

TRENDS

TRAINING FOR WHAT? PART 3

Training Needs for Wyoming's Manufacturing Industry

by: Lisa Knapp, Research Analyst

This issue of Wyoming Labor Force Trends includes the third and fourth installments of a five-part series exploring Wyoming's manufacturing industry. This article analyzes the results of a questionnaire sent to manufacturing employers in Wyoming. A related article on page 20 looks at the skills needs in this industry as identified by employers.

In the spring of 2011, the Research & Planning (R&P) section of the Wyoming Department of Workforce Services mailed the Manufacturing-Works questionnaire to 602 employers in Wyoming's manufacturing industry. This survey instrument was designed to find out about skills needs in Wyoming's manufacturing industry, and what types of training employers need compared to what types of training they provide. It is important to note that a survey represents a report of behavior, opinion, or point of view; it is not an observation of behavior.

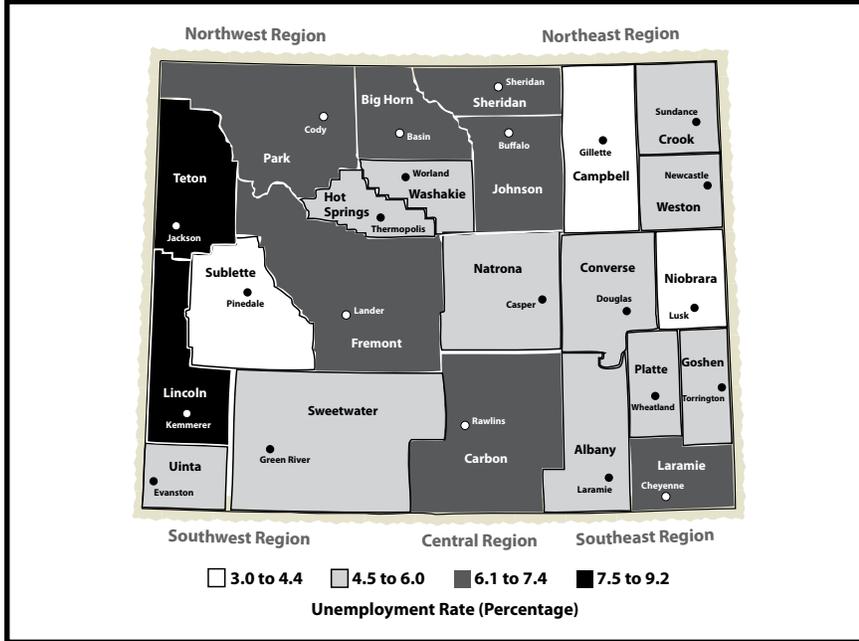
According to the U.S. Bureau of Labor Statistics (BLS), the manufacturing industry is comprised of establishments engaged in mechanical, physical, or chemical transformation of materials. The manufacturing industry is categorized by the North American Industry Classification System (NAICS) as NAICS 31-33. This includes plants, mills, and factories, and may include bakeries and tailors. In Wyoming, the largest number of manufacturing employers are fabricated metal product manufacturers

(Text continued on page 3)

HIGHLIGHTS

- The number of occupational fatalities in Wyoming rose from 19 in 2009 to 34 in 2010, an increase of 78.9%. ... *page 28*
- Unemployment Insurance covered employment increased noticeably in fourth quarter 2010, up 2,918 jobs (1.1%) from fourth quarter 2009. This was the first noticeable over-the-year increase in employment in nearly two years. ... *page 30*

Unemployment Rate by Wyoming County, May 2011 (Not Seasonally Adjusted)



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(Text continued from page 1)

(108; see Table 1), food manufacturers (74), and non-metallic mineral product manufacturers (59).

Wyoming's manufacturing industry is considerably different than that of the nation as a whole. Wyoming's manufacturers are smaller, and represent less of the gross domestic product (GDP). Nationally, in 2010, employment in manufacturing constituted 10.8% of total private sector employment but in Wyoming it only constituted 4.2% of total private sector employment. Similarly, while manufacturing made up 13.5% of the nation's 2010 GDP, it only contributed 8.6% of Wyoming's 2010 GDP (Manning, 2011). In the U.S. during first quarter 2011, more than

half of the manufacturing employers had fewer than 10 employees (59.0%; see Figure 1a, page 4). However, during fourth quarter 2010, nearly three-quarters of Wyoming manufacturing employers had fewer than 10 employees (72.3%; see Figure 1b, page 4). Nationally, in first quarter 2011, only 5.6% of manufacturing employees worked for employers with fewer than 10 employees, while the other 94.4% worked for larger firms (see Figure 2a, page 5). In comparison, 15.5% of Wyoming manufacturing employees worked for firms with fewer than 10 employees in fourth quarter 2010 (see Figure 2b, page 5).

Research by Moore (2011) using the Wyoming New Hires survey found that half of all workers (50.9%) in the manufacturing

Table 1: Wyoming Employer and Job Response by Three-Digit NAICS^a Industry, 2011 Manufacturing-Works Survey

3-digit NAICS	NAICS Description	Employers			Jobs		
		Surveyed	Returned	% Returned	Surveyed	Returned	% Returned
311	Food Manufacturing	74	27	36.5	1,038	470	45.3
312	Beverage & Tobacco Product Manufacturing	16	3	18.8	266	13	4.9
313	Textile Mills	4	0	0.0	52	0	0.0
314	Textile Product Mills	28	9	32.1	115	36	31.0
315	Apparel Manufacturing	3	2	66.7	6	5	84.2
316	Leather & Allied Product Manufacturing	10	4	40.0	23	12	50.7
321	Wood Product Manufacturing	30	10	33.3	343	156	45.4
323	Printing & Related Support Activities	49	21	42.9	285	88	31.0
324	Petroleum & Coal Products Manufacturing	17	6	35.3	1,018	838	82.3
325	Chemical Manufacturing	34	13	38.2	1,593	1,088	68.3
326	Plastics & Rubber Products Manufacturing	11	2	18.2	377	240	63.5
327	Nonmetallic Mineral Product Manufacturing	59	26	44.1	892	240	26.9
331	Primary Metal Manufacturing	3	3	100.0	72	72	100.0
332	Fabricated Metal Product Manufacturing	108	36	33.3	1,349	655	48.5
333	Machinery Manufacturing	38	13	34.2	514	284	55.3
334	Computer & Electronic Product Manufacturing	8	2	25.0	131	96	73.2
335	Electrical Equipment, Appliance, & Component Manufacturing	13	5	38.5	273	135	49.4
336	Transportation Equipment Manufacturing	16	11	68.8	454	248	54.7
337	Furniture & Related Product Manufacturing	44	17	38.6	190	94	49.3
339	Miscellaneous Manufacturing	37	11	29.7	111	46	41.6
Total		602	221	36.7	9,103	4,816	52.9

^a North American Industry Classification System

industry work in production occupations and 43.5% of new hires fill production positions. While this research shows what kinds of jobs are worked by employees of manufacturing companies, it does not show what kind of training is needed for them. In July 2011, R&P was hired by the Manufacturing-Works program at the University of Wyoming to conduct a survey of training needs among the state's manufacturers. Three main concepts stood out during the analysis of this survey concerning issues in human resource acquisition, barriers to business expansion, and training needs. Each is discussed in turn.

Methodology

The Manufacturing-Works questionnaire (see Appendix A at <http://doe.state.wy.us/LMI/0711/a1-appendix.htm>) was created using data from the National Association of Manufacturers. This questionnaire was sent out to all 602 employers in the state that were identified as belonging in the manufacturing industry (NAICS 31-33) in the Quarterly Census of Employment and Wages (QCEW) database during fourth quarter 2010. Employers may have received

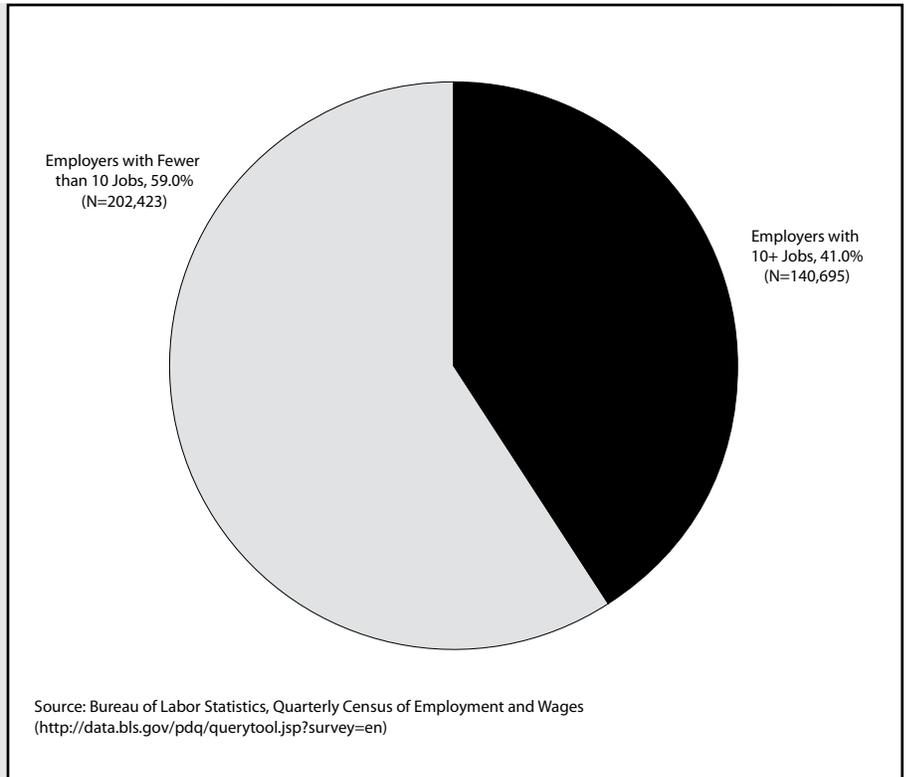


Figure 1a: Proportion of U.S. Manufacturing Employers by Size Class, First Quarter 2011 (Total N = 343,118)

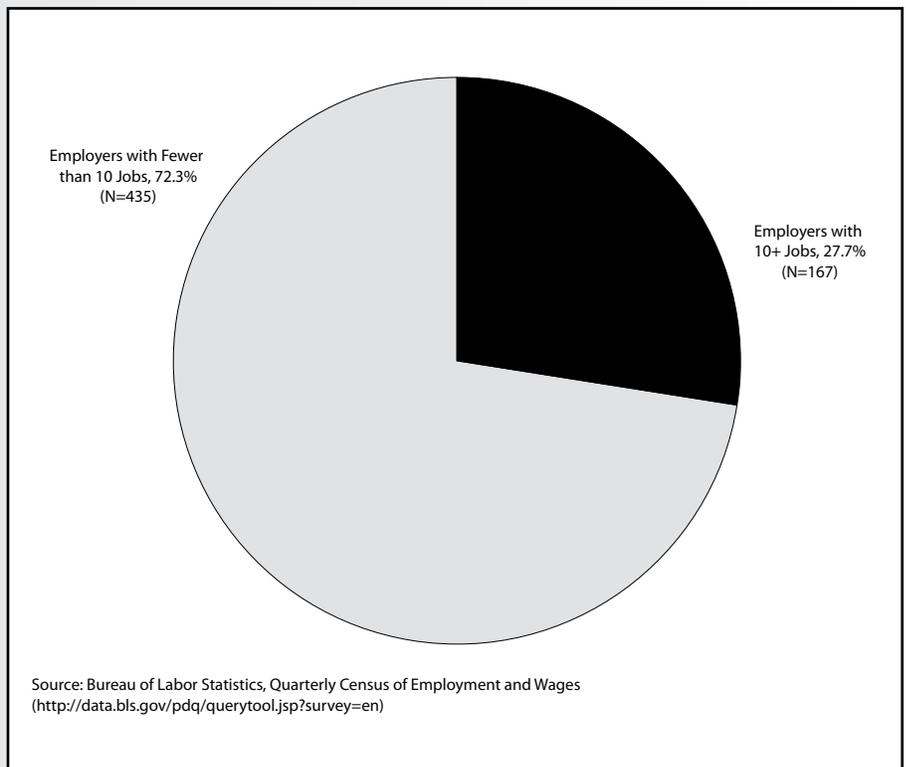


Figure 1b: Proportion of Wyoming Employers by Size Class, Fourth Quarter 2010 (Total N = 602)

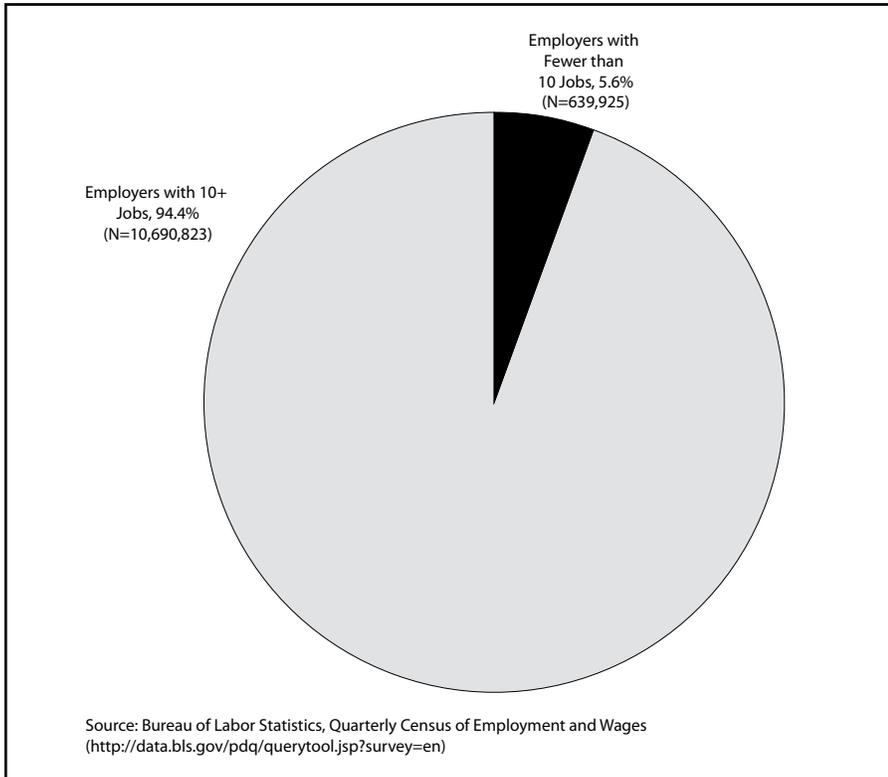


Figure 2a: Proportion of U.S. Manufacturing Employees by Employer Size Class, First Quarter 2011, Average (Total N = 11,330,749)

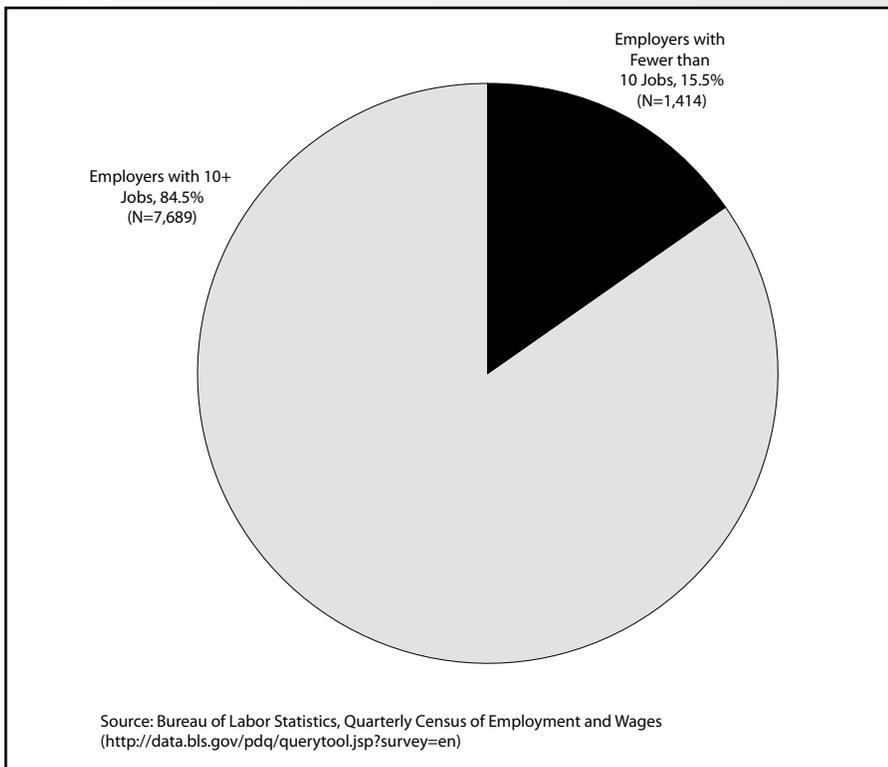


Figure 2b: Proportion of Wyoming Manufacturing Employees by Employer Size Class, Fourth Quarter 2010 (Total N = 9,103)

the questionnaire up to two times. Research & Planning mailed a first round of questionnaires with addressed and stamped return envelopes on May 23, 2011, to all employers. If they did not return a completed form, they were sent another one on June 9, 2011. Phone calls were made to non-responding employers between June 23-28, 2011, in an effort to improve the survey response rate.

Unfortunately, the timing of the project did not permit the normal address and firm contact refinement that would have allowed R&P to improve the quality of the contact information. Of the 602 questionnaires that were mailed to employers, 185 (30.7%; see Table 2, page 6) were completed and returned, and another 36 (6.0%) were collected over the telephone. Slightly more than one in 10 questionnaires were undeliverable due either to insufficient address information (58, or 9.6%) or business closure (4, or 0.7%).

Eight employers refused to participate (1.3%) and half of the questionnaires sent out (311, or 51.7%) were never returned. Businesses with insufficient address information and closures were removed from the original pool because no

useable data could be collected from them, which left a net response rate of 40.9%. Larger employers (those with 10 or more positions) had a higher response rate at 42.5% than smaller employers with fewer than 10 positions (40.3%; see Table 3). However, as shown in Table 4, more than half (58.1%) of manufacturing jobs were represented. The larger employers who responded represented 59.0% of the jobs among all employers with 10 or more jobs; the smaller employers who responded represented 52.1% of the jobs among all employers with fewer than 10 jobs.

A 40.9% response rate is considered very low, especially by R&P's standards. Responses were captured for employers of nearly 60% of manufacturing employment but, unfortunately, with a low response rate such as this the results cannot be generalized to all manufacturing employers. The lack of response to this survey may be explained by the questionnaire content. Many of the questions were modeled after those used by the National Association of Manufacturers, but as was discussed in the comparison of the size of manufacturing employment relative to the U.S., comparison of firm size

and contribution to the GDP do not seem to be applicable to the small employers that make up much of Wyoming's manufacturing base.

This study should be viewed almost as a pre-test. There was not enough time to work directly with employers, especially smaller employers, to determine what economic questions were relevant to them. Based on the response patterns in this round of the survey, there are distinct differences between larger and smaller employers. A greater proportion of large employers responded to questions about the various types of training, probably because they employed enough people to offer training on a large scale. Many smaller employers did not reply to any of the training types listed on the questionnaire. Based on discussions with employers

during telephone interviews, R&P can propose a number of reasons: they are a family-run business, they are only open a few months per year (as is the case with many meat processing companies in the state), or they simply do not employ enough people to justify the time and money required to provide formal training. That is not to say that workers at these companies do not receive training of some sort; they just do not receive it in the ways presented in the survey instrument. Time spent with

Table 2: Questionnaire Response Status, 2011 Manufacturing-Works Survey

Status	N	% of Total
Submitted (Mail)	185	30.7
Collected by Phone	36	6.0
Out of Business	4	0.7
Undeliverable	58	9.6
Refused	8	1.3
No Response	311	51.7
Total	602	100.0

Table 3: Response Rate for Wyoming Employers, 2011 Manufacturing-Works Survey (Excluding Undeliverable Addresses)

NAICS	N	OOB/Undeliv	Total Employers	Response Rate
Small Employers (fewer than 10 employees)	156	48	435	40.3%
Large Employers (10+ employees)	65	14	167	42.5%
All Employers	221	62	602	40.9%

Table 4: Employment Numbers for Wyoming Manufacturing Respondents, 2011 Manufacturing-Works Survey (Excluding Undeliverable Addresses)

NAICS	Response (N Employees)	Total (N Employees)	% of Employees
Small employers (fewer than 10 employees)	663	1,273	52.1%
Large (10+ employees)	4,153	7,017	59.0%
All Employers	4,816	8,290	58.1%

smaller employers in the form of focus groups and one-on-one interviews would help clarify what issues they would like to see included in survey research.

