

New Hires in Wyoming: An In-Depth Analysis

While the level of growth in Wyoming's economy is very slow and gradual, there is a tremendous amount of activity underneath. In fourth quarter 2009 and first quarter 2010, Wyoming's employers added 39,902 new hires. Each of these new hires is an employee who had not worked for that particular employer before.

Keep in mind that these 39,902 new hires were added during the lowest point of Wyoming's economic downturn. Ongoing research will be presented online and in a future article in *Wyoming Labor Force Trends*, showing that substantially more new hires were made in the following quarters.

What types of occupations were filled? See page 3. The New Hires Survey conducted by the Research & Planning (R&P) section of the Wyoming Department of Employment captured direct information from employers about the types of new hires, what they earned, and what level of education employers required. For example, there were 1,336 truck drivers, heavy & tractor trailer, hired during this period; those hired for this occupation earned a median hourly wage of \$17.00. Of these truck drivers, 78.9% were still employed one quarter after hire. Also, the 320 registered nurses hired during this period earned a median hourly wage of \$23.00.

How did the employer and new hire connect? See page 18. Technology has changed the way employers and job seekers find one another. Employers are advertising openings on their own websites and are seeking out potential employees through various social media outlets. Likewise, job seekers are able to find out more about their potential employers than ever before.

How many Wyoming firms are involved in energy-efficient activities? See page 23. R&P's Baseline Survey asked employers whether they were involved in energy-efficient activities; among employers surveyed, 11.5% said their companies were involved in these types of activities.

Find More Online

http://doe.state.wy.us/LMI/energy.htm

This website includes comprehensive tables made up from data collected from Research & Planning's New Hires Survey. The tables include information such as the number of new hires made for each occupation, median wage, the level of education required, types of benefits offered to new hires, what percent of new hires were still employed one quarter later, and more. Unemployment Rate by Wyoming County, December 2010 (Not Seasonally Adjusted)



IN THIS ISSUE

Wyoming Labor Force Trends

A monthly publication of the Wyoming Department of Employment, Joan Evans, Director

Research & Planning P.O. Box 2760 Casper, WY 82602-2760 doeerd_r&p_web@state.wy.us 307-473-3807

Tom Gallagher, Manager Tony Glover, Workforce Information Supervisor

Carola Cowan, Bureau of Labor Statistics Programs Supervisor

Phil Ellsworth, Editor Michael Moore, Associate Editor

Editorial Committee: David Bullard, Valerie A. Davis, Phil Ellsworth, and Michael Moore

Contributors to *Wyoming Labor Force Trends* this month: David Bullard, Carola Cowan, Margaret Hiatt, Lisa Knapp, Douglas W. Leonard, Patrick Manning, and Michael Moore.

Subscriptions, additional copies, and back issues available free of charge. © Copyright 2011 by the Wyoming Department of Employment, Research & Planning.

Material contained in this publication is in the public domain and may be reproduced without special permission provided that source credit is given to: **Wyoming Labor Force Trends,** Wyoming Department of Employment, Research & Planning.

Department of Employment Nondiscrimination Statement

The Department of Employment does not discriminate on the basis of race, color, religion, national origin, sex, age, or disability. It is our intention that all individuals seeking services from our agency be given equal opportunity and that eligibility decisions be based upon applicable statutes, rules, and regulations.

Mission statement available at http:// doe.state.wy.us/LMI/mission.pdf.

ISSN 0512-4409

Survey Captures Data on Wyoming New Hires

by: Lisa Knapp, Research Analyst

uring the spring of 2010, the Research & Planning (R&P) section of the Wyoming Department of Employment, along with several other state Labor Market Information offices, received funding to study the workforce and, as a subset, jobs that spend time on activities that increase energy efficiency, use or develop renewable energy resources, or preserve and restore the environment. 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 energyefficient activities and was designed to capture and assess the types of skills needed for jobs in Wyoming. Ultimately, the goal of this project is to determine what types of jobs are available in the state, which ones are likely to be energy-efficient, and whether there are any significant differences between energy-efficient jobs and those that are not energy efficient.

The results of this study will inform educators, training providers, and policymakers about the skill sets employers think are important for these jobs. These entities can then use the results to develop curricula to help train Wyoming's future workforce for these positions.

This study employs a strategy of combining survey data with administrative datasets such as the Wyoming Unemployment Insurance (UI) Wage Records database and the Quarterly Census of Employment and Wages (QCEW). Among the advantages to using the UI Wage Records database linked to other administrative datasets is that it is a low-cost source of data and, because it is collected by law for tax purposes, there is less chance for the recall bias or misrepresentation that can occur with surveys.

As Figure 1 (see page 4) shows, there are many advantages to using linked administrative data. In the past, they have been used to analyze wage progression, job tenure and turnover, compensation, training outcomes, commuting, and more. Because these datasets are collected at regular intervals, it makes using longitudinal analysis to identify trends and changes over time possible. Administrative databases also allow for a quasi-experimental research design to conduct comparisons between groups with a certain characteristic (treatment group) and a random, matched sample of the total population (control group) to identify statistically significant differences between the two.

Although there are many advantages to using administrative datasets in research, there is one major disadvantage. Administrative datasets lack the rich detail needed for some research, which is where survey data become important. Survey data are used by R&P to supplement administrative datasets with information on occupations, skills, educational requirements, indirect compensation, satisfaction, etc. The biggest disadvantage to using survey data is that it is costly. The second is that it represents a cross-section of a population taken at a single point in time and cannot be used to identify trends or change. However, R&P is able to link survey responses to administrative datasets to track respondent outcomes over time or for other longitudinal research.

This strategy, combining administrative

data with survey data, has been used by R&P several times in the past. In 2003 (Saulcy, 2003) and 2004 (Saulcy, 2004), a questionnaire was sent to employers regarding the skills of recent Wyoming community college graduates. The responses from these questionnaires were combined with UI wage records data to track community college students after graduation, compare the wages of community college graduates to non-college graduates, and to analyze the satisfaction of employers with the skills of the people they hire. In 2005, R&P worked with the Wyoming Lodging and Restaurant Association (Saulcy and Harris, 2005) to compare the employment and wage history of students who had participated in the Wyoming Hospitality Alliance Mentoring (WHAM) program to those who did not. Survey data were collected during this project to analyze employer satisfaction with the skills of those who had gone through the program.

Among the topics in the current survey questionnaire is the extent to which jobs in the state are engaged in energy-efficient activities. The Bureau of Labor Statistics (BLS) defines energy-efficient jobs in two ways. The first is an output approach and

	Admini Rec	strative ords	Surv	/eys	Adminis Records Surv	trative Tied to eys
	Advantage	Disadvantage	Advantage	Disadvantage	Advantage	Disadvantage
Longitudinal	х			х	x	
Integrate Training and Education with Work Force Outcomes; Lends Itself to Quasi-Experimental Design of Comparison Groups	x			x	x	
Total Compensation	х			х	x	
Permits Calculation of Tenure with Employer	x			x	x	
Experience with Industry	х			x	x	
Experience with Locality	x			x	x	
Wage Progression Inter-Industry Job Change	x			х	x	
Inter-State Job Change	х			x	x	
Rich Detail (May Not Have Occupation, Rate of Compensation, Benefits, Skills)		x	х		x	

Figure 1: Tying Surveys to Linked Administrative Databases Eliminates Disadvantages Associated with Each

is defined as "jobs that produce goods or provide services that benefit the environment or conserve natural resources." The second is a process approach and is defined as "jobs in which workers' duties involve making their establishments' production processes more environmentally friendly or use fewer natural resources" (Bureau of Labor Statistics). For the purposes of this study, energyefficient jobs may fit into either or both of the definitions since the categories are not mutually exclusive.

Currently there is little research available about what jobs are most likely to perform energy-efficient activities but the results of this study should help to provide more insight. This research will also provide information about the industries in which these energy-efficient jobs are found. Staffing patterns then can be used to determine whether any differences exist in the way employers fill energy-efficient jobs and jobs that are not energy-efficient. Analysis also will compare tenure and wage progression for employees working in energy-efficient jobs compared to others.

The data from this project will allow for the comparison of the types of skills needed for jobs that perform energyefficient activities and those that do not. It will also allow for the comparison of other job-related attributes such as education, benefits, and wages.

There is no current comprehensive and accurate source of data describing the jobs for which Wyoming employers hire. The data collected during this study will show what types of job openings are available in the state and the skills and qualifications workers need for those jobs. Benefits and pay rates are also being collected and will be analyzed by job and industry. Finally, the results of this study will be combined with wage and employer data from the UI Wage Records database to determine job tenure — how long the employee stayed with the firm — and wage progression. Tenure and wage progression are both important tools in assessing job quality. R&P has conducted research on this subject in the past (Edlin, 1995), particularly in terms of evaluating training programs (Harris, 2002). With the results of this study, tenure can be measured for jobs that perform energy-efficient activities and for those that do not, and can be compared to determine any significant differences.

