$8.28
43-4151	Order Clerks	410	404	-6	-1.5	9	\$10.58
43-2011	Switchboard Operators, Including Answering Service	333	325	-8	-2.4	9	\$9.82
43-9071	Office Machine Operators, Except Computer	83	69	-14	-16.9	2	N/A
51-9132	Photographic Processing Machine Operators	87	70	-17	-19.5	2	N/A
41-9041	Telemarketers	582	532	-50	-8.6	10	N/A
43-9051	Mail Clerks & Mail Machine Operators, Except Postal Service	166	111	-55	-33.1	5	\$9.93
43-4199	Information & Record Clerks, All Other	596	538	-58	-9.7	9	\$15.86
43-5041	Meter Readers, Utilities	165	101	-64	-38.8	5	\$16.76
43-4071	File Clerks	279	188	-91	-32.6	8	\$8.57
Work	x Experience in a Related Occupa	tion					
47-1011	First-Line Supervisors/Managers of Construction Trades & Extraction Workers	2,765	4,126	1,361	49.2	183	\$26.50
53-1031	First-Line Supervisors/Managers of Transportation & Material-Moving Machine & Vehicle Operators	838	1,241	403	48.1	60	\$24.33
51-1011	First-Line Supervisors/Managers of Production & Operating Workers	1,130	1,479	349	30.9	59	\$23.58

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
41-1011	First-Line Supervisors/Managers of Retail Sales Workers	3,821	4,158	337	8.8	102	\$15.60
49-1011	First-Line Supervisors/Managers of Mechanics, Installers, & Repairers	1,197	1,528	331	27.7	63	\$24.99
11-9199	Managers, All Other	1,904	2,226	322	16.9	69	\$28.49
35-1012	First-Line Supervisors/Managers of Food Preparation & Serving Workers	1,927	2,242	315	16.4	77	\$11.43
43-1011	First-Line Supervisors/Managers of Office & Administrative Support Workers	1,780	2,088	308	17.3	69	\$18.51
53-1021	First-Line Supervisors/Managers of Helpers, Laborers, & Material Movers, Hand	384	522	138	35.9	23	\$19.04
41-1012	First-Line Supervisors/Managers of Non-Retail Sales Workers	584	721	137	23.5	25	\$23.74
13-1051	Cost Estimators	247	382	135	54.7	19	\$26.95
37-1011	First-Line Supervisors/Managers of Housekeeping & Janitorial Workers	583	705	122	20.9	26	\$13.07
37-1012	First-Line Supervisors/Managers of Landscaping, Lawn Service, & Groundskeeping Workers	544	658	114	21.0	16	\$16.94
11-9081	Lodging Managers	390	480	90	23.1	16	\$16.44
11-9051	Food Service Managers	784	865	81	10.3	21	\$17.75
39-1021	First-Line Supervisors/Managers of Personal Service Workers	383	455	72	18.8	17	\$14.89
35-1011	Chefs & Head Cooks	379	448	69	18.2	18	\$14.27
25-3021	Self-Enrichment Education Teachers	345	409	64	18.6	11	\$0.00
13-1023	Purchasing Agents, Except Wholesale, Retail, & Farm Products	287	346	59	20.6	13	\$22.21
11-3071	Transportation, Storage, & Distribution Managers	148	198	50	33.8	8	\$29.32
41-9021	Real Estate Brokers	279	328	49	17.6	10	N/A
47-4011	Construction & Building Inspectors	115	157	42	36.5	7	\$18.64
13-1022	Wholesale & Retail Buyers, Except Farm Products	148	184	36	24.3	8	\$13.92
	First-Line Supervisors/Managers of Police & Detectives	159	187	28	17.6	8	\$24.72
33-3021	Detectives & Criminal Investigators	154	179	25	16.2	7	\$24.63
53-6051	Transportation Inspectors	121	146	25	20.7	5	\$22.20
33-1021	First-Line Supervisors/Managers of Fire Fighting & Prevention Workers	79	96	17	21.5	5	\$24.00
39-1011	Gaming Supervisors	59	73	14	23.7	3	N/A
33-1099	First-Line Supervisors/Managers, Protective Service Workers, All Other	131	145	14	10.7	5	\$25.62
33-1011	First-Line Supervisors/Managers of Correctional Officers	67	77	10	14.9	3	\$21.34
13-1061	Emergency Management Specialists	24	31	7	29.2	1	\$17.39
45-1011	First-Line Supervisors/Managers of Farming, Fishing, & Forestry Workers	24	30	6	25.0	1	\$21.67
27-2032	Choreographers	88	94	6	6.8	6	\$12.59
11-9071	Gaming Managers	8	11	3	37.5	1	N/A

6-Digit SOC Code	Occupational Title	2004	2014 (Projected)	Net Change	% Change	Annual Openings	2005 Median Hourly Wage
33-9021 I	Private Detectives & Investigators	38	41	3	7.9	1	\$16.99
53-1011 A	Aircraft Cargo Handling Supervisors	9	11	2	22.2	0	N/A
53-5021 (	Captains, Mates, & Pilots of Water Vessels	13	14	1	7.7	1	N/A
53-4021 I	Railroad Brake, Signal, & Switch Operators	40	41	1	2.5	1	\$31.04
33-2021 I	Fire Inspectors & Investigators	20	20	0	0.0	1	\$17.74

Table run May 2007 by Jones, S.