Occupations are grouped together using the Standard Occupational Classification (SOC) System; see <http://www.bls.gov/soc/> for more information.

Analysis

Overall, 36.7% of manufacturing employers responded, representing 52.9% of manufacturing jobs (see Table 1). Table 5 shows the estimated employment by occupation for all employers. This table was calculated using a staffing pattern created from the Occupational Employment Statistics (OES) program, a representative survey of each industry to obtain staffing patterns and wages. More information on OES can be found at <http://doe.state.wy.us/LMI/oes.htm>.

The OES program was used to determine the typical ratio of employment by occupation at a three-digit industry level. This ratio was then applied to employees working for the employers that responded to the survey. For example, if the staffing pattern from OES for food manufacturing (NAICS 311) showed that 50% of jobs were typically found in production occupations and an employer classified in this NAICS group had 30 positions, 15 jobs would be added to the production row of the table.

As shown in Table 5, the columns under “employers with each occupation” contain

Table 5: Proportion of Occupations in Wyoming Manufacturing Based on Staffing Pattern, by Number of Employers with Those Occupations and Number of Jobs in Those Occupations, 2011 Manufacturing-Works Survey

	Employers with each occupation			Jobs in each occupation		
	Estimated total	Estimated Respondents	Response Rate	Estimated Total	Estimated jobs in companies that responded	Response Rate
Management & Financial Operations (SOC 11-13)	588	216	36.7	570	298	52.2
Computer & Mathematical (SOC 15)	246	80	32.5	49	30	62.6
Architecture, Engineering, & Sciences (SOC 17-19)	445	167	37.5	419	282	67.3
Arts, Design, Entertainment, Sports, & Media (SOC 27)	263	91	34.6	33	10	30.5
Healthcare Practitioners & Technical (SOC 29)	204	72	35.3	27	13	47.9
Food Preparation, Building & Grounds, & Cleaning & Maintenance (SOC 35-37)	358	129	36.0	143	62	43.6
Sales & Related (SOC 41)	571	210	36.8	203	90	44.3
Office & Administrative Support (SOC 43)	601	221	36.9	886	383	43.2
Construction & Extraction, Installation, Maintenance, & Repair (SOC 47-49)	511	186	36.4	1,154	633	54.8
Production (SOC 51)	601	221	36.9	4,623	2,411	52.2
Transportation & Material Moving (SOC 53)	507	188	37.1	988	389	39.4
Total	602	221	36.9	9,095	4,602	50.6

Distribution of employment in the jobs columns were created using a staffing pattern at the three-digit industry level. Discrepancies between the total in the total jobs column and the jobs total in Table 1 are due to estimation and rounding errors.

the number of employers that, according to the staffing pattern, had jobs in each type of occupation and the number of employers with each occupation that responded to the survey. Almost all manufacturing employers had production positions (SOC 51; 601 employers), office & administrative support positions (SOC 43; 601), and management & financial operations positions (SOC 11-13; 588 employers). Not as many had positions in computer & mathematical occupations (SOC 15; 246 employers), food preparation or building & grounds cleaning & maintenance occupations (SOC 35-37; 358 employers), or healthcare practitioners and technical occupations (SOC 29; 204 employers). Approximately one-third of employers with each type of occupation responded. For example, of the 601 employers with production jobs (SOC 51), 221 (36.9%) responded.

The columns under “jobs in each occupation” contain the estimated number of jobs in each occupation according to the staffing pattern, and the number of jobs represented by responding employers (see Table 5). There were an estimated 4,623 production jobs (SOC 51) in the state and employers of just over half (52.2%) returned a questionnaire. Of the estimated 570 management & financial operations jobs in the state (SOC 11-13), half (52.2%) worked for an employer that returned a questionnaire, and of the 988 transportation & material moving jobs (SOC 53), 39.4% were represented by responding employers.

Human Resource Acquisition Strategies

Employers were asked to indicate how

useful they thought different human resource acquisition strategies were to their hiring practices. Table 6 (see page 9) shows the proportion of respondents who indicated each strategy was “very useful” for hiring by three-digit industry. Word of mouth was considered to be a very useful hiring strategy by the largest proportion of responding employers (64.7%). Of the 27 food manufacturers (NAICS 311) that responded to the survey, 74.1% thought this strategy was very useful. Similarly, 75.0% of the 36 respondents in fabricated metal products manufacturing (NAICS 332) and 69.2% of the machinery manufacturing respondents (NAICS 333) noted that this was a very useful strategy for hiring.

Approximately one-fifth (20.4%) of responding employers thought newspaper job vacancy ads were very useful (see Table 6). The largest proportion of these were in plastics & rubber products manufacturing (NAICS 326; 50.0%), transportation equipment manufacturing (NAICS 336; 45.5%), and chemical manufacturing (NAICS 325; 38.5%). Another one in five (21.3%) responding employers felt the DWS local offices were very useful for hiring employees. Just under one-third (29.4%) of the 17 respondents in furniture & related product manufacturing industry (NAICS 337) and 36.1% of the 36 employers in the fabricated metal product manufacturing industry (NAICS 332) felt this way.

Only 1.8% of employers thought local career fairs were very useful for hiring employees (see Table 6). Those employers were in chemical manufacturing (NAICS 325; 7.7%), primary metal manufacturing (NAICS 331; 33.3%), transportation equipment manufacturing (NAICS 336; 9.1%), and miscellaneous manufacturing (NAICS 339; 9.1%). Only 1.4% of employers

found work readiness certificates from DWS to be useful, as well. These employers were in electrical equipment, appliance, & component manufacturing (NAICS 335;

20.0%), primary metal manufacturing (NAICS 331; 33.3%), and nonmetallic mineral product manufacturing (NAICS 327; 3.8%).

Table 6: Percent of Responding Wyoming Employers That Indicated Each Type of Human Resource Acquisition Strategy Was 'Very Useful' by Three-Digit Industry, 2011 Manufacturing-Works Survey

Three-Digit Industry Code	Three-Digit Industry Description	Total Respondents	Newspaper Job Vacancy Ads	Word of Mouth	Local Career Fairs	Wyoming @ Work	Community College	Department of Workforce Services Local Office	Work Readiness Certificate from DWS ^a
311	Food Manufacturing Beverage & Tobacco Product Manufacturing	27	29.6	74.1	0.0	0.0	3.8	0.0	0.0
312	Textile Mills	3	0.0	33.3	0.0	0.0	0.0	100.0	0.0
313	Textile Product Mills	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
314	Apparel Manufacturing	9	11.1	44.4	0.0	0.0	0.0	0.0	0.0
315	Leather & Allied Product Manufacturing	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
316	Wood Product Manufacturing	4	0.0	25.0	0.0	0.0	0.0	0.0	0.0
321	Printing & Related Support Activities	10	30.0	70.0	0.0	0.0	0.0	0.0	0.0
323	Petroleum & Coal Products Manufacturing	21	28.6	66.7	0.0	19.0	4.8	33.3	0.0
324	Chemical Manufacturing	6	33.3	83.3	0.0	0.0	0.0	16.7	0.0
325	Plastics & Rubber Products Manufacturing	13	38.5	38.5	7.7	38.5	15.4	30.8	0.0
326	Nonmetallic Mineral Product Manufacturing	2	50.0	50.0	0.0	50.0	0.0	50.0	0.0
327	Primary Metal Manufacturing	26	23.1	46.2	0.0	15.4	3.9	11.5	3.8
331	Fabricated Metal Product Manufacturing	3	0.0	100.0	33.3	66.7	33.3	100.0	33.3
332	Machinery Manufacturing	36	11.1	75.0	0.0	30.6	8.3	36.1	0.0
333	Computer & Electronic Product Manufacturing	13	15.4	69.2	0.0	23.1	7.7	15.4	0.0
334	Electrical Equipment, Appliance, & Component Manufacturing	2	0.0	50.0	0.0	50.0	50.0	0.0	0.0
335	Transportation Equipment Manufacturing	5	20.0	60.0	0.0	0.0	20.0	40.0	20.0
336	Furniture & Related Product Manufacturing	11	45.5	81.8	9.1	18.2	9.1	9.1	0.0
337	Miscellaneous Manufacturing	17	5.9	76.5	0.0	0.0	0.0	29.4	0.0
339	Miscellaneous Manufacturing	11	0.0	72.7	9.1	0.0	27.3	18.2	0.0
	Total	221	20.4	64.7	1.8	14.9	7.2	21.3	1.4

^aDepartment of Workforce Services

Barriers to Business Expansion

In addition to human resource acquisition strategies, employers were asked to rate how important they felt several potential barriers were to expanding their businesses. As shown in Table 7 (see page 11), the barrier considered very important by the largest proportion of employers was the cost of health insurance (51.6%). More than half of employers in 12 manufacturing subsectors felt this way, including those in transportation equipment manufacturing (NAICS 336; 72.7%), printing & related support activities (NAICS 323; 52.4%), and fabricated metal product manufacturing (NAICS 332; 69.4%).

A skills shortage was considered a barrier to expansion by 38.5% of employers (see Table 7). Nearly three-quarters (72.7%) of employers in transportation equipment manufacturing (NAICS 336) and 52.8% of fabricated metal product manufacturers (NAICS 332) said this was a very important barrier to business expansion. Only 10.0% of wood product manufacturers (NAICS 321) said it was a very important barrier to expansion.

Another 38.9% of manufacturers indicated that non-fuel manufacturing input costs were a very important barrier to expansion (see Table 7). More than one-third of employers in 13 manufacturing subsectors felt this way, including those in fabricated metal product manufacturing (NAICS 332; 47.2%), transportation equipment manufacturing (NAICS 336; 54.5%), and nonmetallic mineral product manufacturing (NAICS 327; 42.3%).

Training

Employers were asked whether or not their companies provided all their training internally or if they anticipated needing training from outside providers. Because these questions were asked independently of each other, an employer could answer yes to each, no to each, or yes to one or the other.

As shown in Table 8a (see page 12), 81.0% of employers said they provided all of their training internally. This was the case for more than three-quarters of employers in 12 manufacturing subsectors, including food manufacturing (NAICS 311; 88.9%), printing & related support activities (NAICS 323; 90.5%), and furniture & related product manufacturing (NAICS 337; 100.0%). Smaller proportions of manufacturers in chemical manufacturing (NAICS 325; 46.2%) and textile product mills (NAICS 314; 66.7%) indicated they offered internal training.

The proportions of employers that said they have or anticipated having a need for training from outside entities are shown in Table 8b (see page 13). A much smaller proportion of employers (19.5%) indicated providing outside training. Included in those that said yes were 28.6% of those in printing & related support activities (NAICS 323), 38.5% of those in chemical manufacturing (NAICS 325), and 26.9% of those in non-metallic mineral product manufacturing (NAICS 327).

One of the main purposes of this survey was to identify the types of training employers offered their workers and what may be needed. Employers were presented with several types of training, ranging from leadership skills to safety training and were

asked to indicate by occupational group whether the training was offered by the company, or not offered but needed. They could also leave a blank if they felt neither option applied or they did not have jobs in a particular occupation. As with Table 5, an occupational staffing pattern was created

for the three-digit level of the manufacturing industry and used to estimate the number of jobs in each occupation that were offered training or needed training. The percentages in each row of these tables refer to the percentage of jobs in each occupation that need each type of training and do not add

Table 7: Percent of Responding Wyoming Employers That Indicated Each Type of Barrier to Business Expansion Was 'Very Important' by Three-Digit Industry, 2011 Manufacturing-Works Survey

Three-Digit Industry Code	Three-Digit Industry Description	Total Respondents	A Skills Shortage	Mfg. Fuel Costs	Non-Fuel Mfg. Input Costs	Cost of Health Insurance	Cost of Non-Health Insurance Employee Benefits	Distance/Transportation Costs to Market
311	Food Manufacturing	27	37.0	18.5	29.6	25.9	22.2	11.1
312	Beverage & Tobacco Product Manufacturing	3	0.0	33.3	33.3	66.7	33.3	66.7
313	Textile Mills	0	0.0	0.0	0.0	0.0	0.0	0.0
314	Textile Product Mills	9	22.2	11.1	33.3	55.6	22.2	11.1
315	Apparel Manufacturing	2	0.0	0.0	0.0	0.0	0.0	0.0
316	Leather & Allied Product Manufacturing	4	0.0	25.0	25.0	50.0	25.0	0.0
321	Wood Product Manufacturing	10	10.0	40.0	30.0	60.0	30.0	40.0
323	Printing & Related Support Activities	21	33.3	23.8	28.6	52.4	23.8	4.8
324	Petroleum & Coal Products Manufacturing	6	33.3	16.7	16.7	33.3	16.7	33.3
325	Chemical Manufacturing	13	30.8	38.5	46.2	38.5	38.5	38.5
326	Plastics & Rubber Products Manufacturing	2	0.0	50.0	50.0	50.0	0.0	50.0
327	Nonmetallic Mineral Product Manufacturing	26	46.2	50.0	42.3	69.2	53.8	30.8
331	Primary Metal Manufacturing	3	66.7	100.0	100.0	66.7	66.7	66.7
332	Fabricated Metal Product Manufacturing	36	52.8	38.9	47.2	69.4	30.6	38.9
333	Machinery Manufacturing	13	30.8	38.5	46.2	53.8	23.1	38.5
334	Computer & Electronic Product Manufacturing	2	100.0	0.0	50.0	50.0	50.0	50.0
335	Electrical Equipment, Appliance, & Component Manufacturing	5	40.0	40.0	40.0	40.0	20.0	20.0
336	Transportation Equipment Manufacturing	11	72.7	27.3	54.5	72.7	54.5	27.3
337	Furniture & Related Product Manufacturing	17	29.4	35.3	35.3	29.4	29.4	29.4
339	Miscellaneous Manufacturing	11	45.5	27.3	36.4	45.5	27.3	27.3
	Total	221	38.5	33.0	38.9	51.6	31.7	27.6

up to the total percentage. For example, 45.0% of jobs in management may need a type of training, but only 20.0% of all jobs need that type of training.

Table 9a (see page 14) contains the number of employers and the estimated number of jobs that needed leadership skills training. An estimated 424 jobs in 49 companies (9.1%) needed basic supervisory training. Of those, 52 jobs in 32 companies (16.4%) were in management or financial operations positions (SOC 11-13) and 198 jobs in 15 companies (8.2%)

were in production occupations (SOC 51).

The type of leadership training needed by the largest proportion of jobs was problem solving and decision making (694, 14.9%; see Table 9a). Approximately 75 jobs in 12 companies (17.6%) in transportation & material moving occupations (SOC 53) needed this type of training, as did 413 production jobs in 16 companies (SOC 51; 17.3%). Only an estimated two sales & related jobs in 9 companies (SOC 41; 2.4%) needed this type of training.

Table 8a: Wyoming Employer Provides All Training Internally by Three-Digit Industry, 2011 Manufacturing-Works Survey

Three-Digit Industry Code	Three-Digit Industry Description	Internal Training Provided		Internal Training Not Provided		No Response		Total
		N	Row %	N	Row %	N	Row %	N
311	Food Manufacturing	24	88.9	3	11.1	0	0.0	27
312	Beverage & Tobacco Product Manufacturing	3	100.0	0	0.0	0	0.0	3
313	Textile Mills	0	0.0	0	0.0	0	0.0	0
314	Textile Product Mills	6	66.7	2	22.2	1	11.1	9
315	Apparel Manufacturing	2	100.0	0	0.0	0	0.0	2
316	Leather & Allied Product Manufacturing	4	100.0	0	0.0	0	0.0	4
321	Wood Product Manufacturing	10	100.0	0	0.0	0	0.0	10
323	Printing & Related Support Activities	19	90.5	2	9.5	0	0.0	21
324	Petroleum & Coal Products Manufacturing	4	66.7	2	33.3	0	0.0	6
325	Chemical Manufacturing	6	46.2	5	38.5	2	15.4	13
326	Plastics & Rubber Products Manufacturing	1	50.0	1	50.0	0	0.0	2
327	Nonmetallic Mineral Product Manufacturing	21	80.8	4	15.4	1	3.8	26
331	Primary Metal Manufacturing	3	100.0	0	0.0	0	0.0	3
332	Fabricated Metal Product Manufacturing	25	69.4	10	27.8	1	2.8	36
333	Machinery Manufacturing	11	84.6	2	15.4	0	0.0	13
334	Computer & Electronic Product Manufacturing	1	50.0	1	50.0	0	0.0	2
335	Electrical Equipment, Appliance, & Component Manufacturing	4	80.0	1	20.0	0	0.0	5
336	Transportation Equipment Manufacturing	10	90.9	1	9.1	0	0.0	11
337	Furniture & Related Product Manufacturing	17	100.0	0	0.0	0	0.0	17
339	Miscellaneous Manufacturing	8	72.7	3	27.3	0	0.0	11
Total		179	81.0	37	16.7	5	2.3	221

Similarly, approximately 657 jobs in 35 companies (14.1%) needed training for training and coaching skills (see Table 9a). Of these, an estimated 72 jobs in 8 companies (16.8%) were in transportation & material moving occupations (SOC 53), 405 jobs in 15 companies (16.9%) were in production occupations (SOC 51), and 109 jobs in 10 companies (17.5%) were in construction, extraction, or installation, maintenance, & repair occupations (SOC 47-49).

The estimated number and proportion of jobs that were provided leadership training are displayed in Table 9b (see page 15). The largest proportion of jobs (1,893, 40.6%)

were provided with basic supervisory training. Of those, an estimated 211 jobs in 76 companies (67.2%) were in management or financial operations occupations (SOC 11-13) and an estimated 1,098 jobs in 81 companies (45.9%) were in production occupations (SOC 51).

An estimated 1,349 jobs in 73 companies (29.0%) received cross training in gender equity (see Table 9b). Of those, 873 were production jobs from 49 companies (SOC 51; 36.4%), 168 were transportation & material moving jobs

(Text continued on page 16)

Table 8b: Company Currently Has or Anticipates Needing Training From Outside Entities by Three-Digit Industry, 2011 Manufacturing-Works Survey

Three-Digit Industry Code	Three-Digit Industry Description	External Training Provided		External Training Not Provided		No Response		Total
		N	Row %	N	Row %	N	Row %	N
311	Food Manufacturing	2	7.4	25	92.6	0	0.0	27
312	Beverage & Tobacco Product Manufacturing	0	0.0	3	100.0	0	0.0	3
313	Textile Mills	0	0.0	0	0.0	0	0.0	0
314	Textile Product Mills	1	11.1	7	77.8	1	11.1	9
315	Apparel Manufacturing	0	0.0	2	100.0	0	0.0	2
316	Leather and Allied Product Manufacturing	0	0.0	4	100.0	0	0.0	4
321	Wood Product Manufacturing	1	10.0	9	90.0	0	0.0	10
323	Printing and Related Support Activities	6	28.6	15	71.4	0	0.0	21
324	Petroleum and Coal Products Manufacturing	3	50.0	3	50.0	0	0.0	6
325	Chemical Manufacturing	5	38.5	6	46.2	2	15.4	13
326	Plastics and Rubber Products Manufacturing	1	50.0	1	50.0	0	0.0	2
327	Nonmetallic Mineral Product Manufacturing	7	26.9	18	69.2	1	3.8	26
331	Primary Metal Manufacturing	2	66.7	1	33.3	0	0.0	3
332	Fabricated Metal Product Manufacturing	6	16.7	29	80.6	1	2.8	36
333	Machinery Manufacturing	3	23.1	9	69.2	1	7.7	13
334	Computer and Electronic Product Manufacturing	1	50.0	1	50.0	0	0.0	2
335	Electrical Equipment, Appliance, and Component Manufacturing	1	20.0	4	80.0	0	0.0	5
336	Transportation Equipment Manufacturing	1	9.1	10	90.9	0	0.0	11
337	Furniture and Related Product Manufacturing	0	0.0	17	100.0	0	0.0	17
339	Miscellaneous Manufacturing	3	27.3	8	72.7	0	0.0	11
Total		43	19.5	172	77.8	6	2.7	221

Table 9a: Leadership Skills Matrix — Training Needed, Manufacturing-Works Survey

Occupation	Basic Supervisory		Managing Productivity		Developing Management and People Skills		Training and Coaching Skills		Problem Solving and Decision Making		Using Creativity to Come up with Solutions		Cross Training Gender Equity		Recognizing Separate but Equal Work Female/Male	
	N	n %	N	n %	N	n %	N	n %	N	n %	N	n %	N	n %	N	n %
Management & Financial Operations	32	52 16.4	21	52 16.5	23	44 14.0	21	54 17.3	21	36 11.6	16	17 5.4	9	54 17.1	7	54 17.1
Computer & Mathematical	16	6 20.9	12	10 33.1	11	0 0.0	12	10 33.2	11	6 20.9	14	1 3.3	9	1 3.3	7	1 3.3
Architecture, Engineering, & Sciences	10	37 13.4	7	0 0.1	8	2 0.6	7	0 0.1	9	0 0.1	10	0 0.1	9	67 24.1	7	67 24.1
Arts, Design, Entertainment, Sports, & Media	11	1 5.8	9	1 5.8	8	0 3.9	7	1 5.8	8	0 3.0	10	1 6.8	7	0 3.0	6	0 3.0
Healthcare Practitioners & Technical	7	0 0.1	6	0 0.1	6	0 0.1	6	0 0.1	8	0 0.1	8	0 0.1	6	0 0.1	5	0 0.1
Food Preparation, Building & Grounds, & Cleaning & Maintenance	7	0 0.3	6	0 0.2	6	0 0.2	6	0 0.2	10	0 0.2	8	0 0.2	6	0 0.2	5	0 0.1
Sales & Related	11	2 2.7	11	2 2.4	8	2 2.2	7	1 1.7	9	2 2.4	10	2 2.6	6	9 10.5	4	1 1.0
Office & Administrative Support	9	32 7.7	9	31 7.3	5	4 0.8	5	4 0.9	11	98 23.2	10	71 16.8	6	3 0.8	4	3 0.7
Construction & Extraction; Installation, Maintenance, & Repair	9	89 14.3	14	25 4.0	11	92 14.8	10	109 17.5	15	62 10.0	10	5 0.8	8	4 0.6	6	2 0.4
Production	15	198 8.2	15	203 8.5	14	379 15.8	15	405 16.9	16	413 17.3	16	104 4.3	7	26 1.1	4	23 0.9
Transportation & Material Moving	6	6 1.4	9	72 16.9	8	6 1.4	8	72 16.8	12	75 17.6	10	72 16.8	6	6 1.4	7	7 1.6
Total	49	424 9.1	39	396 8.5	39	529 11.4	35	657 14.1	35	694 14.9	30	273 5.9	16	171 3.7	14	158 3.4

N = Number of Employers.

n = Number of Jobs.