Methodology

Table 1 (see page 7) contains an example of quarterly turnover statistics, which are included in R&P's Wyoming Labor Force Trends publication (Leonard, 2010). UI wage records are used to create turnover statistics. These wage records contain the employer's unemployment insurance identification number, worker social security number, and worker wages by quarter for each job worked in Wyoming. It is possible for a worker to have more than one job in a quarter, so turnover statistics refer to the transaction or job rather than the worker. There are four types of transactions related to turnover:

1. Hires, in which a person is hired for a job in a specified quarter and is still employed by that employer in the next quarter;

2. Exits, in which the employee has worked for a firm during a specified quarter and those prior, but not during the subsequent quarter; 3. Both hire and exit, in which the employee started a job and worked for a firm only within a quarter;

4. Continuous, where the employee is employed by a firm for all quarters of interest (previous, current, and subsequent; Glover, 2001).

During fourth quarter 2009 (2009Q4; the reference period for the first panel of this study), there were 28,193 jobs in the state that were a "hire" (9.2% of all transactions), 16,050 jobs that were both a "hire" and an "exit" (5.3% of all transactions), 40,467 jobs categorized as exits (13.3% of all transactions), and 220,455 jobs that were worked continuously (72.2% of all transactions). The total turnover rate during this quarter was 27.8%.

For the purpose of this study, R&P was interested in sampling from only those employees who were designated "hires," excluding those who fell in the "both" category. Specifically, this research only included employees who were considered a "new hire" during the quarter of interest (2009Q4, in this case). "New hire" was defined as someone who was hired by a firm for which he or she had not worked in at least the last 20 years (the time frame for which R&P has UI wage records). 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 who were retained by the same employer for at least two quarters. These jobs were probably more likely to require a training or educational investment by the employer. This was done to track the types of jobs for which employers were hiring and the skills required for these positions.

Because R&P wanted to use the most current UI wage records available for drawing the sample, it meant that there would not be access to data from the subsequent guarter to verify that the employee still worked for the same employer. To estimate the probability of employment duration lasting more than one quarter, a binary logistic regression model was created to predict which new hires would still be working in the next quarter. This model was created by using historical new hire data from first quarter 2005 through first quarter 2009. Five variables (age, wages, gender, industry, and quarter) were added as independent variables in the attempt to explain retention (Leonard, 2010).

All new hires in the most current quarter of UI wage records data were given a score based on the results of the logistic regression. It was decided that a probability of 0.5 was the lowest acceptable value for the probability of retention. Only those with a score of 0.5 or greater were selected from the universe; this became the subset of workers from which the survey sample was drawn. This methodology was tested using two available quarters of UI wage records data prior to beginning the project and the model was found to have an accuracy rate of more than 70%. The results of this study will be generalized to the universe of all new hires meeting the model criteria.

R&P randomly samples employers for several other research projects. To reduce survey burden and increase response rates, any employer receiving one of the other mail questionnaires was removed. In addition, in order to reduce the respondent burden, it was decided that the maximum number of questionnaires any employer would get was four. This decision was made based on prior experience regarding respondent burden and the need for an adequate sample of events. Up to four new hires were randomly selected from each employer UI account; those selected jobs then became the final universe from which the sample was drawn. There were 28,193 total hires-only during 2009Q4 (the most current quarter of data available when the project started; see Table 1), but 9,401 were removed for several reasons. Many of these were removed because they were rehires or they did not meet the 0.5 threshold for probability of working with the same employer during the next quarter

Major Industry		Hires	Total Hires	Both Hire and Fxit	Exit Only	Total Fxits	Continuous Employment	Total	Turnover Rate
Aariculture, Forestry, Fishing,	Transactions	171	504	333	478	811	1,916	2,898	Indie
& Hunting	Rates	5.9	17.4	11.5	16.5	28	66.1	100	33.9
	Transactions	1,961	2,844	883	2,640	3,523	21,130	26,614	
Mining	Rates	7.4	10.7	3.3	9.9	13.2	79.4	100	20.6
Comptantion	Transactions	2,931	5,876	2,945	6,887	9,832	17,176	29,939	120
Construction	Rates	9.8	19.6	9.8	23	32.8	57.4	100	42.6
Manufacturing	Transactions	660	1,089	429	956	1,385	8,671	10,716	10.1
Manufacturing	Rates	6.2	10.2	4	8.9	12.9	80.9	100	19.1
Wholesale Trade, Transportation, Utilities, &	Transactions	1,398	2,204	806	2,001	2,807	17,263	21,468	19.6
Warehousing	Rates	6.5	10.3	3.8	9.3	13.1	80.4	100	
	Transactions	3,870	5,922	2,052	4,877	6,929	25,818	36,617	205
Retail Irade	Rates	10.6	16.2	5.6	13.3	18.9	70.5	100	29.5
Information	Transactions	317	394	77	314	391	3,980	4,688	151
Information	Rates	6.8	8.4	1.6	6.7	8.3	84.9	100	15.1
Einancial Activitios	Transactions	857	1,187	330	1,065	1,395	9,472	11,724	10.2
Tillalicial Activities	Rates	7.3	10.1	2.8	9.1	11.9	80.8	100	19.2
Professional & Business	Transactions	2,017	4,004	1,987	3,774	5,761	13,135	20,913	37.2
Services	Rates	9.6	19.1	9.5	18	27.5	62.8	100	57.2
Educational Services	Transactions	2,980	4,434	1,454	1,661	3,115	26,625	32,720	186
	Rates	9.1	13.6	4.4	5.1	9.5	81.4	100	10.0
Health Services	Transactions	2,753	3,625	872	3,189	4,061	26,490	33,304	20.5
	Rates	8.3	10.9	2.6	9.6	12.2	79.5	100	
Leisure & Hospitality	Transactions	6,232	9,281	3,049	9,759	12,808	22,570	41,610	45.8
	Rates	15	22.3	7.3	23.5	30.8	54.2	100	
Other Services	Transactions	871	1,341	470	1,194	1,664	6,367	8,902	28.5
	Rates	9.8	15.1	5.3	13.4	18.7	71.5	100	
Public Administration	Transactions	1,175	1,534	359	1,672	2,031	19,841	23,047	13.9
	Rates	5.1	6.7	1.6	7.3	8.8	86.1	100	
Unclassified	Iransactions	0	4	4	0	4	1	100	80
	Rates	0	80	80	0	80	20	100	
Total	Iransactions	28,193	44,243	16,050	40,467	56,517	220,455	305,165	27.8
	Rates	9.2	14.5	5.3	13.3	18.5	72.2	100	

Table 1: Quarterly Turnover Statistics by Industry, Fourth Quarter 2009

February 2011

http://doe.state.wy.us/LMI

(2010Q1), or they were outside of the up to four randomly selected employees from each firm. This left 18,792 new hires (see Table 2) from which to draw the 2009Q4 sample. The sample was stratified by industry. As illustrated in Table 1, industries in Wyoming vary widely in their turnover, hiring practices, skill sets, etc. Essentially, the sample was

Table 2: Response ar	nd Margin of	Error, Nev	v Hires Pa	anel 1						
Industry	Selected by Regression Model	n Selected for Sample	Row %	Undeliverable	Row %	Refused	Row %	Completed	Response Rate (Minus Undeliverable)	Current Margin of Error
Agriculture, Forestry, Fishing, & Hunting	162	115	0.7	1	0.9	2	1.7	90	78.9%	6.91%
Mining, Quarrying, & Oil & Gas	1,688	319	0.2	16	5.0	4	1.3	199	65.7%	6.49%
Utilities	64	28	0.4	5	17.9	1	3.6	20	87.0%	18.31%
Construction	2,094	325	0.2	9	2.8	1	0.3	221	69.9%	6.28%
Manufacturing	495	217	0.4	7	3.2	9	4.1	146	69.5%	6.82%
Wholesale Trade	511	221	0.4	23	10.4	5	2.3	143	72.2%	7.00%
Retail Trade	2,896	340	0.1	19	5.6	11	3.2	208	64.8%	6.58%
Transportation & Warehousing	614	237	0.4	14	5.9	4	1.7	155	69.5%	6.84%
Information	291	167	0.6	11	6.6	19	11.4	124	79.5%	6.77%
Finance & Insurance	445	207	0.5	16	7.7	5	2.4	139	72.8%	7.12%
Real Estate & Rental & Leasing	260	135	0.5	21	15.6	5	3.7	90	78.9%	8.37%
Professional, Scientific, & Tech. Svcs.	427	203	0.5	14	6.9	2	1.0	141	74.6%	6.95%
Management of Companies & Enterprises	18	17	0.9	3	17.6	0	0.0	13	92.9%	14.74%
Administrative & Support & Waste	836	265	0.3	11	4.2	10	3.8	169	66.5%	6.74%
Educational Services	1,555	269	0.2	3	1.1	1	0.4	203	76.3%	6.43%
Health Care & Social Assistance	2,587	335	0.1	15	4.5	7	2.1	257	80.3%	5.80%
Arts, Entertainment, & Recreation	318	175	0.6	8	4.6	1	0.6	136	81.4%	6.53%
Accomodation & Food Services	2,947	342	0.1	8	2.3	5	1.5	235	70.4%	6.19%
Other Services	584	232	0.4	10	4.3	2	0.9	174	78.4%	6.28%
Public Administration		227		0	0.0	0	0.0	172	75.8%	
Total	18,792	4,376	23.3	213	4.9	97	2.2	3,035	72.9%	

drawn independently for each industry in a manner that would ensure a 95% confidence level with +/- 0.05 error. Table 2 shows the number of new hires that, according to the regression model results, would most likely be employed by the same employer for at least two quarters and the number included in the sample by industry.