% = Percent of Jobs.

Table 9b: Leadership Skills Matrix — Training Provided, Manufacturing-Works Survey

Occupation	Basic Supervisory			Managing Productivity			Developing Management and People Skills			Training and Coaching Skills			Problem Solving and Decision Making			Using Creativity to Come up with Solutions			Cross Training Gender Equity			Recognizing Separate but Equal Work Female/Male		
	N	n	%	N	n	%	N	n	%	N	n	%	N	n	%	N	n	%	N	n	%	N	n	%
Management & Financial Operations	76	211	67.2	64	132	41.9	52	170	54.1	56	176	55.9	52	149	47.4	48	95	30.1	48	87	27.7	46	81	25.7
Computer & Mathematical	38	16	52.4	30	5	18.2	24	5	15.8	23	5	18.2	25	5	15.8	26	5	15.8	27	3	9.6	27	3	9.9
Architecture, Engineering, & Sciences	17	86	30.8	14	21	7.5	13	87	31.0	13	84	30.2	14	86	30.8	16	19	6.8	11	7	2.4	15	9	32
Arts, Design, Entertainment, Sports, & Media	10	2	17.3	10	2	17.3	12	4	33.7	12	2	17.3	10	2	17.3	14	4	32.3	15	4	31.8	12	3	25.2
Healthcare Practitioners & Technical	4	0	3.2	4	0	3.2	5	1	3.8	4	0	1.5	4	0	3.2	3	0	1.5	5	0	3.2	5	0	3.2
Food Preparation, Building & Grounds, and Cleaning & Maintenance	13	11	17.7	10	11	18.1	8	10	16.8	10	10	16.9	9	13	21.6	8	10	16.9	10	2	3.3	10	2	3.4
Sales & Related	57	31	37.4	45	28	33.6	43	29	34.6	43	26	31.5	39	26	31.3	38	26	31.9	29	18	22.4	29	26	31.9
Office & Administrative Support	61	190	45.0	50	90	21.3	42	154	36.5	40	80	18.9	45	82	19.5	42	66	15.7	38	147	34.9	40	138	32.8
Construction & Extraction; Installation, Maintenance, & Repair	32	55	8.9	20	37	5.9	20	48	7.6	24	46	7.4	22	39	6.3	16	33	5.3	20	40	6.5	22	45	7.1
Production	81	1,098	45.9	68	784	32.7	47	578	24.1	55	558	23.3	57	547	22.9	49	498	20.8	49	873	36.4	50	598	25.0
Transportation ; Material Moving	34	192	45.1	23	87	20.3	23	107	25.1	24	106	24.9	22	86	20.3	18	55	12.8	24	168	39.3	28	177	41.6
Total	118	1,893	40.6	97	1,196	25.7	76	1,192	25.6	83	1,094	23.5	86	1,036	22.2	80	811	17.4	73	1,349	29.0	70	1,083	23.2

N = Number of Employers.
 n = Number of Jobs.
 %= Percent of Jobs.

(Text continued from page 13)

from 24 companies (SOC 53; 39.3%), and 87 were management & financial operations jobs in 48 companies (SOC 11-13; 27.7%). Another quarter of jobs (1,196; 25.7%) were provided with training in managing productivity. Among those were 132 jobs from 64 companies (41.9%) that worked in management & financial operations occupations (SOC 11-13) and 28 jobs from 45 companies that were in sales and related occupations (SOC 41; 33.6%).

Table 10a contains the number and proportion of jobs that needed computer-aided manufacturing training. A select few manufacturing firms with 10 or more positions were asked to complete this question (44). Only 390 jobs in seven of these firms (12.7%) needed computer-aided design training. Of those, 29 jobs in five companies (13.5%) were in management & financial operations occupations (SOC 11-

13), 88 jobs in two companies (16.6%) were in construction, extraction, or installation, maintenance, & repair occupations (SOC 47-49), and 252 jobs in three companies were production workers (SOC 51; 17.3%).

Fifteen employers provided computer aided manufacturing training for 493 jobs. A summary table for this type of training provided is available online at <http://doe.state.wy.us/LMI/trends/0711/a1-tables.htm#table10b>.

Office production software training was provided for 743 jobs in 19 companies (24.2%). This training provided for 109 management & financial operations jobs in 12 companies (SOC 11-13; 50.5%) and 85 architecture, engineering, & sciences jobs in 4 firms (SOC 17-19; 37.4%).

Computer integrated production management training was provided for 608 jobs in 10 firms (19.8%). An estimated 88

Table 10a: Computer-Aided Manufacturing — Training Needed, 2011 Manufacturing-Works Survey

Occupation	Computer Aided Design			Computer-Integrated Production Management			Office Production Software		
	N	n	%	N	n	%	N	n	%
Management & Financial Operations	5	29	13.5	4	20	9.1	3	1	0.7
Computer & Mathematical	4	10	41.0	3	10	41.0	2	0	0.0
Architecture, Engineering, & Sciences	1	0	0.1	1	0	0.1	1	0	0.1
Arts, Design, Entertainment, Sports, & Media	1	0	0.0	1	0	0.0	1	0	0.0
Healthcare Practitioners & Technical	1	0	0.2	1	0	0.2	1	0	0.2
Food Preparation, Building & Grounds, & Cleaning & Maintenance	1	0	0.0	1		0.0	1		0.0
Sales & Related	2	1	2.8	1	0	0.5	3	1	5.1
Office and Administrative Support	3	5	1.8	3	3	1.1	4	18	7.1
Construction & Extraction, Installation, Maintenance, & Repair	2	88	16.6	2	88	16.6	2	2	0.4
Production	3	252	17.3	5	262	18.0	3	27	1.9
Transportation & Material Moving	1	5	1.7	2	5	1.7	2	5	1.7
Total	7	390	12.7	6	388	12.6	6	56	1.8

N = Number of Employers.

n = Number of Jobs.

% = Percent of Jobs.

jobs in 4 firms (38.6%) were in architecture, engineering, or sciences occupations (SOC 17-19) while 308 jobs in 7 firms (21.1%) were in production occupations (SOC 51). Approximately 493 jobs in 15 firms (15.8%) were provided with computer-aided design training. Of these, 90 jobs in 6 firms (39.7%) were in architecture, engineering, & sciences occupations (SOC 17-19).

All employers were asked to indicate which jobs needed safety training. As shown in Table 11a, employers reported that a comparatively small proportion of jobs needed these types of training compared to leadership training. Only an estimated 129 jobs in 22 firms (2.8%) needed injury and illness prevention training, and of those, 114 were production jobs in 13 firms (SOC 51; 4.8%). An estimated 129 jobs in 19 firms (2.8%) needed OSHA or regulatory training and, again, a majority were production workers (SOC 51; 118, 4.9%). Approximately 117 jobs in 14 companies (2.5%) needed

equipment safety training and 107 jobs in 13 companies (2.3%) needed confined space entry training.

All employers were asked to indicate if they provided safety training to their employees (see Table 11b, page 18). More than half of the jobs were provided with each type of safety training. An estimated 2,878 jobs in 150 companies (61.8%) were provided with equipment safety training. Of those, 1,893 production jobs in 127 firms (SOC 51; 79.1%) and 194 management or financial operations jobs in 70 companies (SOC 11-13; 61.7%) were provided with this training. Approximately 2,848 jobs in 119 firms (61.1%) were provided with OSHA or regulatory training. Of those, 1,795 jobs in 97 firms were production workers (SOC 51; 75.0%), 190 jobs in 52 firms were in transportation & material moving occupations (SOC 53; 44.6%), and 362 jobs in 54 firms (58.0%) were in construction, extraction, or installation, maintenance, &

Table 11a: Safety Matrix — Training Needed, 2011 Manufacturing-Works Survey

Occupation	Injury & Illness Prevention Plan Setup			Confined Space Entry Training			OSHA / Regulatory			Equipment Operated Safely		
	N	n	%	N	n	%	N	n	%	N	n	%
Management & Financial Operations	10	2	0.6	7	1	0.4	9	2	0.8	3	1	0.4
Computer & Mathematical	10	0	0.0	10	0	1.0	7	0	0.0	4	0	0.0
Architecture, Engineering, & Sciences	7	0	0.1	8	0	0.1	5	0	0.1	5	0	0.1
Arts, Design, Entertainment, Sports, & Media	10	1	10.6	10	2	13.4	7	1	8.2	5	1	5.3
Healthcare Practitioners & Technical	7	0	0.1	8	0	0.1	5	0	0.1	5	0	0.1
Food Preparation, Building & Grounds, & Cleaning and Maintenance	10	0	0.2	8	0	0.1	6	0	0.1	6	0	0.1
Sales & Related	9	1	1.5	8	1	0.9	7	1	1.5	6	1	0.9
Office & Administrative Support	11	8	1.9	9	6	1.5	7	5	1.1	5	3	0.8
Construction & Extraction, Installation, Maintenance, & Repair	8	1	0.2	9	3	0.5	4	1	0.2	4	1	0.1
Production	13	114	4.8	8	93	3.9	14	118	4.9	9	109	4.6
Transportation & Material Moving	8	1	0.3	8	1	0.3	4	0	0.0	6	1	0.3
Total	22	129	2.8	13	107	2.3	19	129	2.8	14	117	2.5

N = Number of Employers.
 n = Number of Jobs.
 % = Percent of Jobs.

repair occupations (SOC 47-49).

A small selection of employers with 10 or more positions (44) were also asked to indicate what types of quality assurance training were needed for those jobs (see Table 12a, page 19). An estimated 484 jobs in nine firms (10.6%) needed training in process improvement techniques. Of these, 350 jobs in seven firms (14.6%) were production occupations (SOC 51) and 90 jobs in seven firms (14.6%) were construction, extraction, or installation, maintenance, & repair workers (SOC 47-49).

As shown in Table 12a (see page 19), only 49 jobs in four companies (1.1%) needed statistical process control training, mainly in computer and mathematical occupations (SOC 15; 10, or 33.1%). Approximately 494 jobs in nine firms (10.8%) needed job planning and scheduling training, mainly among production workers (SOC 51; 309, or 12.9%) and transportation and materials

moving jobs (SOC 53; 71, or 16.7%).

An estimated 481 jobs in 11 firms (10.3%) were provided with statistical process control training by their employers. Of these, 84 jobs in 6 firms (26.7%) worked in management & financial operations occupations (SOC 11-13). An estimated 684 jobs in 17 firms (14.7%) were provided with organizing and maintenance operations training. The largest number of these (382, or 16.0%) worked in production occupations (SOC 51) while another 79 (12.6%) were estimated to work in construction, extraction, or installation, maintenance, & repair occupations (SOC 47-49). A summary table for this type of training provided is available online at <http://doe.state.wy.us/LMI/trends/0711/a1-tables.htm#table12b>.

Summary

Employers reported that they relied on

Table 11b: Safety Matrix — Training Provided, 2011 Manufacturing-Works Survey

Occupation	Injury & Illness Prevention Plan Setup			Confined Space Entry Training			OSHA / Regulatory			Equipment Operated Safely		
	N	n	%	N	n	%	N	n	%	N	n	%
Management & Financial Operations	70	202	64.3	40	185	58.7	64	203	64.7	70	194	61.7
Computer & Mathematical	27	5	16.5	8	9	30.7	24	5	16.5	22	3	10.2
Architecture, Engineering, & Sciences	17	90	32.2	8	120	43.0	16	90	32.0	14	85	30.5
Arts, Design, Entertainment, Sports, & Media	9	1	9.4	4	0	0.0	9	2	13.2	12	2	14.7
Healthcare Practitioners & Technical	5	0	1.5	4	2	15.4	7	0	3.6	7	0	3.2
Food Preparation, Building & Grounds, & Cleaning and Maintenance	11	3	5.2	6	1	1.9	13	14	23.3	15	13	22.0
Sales & Related	40	23	27.3	20	10	11.7	33	26	31.0	38	15	17.7
Office & Administrative Support	50	220	52.1	26	120	28.3	47	162	38.3	48	105	24.9
Construction & Extraction, Installation, Maintenance, & Repair	47	306	49.1	32	347	55.7	54	362	58.0	59	371	59.4
Production	92	1,512	63.2	55	1,487	62.1	97	1,795	75.0	127	1,893	79.1
Transportation & Material Moving	46	196	46.0	30	175	41.1	52	190	44.6	57	197	46.1
Total	117	2,559	54.9	66	2,456	52.8	119	2,848	61.1	150	2,878	61.8

N = Number of Employers.

n = Number of Jobs.

% = Percent of Jobs.

word of mouth more than any other human resource hiring strategy when filling positions, although they also used newspaper job vacancy advertisements and DWS local offices to fill jobs. Very few used local career fairs or DWS work readiness certificates for their hiring needs.

Half of the employers said the cost of health care insurance was the most important barrier to their ability to expand their business. They also felt that the cost of non-fuel manufacturing inputs would have a negative effect on business expansion.

Overall, leadership skills had the highest reported proportions of jobs that needed training. Employers felt that nearly 15% of their jobs needed training in both training and coaching skills and in decision making and problem solving. They felt another nearly 10% of their workforce needed some type of training in basic supervisory skills. In comparison, employers felt that very few of their jobs needed any type of safety training.

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Table 12a: Quality Assurance Matrix — Training Needed, 2011 Manufacturing-Works Survey

Occupation	Process Improvement Techniques			Statistical Process Control			Job Planning and Scheduling			Organizing and Maintenance Operations		
	N	n	%	N	n	%	N	n	%	N	n	%
Management & Financial Operations	6	25	7.8	1	0	0.1	4	21	6.5	2	1	0.4
Computer & Mathematical	2	10	33.1	2	10	33.1	1	0	0.0	2	0	0.0
Architecture, Engineering, & Sciences	1	0	0.1	1	0	0.1	2	1	0.5	1	0	0.1
Arts, Design, Entertainment, Sports, & Media	1	0	0.0	1	0	0.0	1	0	0.0	1	0	0.0
Healthcare Practitioners & Technical	1	0	0.1	1	0	0.1	1	0	0.1	1	0	0.1
Food Prep., Bldg. & Grounds, & Cleaning and Maint.	2	0	0.0	1	0	0.0	1	0	0.0	1	0	0.0
Sales & Related	3	1	1.4	1	0	0.2	3	1	1.4	3	1	1.3
Office & Administrative Support	2	3	0.7	1	1	0.3	3	3	0.7	2	3	0.7
Const. & Extract., Installation, Maint., & Repair	4	90	14.4	1	2	0.3	4	88	14.1	6	90	14.4
Production	7	350	14.6	3	29	1.2	8	309	12.9	8	300	12.5
Transportation and Material Moving	2	6	1.3	1	5	1.3	3	71	16.7	2	6	1.3
Total	9	484	10.6	4	49	1.1	9	494	10.8	8	401	8.8

N = Number of Employers.
 n = Number of Jobs.
 % = Percent of Jobs.

TRAINING FOR WHAT? PART 4

Skills Needs in Manufacturing

by: Sara Saulcy, Senior Economist

Questionnaires using closed-ended questions are in many ways ideal for both respondents and researchers because the tasks of providing and compiling information are simplified. However, they limit the information provided by respondents. Open-ended questions give respondents an opportunity to expand on questionnaire topics and introduce new topics. These questions can provide researchers with richer information than otherwise might be obtained from closed-ended questions. This article explores employer responses to an open-ended question about skills needed by newly hired employees in the manufacturing industry.

In the spring of 2010, the Research & Planning (R&P) Section of the Wyoming Department of Workforce Services, along with several other state Labor Market Information offices, received research funding to study newly hired employees and, as a subset, environmental jobs: those that increase energy efficiency, use or develop renewable energy resources, or preserve or restore the environment; see <http://doe.state.wy.us/LMI/energy.htm> for more research related to this subject.

R&P designed a mail questionnaire that contained a question intended to measure the degree to which a job was involved in any of these environmental activities, and to capture and assess the types of skills needed in Wyoming; this questionnaire is available online at http://doe.state.wy.us/LMI/energy/new_hires_survey.pdf. Skills were assessed using open-ended and closed-ended questions (see Definitions on page 21 for further discussion). This article explores skills needs for jobs in the manufacturing industry using text mining, an automated process of examining text for themes that can then be quantified.

For the purpose of this study, R&P was interested in sampling from only

those employees that were designated hires excluding those that fell in the both hire and exit category. Specifically, only employees that were considered a new hire during the quarter of interest were included. Rehires were excluded to control for the confounding effects of seasonal re-hiring and to eliminate circumstances where employers and employees based hiring decisions on prior joint human capital and business investment. Finally, R&P was most interested in including new hires that were retained by the same employer for at least two quarters. These jobs were more likely to require a training or educational investment by the employer. This was so R&P could also track what kinds of jobs employers were hiring for and the skills required for those positions (see related article on page 1).

The questionnaire was composed of two types of questions: closed-ended questions and open-ended questions. To assess employer skills needs, R&P first asked employers closed-ended questions about five types of skills: service orientation, critical thinking, reading comprehension, technology design, and operation and control (see Table 1, page 22). These were selected after cognitive interviews were conducted

by the Wyoming Survey & Analysis Center (WYSAC, 2010). Cognitive testing helps to determine if a questionnaire is serving its intended purpose. The five skills on the original questionnaire were chosen from the most frequently occurring skills for environmental jobs.

Cognitive testing revealed that the five original skills were measuring the same concept. The questionnaire was revised to include skills that contrasted with one another such that the five skills would be measuring the importance of different skills.

Definitions

Both hire and exit: where the employee started a job and worked for a firm only within a quarter.

Categories: a grouping of words that form a common theme.

Closed-ended questions: closed-ended questions limit the number of possible responses that a respondent can provide. Questions that ask respondents to choose a number on a scale are examples of closed-ended questions.

Concepts: words or phrases that are extracted from the text data. Concepts may be included in libraries to aid extraction or grouped into categories.

Environmental jobs: those that involve activities and duties related to increasing energy efficiency, utilizing or developing renewable energy resources, or preserving and/or restoring the environment some or all of the time.

Extract, extraction: computer processing of text when data are imported into the software Text Analytics for Surveys.

Extraction results: key words and phrases that are extracted from text responses when data are imported into

the software Text Analytics for Surveys.

Forced in: manually placing concepts into categories.

Forced out: manually removing concepts from categories.

Hire: a person is hired for a job in a specified quarter and is still employed by that employer in the next quarter.

New hire: someone hired by a firm for which they had not worked in at least the last 20 years (the time frame for which R&P has unemployment insurance wage records).

Open-ended questions: in open-ended questions, response options are not limited. “Why did you choose Wyoming as a place to live?” is an example of an open-ended question.

Library: a set of words or phrases consisting of preexisting concepts and user-identified concepts which aid in extracting data for use in categories.

Rules: statements that can be created to automatically classify records into a category based on a logical expression.

Text mining: the process of examining text for themes that can then be quantified.

R&P then asked employers to answer an open-ended question about which skill they considered most important for the job. The question indicated that it could be one of the five skills previously mentioned or another skill. Although the questionnaire asked employers to provide a single skill, several employers reported two or more skills having equal importance.

To evaluate respondents' answers to the open-ended question, R&P used text mining, a useful tool for evaluating and quantifying responses to open-ended questions. The process helps to identify themes that cannot otherwise be determined from closed-ended questions. The purpose of identifying themes is to capture information based on what respondents consider important, not what researchers consider important. For large surveys (more than 10,000 responses in this case), text mining by hand is impractical. R&P used text mining software to expedite the process of capturing common themes reported by employers about skills needed to be successful in jobs for which employees were newly hired. The process was then

Table 1: O*NET Skills Used in Wyoming New Hires Survey

Skill	Definition
Active learning	Understanding the implications of new information for both current and future problem-solving and decision-making.
Active listening	Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
Complex problem solving	Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
Coordination	Adjusting actions in relation to others' actions.
Critical thinking	Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
Equipment maintenance	Performing routine maintenance on equipment and determining when and what kind of maintenance is needed; included with operation and control.
Equipment selection	Determining the kind of tools and equipment needed to do a job; included with operation and control.
Installation	Installing equipment, machines, wiring, or programs to meet specifications.
Instructing	Teaching others how to do something.
Judgment and decision making	Considering the relative costs and benefits of potential actions to choose the most appropriate one.
Learning strategies	Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things; included with critical thinking.
Management of financial resources	Determining how money will be spent to get the work done, and accounting for these expenditures; included with management of material resources.
Management of material resources	Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work.
Management of personnel resources	Motivating, developing, and directing people as they work, identifying the best people for the job; included with management of material resources.
Mathematics	Using mathematics to solve problems.
Monitoring	Monitoring/assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action; included with critical thinking.
Negotiation	Bringing others together and trying to reconcile differences.
Operation and control	Controlling operations of equipment or systems.
Operation monitoring	Watching gauges, dials, or other indicators to make sure a machine is working properly; included with operation and control.
Operations analysis	Analyzing needs and product requirements to create a design; included with critical thinking.
Persuasion	Persuading others to change their minds or behavior.
Programming	Writing computer programs for various purposes; included with critical thinking.
Quality control analysis	Conducting tests and inspections of products, services, or processes to evaluate quality or performance; included with critical thinking.
Reading comprehension	Understanding written sentences and paragraphs in work-related documents.

Table continued on page 23

supplemented by reviewing concepts in individual records.

Methodology

R&P used PASW Text Analytics for Surveys 4 text mining software from SPSS Inc. (<http://www.spss.com/software/statistics/text-analytics-for-surveys/>). Data originated from the New Hires Survey for fourth quarter 2009 through third quarter 2010 and were entered into a SQL server database using a form in Visual Basic.

Responses were imported into the text

mining software and concepts were extracted from the text. The 5 skills from questions 6 through 10 of the questionnaire were entered into a library. The 5 skills were:

- Service orientation – actively looking for ways to help people.
- Critical thinking – using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Reading comprehension – understanding written sentences and

paragraphs in work-related documents.

- Technology design – generating or adapting equipment and technology to serve user needs.
- Operation and control – controlling operations of equipment or systems.

These skills were also entered as categories. In addition to the 5 skills, R&P added 19 other skills listed in O*NET OnLine (<http://online.onetcenter.org/find/descriptor/browse/Skills/>) as categories for a total of 24 skills. Selected skills were combined because of content overlap (see Table 1 for a complete list of skills, definitions, and skills that were combined). R&P used O*NET to describe skills in a nationally known context. O*NET skills are used by employers, job seekers, career counselors, and researchers to help assess skills.

To get a broader sense of the skills employers considered important, R&P combined responses to the questions about the five skills with answers to the open-ended question about which skill or skills employers considered most important for the job. All of

Table continued from page 22

Table 1: O*NET Skills Used in Wyoming New Hires Survey

Skill	Definition
Repairing	Repairing machines or systems using the needed tools.
Science	Using scientific rules and methods to solve problems.
Service orientation	Actively looking for ways to help people.
Social perceptiveness	Being aware of others' reactions and understanding why they react as they do.
Speaking	Talking to others to convey information effectively.
Systems analysis	Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes; included with critical thinking.
Systems evaluation	Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.
Technology design	Generating or adapting equipment and technology to serve user needs.
Time management	Managing one's own time and the time of others.
Troubleshooting	Determining causes of operating errors and deciding what to do about it.
Writing	Communicating effectively in writing as appropriate for the needs of the audience.

the responses indicated as “important” on the survey were included with answers to the open-ended question for text mining analysis.

In the first pass through the data, R&P took the extraction results that were synonymous placements and grouped them into the 24 categories. For example, if an employer reported that critical thinking was the most important skill for the job, then the response was placed into the critical thinking category. The software did not always correctly determine into which categories to place concepts. R&P then reviewed the data to determine which categories to place records. “Common sense” is an example of a concept which the text mining software did not

automatically place in the category of critical thinking. R&P then took this concept and placed it into the critical thinking category. In some instances concepts did not appear in the list of extraction results to be placed into categories. Records were reviewed individually and, where necessary, records were forced into categories. For example, one respondent indicated that “knowledge of the game and the ability to describe the action to the audience” was the most important skill. Because the skill is unique, R&P did not find it necessary to create a rule to categorize the skill, and thus the skill was forced into the category of speaking. Alternatively some records were placed by the software in categories where they did

not belong. These records were forced out. In one such instance, “knowledge of good cleaning skills” was misplaced by the software into the service orientation category so R&P forced the skill out of the service orientation category. Although the software expedites the process of categorizing concepts through rules, libraries, and other resources, the process of determining the categories in which concepts belong is a subjective process (SPSS, Inc., 2010, p. 2).

Results

Table 2 shows the employer-reported importance of selected skills by Wyoming manufacturing employers and all employers. The first five skills were from the survey and were made into categories. Remaining skills were determined from responses to the open-ended survey question and categorized according to the O*NET skills (for a complete table showing all of the skills, go to <http://doe.state.wy.us/LMI/green.htm>).

Regarding skills that were part of the survey, operation and control

Table 2: Wyoming Newly Hired Employees, Manufacturing and All Industries, by Employer-Reported Importance of Skills

Skill	Reported as Important		Reported as Important	
	Manufacturing (Total = 565)		All Industries (Total = 11,029)	
	n	%	n	%
Operation and Control	449	79.4	6,954	63.0
Reading Comprehension	385	68.1	7,558	68.5
Critical Thinking	481	85.1	8,766	79.4
Technology Design	290	51.3	4,365	39.5
Service Orientation	292	51.6	8,028	72.7
Installation	59	10.4	514	4.6
Active Listening	33	5.8	484	4.3
Mathematics	6	1.0	107	0.9
Time Management	7	1.2	155	1.4
Active Learning	11	1.9	92	0.8
Management of Material Resources	6	1.0	129	1.1

had a greater number of manufacturing employers who reported the skill as important relative to all employers. Nearly 80% of manufacturing employers indicated operation and control to be an important skill. By comparison, 63.0% of employers across all industries described operation and control as important. Critical thinking and technology design were skills that also had a greater percentage of manufacturing employers reporting them as important compared to the total. Whereas 85.1% of manufacturing employers detailed critical thinking as an important skill, 79.4% of all employers reported the skill as important. Just over half (51.3%) of manufacturing employers noted technology design as an important skill, while 39.5% of all employers reported the skill to be important. Nearly equal percentages of manufacturing employers and total employers indicated reading comprehension as an important skill (68.1% and 68.5%, respectively). Service orientation was a skill in which 72.7% of total employers reported the skill as important compared to 51.6% of manufacturing employers.

Of the employer-reported skills, more manufacturing employers described installation as important than did employers generally. Of the 565 manufacturing employers, installation was indicated to be an important skill for 10.4% of jobs. By comparison, 4.6% of all employers reported installation skills as important. A greater percentage of manufacturing employers also detailed active listening as an important skill (5.8% compared to 4.3% of all employers).

Figures 1a and 1b (see page 26) show satisfaction with employees' skills for manufacturing employers and all employers, respectively. About 10%

of manufacturing and all responding employers did not respond to the question. A slightly higher percentage of manufacturing employers were satisfied with employees' skills (67.7%) than all employers (65.9%). A similar percentage of employers in both categories were neither satisfied nor unsatisfied with employees' work skills (15.5% of manufacturing employers, 15.0% of all employers). Slightly more of all employers were dissatisfied with employees' work skills (8.1%) than manufacturing employers (7.0%).

How did satisfaction with employees' skills factor into the importance of employees' various skills? Table 3 (see page 27) shows employer-reported importance of the five skills from the survey in a cross-tabulation of employer satisfaction with employees' skills for manufacturing and all industries. Note that satisfaction was with regard to employees' skills generally, not satisfaction with employees' aptitude for a specific skill. Across all five skills, a greater percentage of manufacturing employers who reported the skills as important were also satisfied with employees' skills relative to employers generally. However the difference for each skill was no more than one to two percentage points. For example, for the skill operation and control, the 80.1% of employees with whom manufacturing employers indicated they were satisfied was only 0.4% higher than for all employers (67.9%). Even though the differences between employers in manufacturing and all employers are relatively small with regard to satisfaction and skills, the consistently greater percentages for manufacturing employers suggests that, overall, manufacturing employers are more satisfied with their employees and their employees' skills

than are employers generally.

The New Hires Survey found that most manufacturing employers were satisfied with their newly hired employees' skills; this was consistent with the results of the Manufacturing Training Needs Survey recently conducted by R&P (see related article on Page 1). Results from the manufacturing survey of 221 employers found that 38.5% considered skills shortages to be a very important factor in deciding whether or not to expand

their businesses. For the most part, Wyoming manufacturing employers were satisfied with employees' skills and those skills were not a major factor for most businesses in deciding whether to expand.

Conclusion

Wyoming's manufacturing industry is small relative to other industries in the state, but it is growing (see the June 2011

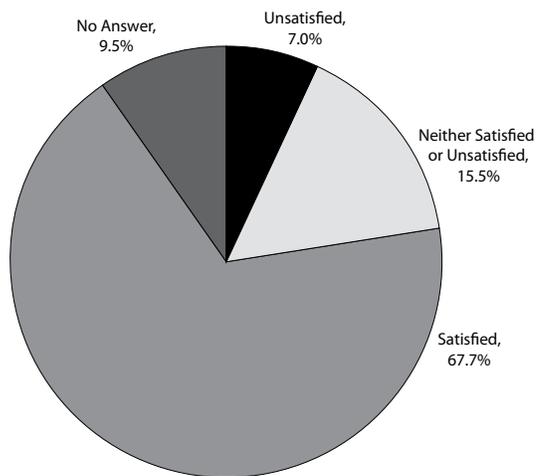


Figure 1a: Wyoming Manufacturing Employers' Satisfaction with Worker Skills

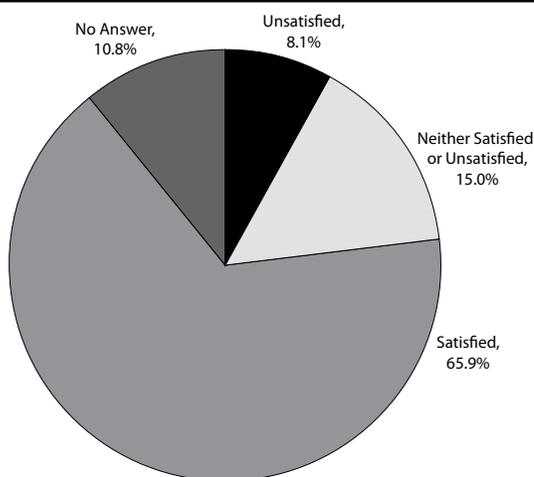


Figure 1b: Wyoming Employers' Satisfaction with Worker Skills, All Industries

Note: Percentages do not equal 100% due to rounding.

Figure 1: Wyoming Employers' Satisfaction with Worker Skills

Table 3: Wyoming Newly Hired Employees, Manufacturing and All Industries, by Employer-Reported Importance of Selected Skills and Satisfaction With Employees' Skills

Skill	Manufacturing			All Industries			
	Not Reported as Important	Reported as Important	Total	Not Reported as Important	Reported as Important	Total	
Operation and Control							
Satisfied	n	76	307	383	2,552	4,725	7,277
	%	65.5%	68.3%	67.7%	62.6%	67.9%	65.9%
Neither Satisfied or Unsatisfied	n	26	62	88	692	964	1,656
	%	22.4%	13.8%	15.5%	16.9%	13.8%	15.0%
Unsatisfied	n	9	31	40	310	589	899
	%	7.7%	6.9%	7.0%	7.6%	8.4%	8.1%
No Answer	n	5	49	54	521	676	1,197
	%	4.3%	10.9%	9.5%	12.7%	9.7%	10.8%
Subtotal	n	116	449	565	4,075	6,954	11,029
Reading Comprehension							
Satisfied	n	98	285	383	2,091	5,186	7,277
	%	54.4%	74.0%	67.7%	60.2%	68.6%	65.9%
Neither Satisfied or Unsatisfied	n	40	48	88	656	1,000	1,656
	%	22.2%	12.4%	15.5%	18.8%	13.2%	15.0%
Unsatisfied	n	15	25	40	300	599	899
	%	8.3%	6.4%	7.0%	8.6%	7.9%	8.1%
No Answer	n	27	27	54	424	773	1,197
	%	15.0%	7.0%	9.5%	12.2%	10.2%	10.8%
Subtotal	n	180	385	565	3,471	7,558	11,029
Technology Design							
Satisfied	n	172	211	383	4,172	3,105	7,277
	%	62.5%	72.7%	67.7%	62.6%	71.1%	65.9%
Neither Satisfied or Unsatisfied	n	52	36	88	1,092	564	1,656
	%	18.9%	12.4%	15.5%	16.3%	12.9%	15.0%
Unsatisfied	n	22	18	40	555	344	899
	%	8.0%	6.2%	7.0%	8.3%	7.8%	8.1%
No Answer	n	29	25	54	845	352	1,197
	%	10.5%	8.6%	9.5%	12.6%	8.0%	10.8%
Subtotal	n	275	290	565	6,664	4,365	11,029
Critical Thinking							
Satisfied	n	44	339	383	1,271	6,006	7,277
	%	52.3%	70.4%	67.7%	56.1%	68.5%	65.9%
Neither Satisfied or Unsatisfied	n	21	67	88	467	1,189	1,656
	%	25.0%	13.9%	15.5%	20.6%	13.5%	15.0%
Unsatisfied	n	4	36	40	196	703	899
	%	10.0%	90.0%	100.0%	8.6%	8.0%	8.1%
No Answer	n	4.7%	7.4%	7.0%	329	868	1,197
	%	15	39	54	14.5%	9.9%	10.8%
Subtotal	n	17.8%	8.1%	9.5%	2,263	8,766	11,029
Service Orientation							
Satisfied	n	179	204	383	1,891	5,386	7,277
	%	65.5%	69.8%	67.7%	63.0%	67.0%	65.9%
Neither Satisfied or Unsatisfied	n	46	42	88	543	1,113	1,656
	%	16.8%	14.3%	15.5%	18.0%	13.8%	15.0%
Unsatisfied	n	14	26	40	236	663	899
	%	5.1%	8.9%	7.0%	7.8%	8.2%	8.1%
No Answer	n	34	20	54	331	866	1,197
	%	12.4%	6.8%	9.5%	11.0%	10.7%	10.8%
Subtotal	n	273	292	565	3,001	8,028	11,029

issue of *Wyoming Labor Force Trends* for a more complete discussion). Skills that employers reported as important include operation and control, critical thinking, and installation. In order to be successful in the industry, employees can acquire the skills that employers demand either on their own or through employer-provided training opportunities.

References

SPSS, Inc. (2010). IBM SPSS Text Analytics for Surveys 4.0 User's Guide.

WYSAC. (2010). Cognitive Interviews for the Wyoming Department of Employment: Testing a Job Skills Questionnaire, by T. Furgeson & M. Dorssom. (WYSAC Technical Report No. SRC-1014). Laramie, WY: Wyoming Survey & Analysis Center, University of Wyoming.

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Wyoming Occupational Fatalities Rise in 2010

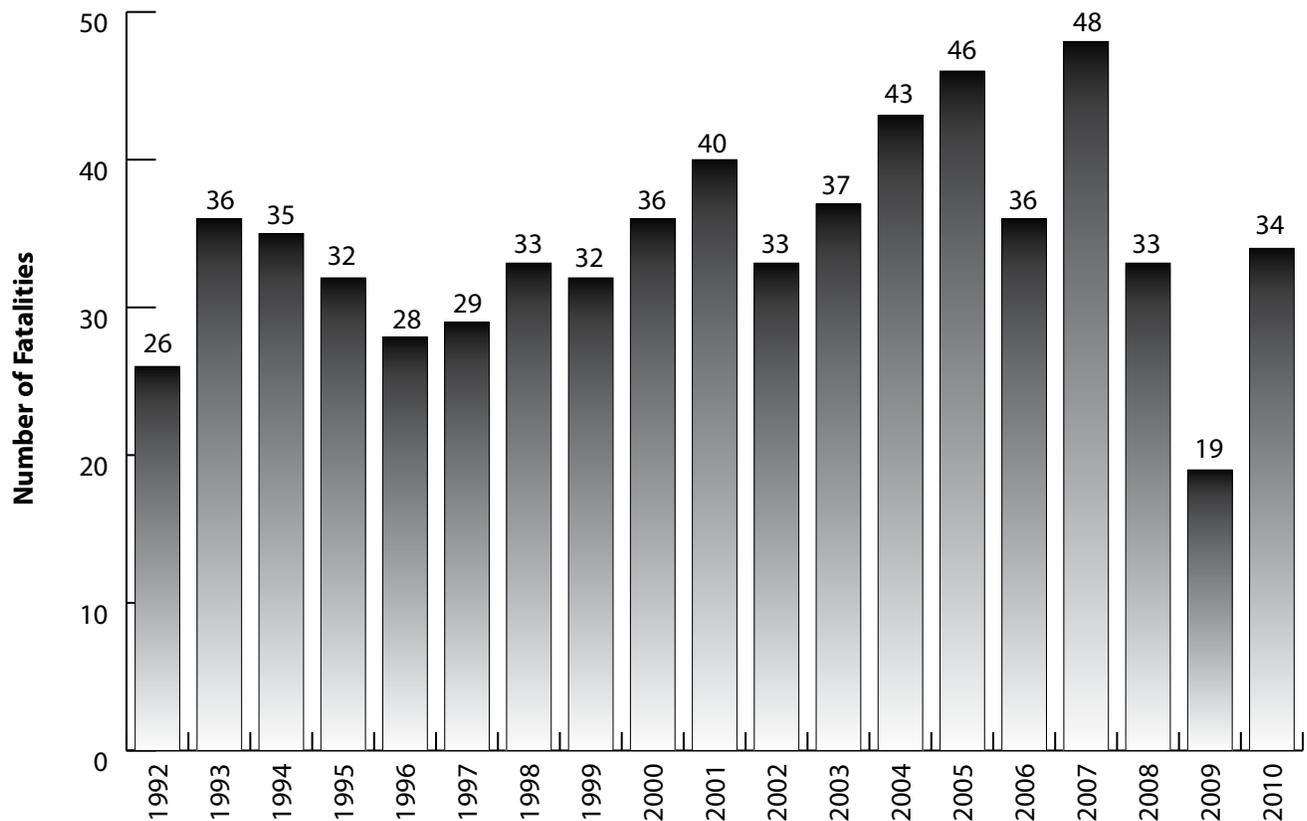
by: Sara Saulcy, Senior Economist

Wyoming occupational fatalities increased from 19 in 2009 to 34 in 2010, an increase of 78.9% (see the Figure).

From 1992 to 2010, an average of 35 people died on the job in Wyoming in a given year. While 2009 fatalities were

much lower than this average, the 2010 fatalities were more consistent with other years. The rise in deaths from 2009 to 2010 was associated with a 63.6% increase in transportation accidents.

Natural resources & mining had the most fatalities with 10, or 29.4% of all



Source: U.S. Department of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, in cooperation with state and federal agencies.