Employers with employees in the sample were sent a cover letter and a questionnaire for each sampled employee along with an addressed, stamped return envelope. The cover letter included information about the purpose of the questionnaire and information on how the study results would be used.

This project was designed to measure elements of the job rather than attributes and abilities of the employee hired for the job. Questions on the mail questionnaire pertained to the rate of pay, hours worked, benefits offered, and qualifications needed for the job as well as the amount of time that job performed energy-efficient tasks. The questionnaire also included a series of job skills and asked employers to rate the level of importance of each skill to the job on a scale of one to three. These skills included service orientation, critical thinking, reading comprehension, technology design, and operation and control. Employers were given a space to write in the one skill they felt was most important in performing the job's duties. That skill may have been one that was included in those that the employer had previously rated, or it might have been something completely different. Finally, there were two questions about the employee: the employer's level of satisfaction with the employee's work skills and whether the employee was still employed in the job. These two were the only questions on the survey instrument that referred directly to

the worker.

R&P hired the Wyoming Survey and Analysis Center (WYSAC) at the University of Wyoming to perform cognitive interviews with the questionnaire and cover letter (Furgeson & Dorsomm, 2010). The purpose of these interviews was to ensure the questionnaire and cover letter were easy to read and understand, and, in the case of the questionnaire, that it was actually measuring the concepts it was intended to measure. WYSAC randomly chose 10 companies to participate in these interviews; these companies fell into a variety of geographical regions, industries, and employer sizes to better represent the economic make-up of the state.

The results of these cognitive interviews were used to refine the content of the cover letter to better convey to employers the purpose of the study and what they were being asked to do. The results were also used to simplify or clarify questions on the survey instrument that interviewees found confusing and to revise those questions that did not appear to capture the desired data. More information about this process and the cognitive interview findings can be found at http://doe.state.wy.us/LMI/energy. htm.

Data collection for the first panel of this project, which consisted of new hires from 2009Q4, began on May 26, 2010, and ran through June 11, 2010. Address refinement postcards were mailed to the 2,752 employers for whom the new hires worked (see Table 3, page 10). These cards included a space for the employer to supply contact information such as name and title, as well as space for address updates. They were then mailed back to R&P. Updated address information also was received from the United States Postal Service for postcards that could not be delivered to the address on file.

Questionnaires were sent out in June 2010, and data were collected through September 2010. A questionnaire was mailed to employers up to three times during this period. During the first mailing (June 14 – July 2, 2010), all employers received questionnaires pertaining to their new hires. Only employers who did not respond received questionnaires during the two follow-up mailings (July 8 – July 30, 2010, and August 2 – September 22, 2010, respectively). On August 18, 2010, in order to increase the response rate, R&P began making phone calls to employers who had not responded to any of the three questionnaires that had been mailed to them, and their responses were taken over the phone.

Table 2 shows detailed response data for the first panel of this study. In total, questionnaires were mailed out for 4,376 new hires, approximately 23.3% of the new hires eligible to be sampled. Of these, 213 (4.9%) could not be delivered due to insufficient employer address information, and 97 employers (2.2%) refused to respond. R&P received 3,035 completed questionnaires. After removing the questionnaires that could not be delivered from the total, the overall response rate was 72.9%. The response rate by industry ranged from a high of 92.9% for management of companies & enterprises

hable 5. Response nate for Employers by	industry, i u		1	1			1
Industry	Sample n	Undeliverable	Row %	Refused	Row %	Completed	Response Rate (Minus Undeliverable)
Agriculture	75	1	1.3	2	2.7	56	75.7%
Mining	182	8	4.4	2	1.1	113	64.9%
Utilities	16	3	18.8	1	6.3	11	84.6%
Construction	216	6	2.8	1	0.5	155	73.8%
Manufacturing	125	5	4.0	3	2.4	84	70.0%
Wholesale Trade	148	14	9.5	4	2.7	99	73.9%
Retail Trade	253	13	5.1	6	2.4	165	68.8%
Transportation & Warehousing	147	7	4.8	3	2.0	94	67.1%
Information	92	4	4.3	9	9.8	73	83.0%
Finance & Insurance	139	9	6.5	7	5.0	90	69.2%
Real Estate	100	11	11.0	5	5.0	72	80.9%
Professional, Scientific, & Technical Services	163	9	5.5	5	3.1	112	72.7%
Management of Companies & Enterprises	8	1	12.5	0	0.0	6	85.7%
Administrative & Support	166	8	4.8	0	0.0	108	68.4%
Education	107	2	1.9	1	0.9	80	76.2%
Health Care & Social Assistance	213	10	4.7	5	2.3	165	81.3%
Arts, Entertainment, & Recreation	93	5	5.4	0	0.0	71	80.7%
Accomodation & Food Services	252	7	2.8	4	1.6	171	69.8%
Other Services	165	10	6.1	1	0.6	120	77.4%
Public Administration	92	0	0.0	0	0.0	71	77.2%
Total	2,752	132	4.8	59	2.1	1,916	73.1%

Table 3: Response Rate for Employers by Industry, Panel 1

to a low of 64.8% for retail trade. The 97 refusals were included in the calculation of response rates but will not be included in any further analysis.

Employers were asked to mark "yes, the employee did work for this company during the reference period" or "no, the employee did not work for this company." As shown in Table 4, 2,841 (93.6%) of questionnaires were marked "yes" and 194 (6.4%) were marked "no." If they chose yes, they were asked to complete the questionnaire; if they chose no, they were asked to mail the questionnaire back to R&P in the

Table 4: Di the Comp Period?	id this Employ any During th	yee Work for ne Reference
	n	Percent
Yes	2,841	93.6%
No	194	6.4%
Total	3,035	100.0%

enclosed envelope. All returned questionnaires, regardless of how the employer answered this question, were included in the calculation of response rates. However, only responses from the questionnaires that indicated the employee did work for the firm were used in the following analysis.



As noted in the introduction, energyefficient jobs are defined as such based on the goods they produce, the methods of production, or both. One of the research questions this project seeks to answer is whether there is a difference in job tenure for those employed in energyefficient jobs compared to those employed in jobs that employers do not consider energy-efficient. To do this, the proportion of employees

still employed by the same firm one quarter after hire (the most current data available) are compared for each group. Because currently only one panel of data has been collected, only broad generalizations are possible at this time. As R&P collects more data, advanced statistical analysis will be performed.

Overall, R&P received data on 2,841 new hires during the first panel of data collection (see Table 4) for which the employer responded, "yes, the employee did work for this company," and, of those, 2,782 had valid responses to the question regarding the job's level of energyefficiency (see Table 5). In total, 446 (16.0%) worked in energy-efficient jobs while 1,838 (66.1%) worked in jobs that were not considered energy-efficient. The energy-efficient status was unknown for almost one in five workers (n =

Table 5:	Selected	Statistics	for All Jo	obs, Jobs i	in Mining	, and Job	s in Healt	h Care					
		E	nergy-Eff	icient Job	95	Not	Energy-E	fficient J	obs	Energy-I	Efficient S	Status Ur	nknown
	n, New Hires	n	% of Total	n, Still Emp	% of Total	n	% of Total	n, Still Emp	% of Total	n	% of Total	n, Still Emp	% of Total
All Jobs	2,782	446	16.0%	356	79.8%	1,838	66.1%	1,375	74.8%	498	17.9%	375	75.3%
Jobs, Mining	184	46	25.0%	35	76.1%	79	42.9%	54	68.4%	59	32.1%	43	72.9%
Jobs, Health Care	235	15	6.4%	14	93.3%	193	82.1%	163	84.5%	27	11.5%	21	77.8%

February 2011

498, 17.9%). A greater proportion of those working in energy-efficient jobs (n = 356, 79.8%) were still employed one quarter after hire compared to those not working in energy-efficient jobs (n = 1,375, 74.8%) or those where the energy-efficient status was not known (n = 375, 75.3%).

Data for two industries, mining (NAICS 21) and healthcare & social assistance (NAICS 62, examples include hospitals, nursing homes, child and youth services, and daycare facilities), are also shown in Table 5. Completed questionnaires were received for 184 new hires in the mining industry and 235 new hires in the health care & social assistance industry. In mining, 46 employees (25.0%) had energyefficient jobs and of those, 76.1% (n = 35) were still employed one quarter after hire. In comparison, far fewer employees in health care & social assistance had energy-efficient jobs (n = 15, 6.4%), but a larger proportion of those that did have energy-efficient jobs were still employed after one quarter (n = 14, 93.3%).