Figure: Wyoming Occupational Fatalities, 1992-2010

deaths (see Table 1). The remainder of deaths were spread out across other industries, including trade,

transportation, & utilities (6); construction (5); and other services, except public administration (4).

More than half of all fatalities (52.9%) were the result of transportation accidents, a result similar to other years.

Table 1: Wyoming Occupational Fatalities by Selected Industry and Event, 2010

Industry	Total		Transportation Accidents ^a	
	N	Column %	N	Row %
Natural Resources & Mining	10	29.4	3	30.0
Construction	5	14.7	3	60.0
Trade, Transportation, & Utilities	6	17.6	4	66.7
Other Services, Exc. Public Administration	4	11.8	4	100.0
All Other Industries	9	26.5	4	44.4
Total	34	100.0	18	52.9

^aTransportation accidents involve transportation vehicles, powered industrial vehicles or powered mobile industrial equipment in which at least one vehicle (or mobile equipment) is in normal operation and the injury/illness was due to collision or other type of traffic accident regardless of the location where the event occurred. Examples of vehicles included are airplanes, trucks, forklifts, and all-terrain vehicles (ATVs).

Source: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State and Federal Agencies, Census of Fatal Occupational Injuries.

Transportation accidents are the most common cause of work-related deaths. As seen in Table 2, from 2003 to 2010, 296 people died while on the job. Of that total, 61.5% (182) resulted from transportation accidents. Nearly one-third of all deaths during this time occurred in natural resources & mining (31.4%), followed by trade, transportation, & utilities (28.4%).

Table 2: Summary of Wyoming Occupational Fatalities for Selected Industries, Total and Transportation Accidents, 2003-2010

Industry	Total		Transportation Accidents ^a	
	N	Column %	N	Row %
Natural Resources & Mining	93	31.4	39	41.9
Construction	44	14.9	25	56.8
Manufacturing	7	2.4	3	42.9
Trade, Transportation, & Utilities	84	28.4	69	82.1
Transportation & Warehousing	64	21.6	55	85.9
Financial Activities	4	1.4	3	75.0
Professional & Business Services	15	5.1	10	66.7
Leisure & Hospitality	13	4.4	6	46.2
Other Services exc. Public Administration	10	3.4	8	80.0
Public Administration	20	6.8	14	70.0
All Other Industries	6	2.0	5	83.3
Total Fatalities, 2003-2010	296	100.0	182	61.5

^aTransportation accidents involve transportation vehicles, powered industrial vehicles or powered mobile industrial equipment in which at least one vehicle (or mobile equipment) is in normal operation and the injury/illness was due to collision or other type of traffic accident regardless of the location where the event occurred. Examples of vehicles included are airplanes, trucks, forklifts, and all-terrain vehicles (ATVs).

Source: U.S. Department of Labor, Bureau of Labor Statistics, in cooperation with State and Federal Agencies, Census of Fatal Occupational Injuries.

Note: Column percentages do not equal 100.0 due to rounding.

Variations from year to year are, to some extent, the result of the random nature of work-related accidents. The only events that show a consistent pattern in Wyoming are transportation events, highway accidents in particular.

For more information on occupational fatalities, go to <http://doe.state.wy.us/LMI/cfoi/toc.htm>.

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Detailed Covered Employment and Wages for Fourth Quarter 2010: Job Gains and Payroll Growth Indicate Economic Recovery

by: David Bullard, Senior Economist

tables by: Nancy Brennan, Senior Economist

In fourth quarter 2010, for the first time in nearly two years, Unemployment Insurance (UI) covered employment increased noticeably (up 2,918 jobs, or 1.1% from fourth quarter 2009). Additionally, total payroll increased by \$174.5 million (6.0%). UI covered payroll represents approximately 91% of all wage and salary disbursements and 43% of personal income in the state (U.S. Bureau of Economic Analysis, 2011). Job growth (1.1%) and payroll growth (6.0%) were very similar to their five-year averages (1.2% and 6.6%, respectively; see Table 1), suggesting that the state's economy was recovering. As in third quarter, the largest number of new jobs and the greatest growth in total payroll occurred in the mining sector (including oil & gas). On an annual average basis, employment fell by approximately 3,700 jobs (-1.3%) from 2009 to 2010. This decrease was much smaller than the job losses which occurred between 2008 and 2009 (approximately -11,600 jobs, or -4.0%). Analysts have noted that "minerals related

Table 1: Percentage Change in Wyoming Covered Employment and Wages for Fourth Quarter 2006 (2006Q4) to Fourth Quarter 2010 (2010Q4)

	Average Monthly Employment Percentage Change Over the Previous		Total Wages Percentage Change Over the Previous		Average Weekly Wage Percentage Change Over the Previous	
	Year	Quarter	Year	Quarter	Year	Quarter
2006Q4	5.1	-1.3	17.1	6.5	11.5	7.9
2007Q4	3.8	-1.2	11.3	9.7	7.2	11.1
2008Q4	2.4	-2.2	6.8	6.4	4.3	8.8
2009Q4	-6.3	-3.2	-8.4	6.4	-2.2	9.9
2010Q4 ^a	1.1	-2.1	6.0	7.7	4.9	10.0
Five-Year Average for Q4	1.2	-2.0	6.6	7.3	5.1	9.5

^aPreliminary.

Source: Quarterly Census of Employment and Wages, developed through a cooperative program between Research & Planning and the U.S. Bureau of Labor Statistics.

Extract date: April 2011.

employment is one of the key predictors of sales and use tax income" in Wyoming (CREG 2010).

The covered payroll and employment data in this article are tabulated by place of work, in contrast to the labor force estimates (see page 45) which are a measure of employed and unemployed persons by place of residence. Also, the employment data presented in this article represent a count of jobs, not persons.

When individuals work more than one job, each is counted separately. Finally, job growth (or decline) is stated in terms of net change. The Quarterly Turnover Statistics by Industry table (see page 39) presents alternative measures of job gains and losses.

The purpose of this article is to show employment and payroll changes between fourth quarter 2009 and fourth quarter 2010. These economic changes help

Table 2: Over-the-Year Percentage Change in Wyoming Covered Employment and Wages for Fourth Quarter 2003 (2003Q4) to Fourth Quarter 2010 (2010Q4)

	Average Monthly Employment	Total Wages
2003Q4	1.7	5.9
2004Q1	3.0	7.2
2004Q2	2.9	7.1
2004Q3	2.0	7.1
2004Q4	2.4	6.5
2005Q1	1.9	6.6
2005Q2	2.1	8.3
2005Q3	2.7	11.7
2005Q4	3.4	10.1
2006Q1	5.1	15.1
2006Q2	5.0	15.5
2006Q3	4.6	14.8
2006Q4	5.1	17.1
2007Q1	4.8	14.5
2007Q2	3.9	12.4
2007Q3	3.7	8.0
2007Q4	3.8	11.3
2008Q1	3.6	10.6
2008Q2	3.1	8.7
2008Q3	3.4	10.1
2008Q4	2.4	6.8
2009Q1	-1.0	-1.2
2009Q2	-3.4	-5.0
2009Q3	-5.3	-8.4
2009Q4	-6.3	-8.4
2010Q1	-4.7	-4.9
2010Q2	-1.7	1.1
2010Q3	0.0	4.8
2010Q4 ^a	1.1	6.0

^aPreliminary.

Source: Quarterly Census of Employment and Wages, developed through a cooperative program between Research & Planning and the U.S. Bureau of Labor Statistics.

Extract date: April 2011.

gauge the overall strength of Wyoming’s economy and identify the fastest and slowest growing sectors and geographic areas.

Job growth increased from 0.0% in third quarter to 1.1% in fourth quarter and payroll growth rose from 4.8% to 6.0% (see Figure). Although a 1.1% increase in employment is modest compared to growth rates that prevailed from 2004-2008, it represents steady improvement in Wyoming’s labor market (see Table 2). The increase in total payroll similarly suggests that the state’s economy is recovering at a moderate pace.

in 15 counties and decreased in 8 counties (see Table 3, page 32). Many of the fastest growing counties were impacted by job growth in the mining sector (including oil & gas). Total payroll rose in 20 counties and fell in 3 counties.

Sweetwater County gained 1,187 jobs (5.1%) and its total payroll increased by \$31.5 million (10.4%). Construction employment rose by more than 400 jobs and mining (including oil & gas) added more than 350 jobs. Growth was also seen in administrative & waste services, local government (including public schools & colleges), transportation & warehousing, and accommodation & food services.

Employment and Wages by County

Employment increased

(Text continued on page 33)

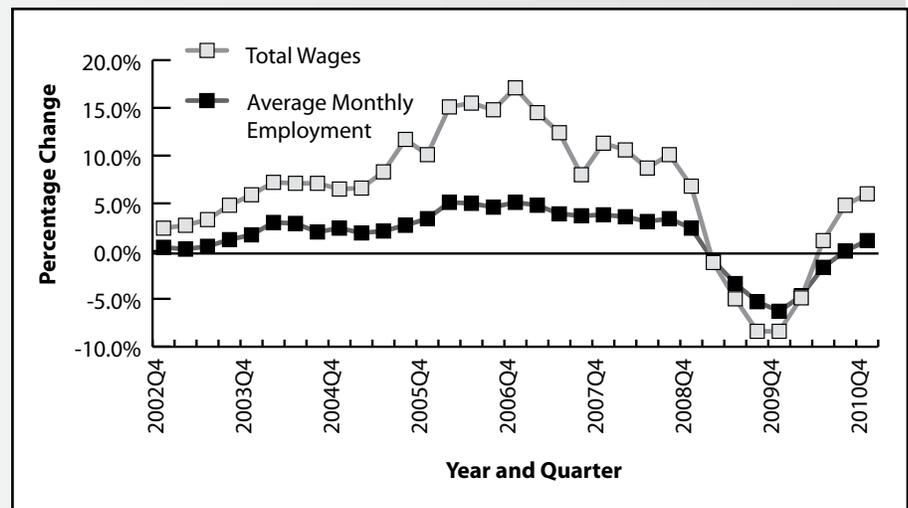


Figure: Over-the-Year Percentage Change in Wyoming Covered Employment and Wages for Fourth Quarter 2002 (2002Q4) to Fourth Quarter 2010 (2010Q4)

Table 3: Wyoming Average Monthly Employment, Total Payroll, and Average Weekly Wage for Fourth Quarter by County, 2009 and 2010^a

County	Average Monthly Employment			Total Payroll			Average Weekly Wage		
	Fourth Quarter 2009	Fourth Quarter 2010	Change n %	Fourth Quarter 2009	Fourth Quarter 2010	Change \$ %	Fourth Quarter 2009	Fourth Quarter 2010	Change \$ %
Total	269,439	272,357	2,918 1.1	\$2,911,594,084	\$3,086,136,830	\$174,542,746 6.0	\$831	\$872	\$40 4.9
Albany	15,818	15,313	-505 -3.2	\$143,761,185	\$140,668,923	-\$3,092,262 -2.2	\$699	\$707	\$8 1.1
Big Horn	4,158	4,202	44 1.1	36,811,061	40,369,227	3,558,166 9.7	681	739	58 8.5
Campbell	28,364	28,465	101 0.4	386,234,681	422,175,825	35,941,144 9.3	1,047	1,141	94 9.0
Carbon	6,695	6,696	1 0.0	67,150,369	69,934,360	2,783,991 4.1	772	803	31 4.0
Converse	5,483	5,409	-74 -1.3	63,813,745	60,719,059	-3,094,686 -4.8	895	864	-31 -3.5
Crook	2,301	2,325	24 1.0	20,896,657	21,655,117	758,460 3.6	699	716	17 2.4
Fremont	16,297	16,794	497 3.0	150,803,718	163,033,052	12,229,334 8.1	712	747	35 4.9
Goshen	4,669	4,644	-25 -0.5	36,469,843	37,596,494	1,126,651 3.1	601	623	22 3.7
Hot Springs	2,076	2,110	34 1.6	16,137,505	17,940,272	1,802,767 11.2	598	654	56 9.4
Johnson	3,249	3,345	96 3.0	26,669,135	28,221,478	1,552,343 5.8	631	649	18 2.9
Laramie	42,883	42,713	-170 -0.4	433,407,413	438,281,484	4,874,071 1.1	777	789	12 1.5
Lincoln	6,146	6,095	-51 -0.8	61,058,225	65,588,822	4,530,597 7.4	764	828	64 8.4
Natrona	37,262	38,462	1,200 3.2	426,861,969	465,802,075	38,940,106 9.1	881	932	51 5.8
Niobrara	908	873	-35 -3.9	6,910,776	6,851,084	-59,692 -0.9	585	604	19 3.2
Park	12,726	12,814	88 0.7	118,553,232	124,377,522	5,824,290 4.9	717	747	30 4.2
Platte	3,342	3,469	127 3.8	30,471,665	33,467,431	2,995,766 9.8	701	742	41 5.8
Sheridan	12,986	12,953	-33 -0.3	130,870,526	130,933,677	63,151 0.0	775	778	3 0.4
Sublette	5,424	5,631	207 3.8	77,633,163	83,764,422	6,131,259 7.9	1,101	1,144	43 3.9
Sweetwater	23,049	24,236	1,187 5.1	302,458,177	333,947,706	31,489,529 10.4	1,009	1,060	51 5.1
Teton	15,813	15,522	-291 -1.8	165,638,935	171,586,332	5,947,397 3.6	806	850	44 5.5
Uinta	9,378	9,768	390 4.2	98,050,744	116,322,498	18,271,754 18.6	804	916	112 13.9
Washakie	4,000	4,015	15 0.4	36,476,846	37,803,112	1,326,266 3.6	701	724	23 3.3
Weston	2,271	2,322	51 2.2	19,303,592	21,040,700	1,737,108 9.0	654	697	43 6.6
Nonclassified ^b	4,141	4,182	41 1.0	55,150,922	54,056,158	-1,094,764 -2.0	1,025	994	-30 -2.9

^aPreliminary.^bThe employer may be located statewide or in more than one county.

Source: Quarterly Census of Employment and Wages, developed through a cooperative program between Research & Planning and the U.S. Bureau of Labor Statistics.

Extract date: April 2011.

(Text continued from page 31)

Fremont County added 497 jobs (3.0%) and its total payroll rose by \$12.2 million (8.1%). Job gains were seen in mining (including oil & gas), construction, educational services, health care & social assistance, and local government.

Uinta County's employment increased by 390 jobs (4.2%) and its total payroll rose by \$18.3 million (18.6%). It appears that the Ruby Pipeline project had a large impact on the county as the construction sector added approximately 450 jobs. Smaller job gains were seen in manufacturing, transportation & warehousing, professional & technical services, and local government. Job losses were noted in mining (including oil & gas) and retail trade.

Platte County added 127 jobs (3.8%) and its total payroll grew by \$3.0 million (9.8%). Modest job gains occurred in agriculture, mining, and construction.

Campbell County added 101 jobs (0.4%) and its total payroll increased by \$35.9 million (9.3%). Job gains were seen in mining (including oil & gas; more than 300 jobs) and local government (including public schools, colleges, & hospitals; approximately 200 jobs). Despite job gains associated with work on the Bison Pipeline, overall construction employment fell by approximately 200 jobs.

Albany County lost 505 jobs (-3.2%) and its total payroll fell by \$3.1 million (-2.2%). State government and construction each lost approximately 200 jobs. More modest job losses occurred in federal government, local government, and manufacturing.

Teton County's employment fell by 291 jobs (-1.8%), but its total payroll increased by \$5.9 million (3.6%). Job

gains in accommodation & food services (approximately 120 jobs) were more than offset by job losses in construction (approximately 320 jobs).

Converse County employment decreased by 74 jobs (-1.3%) and its total payroll fell by \$3.1 million (-4.8%). Mining (including oil & gas) added approximately 200 jobs. Construction lost more than 350 jobs.

Lincoln County lost 51 jobs (-0.8%), but its total payroll increased by \$4.5 million (7.4%). Employment decreased slightly in retail trade, local government, and manufacturing.

Natrona County gained 1,200 jobs (3.2%) and its total payroll grew by \$38.9 million (9.1%). Mining (including oil & gas) added 847 jobs (31.6%) and its total payroll increased by \$24.3 million (44.5%). Notable job growth was also seen in accommodation & food services (192 jobs, or 5.8%), other services (159 jobs, or 9.8%), health care & social assistance (137 jobs, or 2.5%), and manufacturing (127 jobs, or 8.2%). Retail trade posted large job losses (-419 jobs, or -8.1%) and its total payroll also decreased (-\$3.5 million, or -9.6%).

Laramie County lost 170 jobs (-0.4%) while its total payroll increased by \$4.9 million (1.1%). The largest job losses occurred in construction (-349 jobs, or -12.4%), manufacturing (-61 jobs, or -4.1%), and finance & insurance (-61 jobs, or -3.6%). Job gains were seen in transportation & warehousing (179 jobs, or 8.5%), local government (102 jobs, or 1.4%), and retail trade (77 jobs, or 1.4%).

Detailed tables for Natrona and Laramie counties are available online at <http://doe.state.wy.us/LMI/0711/qcew-tables.htm>.

Statewide Employment and Wages by Industry

When viewed from an industry perspective, the largest job gains occurred in mining (including oil & gas), accommodation & food services, local government (including public schools, colleges, & hospitals), transportation & warehousing, health care & social assistance, and administrative & waste services (see Table 4, page 35). Employment fell in retail trade, construction, and finance & insurance.

Mining employment (including oil & gas) increased by 2,000 jobs (8.3%) and its total payroll grew by \$73.8 million (16.1%). Oil & gas extraction added approximately 200 jobs, mining, except oil & gas added approximately 200 jobs, and support activities for mining added more than 1,600 jobs.

Accommodation & food services added 591 jobs (2.1%) and its total payroll increased by \$5.9 million (5.2%). The largest job gains were found in food services & drinking places (approximately 500 jobs) while employment increased modestly in accommodation.

Local government grew by 429 jobs (0.9%) and its total payroll increased by \$6.2 million (1.3%). Most of the growth occurred in local government education (including public schools & colleges) which added 251 jobs (1.0%). Employment also increased slightly in public hospitals (54 jobs, or 0.8%).

Transportation & warehousing gained 415 jobs (4.7%) and its total payroll rose by \$11.4 million (11.6%). The vast majority of job gains (more than 350) occurred in truck transportation, but employment also increased in couriers & messengers and warehousing & storage. Employment

decreased slightly in air transportation and pipeline transportation.

Health care & social assistance added 319 jobs (1.4%) and its total payroll grew by \$6.9 million (2.8%). Ambulatory health care services gained 237 jobs (2.8%) and smaller gains were seen in hospitals (27 jobs, or 0.8%) and social assistance (46 jobs, or 0.7%).

Employment rose by 253 jobs (3.6%) in administrative & waste services and its total payroll increased by \$2.9 million (5.7%). Employment services (including temporary help agencies) added approximately 250 jobs, while waste management & remediation services added more than 100 jobs. Job losses were seen in business support services (including call centers) and other support services.

Retail trade lost 773 jobs (-2.6%) and its total payroll fell by \$3.0 million (-1.5%). Notable job losses were seen in food & beverage stores (approximately 250 jobs), nonstore retailers (including Internet & catalog retailers; approximately 250 jobs), general merchandise stores (including warehouse clubs & supercenters; approximately 200 jobs), and miscellaneous store retailers (approximately 100 jobs). Employment increased slightly in electronics & appliance stores and clothing & clothing accessories stores.