Table 6 (see page 13) shows selected statistics by occupation for jobs in the mining industry. Of these jobs, 25.0% (n = 46) were considered energy-efficient while 79 (42.9%) were not considered energyefficient and the energy-efficiency status was unknown for approximately one-third (n = 59, 32.1%). According to the data available, a greater proportion of employees holding energy-efficient jobs were still employed one guarter after hire (76.1%) than those not holding energy-efficient jobs (68.4%). The proportion of employees still employed one quarter after hire where energy-efficient status was unknown fell in between the other two categories (72.9%).

Table 7 (see page 14) contains similar data for employees working in health

care and social assistance. Of the 235 new hires for whom data was provided, 15 (6.4%) held energy-efficient jobs, 193 (82.1%) held jobs that were not considered energy-efficient, and there were 27 (11.5%) that could not be categorized. A greater proportion of workers in energy-efficient jobs were still employed a quarter after hire (93.3%, n = 14) than those in jobs that were not energy-efficient (84.5%, n = 163). Employees in jobs that could not be categorized as energy-efficient or not had the smallest proportion of employees still working one quarter after hire (77.8%, n = 21).

Conclusions

Although the data collection process for this project is not complete and there is not enough information to make solid conclusions, the evidence thus far supports the concept that new hires holding energy-efficient jobs are more likely to stay employed at that job longer than those in jobs that are not energyefficient. Currently R&P has collected data for one panel in one quarter. Ultimately, at least four quarters of data will be collected, which should result in enough data to conduct more in-depth statistical analyses. Future analyses will study tenure differences in greater detail as well as look into the possible reasons why employees with energy-efficient jobs have longer tenure, should that continue to be true. Analyses will also be done to compare the types of jobs that are considered energy-efficient and those that are not, and to compare the types of skills workers need to work in energy-efficient jobs compared to the skills needed for jobs

(Text continued on page 15)

	F	otal		Energy-Ef	fficient J	lobs		Not Energy-Ef	ficien	t Jobs	En	ergy-Efficiency S	tatu	s Unknown
	2	Col %	2	Col % Row %	6 Still 6 Emp	Col % Row %	2	Col% Row % E	np Till	Col % Row %	2	Col % Row % En	д г	Col % Row
II Other Extraction /orkers	33	17.9%	5	10.9%	5	14.3%	15	19.0%	7	13.0%	13	22.0%	10	23.3%
oustabouts, Oil & as	33	17.9%	10	21.7%	9	17.1%	15	19.0%	12	22.2%	∞	13.6%	2	11.6%
ruck Driver,s Heavy TractorTrailer	13	7.1%	4	8.7%	4	11.4%	5	6.3%	4	7.4%	4	6.8%	4	9.3%
ierrick Operators, iil & Gas	80	4.3%	m	6.5%	2	5.7%	-	1.3%	-	1.9%	4	6.8%	m	7.0%
elpers-Extraction /orkers	8	4.3%	m	6.5%	0	0.0%	4	5.1%	7	3.7%	-	1.7%	-	2.3%
aborers & Frght, tock, & Mat Movers	9	3.3%	-	2.2%	-	2.9%	4	5.1%	m	5.6%	-	1.7%	-	2.3%
otary Drill perators, Oil & Gas	9	3.3%	0	0.0%	0	0.0%	S	6.3%	Ŋ	9.3%	-	1.7%	0	0.0%
nable to ssign Based on escription	Ŋ	2.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	Ŋ	8.5%	Ŋ	11.6%
/elders, Cutters, olderers, & Brazers	Ŋ	2.7%	-	2.2%	-	2.9%	2	2.5%	-	1.9%	2	3.4%	-	2.3%
elpers - Production /orkers	4	2.2%	0	0.0%	0	0.0%	ε	3.8%	-	1.9%	-	1.7%	0	0.0%
ıspect, Test, Sort, amp, & Weighers	4	2.2%	0	0.0%	0	0.0%	-	1.3%	0	0.0%	m	5.1%	7	4.7%
ookkeepng, ccountng, & Aud lerks	ŝ	1.6%	0	0.0%	0	0.0%	5	2.5%	7	3.7%	-	1.7%	-	2.3%
ecretaries, Ex Legal, ledicl & Exec	ŝ	1.6%	0	0.0%	0	0.0%	ε	3.8%	2	3.7%	0	0.0%	0	0.0%
erv Unit Operators, il, Gas & Mine	ŝ	1.6%		2.2%	0	0.0%	2	2.5%	2	3.7%	0	0.0%	0	0.0%
axi Drivers & hauffeurs	ŝ	1.6%	m	6.5%	2	5.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
/ellhead Pumpers	m	1.6%	0	0.0%	0	0.0%	m	3.8%	7	3.7%	0	0.0%	0	0.0%
All Other	44	%b 20	15	37 60%	14	70.00	11	17 70%	10	1 8 50%	15	DE 40%	10	702 20

© WYOMING LABOR FORCE TRENDS

February 2011

http://doe.state.wy.us/LMI

	Totă	le le		Energy-Effici	ent Jo	bs		Not Energy-E	fficien	t Jobs	<u></u>	ergy-Efficiency St	tatus	: Unknown
	ں ء	ol %	5	Col % Row % <mark>E</mark> i	n di T	Col % Row %	2	Col% Row%	Still Emp	Col % Row %	2	Col % Row % St En	E E	Col % Row %
ursing Assistants	29 1	12.3%	0	0.0%	0	0.0%	23	11.9%	17	10.4%	9	22.2%	4	19.0%
hild Care Workers	24 1	0.2%	2	13.3%	2	14.3%	21	10.9%	18	11.0%	-	3.7%	-	4.8%
egistered Nurses	16	6.8%	0	0.0%	0	0.0%	13	6.7%	12	7.4%	m	11.1%	-	4.8%
ersonal & Home are Aides	14	6.0%	0	0.0%	0	0.0%	12	6.2%	11	6.7%	7	7.4%	-	4.8%
ledical Secretaries	10	4.3%	2	13.3%	2	14.3%	~	3.6%	7	4.3%		3.7%	-	4.8%
ecretaries, Ex Legal, edicl & Exec	œ	3.4%	0	0.0%	0	0.0%	Ŋ	2.6%	4	2.5%	ε	11.1%	ŝ	14.3%
aids & ousekeeping eaners	9	2.6%	0	0.0%	0	0.0%	Ŋ	2.6%	2	1.2%	-	3.7%	-	4.8%
nable to ssign Based on escription	9	2.6%	-	6.7%	-	7.1%	Ŋ	2.6%	4	2.5%	0	0.0%	0	0.0%
ental Assistants	5	2.1%	2	13.3%	-	7.1%	2	1.0%	0	0.0%	-	3.7%	-	4.8%
eceptionists & formation Clerks	5	2.1%	-	6.7%	-	7.1%	4	2.1%	ŝ	1.8%	0	0.0%	0	0.0%
censed Pract & censed Voc Nurse	4	1.7%	0	0.0%	0	0.0%	4	2.1%	4	2.5%	0	0.0%	0	0.0%
edical Assistants	4	1.7%	0	0.0%	0	0.0%	m	1.6%	m	1.8%	-	3.7%	-	4.8%
ental Hygienists	m	1.3%	-	6.7%	-	7.1%	2	1.0%	2	1.2%	0	0.0%	0	0.0%
rstLine Sup/Mgr of 1 Prep & Ser	m	1.3%	0	0.0%	0	0.0%	m	1.6%	m	1.8%	0	0.0%	0	0.0%
ccupational nerapists	m	1.3%	0	0.0%	0	0.0%	m	1.6%	m	1.8%	0	0.0%	0	0.0%
rrgeons	m	1.3%	0	0.0%	0	0.0%	m	1.6%	-	0.6%	0	0.0%	0	0.0%
acher Assistants	m	1.3%	0	0.0%	0	0.0%	m	1.6%	2	1.2%	0	0.0%	0	0.0%
aiters & Waitresses	ε	1.3%	0	0.0%	0	0.0%	- ;	0.5%	- ;	0.6%	7	7.4%	, - ,	4.8%
otal, All Other	86	36.6%	9	40.0%	9	42.9%	74	38.3%	99	40.5%	9	22.2%	9	28.6%

© WYOMING LABOR FORCE TRENDS

Page 14

http://doe.state.wy.us/LMI

(Text continued from page 12)

that are not energy efficient.

Research Analyst Lisa Knapp can be reached at (307) 473-3835 or lknapp@state. wy.us.

Statistical Data Technicians Katelyn Rhoades and Laura Stryker collected and managed the data gathered through the New Hires Survey.

References

- Bureau of Labor Statistics. Measuring Green Jobs. Retrieved December 1, 2010, from: http://www.bls.gov/green/
- Edlin, G. C. (1995). Steady work pays off: Wyoming unemployment insurance wage records revisited. Wyoming Labor Force Trends, 32(10). Retrieved December
 2, 2010, from http://doe.state.wy.us/ LMI/1095/1095a1.htm
- Furgeson, T. & Dorsomm, M. (2010, April). Cognitive interviews for the Wyoming Department of Employment: Testing a job skills questionnaire. WYSAC technical report no. SRC-1014. Retrieved December 15, 2010, from http://doe.state.wy.us/ LMI/energy/wysac_report_SRC1014.pdf
- Glover, T. (2001). *Turnover analyses: Definitions, process, and quantification.* Retrieved November 26, 2010 from http:// doe.state.wy.us/LMI/w_r_research/ Turnover_Methodology.pdf
- Harris, M.A. (2002). Measuring the impact of Wyoming's workforce development training fund. *Wyoming Labor Force Trends*, 39(5). Retrieved December

2, 2010, from http://doe.state.wy.us/ LMI/0502/a1.htm

- Harris, M.A. (2002, June). Measuring the impact of Wyoming's workforce development training fund: Part two. *Wyoming Labor Force Trends, 39*(6). Retrieved December 2, 2010, from http:// doe.state.wy.us/LMI/0602/toc.htm
- Leonard, D. (2010). Logistic regression modeling and worker retention. Retrieved March 9, 2011, from http://wydoe.state. wy.us/LMI/energy/reg_method.pdf
- Leonard, D. (2010). Quarterly turnover statistics by industry, fourth quarter 2009. Wyoming Labor Force Trends, 47(7). Retrieved November 26, 2010, from http://doe.state.wy.us/LMI/0710/a6.htm
- Saulcy, S. (2003). Connecting business and the Wyoming community college: A study of employment outcomes of 2001 graduates from Wyoming community colleges. Retrieved November 26, 2010, from http://doe.state.wy.us/LMI/ CollegeReport2003.pdf
- Saulcy, S. (2004). Introduction. In Where are they now? Community college graduates' labor market outcomes 2004 (pp. 15-16). Retrieved November 26, 2010 from http://doe.state.wy.us/LMI/ CollegeReport2004.pdf

Saulcy, S. and Harris, M.A. (2005). Cooking up a career: Examining the outcomes of a high school training program in the culinary arts and hospitality management. Retrieved November 29, 2010, from http://doe. state.wy.us/LMI/ WHAMReport.pdf

February 2011

Information from the New Hires Survey

by: Michael Moore, Associate Editor

Data collected from the first two panels of Research & Planning's New Hires Survey are now available online.

The new hires data from fourth quarter 2009 (2009Q4) and first quarter 2010 (2010Q4) are presented online in various tables. These tables present information such as the number of new hires in each occupation, median wage, what percentage of new hires were offered which benefits, educational requirements, what percentage of new hires were involved in energy-efficient activities, important job skills, age and gender demographic data, and more.

Data collected from the New Hires Survey illustrated that those working in occupations that require a higher level of education earn more than those working in occupations that require onthe-job training (see Table 1 and Figure 1, page 17). New hires in jobs requiring a bachelor's degree earned a considerably higher hourly average wage (\$23.88) than all other groups. Those occupations requiring on-the-job training (\$13.93) and postsecondary technical training (\$14.33) had the lowest hourly average wage among all new hires. Occupations requiring an associate's degree (\$18.37) had the second highest average hourly wage among all new hires.

Within the top 90% of all new hires, 77.7% of all occupations required onthe-job training, while only 6.6% of all occupations required a bachelor's degree.

Table 2 (see page 17) shows the number of new hires involved in energy-efficient

activities in the top 15 occupations with the largest number of new hires. Energy efficiency can refer to either a job that

Table 1: Educational Requirements* for Select Occupations in Wyoming, Fourth Quarter 2009 and First Quarter 2010

		Median Hourly
Occupation	N	Wage
Total	39,902	\$12.00
On-the-Job Training		
Cashiers	1,591	8.40
Combined Food Prep & Serving Workers	1,489	8.00
Retail Salespersons	1,479	9.20
Truck Drivers, Heavy & Tractor Trailer	1,336	17.00
Waiters and Waitresses	1,164	7.50
Postsecondary Technical Training		
Automotive Service Tech & Mechanics	302	15.00
Welders, Cutters, Solderers, & Brazers	265	18.60
Fitness Trainers & Aerobics Instructors	195	11.00
Bus & Truck Mechanc & Diesel Eng Spc.	170	15.14
Library Technicians	94	9.00
Associate's Degree		
Registered Nurses	320	23.00
Dental Hygienists	83	27.75
Geological & Petroleum Technicians	61	17.09
Paralegals & Legal Assistants	55	15.64
Legal Secretaries	34	13.00
Bachelor's Degree		
Accountants and Auditors	138	22.00
Child, Family, & Sch Social Workers	112	10.00
Prprty, Real Estate, & Com Assoc Mgr	95	18.50
All Other Community & Soc Svc Spc	73	13.83
Loan Officers	71	20.13
Licensure or Certification		
Truck Drivers, Heavy & Tractor Trailer	1,336	17.00
FirstLine Sup/Mgr of Const & Extr	321	28.28
Hairdressers, Hairstylists, & Cos	77	10.00
Emergency Med Tech & Paramedics	43	17.50
Licensed Pract & Licensed Voc Nurses	40	20.87

* Some occupations have multiple educational requirements. The occupations in this table are sorted by the highest level of education required.

Table 2: Percent of New Hires Involved in Energy Efficient Activities for Select Occupations in Wyoming

		% Involved in Energy- Efficient
Occupation	<u>N</u>	Activities
Cashiers	1,591	11.2
Combined Food Prep and Serving Workers	1,489	10.9
Retail Salespersons	1,479	5.8
Truck Drivers, Heavy & Tractor Trailer	1,336	27.1
Waiters and Waitresses	1,164	7.7
Construction Laborers	773	11.9
Maids and Housekeeping Cleaners	762	16.0
Janitors & Cleaners, Ex Maids & Housekeeping Cleaners	758	18.8
Electricians	750	17.7
Cooks, Restaurant	653	17.2
Substitute Teachers	624	5.2
Secretaries, Ex Legal, Medicl & Exec	601	13.3
Bookkeepng, Accountng, & Aud Clerks	572	15.2
Carpenters	570	27.0
Bartenders	552	15.3
Total	39,902	16.7

produces goods or provides services that are beneficial to the environment, or jobs that use environmentally-friendly processes in everyday activity.

Among all new hires in Wyoming, 16.7% were involved in some sort of energy-efficient activity. Truck drivers, heavy and tractor trailer (27.1%) and carpenters (27.0%) had among the highest percentages of new hires from this period involved in some sort of energy-efficient activities.

Several in-depth tables containing information from the New Hires Survey can be found online at http://doe.state. wy.us/LMI/energy.htm.

Associate Editor Michael Moore can be reached at (307) 473-3814 or mmoore1@ state.wy.us.



Figure 1: Average Hourly Wage for New Hires in Wyoming by Educational Requirement, 2009Q4-2010Q1

Current Employer-Job Candidate Search Practices: A Review of the Literature

by: Douglas W. Leonard, Senior Economist

inding the right people to fill job openings is of great importance to all firms. Employers incur upfront costs when seeking candidates, and a learning curve also occurs once they are hired. Hiring mistakes may be quite costly, depending on the position. With such a large risk of time and capital involved in employee selection, how can firms reduce costs and find optimal candidates? This article presents an overview of how firms search for workers and how workers search for jobs. The methods described here not only shed light on what methods firms use, but why and how they use them to increase hiring success while reducing hiring costs. The candidate search process is a two-way street; employers search for workers and workers search for employers. This article also examines the influence of social media in the hiring process with a focus on younger and more tech-savvy workers. Lastly, the article describes the ways in which traditional recruiting methods are changing in the digital age.

The Hiring Process

Backes-Gellner and Tuor (2010) found that German companies "were able to reduce job vacancies by signaling the quality of their labor relations through observable characteristics." In this instance, the existence of apprenticeship programs, the level of unionization, employee participation, and corporate culture are directly related to firms' ability to recruit desired candidates. How can employers determine what signals are sent to the marketplace? Clapperton (2010) advises smaller organizations to "keep on top of social media and investigate what prospective employees are saying about them." By extension, larger organizations may be advised to do the same.

Other signals are sent by firms through their compensation plans. Ho and Ling-Chu (2009) found that changes in the compensation structure (from straight commission to salary plus a lesser unit commission) at an auto dealership led to more lower-performing sales people being hired while the higher-performing salespeople left the company. However, the overall profitability of the firm remained unchanged because the new employees changed the sales mix of units sold (fewer more expensive models).

Firms' websites also send signals to potential candidates. Wagner (2008) states that "any candidate worth their salt before they go out on an interview is going to hit the website of the company." Furthermore, company websites should be viewed by employers as tools to obtain talent by describing what it is like to work there. Since the website is the online face of the organization, it must be designed with users — potential job applicants as well as customers — in mind. Systems must be very user-friendly and fast to hold applicant interest (Sylva and Stefan, 2009). This is important because when applicants become disappointed with the hiring process they may withdraw, leading to a loss of potential top candidates (Hulsheger and Anderson, 2009).

Hulsheger and Anderson (2009) further state that unfavorable perceptions of recruiting methods negatively impact firm success in hiring.

Companies can and do build their own websites for postings. However, Mickey (2008) cautions that while companies can design websites internally or through turnkey operations, they require considerable resources to remain relevant and useful, including robust search capabilities.