Construction employment fell by 717 jobs (-3.1%), but its total payroll grew by \$17.4 million (6.1%). Construction of buildings lost approximately 450 jobs and specialty trade contractors lost approximately 550 jobs, but heavy & civil engineering construction gained approximately 300 jobs. Especially strong growth was noted in oil & gas pipeline & related structures construction,

(Text continued on page 36)

Table 4: Wyoming Average Monthly Employment, Total Payroll, and Average Weekly Wage for Fourth Quarter by Industry, 2009 and 2010^a

NAICS ^b Title	Average Monthly Employment			Total Payroll			Average Weekly Wage			
	Fourth Quarter	Change	%	Fourth Quarter	Change	%	Fourth Quarter	Change	%	
	2009	2010	n	2009	2010	\$	2009	2010	\$	
Total, All Industries	269,439	272,357	2,918	\$2,911,594,084	\$3,086,136,830	\$174,542,746	6.0	\$831	\$872	4.9
Total Private	202,969	205,465	2,496	\$2,172,476,622	\$2,336,463,772	\$163,987,150	7.5	\$823	\$875	6.3
Agriculture	2,350	2,362	12	18,455,789	20,006,319	1,550,530	8.4	604	652	7.9
Mining	24,125	26,125	2,000	458,821,228	532,666,764	73,845,536	16.1	1,463	1,568	7.2
Utilities	2,470	2,495	25	53,116,258	54,394,276	1,278,018	2.4	1,654	1,677	1.4
Construction	23,231	22,514	-717	285,990,736	303,353,198	17,362,462	6.1	947	1,036	9.4
Manufacturing	9,109	9,104	-5	121,048,854	125,127,960	4,079,106	3.4	1,022	1,057	3.4
Wholesale Trade	8,391	8,519	128	121,650,699	133,632,165	11,981,466	9.8	1,115	1,207	8.3
Retail Trade	30,254	29,481	-773	199,067,962	196,107,407	-2,960,555	-1.5	506	512	1.2
Transportation & Warehousing	8,741	9,156	415	99,032,069	110,478,103	11,446,034	11.6	872	928	6.4
Information	3,882	3,836	-46	38,440,956	41,764,566	3,323,610	8.6	762	838	10.0
Finance & Insurance	7,024	6,781	-243	86,344,702	88,597,725	2,253,023	2.6	946	1,005	5.9
Real Estate & Rental & Leasing	3,906	3,973	67	38,634,036	44,439,376	5,805,340	15.0	761	860	13.0
Professional & Technical Services	8,998	9,071	73	136,986,195	143,931,157	6,944,962	5.1	1,171	1,221	4.3
Mgmt. of Companies & Enterprises	773	849	76	16,437,387	20,115,484	3,678,097	22.4	1,636	1,823	11.4
Administrative & Waste Services	6,959	7,212	253	51,728,906	54,670,113	2,941,207	5.7	572	583	1.9
Educational Services	1,696	1,863	167	11,776,195	13,041,876	1,265,681	10.7	534	538	0.7
Health Care & Social Assistance	23,153	23,472	319	246,543,772	253,487,667	6,943,895	2.8	819	831	1.5
Ambulatory Health Care Services	8,564	8,801	237	136,811,120	142,071,247	5,260,127	3.8	1,229	1,242	1.1
Hospitals	3,307	3,334	27	42,777,692	43,463,980	686,288	1.6	995	1,003	0.8
Nursing & Res. Care Facilities	4,545	4,554	9	31,820,493	32,541,778	721,285	2.3	539	550	2.0
Social Assistance	6,737	6,783	46	35,134,467	35,410,662	276,195	0.8	401	402	0.2
Arts, Entertainment, & Recreation	2,381	2,316	-65	11,487,374	12,242,735	755,361	6.6	371	407	9.7
Accommodation & Food Services	27,754	28,345	591	113,900,534	119,768,724	5,868,190	5.2	316	325	2.8
Other Services	7,773	7,991	218	63,012,970	68,638,157	5,625,187	8.9	624	661	5.9
Total Government	66,470	66,891	421	\$739,117,462	\$749,673,058	\$10,555,596	1.4	\$855	\$862	0.8
Federal Government	7,398	7,429	31	116,423,239	116,609,905	186,666	0.2	1,211	1,207	-0.3
State Government	13,283	13,244	-39	164,703,436	168,903,522	4,200,086	2.6	954	981	2.8
State Government Education	3,829	3,602	-227	44,914,701	44,886,520	-28,181	-0.1	902	958	6.2
Local Government	45,789	46,218	429	457,990,787	464,159,631	6,168,844	1.3	769	773	0.5
Local Government Education	24,282	24,533	251	235,716,658	237,617,150	1,900,492	0.8	747	745	-0.2
Hospitals	6,553	6,607	54	81,147,189	87,085,015	5,937,826	7.3	953	1,014	6.4

^aPreliminary.

^bNorth American Industry Classification System.

Source: Quarterly Census of Employment and Wages, developed through a cooperative program between Research & Planning and the U.S. Bureau of Labor Statistics. Extract date: April 2011.

(Text continued from page 34)

as work was under way on two separate pipeline projects in the state.

Finance & insurance lost 243 jobs (-3.5%), but its total payroll rose by \$2.3 million (2.6%). The majority of job losses were in credit intermediation & related activities (including banks & credit unions; more than 150 jobs). Job losses also occurred in insurance carriers & related activities (more than 50 jobs).

In summary, for the first time in nearly two years, employment increased substantially and total payroll growth accelerated. Growth was seen in most counties and in most industry sectors, with the largest job gains found in the mining (including oil & gas) sector.

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Total Wages, Average Monthly Employment, and Average Monthly Wage Changes for Wyoming by Year/Quarter: 2002Q1 to 2011Q1

Year/Quarter	Total Wages	% Change	Avg Monthly Employment	% Change	Avg Monthly Wage	% Change
2002/1	\$1,636,196,080		230,173		\$2,369.52	
2003/1	\$1,679,813,923	2.7%	230,620	0.2%	\$2,427.97	2.5%
2002/2	\$1,722,950,712		242,186		\$2,371.39	
2003/2	\$1,781,866,184	3.4%	243,630	0.6%	\$2,437.94	2.8%
2002/3	\$1,744,667,330		247,009		\$2,354.39	
2003/3	\$1,828,341,523	4.8%	250,079	1.2%	\$2,437.02	3.5%
2002/4	\$1,839,183,069		239,105		\$2,563.98	
2003/4	\$1,947,865,484	5.9%	243,210	1.7%	\$2,669.66	4.1%
2003/1	\$1,679,813,923		230,620		\$2,427.97	
2004/1	\$1,800,717,857	7.2%	237,527	3.0%	\$2,527.04	4.1%
2003/2	\$1,781,866,184		243,630		\$2,437.94	
2004/2	\$1,909,209,013	7.1%	250,786	2.9%	\$2,537.63	4.1%
2003/3	\$1,828,341,523		250,079		\$2,437.02	
2004/3	\$1,958,379,343	7.1%	255,077	2.0%	\$2,559.20	5.0%
2003/4	\$1,947,865,484		243,210		\$2,669.66	
2004/4	\$2,074,503,790	6.5%	248,966	2.4%	\$2,777.49	4.0%
2004/1	\$1,800,717,857		237,527		\$2,527.04	
2005/1	\$1,919,538,984	6.6%	243,759	2.6%	\$2,624.91	3.9%

Table continued on page 37

Table continued from page 36

Total Wages, Average Monthly Employment, and Average Monthly Wage Changes for Wyoming by Year/Quarter: 2002Q1 to 2011Q1

Year/Quarter	Total Wages	% Change	Avg Monthly Employment	% Change	Avg Monthly Wage	% Change
2004/2	\$1,909,209,013		250,786		\$2,537.63	
2005/2	\$2,068,675,609	8.4%	258,031	2.9%	\$2,672.39	5.3%
2004/3	\$1,958,379,343		255,077		\$2,559.20	
2005/3	\$2,188,006,458	11.7%	263,747	3.4%	\$2,765.28	8.1%
2004/4	\$2,074,503,790		248,966		\$2,777.49	
2005/4	\$2,283,976,604	10.1%	259,256	4.1%	\$2,936.58	5.7%
2005/1	\$1,919,538,984		243,759		\$2,624.91	
2006/1	\$2,206,882,734	15.0%	254,302	4.3%	\$2,892.73	10.2%
2005/2	\$2,068,675,609		258,031		\$2,672.39	
2006/2	\$2,389,394,775	15.5%	268,726	4.1%	\$2,963.86	10.9%
2005/3	\$2,188,006,458		263,747		\$2,765.28	
2006/3	\$2,511,603,105	14.8%	274,060	3.9%	\$3,054.81	10.5%
2005/4	\$2,283,976,604		259,256		\$2,936.58	
2006/4	\$2,674,775,271	17.1%	270,498	4.3%	\$3,296.11	12.2%
2006/1	\$2,206,882,734		254,302		\$2,892.73	
2007/1	\$2,528,871,913	14.6%	266,599	4.8%	\$3,161.89	9.3%
2006/2	\$2,389,394,775		268,726		\$2,963.86	
2007/2	\$2,679,641,341	12.1%	278,792	3.7%	\$3,203.87	8.1%
2006/3	\$2,511,603,105		274,060		\$3,054.81	
2007/3	\$2,712,325,140	8.0%	284,317	3.7%	\$3,179.93	4.1%
2006/4	\$2,674,775,271		270,498		\$3,296.11	
2007/4	\$2,976,397,551	11.3%	280,888	3.8%	\$3,532.13	7.2%
2007/1	\$2,528,871,913		266,599		\$3,161.89	
2008/1	\$2,798,237,273	10.7%	276,195	3.6%	\$3,377.13	6.8%
2007/2	\$2,679,641,341		278,792		\$3,203.87	
2008/2	\$2,918,008,721	8.9%	287,780	3.2%	\$3,379.91	5.5%
2007/3	\$2,712,325,140		284,317		\$3,179.93	
2008/3	\$2,985,771,294	10.1%	293,895	3.4%	\$3,386.44	6.5%
2007/4	\$2,976,397,551		280,888		\$3,532.13	
2008/4	\$3,177,223,682	6.7%	287,478	2.3%	\$3,684.02	4.3%
2008/1	\$2,798,237,273		276,195		\$3,377.13	
2009/1	\$2,764,364,307	-1.2%	273,471	-1.0%	\$3,369.48	-0.2%
2008/2	\$2,918,008,721		287,780		\$3,379.91	
2009/2	\$2,773,191,493	-5.0%	277,897	-3.4%	\$3,326.40	-1.6%
2008/3	\$2,985,771,294		293,895		\$3,386.44	
2009/3	\$2,736,056,780	-8.4%	278,234	-5.3%	\$3,277.88	-3.2%
2008/4	\$3,177,223,682		287,478		\$3,684.02	
2009/4	\$2,911,594,084	-8.4%	269,439	-6.3%	\$3,602.04	-2.2%
2009/1	\$2,764,364,307		273,471		\$3,369.48	
2010/1	\$2,627,558,836	-4.9%	260,726	-4.7%	\$3,359.29	-0.3%
2009/2	\$2,773,191,493		277,897		\$3,326.40	
2010/2	\$2,802,848,365	1.1%	273,044	-1.7%	\$3,421.73	2.9%
2009/3	\$2,736,056,780		278,234		\$3,277.88	
2010/3	\$2,866,694,334	4.8%	279,429	0.4%	\$3,419.71	4.3%
2009/4	\$2,911,594,084		269,439		\$3,602.04	
2010/4	\$3,087,069,661	6.0%	272,511	1.1%	\$3,776.08	4.8%
2010/1	\$2,627,558,836		260,726		\$3,359.29	
2011/1	\$2,767,530,691	5.3%	263,378	1.0%	\$3,502.61	4.3%

Source: Quarterly Census of Employment and Wages.

Persons Working in Jobs Covered by Wyoming State Unemployment Insurance, First Quarter 2011

by: Tony Glover, Workforce Information Supervisor

The number of new persons not previously found working in Wyoming increased from year-ago levels for the third consecutive quarter, indicating that Wyoming employers continue to hire new employees. Prior to third quarter 2010, the number of persons not previously found working in Wyoming had decreased for 11 consecutive quarters.

The percentage of total persons working two jobs (8.5%) was the lowest on record since Research & Planning began publishing this information in second quarter 2007.

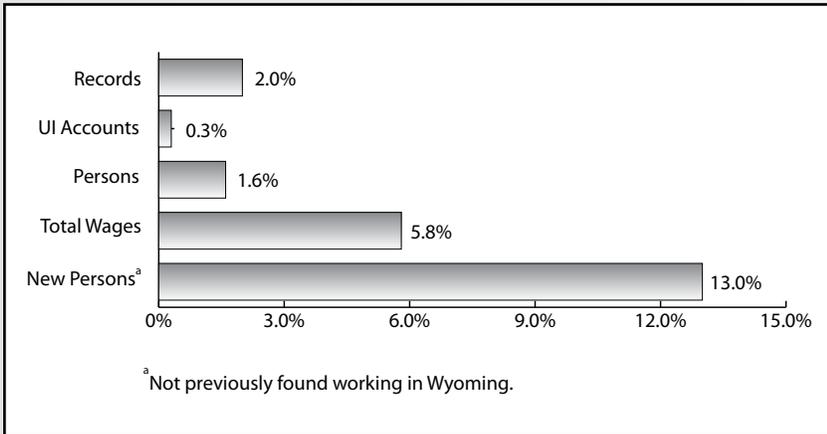


Figure 1: Percentage Change from Previous Year, Wyoming Wage Records, First Quarter 2011

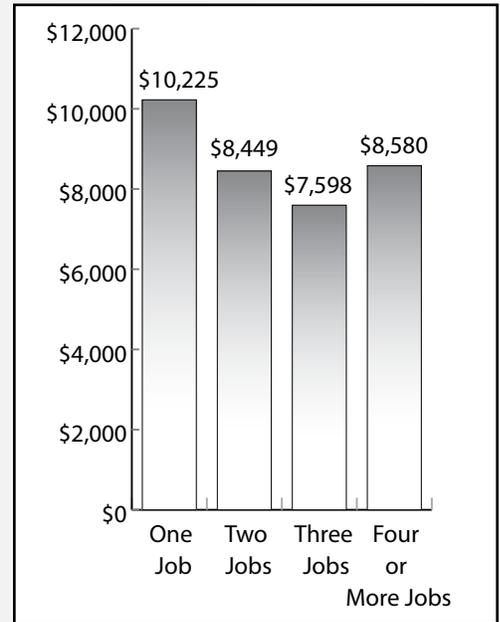


Figure 2: Mean Quarterly Wages in Wyoming by Number of Jobs, First Quarter 2011

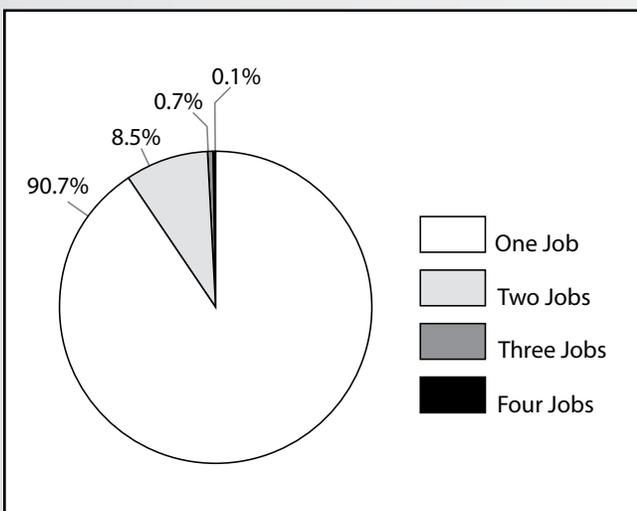


Figure 3: Percentage of Total Persons by Number of Jobs Worked in Wyoming, First Quarter 2011

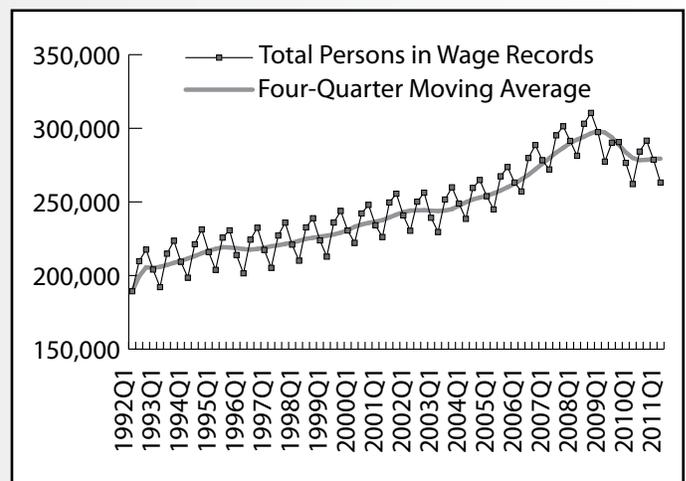


Figure 4: Running Total of Persons in Wyoming Wage Records, First Quarter 1992 (1992Q1) to First Quarter 2011 (2011Q1)

Quarterly Turnover Statistics by Industry, Fourth Quarter 2010

Wyoming's turnover rate for fourth quarter 2010 was 29.5%, up 2.1% from fourth quarter 2009. The turnover rate increased in all industries except information and public administration.

Sector	Major Industry		(H)	(H)+(B)	(B)	(E)	(E)+(B)	(C)	(H+E+B+C)	Turnover	
			Hire Only	Total Hires	Both Hire and Exit	Exit Only	Total Exits	Continuous Employment	Total	Rate ^a	Change Prior Year
Goods Producing	Agriculture, Forestry, Fishing, & Hunting	Transactions ^b	194	476	282	509	791	1,929	2,914	33.8%	0.0%
		Rates	7	16	10	18	27	66	100		
	Mining	Transactions	2,596	3,613	1,017	2,453	3,470	22,680	28,746	21.1%	1.2%
		Rates	9	13	4	9	12	79	100		
	Construction	Transactions	2,797	6,510	3,713	8,180	11,893	15,645	30,335	48.4%	6.3%
		Rates	9	22	12	27	39	52	100		
	Manufacturing	Transactions	831	1,397	566	991	1,557	8,258	10,646	22.4%	3.5%
		Rates	8	13	5	9	15	78	100		
Service Providing	Wholesale Trade, Transportation, Utilities, & Warehousing	Transactions	1,857	2,854	997	2,096	3,093	17,336	22,286	22.2%	3.4%
		Rates	8	13	5	9	14	78	100		
	Retail Trade	Transactions	4,617	6,817	2,200	5,072	7,272	24,699	36,588	32.5%	3.2%
		Rates	13	19	6	14	20	68	100		
	Information	Transactions	329	436	107	372	479	4,031	4,839	16.7%	-2.4%
		Rates	7	9	2	8	10	83	100		
	Financial Activities	Transactions	975	1,416	441	1,048	1,489	9,340	11,804	20.9%	1.6%
		Rates	8	12	4	9	13	79	100		
	Professional & Business Services	Transactions	2,546	4,694	2,148	3,915	6,063	13,202	21,811	39.5%	2.3%
		Rates	12	22	10	18	28	61	100		
	Educational Services	Transactions	3,219	4,564	1,345	1,595	2,940	26,645	32,804	18.8%	0.2%
		Rates	10	14	4	5	9	81	100		
	Health Services	Transactions	3,091	3,989	898	3,085	3,983	27,295	34,369	20.6%	1.2%
		Rates	9	12	3	9	12	79	100		
	Leisure & Hospitality	Transactions	6,402	9,678	3,276	10,304	13,580	22,488	42,470	47.0%	1.6%
		Rates	15	23	8	24	32	53	100		
	Other Services	Transactions	1,047	1,548	501	1,226	1,727	6,475	9,249	30.0%	2.2%
		Rates	11	17	5	13	19	70	100		
	Public Administration	Transactions	1,061	1,446	385	1,771	2,156	19,795	23,012	14.0%	-0.2%
Rates		5	6	2	8	9	86	100			
Unclassified	Transactions	20	32	12	48	60	45	125	64.0%	20.4%	
	Rates	16	26	10	38	48	36	100			
Total	Transactions	31,582	49,470	17,888	42,665	60,553	219,863	311,998	29.5%	2.1%	
	Rates	10	16	6	14	19	71	100			

(H) Hire Only. (B) Both Hire and Exit. (E) Exit Only. (C) Continuous Employment.

^aTurnover rate equals (H+E+B)/Total.

^bJobs worked at any time during the quarter.

Workers' Compensation Claims: First Quarter 2011

by: Patrick Manning, Principal Economist

Initial claims remained flat from fourth quarter 2010 to first quarter 2011, but increased by 2.2% over the year. The largest over-the-year percentage increases were seen in state government (25.4%) and natural resources & mining (14.9%).