Social Media and the Hiring Process

Social media are becoming more and more prevalent as job search and recruiting tools for both firms and individuals. This is particularly true when establishing contact with younger workers. Robbins (2008) posited that companies need to push toward technology rapidly and be creative in their use of sites such as YouTube and Facebook to reach younger workers. A 2010 survey of 600 human resources professionals and recruiters by Jobvite, a recruiting software company, found that 83% of firms planned to use social networks to hire this year [2010]" (Kim, 2010).

Firms large and small are using social media to attract job applicants. Credit unions of all sizes make regular use of these tools (Grensing-Pophal, 2009). Credit unions actively using social networking in recruiting report greater satisfaction with applicants sourced from referrals and social networks than from job boards. Fortunately, companies do not have to go "all in" immediately when it comes to social networking. Grensing-Pophal (2009) suggests that companies establish a presence in these media for information and then move to active recruiting later.

As the influence of social media grows, firms are becoming more creative in their use of these tools in the hiring process. Cassidy (2010) reported that some firms are turning the hiring process into a game in which both the applicant and the firm participate that includes testing, and working actual on-the-job scenarios. Clapperton (2010) found one firm was using Xbox Live (a video gaming console) to recruit candidates for information technology positions.

Although social media usage is becoming more prevalent in the recruiting process, employers should not disregard the use of traditional methods (Stamper, 2009). Social media should be used to augment and improve current practices, not eliminate them.

Use of Traditional Recruiting Methods

Traditional recruiting methods could vary from job advertisements in print to online job boards such as Monster.com or Careerbuilder.com. It also includes word-ofmouth referrals from colleagues and current or former employees. Although print advertising as a recruiting tool is becoming less prevalent (Chase, 2009), it still has a role in recruiting. This is particularly true where entry-level jobs are concerned. The use of recruiting tools varies with firm size and the amount of resources available (Gusdorf, 2008). Inhouse referrals continue to be among the most popular recruiting tools regardless of firm size. Large firms (1,800 - 6,999 employees) tend to favor on-site

recruitment, while online recruiting and firm websites are heavily used across all firm sizes.

In today's online and digital world, word of mouth and networking are extremely important in finding the right candidates. Among financial planning firms, 84.1% reported using this method (word of mouth and networking together) to recruit workers (King, 2010). Some of the networking activity may be through social networks. Other prevalent methods of recruiting for financial planning firms included large online job boards (Monster. com and Careerbuilder.com).

Two areas where print advertising can be more effective are in the wording of the ads themselves and where they are placed geographically. Trunk (2009) noted that in the current workforce, people are always looking for a job. Furthermore, companies which post vague information in their ads such as "salary dependent upon experience" will have an increasingly difficult time filling positions. This is especially true for entrylevel jobs. If at all possible, employers should target print ads geographically. To

do this, employers first have to know the geographic sources of their workforces. Rafaeli (2005) found that although print advertising is more expensive than referrals, geographically-targeted print advertising tends to be more successful than untargeted advertising. In fact, the ratio of new hires from a print source to total applicants from that same source was nearly four times greater with geographically targeted print advertising compared to non-geographically-targeted print advertising. Rafaeli (2005) cautioned that the effectiveness of geographicallytargeted print advertising will likely vary with the types of positions being filled.

Conclusion

This article provided a broad overview of current practices in worker recruiting. Employers of all kinds may want to bear in mind that while they are observing job candidates, the job candidates are observing employers as well, including those who are unemployed (see related article).

Job Search Practices of the Unemployed

Data from the Bureau of Labor Statistics (BLS) show how the unemployed search for jobs (see Table 1, page 21). In 2010, 53.6% of unemployed persons contacted employers directly and 55.2% of unemployed persons sent out resumes or filled out job applications in search of jobs (BLS, 2010). The unemployed on average used 2.03 different methods in their job searches. The next two most frequently cited job search methods were friends or relatives (28.8%) and public employment agencies (22.2%). How the unemployed searched for jobs changed somewhat between 2007 and 2009. In 2007, the unemployed on average used 1.84 different methods (BLS, 2008). However, they were much less likely to use family or relatives (21.7%) and public employment agencies (17.7%) in 2007 than in 2009. The impacts of the economic downturn appear to have changed the composition of methods the unemployed use to search for work. Employers send signals of all kinds to potential hires, as well as their current employees, through their electronic and print communications. To attract top candidates, the literature suggests employers should consider flexibility and use a variety of methods. While traditional methods may be used to reach some candidates, reaching more tech-savvy candidates may require the use of tools such as social media and gaming consoles. The choice of tools depends upon firms' resources and culture in addition to the target audience.

.

	Thousa Pers	inds of ons	N	lethods U	sed as a	Percent o	f Total .	lobseeker	s	
Age and Gender	Total Unemployed	Total Jobseekers	Employer Directly	Sent Out Resumes or Filled Out Applications	Placed or Answered Ads	Friends or Relatives	Public Employment Agency	Private Employment Agency	Other	Average Number of Methods Used
Total, 16 Years and Over	14,825	13,394	53.6	55.2	18.4	28.8	22.2	8.9	15.4	2.03
16-19 Years	1,528	1,450	50.4	61.9	11.7	19.3	9.4	3.6	10.1	1.67
20-24 Years	2,329	2,174	54.3	57.8	17.1	25.0	19.2	7.3	14.1	1.95
25-34 Years	3,386	3,057	55.1	56.3	18.2	28.4	24.2	9.0	14.8	2.07
35-44 Years	2,703	2,391	53.4	52.6	20.0	31.7	26.2	10.6	17.1	2.12
45-54 Years	2,769	2.462	54.9	53.5	21.4	32.5	26.1	11.6	17.0	2.18
55-64 Years	1,660	1,467	52.2	52.6	20.3	32.8	23.6	9.6	18.5	2.11
65 Years and Over	449	384	49.3	43.6	15.8	31.0	17.4	7.0	16.5	1.81
Men, 16 Years and Over	8,626	7,638	54.9	52.7	18.1	30.4	23.0	9.0	15.7	2.04
16-19 Years	863	821	50.7	61.0	12.0	21.0	10.7	3.9	9.6	1.69
20-24 Years	1,398	1,288	55.0	56.0	17.2	26.7	20.3	7.9	13.9	1.98
25-34 Years	1,993	1,749	56.8	53.4	17.7	29.6	25.0	9.1	14.5	2.07
35-44 Years	1,534	1,313	54.9	49.3	19.8	34.0	27.3	11.0	18.3	2.15
45-54 Years	1,614	1,404	56.0	50.4	21.0	34.6	26.4	11.2	17.8	2.18
55-64 Years	962	837	53.8	50.1	19.2	33.7	23.7	9.6	18.9	2.10
65 Years and Over	262	226	50.6	43.3	16.2	30.9	17.2	6.3	17.7	1.83
Women, 16 Years and Over	6,199	5,756	52.0	58.5	18.8	26.7	21.2	8.8	15.1	2.02
16-19 Years	665	638	49.9	63.0	11.4	17.1	7.8	3.2	10.8	1.63
20-24 Years	931	886	53.2	60.3	17.1	22.6	17.5	6.4	14.4	1.92
25-34 Years	1,392	1,308	52.8	60.1	18.8	26.7	23.0	8.9	15.3	2.07
35-44 Years	1,169	1.078	51.6	56.6	20.1	29.0	24.8	10.1	15.6	2.09
45-54 Years	1,156	1,057	53.5	57.6	22.0	29.7	25.7	12.2	16.0	2.18
55-64 Years	698	630	50.2	55.9	21.8	31.7	23.5	9.6	18.0	2.11
65 Years and Over	187	158	47.5	44.1	15.2	31.2	17.7	8.1	14.9	1.80

Source: U.S. Bureau of Labor Statistics Current Population Survey (http://www.bls.gov/cps/cpsaat33.pdf).

References

- Backes-Gellner, U., & Tuor, S. (2010).
 Avoiding labor shortages by employer signaling: On the importance of good work climate and labor relations. *Industrial Labor Relations Review* (January). 271 286.
- Cassidy, A. (2010). Recruiting the next generation. *Campaign* (October 1). 22-23.
- Chase, D. (2010). We want you. BusinessWest (October 12). 50-79.
- Clapperton, G. (2010). Going to work on the web. *Engineering & Technology* (October 23). 66-69.
- Grensing-Pophal, L. (2009). Recruiting 2.0. *Credit Union Management* (September). 42-45.
- Gusdorf, M. (2008). Solving the riddle of recruiting and retention. *HR Focus* (85) (4). 12-15.
- Ho, J., & Ling-Chu, W. (2009). How changes in compensation plans affect employee performance, recruitment and retention: An empirical study of a car dealership. *Contemporary Accounting Research* (26) (1). 167-199.
- Hulsheger, U. & Anderson, N. (2009).
 Applicant perspectives in selection: Going beyond preference reactions. *International Journal of Selection and Assessment (17)* (4). 335-345.
- Kim, M. (2010). Network via social media: Twitter and LinkedIn can help your job hunt. U.S. News & World Report

(December). 53.

- King, R. (2010). Hiring strategies that work. www.FPAPracticeManagement.org (September/October). 27.
- Mickey, B. (2008). Building online job boards. Folio: The Magazine for Magazine Management (37)(3). Retrieved December 8, 2010, from http://www.foliomag. com/2008/building-online-job-boards
- Rafaeli, A., Hadomi, O., & Simons, T.
 (2005). Recruiting through advertising or employee referrals: Costs, yields, and the effects of geographic focus. *European Journal of Work and Organizational Psychology* (14)(4). 355-366.
- Robbins, M. (2008). Recruiting and retaining the best of Gen Y. Employee Benefits News (February). 20-22.
- Stamper, C. (2010). Common mistakes companies make in using social media tools in recruiting efforts. *CMA Management* (April). 12-14.
- Sylva, H., & Stefan T.M. (2009).
 E-recruitment: A study into applicant perceptions of an online application system. International Journal of Selection and Assessment (17)(3). 311-323.
- Trunk, P. (2009). Better hiring practices emerging. *California Job Journal* (1173). 12-13.
- United States Department of Labor, Bureau of Labor Statistics (2010). Unemployed jobseekers by sex, age, race, Hispanic or Latino ethnicity, and active jobsearch methods used. Retrieved January 5, 2011 from http://www.bls.gov/cps/cpsaat33. pdf

United States Department of Labor, Bureau of Labor Statistics (2008). Unemployed jobseekers by sex, age, race, Hispanic or Latino ethnicity, and active jobsearch methods used. Retrieved January 5, 2011, from http://www.bls.gov/opub/ee/ empearn200801.pdf

Wagner, K. (2008). Recruiting talent: Talent in property management takes on new importance. *Journal of Property Management* (January/February). 34-36.

Results of the Baseline Survey

by: Patrick Manning, Principal Economist

The United States is currently undergoing an unprecedented shift in economic activity. Many factors are contributing to this shift, including reducing the nation's dependence on foreign energy supplies, transitioning from nonrenewable to renewable energy sources, reducing greenhouse gas emissions, limiting pollution, and increasing energy efficiency.

Changes in national economic activity and national energy policy can have potentially large impacts on Wyoming's labor market. Currently, the U.S. derives approximately 45% of its energy supply from coal-fired power plants (U.S. EIA, 2009) and approximately 40% of that coal is mined in Wyoming. For example, the Powder River Basin is the largest coalproducing region in the country (U.S. EIA, 2011). Any policy that affects the production and use of coal nationally will have a substantial direct impact on Wyoming's labor market and tax revenues, with many indirect impacts as well. Additionally, the increased interest in utilizing renewable energy technologies will also significantly impact Wyoming. The southern Wyoming corridor in particular is a favorable location for wind power development (U.S. EIA, 2011). A change in the demand for coal and the construction

and operation of wind farms are just two examples of how Wyoming's economy can be effected by changes in national energy policies, as well as changes in national and global economic conditions.

The Research & Planning section of the Wyoming Department of Employment has undertaken several projects to determine the effect of these economic changes on Wyoming's labor market. This particular project involved surveying Wyoming firms regarding their production activities and processes to determine how (or if) Wyoming's economic activities are changing and if so, how these changes affect the demand for the relevant occupations in the state. This is an initial study to establish a baseline for further research efforts as these changes continue to impact Wyoming's economy.

The impetus for this study was identified in the Northern Plains and Rocky Mountain Consortium's technical proposal (Northern Plains and Rocky Mountain Consortium, 2010):

• "The Green Jobs Act of 2007 mandates that state labor market research, information, and labor exchange research programs identify job openings in the renewable energy and energy efficiency sector";

 "Special research is needed to determine how green energies such as biofuels, wind power and carbon sequestration are to be measured from both an industrial (e.g. for the 2012 NAICS revision) and occupational perspective."

In 2010, R&P joined a consortium of Northern Plains and Rocky Mountain states in order to fulfill these requirements. The consortium is comprised of the following states: Montana (project lead), Iowa, Nebraska, South Dakota, Utah, and Wyoming.

Definitions

The abbreviation "EE" (energy efficiency or energy-efficient jobs) is used to represent the jobs discussed in this article. This term includes more than jobs that enhance energy efficiency. EE jobs include employment in the production, implementation, or regulation of:

1. Renewable energy and alternative fuels. Manufacturing, construction, design, research, delivery, operation, storage or maintenance of wind, solar, biomass, hydro, alternative transportation fuels, geothermal, methane, and waste incineration as a fuel source.

2. Energy efficiency and conservation. Manufacturing, construction, or installation of energy-efficient products, energy efficiency services, weatherization, building retrofitting/efficiency, energyefficient production processes, energy distribution improvements, and transportation technology. 3. Pollution, waste, and greenhouse gas management; prevention, and reduction. Activities related to controlling emissions and pollution. Includes controlling and reducing greenhouse gas emissions, waste water, and other pollutants.

4. Environmental cleanup and restoration and wastewater cleanup and mitigation. Environmental restoration including the cleanup and disposal of pollution, waste, and hazardous materials; Superfund/Brownfield redevelopment; and landfill restoration.

5. Education, regulation, compliance, public awareness, training, and energy trading. Activities that educate on energy efficiency, renewable energy, energy rating systems certifications, and more efficient energy consumption. Enforcement of compliance requirements and regulations, and training on effective use of energyrelated products and processes.

6. Sustainable agriculture and natural resource conservation. Products and services to conserve, maintain, and improve natural resources and environment, including low carbon and organic agriculture, land management, water management and conservation, wetlands restoration and environmental conservation.

The preceding six categories of EE employment are considered as EE output employment; these employees produce or in some way enhance an EE product.

There is another method by which employment could be considered EE employment; this method is called EE process employment. This occurs when the firm does not produce an EE product, but the employees provide skills that result in a more EE outcome to the production process. For example, a large construction contractor listed no EE products. This firm employed an environmental engineer and a safety and occupational health manager that both provided EE benefits during the firm's production activities. These two jobs would be considered as EE process jobs.

The survey results show total employment of 3,734. Depending on the method of EE job estimation used, the total employment for EE jobs was 122 or 141. The resulting percentage of EE jobs was 3.3% and 3.8%, respectively.

Methodology

Sample Selection

A sample was chosen that proportionally reflects the Wyoming industry mix. A total of 1,034 business units were surveyed. The first mailing occurred on June 21, 2010 with questionnaires (and associated cover letters and brochures) being mailed to all business units chosen for sampling. The subsequent two mailings were sent only to those business units for which no response had been received or the questionnaire had been undeliverable. The second mailing occurred on July 15 and the third on August 12. Data collection ended on September 17.

Of the 1,034 questionnaires mailed, 453 were completed (at least partially), two were refused, and 51 were undeliverable, with a response rate of 43.8%. Of these 453, 46 were excluded from further analysis due to the employer being out of business or sold, or because the firm did not provide an answer to the question, "How many employees does your organization have at this location?" There were 407 observations left after excluding the aforementioned questionnaires. This number allows for a statewide (not industry-specific) analysis with a 95% level of confidence and a 4.8% margin of error.

Calculation of Total EE Employment

Eighteen employers listed detailed job descriptions on the inside of the survey after they stated that there were no EE jobs or left Question 2 blank. There are two likely possibilities for this discrepancy:

1. The employer thought he or she was supposed to list all jobs, not just EE jobs, or;

2. He or she did not answer Question 2, but actually did have EE jobs listed under the detailed section.

Therefore, the detailed section was examined to see if the employer marked any of the three categories listed under "Percent of time involving environmental benefits or energy efficiency improvement for workers who had this job." If so, it was assumed that this was an EE job, at least partially, and was therefore counted in the EE job total.

Calculation of Wages

Wage information was obtained by asking respondents to indicate how many employees fell into the 12 wage categories provided. These categories were borrowed from the Occupational Employment Statistics (OES) survey instrument (Hauf, 2010). For more information on OES, see http://wydoe.state.wy.us/LMI/oes2010/ oes10.pdf. The midpoint of each category was used to calculate the average wage in categories 2 through 11. There is no midpoint for categories 1 and 12, therefore the boundary wage was used (e.g. \$9.25 and \$90.00, respectively).

Results

Table 1 shows a gross response rate of 43.8%. After adjusting for non-deliverable questionnaires, the net response rate was 46.3%. After removing incomplete questionnaires or responses from firms that were out of business or had been sold, there were 407 observations remaining for analysis.

Table 2 indicates that 11.5% of the employers surveyed had EE production activities.

There were 3,734 total employees included in the analysis (see Table 3). Of these, depending on the method of EE job estimation used, 122 (3.3%) or 141 (3.8%) people had at least a portion of their work time devoted to EE activities. While both calculations have strengths and weaknesses, the remainder of this article will use the 141 figure, as this has been deemed the most representative of the respondents' intentions. This 3.8% roughly corresponds with the findings of California (3.4%; State of California, 2010), Oregon (3.0%; Oregon Employment Department, 2009), and Washington (3.3%; Hardcastle, 2009).