Table: Workers' Compensation Claims, 2011Q1

Initial Claims	2011Q1 Unique Claimants	Claims Filed			Percent Change Claims Filed		Rate per 1,000		
		2011Q1	2010Q4	2010Q1	2011Q1 2010Q4	2011Q1 2010Q1	2011Q1	2010Q4	2010Q1
Wyoming Statewide									
TOTAL CLAIMS FILED	3,297	3,363	3,362	3,289	0.0	2.2	11.6	10.8	11.4
TOTAL GOODS-PRODUCING	809	821	977	818	-16.0	0.4	12.8	13.5	12.8
Natural Res. & Mining	383	385	382	335	0.8	14.9	12.5	12.1	11.8
Mining	318	320	315	280	1.6	14.3	11.3	11	10.8
Oil & Gas Extraction	32	33	24	27	37.5	22.2	7.4	5.3	6.1
Construction	256	260	364	286	-28.6	-9.1	11.1	12	11.3
Manufacturing	170	176	231	197	-23.8	-10.7	17.1	21.7	19.5
TOTAL SERVICE-PROVIDING	1,457	1,478	1,522	1,521	-2.9	-2.8	9.1	8.7	9.5
Trade, Transp., & Utilities	534	538	571	551	-5.8	-2.4	9.8	9.8	10.2
Wholesale Trade	115	116	106	119	9.4	-2.5	12.5	11.4	13.2
Retail Trade	225	225	287	241	-21.6	-6.6	6.7	7.9	7.2
Transp., Warehousing & Utilities	184	187	170	179	10.0	4.5	15.9	13.5	15.5
Information, Financial Activities, & Prof.& Business Svcs.	188	189	239	198	-20.9	-4.5	5.4	6.4	5.7
Educational & Health Svcs.	348	357	339	344	5.3	3.8	12.8	11.8	12.6
Leisure & Hospitality	316	321	293	341	9.6	-5.9	9.1	7	9.5
Other Svcs., exc. Public Admin.	71	73	80	87	-8.8	-16.1	8.2	8.7	10.1
TOTAL GOVERNMENT	888	913	787	837	16.0	9.1	14.5	12.3	13.2
State Government	207	212	206	169	2.9	25.4	15.5	15.1	12.5
Local Government	682	701	581	668	20.7	4.9	14.3	11.6	13.5
Local Education	193	197	160	173	23.1	13.9	7.4	6	6.5
UNCLASSIFIED	146	151	76	113	98.7	33.6	N/A	N/A	N/A
Continued Claims									
Continued Claims	2011Q1 Unique Claimants	Claims Filed			Percent Change Claims Filed		Rate per 1,000		
		2011Q1	2010Q4	2010Q1	2011Q1 2010Q4	2011Q1 2010Q1	2011Q1	2010Q4	2010Q1
Wyoming Statewide									
TOTAL CLAIMS FILED	6,771	6,986	6,852	6,784	2.0	3.0	24.1	22	23.5
TOTAL GOODS-PRODUCING	2,340	2,389	2,325	2,355	2.8	1.4	37.1	32.1	36.9
Natural Res. & Mining	982	1,004	1,002	998	0.2	0.6	32.7	31.8	35.2
Mining	813	828	836	822	-1.0	0.7	29.2	29.1	31.7
Oil & Gas Extraction	71	71	78	77	-9.0	-7.8	16	17.2	17.5
Construction	979	989	955	986	3.6	0.3	42.4	31.6	38.9
Manufacturing	386	396	368	371	7.6	6.7	38.5	34.6	36.7
TOTAL SERVICE-PROVIDING	2,674	2,744	2,654	2,585	3.4	6.2	17	15.1	16.1
Trade, Transp., & Utilities	1,150	1,172	1,145	1,147	2.4	2.2	21.4	19.6	21.1
Wholesale Trade	189	192	188	188	2.1	2.1	20.7	20.3	20.9
Retail Trade	479	486	489	494	-0.6	-1.6	14.4	13.4	14.7
Transp., Warehousing & Utilities	443	451	425	419	6.1	7.6	38.2	33.8	36.2
Information, Financial Activities, and Prof.& Business Svcs.	402	410	381	357	7.6	14.8	11.8	10.2	10.3
Educational & Health Svcs.	537	551	543	526	1.5	4.8	19.8	18.9	19.2
Leisure & Hospitality	449	458	431	417	6.3	9.8	13	10.3	11.7
Other Svcs., exc. Public Admin.	150	153	154	138	-0.6	10.9	17.3	16.8	16
TOTAL GOVERNMENT	1,214	1,250	1,232	1,195	1.5	4.6	19.9	19.3	18.9
State Government	257	268	256	248	4.7	8.1	19.6	18.8	18.3
Local Government	957	982	976	947	0.6	3.7	20	19.6	19.2
Local Education	218	224	228	230	-1.8	-2.6	8.4	8.5	8.7
UNCLASSIFIED	599	603	641	649	-5.9	-7.1	N/A	N/A	N/A

Definitions and methodological notes on workers' compensation claims can be found online at <http://doe.state.wy.us/LMI/0111/a5.htm>.

Occupation Spotlight

There are an estimated 2,250 workers classified as welders, cutters, solderers, & brazers in Wyoming. According to the Occupational Employment Statistics (OES) survey, these workers are paid a mean wage of \$24.03 per hour. Those in the 90th percentile earn as much as \$34.37 per hour.

Wage data for specific occupations is available online at <http://doe.state.wy.us/LMI/oes.htm>. Click on the “County and Regional Wages (estimates for Wyoming wages for March 2011)” link.



**Welders,
Cutters,
Solderers, &
Brazers**

Wyoming Unemployment Rate Unchanged at 6.0% in May 2011

by: David Bullard, Senior Economist

According to the Research & Planning section of the Wyoming Department of Workforce Services, the state’s seasonally adjusted¹ unemployment rate in May was 6.0%, unchanged from a month earlier. It remained significantly below its May 2010 level of 7.1% and the U.S. unemployment rate of 9.1%. Seasonally adjusted employment increased by 1,062 people (or 0.4%) from April to May.

The highest county unemployment rates were found in the western and north central regions of the state. Teton County’s unemployment rate was 9.2% and Lincoln County’s was 8.6%. The next highest rates were reported in Big Horn and Johnson counties (both 6.9%). Sublette County posted the lowest unemployment rate (3.5%) followed by Niobrara (4.1%), Campbell (4.4%), and Albany (4.5%) counties.

From April to May, unemployment rates decreased in 18 counties and increased in 5 counties. Seasonal hiring in construction, leisure & hospitality, retail trade, and other sectors is often associated with decreasing unemployment in May. Teton County’s unemployment rate fell from 13.0% in April to 9.2% in May, while more modest unemployment rate decreases were seen in Lincoln, Johnson, and Sheridan counties.

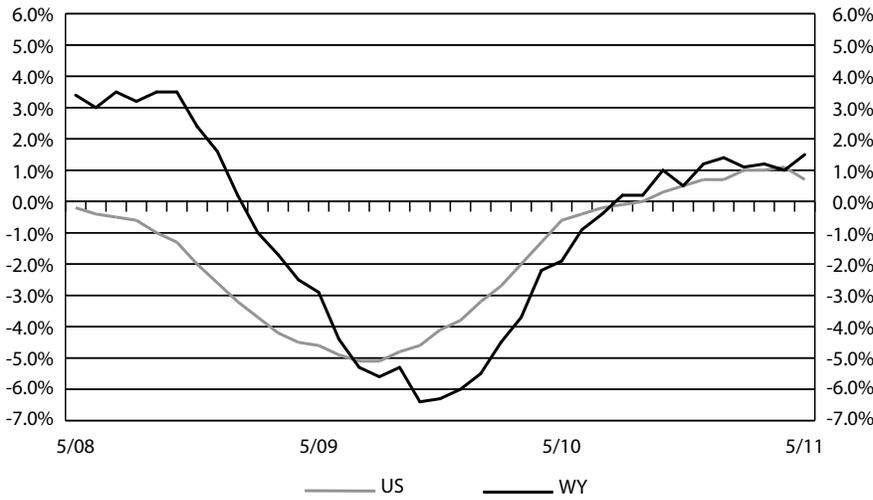
From May 2010 to May 2011 the unemployment rate fell in 22 counties and increased slightly in Hot Springs County (up from 5.1% to 5.3%). The largest decreases in unemployment occurred in two centers of energy development—Campbell (down from 6.4% to 4.4%) and Sweetwater (down from 6.5% to 4.8%) counties.

Total nonfarm employment increased to 289,100 in May, a gain of 4,300 jobs (1.5%) from its year-ago level.

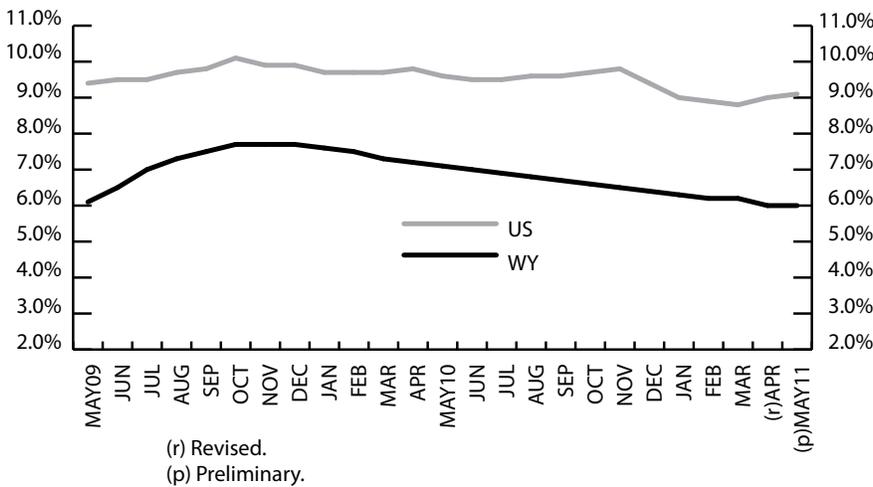


¹ Seasonal adjustment is a statistical procedure to remove the impact of normal regularly recurring events (such as weather, major holidays, and the opening and closing of schools) from economic time series to better understand changes in economic conditions from month to month.

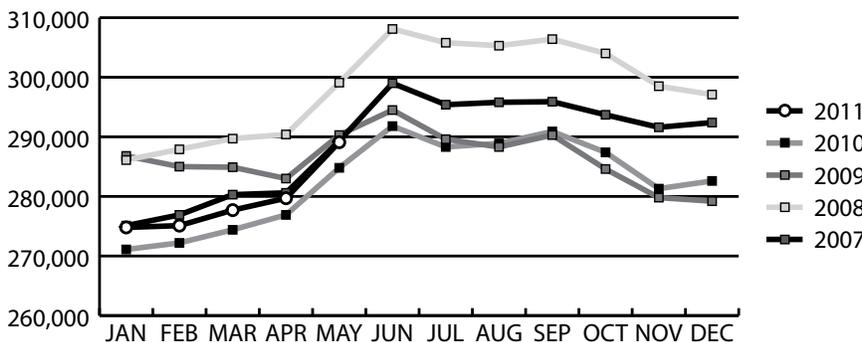
**Nonagricultural Employment Growth
(Percentage Change Over Previous Year)**



Seasonally Adjusted Unemployment Rate (Percentage)



Wyoming Nonagricultural Wage and Salary Employment



**State Unemployment Rates
May 2011
(Seasonally Adjusted)**

State	Unemp. Rate
Puerto Rico	16.0
Nevada	12.1
California	11.7
Rhode Island	10.9
Florida	10.6
Michigan	10.3
Mississippi	10.3
South Carolina	10.0
District of Columbia	9.8
Georgia	9.8
Kentucky	9.8
North Carolina	9.7
Tennessee	9.7
Alabama	9.6
Idaho	9.4
New Jersey	9.4
Oregon	9.3
Arizona	9.1
Connecticut	9.1
United States	9.1
Washington	9.1
Illinois	8.9
Missouri	8.9
Colorado	8.7
Ohio	8.6
West Virginia	8.6
Indiana	8.2
Louisiana	8.2
Delaware	8.0
Texas	8.0
New York	7.9
Arkansas	7.8
Maine	7.7
Massachusetts	7.6
Alaska	7.4
Pennsylvania	7.4
Wisconsin	7.4
Montana	7.3
Utah	7.3
New Mexico	6.9
Maryland	6.8
Kansas	6.6
Minnesota	6.6
Hawaii	6.0
Iowa	6.0
Virginia	6.0
Wyoming	6.0
Vermont	5.4
Oklahoma	5.3
New Hampshire	4.8
South Dakota	4.8
Nebraska	4.1
North Dakota	3.2

Wyoming Nonagricultural Wage and Salary Employment

by: David Bullard, Senior Economist

	% Change Total Employment				
	Employment in Thousands			Employment	
	May 11	Apr 11	May 10	Apr 11	May 10
CAMPBELL COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	28.6	28.3	28.2	1.1	1.4
TOTAL PRIVATE	23.7	23.4	23.4	1.3	1.3
GOODS PRODUCING	11.6	11.4	11.5	1.8	0.9
Natural Resources & Mining	7.9	7.9	7.7	0.0	2.6
Construction	3.2	3.0	3.3	6.7	-3.0
Manufacturing	0.5	0.5	0.5	0.0	0.0
SERVICE PROVIDING	17.0	16.9	16.7	0.6	1.8
Trade, Transport., & Utilities	5.3	5.2	5.4	1.9	-1.9
Information	0.2	0.2	0.2	0.0	0.0
Financial Activities	0.7	0.7	0.7	0.0	0.0
Professional & Bus. Services	1.7	1.7	1.7	0.0	0.0
Educational & Health Serv.	1.0	1.0	1.0	0.0	0.0
Leisure & Hospitality	2.1	2.1	1.9	0.0	10.5
Other Services	1.1	1.1	1.0	0.0	10.0
GOVERNMENT	4.9	4.9	4.8	0.0	2.1

	% Change Total Employment				
	Employment in Thousands			Employment	
	May 11	Apr 11	May 10	Apr 11	May 10
SWEETWATER COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	25.1	24.8	24.7	1.2	1.6
TOTAL PRIVATE	20.0	19.9	19.7	0.5	1.5
GOODS PRODUCING	8.8	8.7	8.6	1.1	2.3
Natural Resources & Mining	5.6	5.6	5.3	0.0	5.7
Construction	1.9	1.8	2.0	5.6	-5.0
Manufacturing	1.3	1.3	1.3	0.0	0.0
SERVICE PROVIDING	16.3	16.1	16.1	1.2	1.2
Trade, Transport., & Utilities	5.0	5.0	4.8	0.0	4.2
Information	0.2	0.2	0.2	0.0	0.0
Financial Activities	0.9	0.9	0.8	0.0	12.5
Professional & Bus. Services	1.1	1.1	1.0	0.0	10.0
Educational & Health Serv.	1.0	1.0	1.0	0.0	0.0
Leisure & Hospitality	2.3	2.3	2.3	0.0	0.0
Other Services	0.7	0.7	1.0	0.0	-30.0
GOVERNMENT	5.1	4.9	5.0	4.1	2.0

	% Change Total Employment				
	Employment in Thousands			Employment	
	May 11	Apr 11	May 10	Apr 11	May 10
TETON COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	16.0	14.8	15.9	8.1	0.6
TOTAL PRIVATE	13.5	12.5	13.4	8.0	0.7
GOODS PRODUCING	1.7	1.5	1.7	13.3	0.0
Nat. Res., Mining & Const.	1.6	1.4	1.6	14.3	0.0
Manufacturing	0.1	0.1	0.1	0.0	0.0
SERVICE PROVIDING	14.3	13.3	14.2	7.5	0.7
Trade, Transport., & Utilities	2.0	2.0	2.1	0.0	-4.8
Information	0.2	0.2	0.2	0.0	0.0
Financial Activities	0.8	0.8	0.8	0.0	0.0
Professional & Bus. Services	1.6	1.5	1.6	6.7	0.0
Educational & Health Serv.	0.9	0.9	0.9	0.0	0.0
Leisure & Hospitality	5.9	5.2	5.7	13.5	3.5
Other Services	0.4	0.4	0.4	0.0	0.0
GOVERNMENT	2.5	2.3	2.5	8.7	0.0

State Unemployment Rates May 2011 (Not Seasonally Adjusted)

State	Unemp. Rate
Puerto Rico	16.0
Nevada	12.1
California	11.4
Rhode Island	11.0
Florida	10.5
Michigan	10.3
District of Columbia	10.2
South Carolina	10.2
Mississippi	10.0
Georgia	9.7
North Carolina	9.7
Alabama	9.5
Kentucky	9.5
Tennessee	9.5
New Jersey	9.3
Connecticut	9.1
Illinois	9.0
Oregon	9.0
Arizona	8.8
Missouri	8.8
Washington	8.8
Idaho	8.7
United States	8.7
West Virginia	8.6
Colorado	8.5
Ohio	8.5
Indiana	8.3
Louisiana	8.1
Arkansas	7.9
Texas	7.9
Maine	7.8
New York	7.8
Pennsylvania	7.6
Delaware	7.5
Alaska	7.4
Massachusetts	7.4
Wisconsin	7.4
Utah	7.3
Montana	7.0
Maryland	6.9
New Mexico	6.5
Minnesota	6.4
Kansas	6.3
Virginia	6.0
Hawaii	5.9
Wyoming	5.9
Iowa	5.6
Vermont	5.4
Oklahoma	5.3
New Hampshire	4.9
South Dakota	4.6
Nebraska	4.0
North Dakota	3.0

Economic Indicators

by: Margaret Hiatt, Administrative/Survey Support Specialist

Total nonfarm employment increased to 289,100 in May, a gain of 1.5% from its May 2010 level.

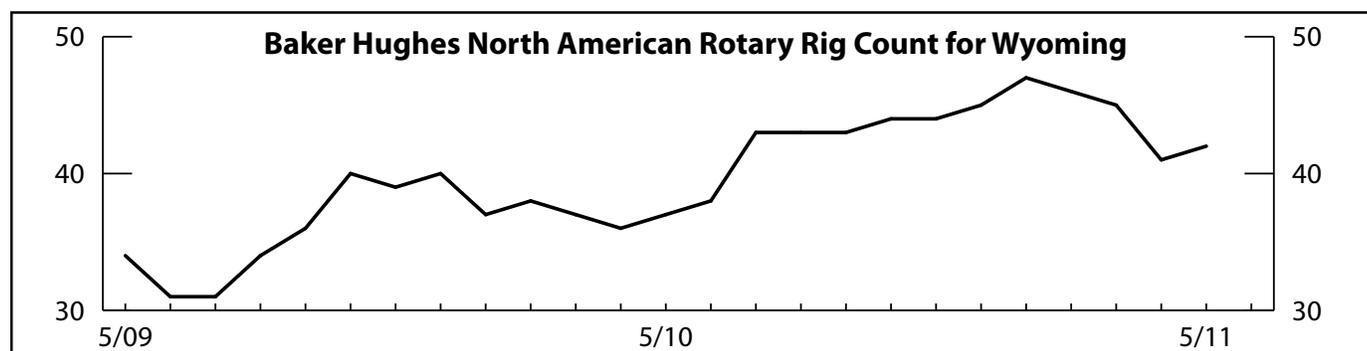
	May 2011 (p)	Apr 2011 (r)	May 2010 (b)	Percent Change Month	Year
Wyoming Total Nonfarm Employment	289,100	279,700	284,800	3.4	1.5
Wyoming State Government	17,500	17,400	17,100	0.6	2.3
Laramie County Nonfarm Employment	43,500	43,500	43,600	0.0	-0.2
Natrona County Nonfarm Employment	39,500	38,500	38,600	2.6	2.3
Selected U.S. Employment Data					
U.S. Multiple Jobholders	7,084,000	6,887,000	7,261,000	2.9	-2.4
As a percent of all workers	5.1%	4.9%	5.2%	N/A	N/A
U.S. Discouraged Workers	822,000	989,000	1,083,000	-16.9	-24.1
U.S. Part Time for Economic Reasons	8,270,000	8,425,000	8,513,000	-1.8	-2.9
Wyoming Unemployment Insurance					
Weeks Compensated	23,800	27,339	32,116	-12.9	-25.9
Benefits Paid	\$7,643,865	\$8,781,163	\$10,668,445	-13.0	-28.4
Average Weekly Benefit Payment	\$321.17	\$321.20	\$332.18	0.0	-3.3
State Insured Covered Jobs ¹	261,032	254,075	258,914	2.7	0.8
Insured Unemployment Rate	2.5%	2.9%	3.4%	N/A	N/A
Consumer Price Index (U) for All U.S. Urban Consumers (1982 to 1984 = 100)					
All Items	226.0	224.9	218.2	0.5	3.6
Food & Beverages	227.1	226.2	219.7	0.4	3.4
Housing	218.5	217.9	216.0	0.3	1.2
Apparel	122.3	122.2	121.0	0.1	1.0
Transportation	220.3	216.9	194.8	1.6	13.1
Medical Care	399.4	398.8	387.8	0.1	3.0
Recreation (Dec. 1997=100)	113.7	113.4	113.7	0.2	0.0
Education & Communication (Dec. 1997=100)	130.6	130.6	129.3	0.0	1.0
Other Goods & Services	385.5	386.2	379.7	-0.2	1.5
Producer Prices (1982 to 1984 = 100)					
All Commodities	204.2	202.8	184.8	0.7	10.5
Wyo. Bldg. Permits (New Privately Owned Housing Units Authorized)					
Total Units	150	152	160	-1.3	-6.3
Valuation	\$40,641,000	\$38,594,000	\$32,593,000	5.3	24.7
Single Family Homes	137	142	107	-3.5	28.0
Valuation	\$39,820,000	\$37,616,000	\$25,485,000	5.9	56.2
Casper MSA ² Building Permits	11	17	14	-35.3	-21.4
Valuation	\$1,355,000	\$2,605,000	\$2,336,000	-48.0	-42.0
Cheyenne MSA Building Permits	31	16	10	93.8	210.0
Valuation	\$4,690,000	\$2,876,000	\$1,793,000	63.1	161.6
Baker Hughes North American Rotary Rig Count for Wyoming	42	41	37	2.4	13.5

(p) Preliminary. (r) Revised. (b) Benchmarked.

¹Local Area Unemployment Statistics Program estimates.

²Metropolitan Statistical Area.

Note: Production worker hours and earnings data have been dropped from the Economic Indicators page because of problems with accuracy due to a small sample size and high item nonresponse. The Bureau of Labor Statistics will continue to publish these data online at <http://www.bls.gov/eag/eag.wy.htm>



Wyoming County Unemployment Rates

by: Carola Cowan, BLS Programs Supervisor

Teton County's unemployment rate fell from 13.0% in April to 9.2% in May, while more modest unemployment rate decreases were seen in Lincoln, Johnson, and Sheridan counties.

REGION	Labor Force			Employed			Unemployed			Unemployment Rates		
	May 2011	Apr 2011	May 2010	May 2011	Apr 2011	May 2010	May 2011	Apr 2011	May 2010	May 2011	Apr 2011	May 2010
County	(p)	(r)	(b)	(p)	(r)	(b)	(p)	(r)	(b)	(p)	(r)	(b)
NORTHWEST	44,441	44,534	45,741	41,590	41,626	42,476	2,851	2,908	3,265	6.4	6.5	7.1
Big Horn	4,867	4,889	5,053	4,529	4,545	4,684	338	344	369	6.9	7.0	7.3
Fremont	18,930	19,025	18,966	17,641	17,705	17,440	1,289	1,320	1,526	6.8	6.9	8.0
Hot Springs	2,490	2,482	2,530	2,359	2,353	2,402	131	129	128	5.3	5.2	5.1
Park	13,979	13,954	14,853	13,125	13,072	13,889	854	882	964	6.1	6.3	6.5
Washakie	4,175	4,184	4,339	3,936	3,951	4,061	239	233	278	5.7	5.6	6.4
NORTHEAST	53,793	53,592	54,167	50,912	50,575	50,398	2,881	3,017	3,769	5.4	5.6	7.0
Campbell	27,404	27,142	27,154	26,200	25,924	25,410	1,204	1,218	1,744	4.4	4.5	6.4
Crook	3,447	3,451	3,596	3,264	3,262	3,378	183	189	218	5.3	5.5	6.1
Johnson	3,877	3,886	3,945	3,610	3,592	3,611	267	294	334	6.9	7.6	8.5
Sheridan	15,868	15,902	16,140	14,813	14,766	14,875	1,055	1,136	1,265	6.6	7.1	7.8
Weston	3,197	3,211	3,332	3,025	3,031	3,124	172	180	208	5.4	5.6	6.2
SOUTHWEST	63,673	62,808	62,999	59,747	58,350	58,252	3,926	4,458	4,747	6.2	7.1	7.5
Lincoln	8,000	8,017	8,045	7,312	7,263	7,283	688	754	762	8.6	9.4	9.5
Sublette	7,089	7,115	7,157	6,843	6,861	6,822	246	254	335	3.5	3.6	4.7
Sweetwater	24,411	23,981	23,849	23,230	22,791	22,292	1,181	1,190	1,557	4.8	5.0	6.5
Teton	13,038	12,526	12,921	11,844	10,897	11,610	1,194	1,629	1,311	9.2	13.0	10.1
Uinta	11,135	11,169	11,027	10,518	10,538	10,245	617	631	782	5.5	5.6	7.1
SOUTHEAST	74,334	74,152	74,125	70,053	69,897	69,311	4,281	4,255	4,814	5.8	5.7	6.5
Albany	19,863	19,643	19,461	18,964	18,810	18,462	899	833	999	4.5	4.2	5.1
Goshen	6,259	6,287	6,300	5,909	5,923	5,918	350	364	382	5.6	5.8	6.1
Laramie	42,805	42,853	42,599	40,062	40,069	39,486	2,743	2,784	3,113	6.4	6.5	7.3
Niobrara	1,218	1,215	1,271	1,168	1,163	1,211	50	52	60	4.1	4.3	4.7
Platte	4,189	4,154	4,494	3,950	3,932	4,234	239	222	260	5.7	5.3	5.8
CENTRAL	56,114	55,304	56,026	52,883	52,048	52,097	3,231	3,256	3,929	5.8	5.9	7.0
Carbon	7,495	7,490	8,013	7,003	6,984	7,433	492	506	580	6.6	6.8	7.2
Converse	7,399	7,392	7,533	7,045	7,042	7,084	354	350	449	4.8	4.7	6.0
Natrona	41,220	40,422	40,480	38,835	38,022	37,580	2,385	2,400	2,900	5.8	5.9	7.2
STATEWIDE	292,355	290,389	293,059	275,185	272,495	272,534	17,170	17,894	20,525	5.9	6.2	7.0
Statewide Seasonally Adjusted										6.0	6.0	7.1
U.S.										8.7	8.7	9.3
U.S. Seasonally Adjusted										9.1	9.0	9.6

Prepared in cooperation with the Bureau of Labor Statistics. Benchmarked 02/2011. Run Date 06/2011.

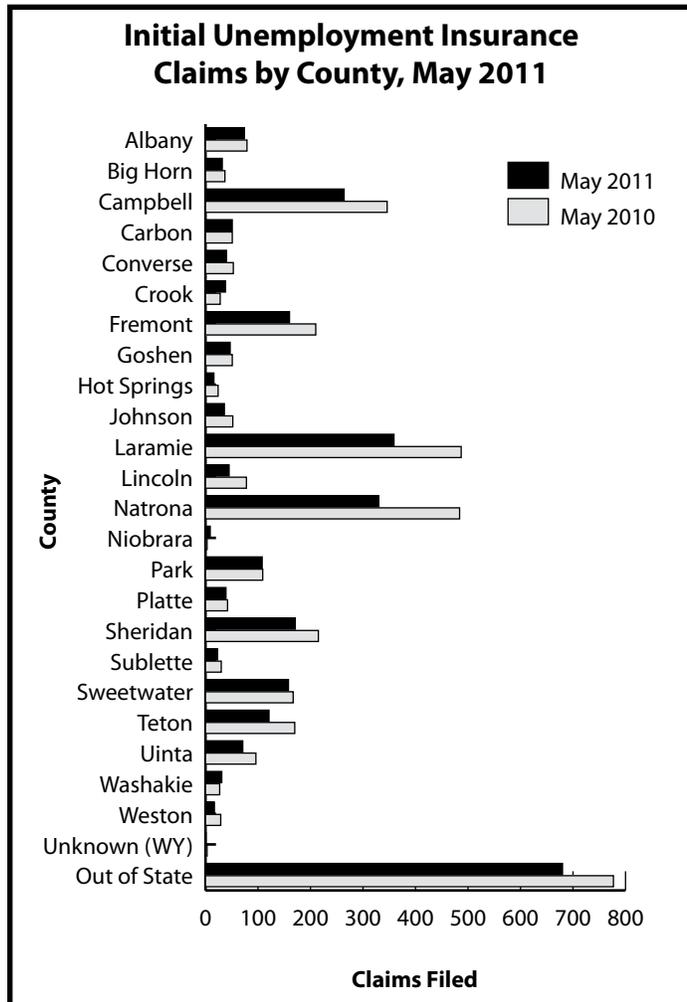
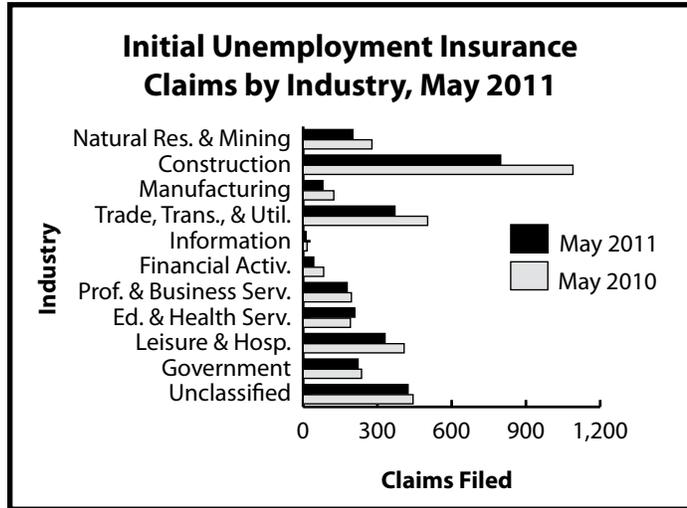
Data are not seasonally adjusted except where otherwise specified.

(p) Preliminary. (r) Revised. (b) Benchmarked.

Wyoming Normalized^a Unemployment Insurance Statistics: Initial Claims

by: Douglas W. Leonard, Senior Economist

May's statewide initial claims total was 30.9% less than in April and 19.9% less than in May of last year. The 30.9% over-the-month decline was the largest on a percentage basis since May 2007.



Initial Claims	Claims Filed		Percent Change	
	May 11	Apr 11	May 11	May 10
Wyoming Statewide	2,923	4,229	-30.9	-19.9
TOTAL CLAIMS FILED	2,923	4,229	-30.9	-19.9
TOTAL GOODS-PRODUCING	1,079	1,270	-15.0	-27.7
Natural Res. & Mining	201	267	-24.7	-27.7
Mining	187	242	-22.7	-25.8
Oil & Gas Extraction	9	13	-30.8	-30.8
Construction	798	893	-10.6	-26.8
Manufacturing	80	110	-27.3	-35.5
TOTAL SERVICE-PROVIDING	1,198	2,250	-46.8	-18.8
Trade, Transp., & Utilities	371	500	-25.8	-26.2
Wholesale Trade	51	54	-5.6	-58.9
Retail Trade	209	278	-24.8	-16.7
Transp., Warehousing & Utilities	111	168	-33.9	-13.3
Information	12	21	-42.9	-25.0
Financial Activities	43	55	-21.8	-48.2
Prof. and Business Svcs.	178	204	-12.7	-8.7
Educational & Health Svcs.	209	169	23.7	9.4
Leisure & Hospitality	331	1,222	-72.9	-18.9
Other Svcs., exc. Public Admin.	54	79	-31.6	-31.6
TOTAL GOVERNMENT	222	222	0.0	-5.9
Federal Government	49	87	-43.7	-40.2
State Government	23	27	-14.8	27.8
Local Government	150	108	38.9	10.3
Local Education	53	24	120.8	35.9
UNCLASSIFIED	424	487	-12.9	-4.5

Laramie County					
TOTAL CLAIMS FILED	356	355	486	0.3	-26.7
TOTAL GOODS-PRODUCING	115	134	196	-14.2	-41.3
Construction	107	122	173	-12.3	-38.2
TOTAL SERVICE-PROVIDING	191	171	238	11.7	-19.7
Trade, Transp., & Utilities	65	61	76	6.6	-14.5
Financial Activities	8	9	14	-11.1	-42.9
Prof. & Business Svcs.	28	27	31	3.7	-9.7
Educational & Health Svcs.	45	37	37	21.6	21.6
Leisure & Hospitality	34	27	63	25.9	-46.0
TOTAL GOVERNMENT	35	31	34	12.9	2.9
UNCLASSIFIED	15	19	18	-21.1	-16.7

Natrona County					
TOTAL CLAIMS FILED	327	343	482	-4.7	-32.2
TOTAL GOODS-PRODUCING	105	119	207	-11.8	-49.3
Construction	67	82	161	-18.3	-58.4
TOTAL SERVICE-PROVIDING	197	195	261	1.0	-24.5
Trade, Transp., & Utilities	77	57	104	35.1	-26.0
Financial Activities	7	6	14	16.7	-50.0
Prof. & Business Svcs.	26	39	36	-33.3	-27.8
Educational & Health Svcs.	32	34	38	-5.9	-15.8
Leisure & Hospitality	42	37	54	13.5	-22.2
TOTAL GOVERNMENT	11	13	9	-15.4	22.2
UNCLASSIFIED	14	16	5	-12.5	180.0

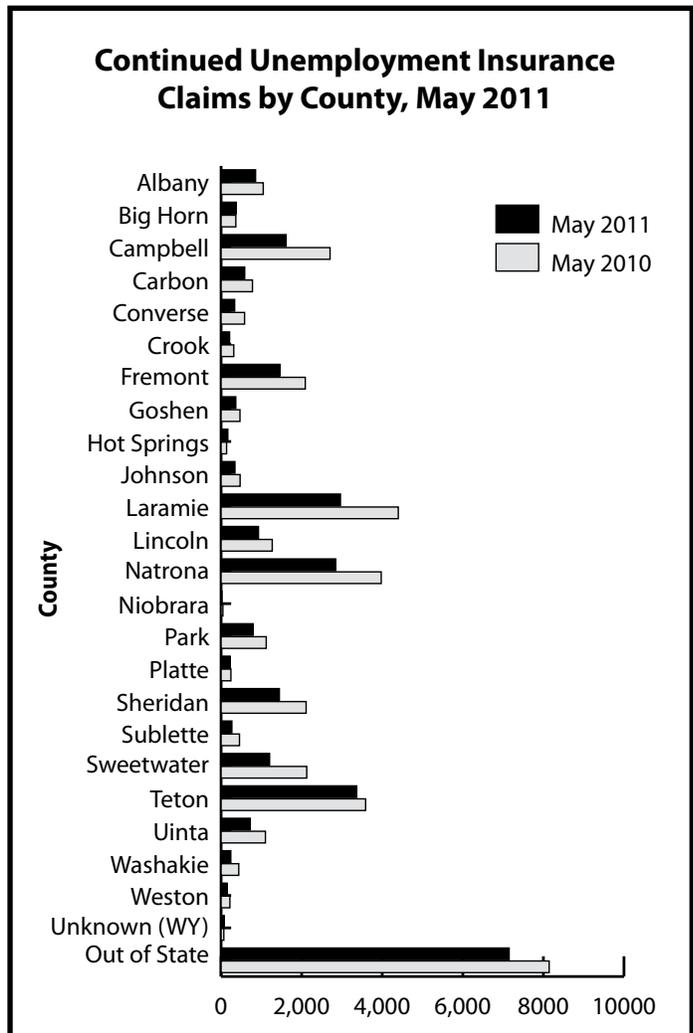
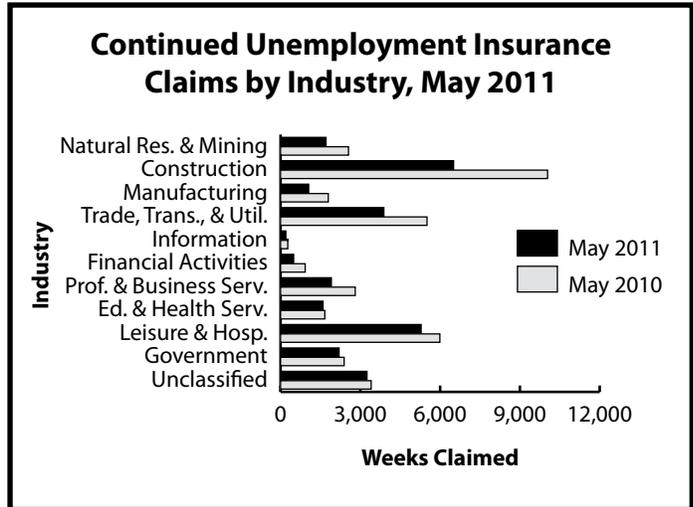
^aAn average month is considered 4.33 weeks. If a month has four weeks, the normalization factor is 1.0825. If the month has five weeks, the normalization factor is 0.866. The number of raw claims is multiplied by the normalization factor to achieve the normalized claims counts.

Wyoming Normalized^a Unemployment Insurance Statistics: Continued Claims

by: Douglas W. Leonard, Senior Economist

Continued weeks claimed declined by 25.0% compared to this time last year. May's continued claims total of 28,720 was 60.1% greater than the top of the historic range from 1997 to 2008.

Continued Claims	Percent Change				
	Continued Weeks Claimed			Weeks Claimed	
	May 11	Apr 11	May 10	Apr 11	May 10
Wyoming Statewide					
TOTAL WEEKS CLAIMED	28,720	32,734	38,272	-12.3	-25.0
EXTENDED WEEKS CLAIMED	16,678	17,773	25,637	-6.2	-34.9
TOTAL UNIQUE CLAIMANTS^b	8,507	10,035	11,202	-15.2	-24.1
<i>Benefit Exhaustions</i>	877	1,138	1,212	-22.9	-27.6
<i>Benefit Exhaustion Rates</i>	10.3%	11.3%	10.8%	-1.0%	-0.5%
TOTAL GOODS-PRODUCING	9,274	11,847	14,390	-21.7	-35.6
Natural Res. & Mining	1,710	1,825	2,555	-6.3	-33.1
Mining	1,524	1,618	2,297	-5.8	-33.7
Oil & Gas Extraction	115	118	150	-2.5	-23.3
Construction	6,506	8,678	10,040	-25.0	-35.2
Manufacturing	1,058	1,344	1,795	-21.3	-41.1
TOTAL SERVICE-PROVIDING	13,995	14,966	18,084	-6.5	-22.6
Trade, Transp., & Utilities	3,885	4,261	5,508	-8.8	-29.5
Wholesale Trade	503	539	877	-6.7	-42.6
Retail Trade	2,446	2,722	3,248	-10.1	-24.7
Transp., Warehousing & Utilities	936	1,000	1,383	-6.4	-32.3
Information	200	202	272	-1.0	-26.5
Financial Activities	492	541	927	-9.1	-46.9
Prof. & Business Services	1,911	2,360	2,808	-19.0	-31.9
Educational & Health Svcs.	1,598	1,673	1,665	-4.5	-4.0
Leisure and Hospitality	5,287	5,327	5,990	-0.8	-11.7
Other Svcs., exc. Public Admin.	622	602	914	3.3	-31.9
TOTAL GOVERNMENT	2,201	2,729	2,391	-19.3	-7.9
Federal Government	791	1,262	709	-37.3	11.6
State Government	254	258	306	-1.6	-17.0
Local Government	1,156	1,209	1,376	-4.4	-16.0
Local Education	211	213	253	-0.9	-16.6
UNCLASSIFIED	3,250	3,192	3,407	1.8	-4.6
Laramie County					
TOTAL WEEKS CLAIMED	2,962	3,551	4,398	-16.6	-32.7
TOTAL UNIQUE CLAIMANTS	861	1,065	1,313	-19.2	-34.4
Total Goods-Producing	860	1,228	1,515	-30.0	-43.2
Construction	739	1,049	1,268	-29.6	-41.7
Total Service-Providing	1,631	1,824	2,308	-10.6	-29.3
Trade, Transp., and Utilities	515	599	894	-14.0	-42.4
Financial Activities	95	101	220	-5.9	-56.8
Prof. & Business Svcs.	262	363	406	-27.8	-35.5
Educational and Health Svcs.	403	415	290	-2.9	39.0
Leisure & Hospitality	224	247	301	-9.3	-25.6
TOTAL GOVERNMENT	352	402	475	-12.4	-25.9
UNCLASSIFIED	119	97	100	22.7	19.0
Natrona County					
TOTAL WEEKS CLAIMED	2,845	3,169	3,975	-10.2	-28.4
TOTAL UNIQUE CLAIMANTS	841	928	1,191	-9.4	-29.4
Total Goods-Producing	825	987	1,479	-16.4	-44.2
Construction	523	678	953	-22.9	-45.1
Total Service-Providing	1,826	1,968	2,244	-7.2	-18.6
Trade, Transp., and Utilities	641	726	811	-11.7	-21.0
Financial Activities	63	65	152	-3.1	-58.6
Professional & Business Svcs.	340	350	386	-2.9	-11.9
Educational & Health Svcs.	288	305	377	-5.6	-23.6
Leisure & Hospitality	296	323	308	-8.4	-3.9
TOTAL GOVERNMENT	121	137	166	-11.7	-27.1
UNCLASSIFIED	73	77	86	-5.2	-15.1



^aAn average month is considered 4.33 weeks. If a month has four weeks, the normalization factor is 1.0825. If the month has five weeks, the normalization factor is 0.866. The number of raw claims is multiplied by the normalization factor to achieve the normalized claims counts.
^bDoes not include claimants receiving extended benefits.

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Research & Planning
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