EE Process vs. Output Jobs

Of the 141 total EE jobs, 33 could be considered EE process jobs, which is 0.01% of total employment and 23.4% of all EE employment. There is a possibility that some of these jobs would have been allocated to EE output employment, but the respondent left Question 2 blank or felt

Table 1: Response Rate		
Survey Status	Count	Percent
Returned	453	43.8%
Complete	407	39.4%
Incomplete or Out of Business/Sold	46	4.4%
Non-Deliverable	51	4.9%
Non-Response	528	51.1%
Refusal	2	0.2%
Total Mailed	1,034	100.0%

Table 2: Energy Efficiency Activity (Are the Companies Involved in Any EE Production Activities?)

EE Activity	Count	Percent
No	360	88.5%
Yes	47	11.5%
Total	407	100.0%

Table 3: Energy Efficiency Employment (Do the Companies Have Any Employees Engaged in EE Activities?)

EE Activity	Count	Percent
Total Employment	3,734	
Total EE Employment ¹	122	3.3%
Total EE Employment ²	141	3.8%

¹ Summation of responses to question 3 on questionnaire. ² The summation of all EE jobs from the detail section of the questionnaire. that the firm's product did not fit into any of the six categories shown.

Industries Involved in EE Activities/ Employment

Table 4 displays the percentages of EE activity and employment by major industry classification. Approximately 28% of the construction firms indicated that they participated in EE activities, followed closely by manufacturing firms at 25.0%. In terms of employment, the manufacturing sector (14.9%) and the professional & business services sector (6.6%) indicated the highest levels of EE employment.

Occupations Involved in EE Activities

Table 5 (see page 28) details the information that was gathered regarding job titles, job requirements, and the minimum educational level required. Due to the relatively small sample size of detailed occupational information, no strong conclusions can be reached from this information. The occupation occurring most frequently was electrician. There were 12 electricians listed as having some portion of their time spent on EE activities. This increases to 16 if the four individuals with the job title 'Energy Efficient Lighting' are included. Respondents also indicated that there were 7 plumbing and 6 HVAC (Heating, Ventilating, and Air Conditioning) EE jobs. Table 6 (see page 29) indicates the average wage for an electrician from this study, a related study called the New Hires Survey, and the OES (Occupational Employment Statistics) survey.

This sample indicates that in Wyoming, EE jobs largely exist within established occupations rather than in new occupations. The wind energy sector may be the exception. There were three jobs with a job title of "field engineer/ wind tech" which would likely be coded in the Standard Occupational Classification (SOC) as "wind energy technicians" or "wind turbine service technicians," both of

(Text continued on page 29)

Table 4. Percentage of Energy		livities and En		 	in Each muust	' y
Industry	Surveys Completed	Units with EE Activity	% with EE Activities	EE Employment	Total Employment	% of EE Employment
Natural Resources & Mining	23	3	13.0%	6	206	2.9%
Construction	43	12	27.9%	40	886	4.5%
Manufacturing	24	6	25.0%	21	141	14.9%
Trade, Transportation, & Utilities	85	10	11.8%	33	584	5.7%
Information	9	1	11.1%	0	367	0.0%
Financial Activities	42	0	0.0%	1	193	0.5%
Professional & Business Services	53	4	7.5%	9	137	6.6%
Educational & Health Services	47	7	14.9%	22	476	4.6%
Leisure & Hospitality	35	2	5.7%	0	376	0.0%
Other Services	36	1	2.8%	8	134	6.0%
Public Administration	10	1	10.0%	1	234	0.4%
Overall	407	47	11.5%	141	3,734	3.8%

Table 4: Percentage of Energy Efficiency Activities and Energy Efficiency Employees in Each Industry

Table 5: Percentage of Energy Efficiency Activities and Energy Efficiency Employees in Each Industry Employees Vacancies Job Title **Minimum Education Brief Description Job Requirements** Blow in Insulation Walls & Attic **Retro Fit Insulation** Apprenticeship/OJT 1 0 Trade Certified **Apprentice Electrician Installs Radiant Heat** WY Apprentice LLC 2 1 Apprenticeship/On-the-Job Training **Bike Sales and Service** 3 0 3 Car Wash Attendant None No Requirements 0 **Carpet Cleaner** No Response 1 Carpet Cleaning/Flood Restoration IIRC Trade Certified 1 1 Class A CDL and **Commercial Driving Instructor** Trade Certified 5 0 Experience Apprenticeship/On-the-Job Training **Construction Worker** 1 0 None **Counter Salesman** Apprenticeship/On-the-Job Training 2 0 Dental Assistant Dental Assistant Cert. **Trade Certified** 2 Drivers Training on Site HS Diploma/GED 2 0 Electrician Apprenticeship/On-the-Job Training 3 0 **Electrical St. License** Electrician Trade Certified 6 0 **Energy-Efficient Lighting** Apprenticeship/On-the-Job Training 4 0 Engineer Graduate/Professional Degree 3 0 **Environmental Engineer** Bachelor's Degree 1 0 Escort Car Driver Pilot Car Cert. HS Diploma/GED 0 1 Master's Degree Coquate **Extension Educators** Graduate/Professional Degree 5 0 Field Factory Sales Training Class 1 0 Factory Sales Rep Bachelor's Degree Fence Material Manufacturer Wildlife Friendly Fencing Apprenticeship/On-the-Job Training 1 0 **Climb Safety** Repair and Maint on Wind Field Engineer/Wind Tech Rope, Rescue CPR/First Post High School, No Degree 3 1 Turbines Aid, Driver's License Tree Measurement Plant Forester Bachelor's Degree 1 0 Identification Bachelor's Degree General Manager Produces Grass for Cattle None 1 0 Heating and Air Conditioning Apprenticeship/On-the-Job Training 2 0 Heating and Air Conditioning High School Diploma/GED 4 0 Helper House Caretaker None No Response 1 0 **Inside Sales** None Post High School, No Degree 2 0 Journeyman Electrician WY Journeyman License Trade Certified 1 1 Labor Shredding and Recycling No Requirements 8 0 Recycling, Cuts Up Old Laborer Railroad Cars, Cleans Up Scrap No Requirements 1 0 Piles at Mining Sites, Etc. Laborer (Plumbing) Apprenticeship/On-the-Job Training 2 1 Climb Safety Rope, Rescue CPR/First Aid, Lead Field Engineer/Wind Tech Post High School, No Degree 1 Driver's License **Creates Space Between** Trees, Removes Unhealthy Apprenticeship/On-the-Job Training 1 0 Logger Trees for a Healthy Forest No Response Manager 1 Manager Post High School, No Degree 0 1 Office Manager Trade Certified 1 **Oilfield Maintenance** None No Requirements 2 **Oilfield Pumper and Operates Wells** High School Diploma/GED 3 None 0 High School Diploma/GED Oil & Gas Process Equip. Tech. None 4 0

Table continued on page 29

http://doe.state.wy.us/LMI

ŝ

S

(Table continued from page 28)

Table 5: Percentage of Energy Efficiency Activities and Energy Efficiency Employees in Each Industry

lob Title	Brief Description	lob Requirements	Minimum Education	Employ	Vacanci
Operator	2		Apprenticeship/On-the-Job Training	5	0
Plumber		Master Plumber	Trade Certified	1	0
Plumber		RINNEI Certification	Trade Certified	6	0
Project Inspection		State Certification	Graduate/Professional Degree	1	0
Registered Dental Hygienist		Hygienist	Bachelor's Degree	1	
Roaster/Manager		Roasts & Prepares Organic Coffee for Sale	High School Diploma/GED	1	0
Safety and Occ Health		organie conceror oure	Post High School, No Degree	1	0
Sales		Sell the Organic Product	High School Diploma/GED	1	0
Sales		to rotential customers	High School Diploma/GED	3	0
Salesperson	Selling Organic Livestock Feed		No Requirements	5	0
Secretary			No Requirements	1	0
Senior Loan Processor		None	High School Diploma/GED	1	0
Site Manager		Climb Safety Rope, CPR/ First Aid, Driver's License	Associate's Degree	1	
Spray Foam Tech	Oilfield Tank Set (Residential)	Cert. Foam Tech	Trade Certified	1	0
Supervisor			No Requirements	1	0
Tire Technicians	Gets Tires Ready for Recycling, Documentation of Disposal, Etc.		Apprenticeship/On-the-Job Training	6	0
Truck Driver		CDL Heavy Haul Cert.	High School Diploma/GED	1	0
Visitor Center		Professional Engineer, Professional Geologist	Bachelor's Degree	4	
Web Site Sale		None	Apprenticeship/On-the-Job Training	1	0
Welder		Certified Welder	No Response	3	0
Window and Door Installer			Apprenticeship/On-the-Job Training	3	0
Wool Processing			High School Diploma/GED	4	0

(Text continued from page 27)

which have an SOC code of 49-9081. This is a new code in the 2010 SOC edition.

Source	N Observed	Average Hourly Wage
Current Study	12	\$21.65
Current Study ¹	16	\$25.15
New Hires Survey	33	\$24.40
OES Estimate	Unknown	\$23.77

There was no code for this in the previous edition of the SOC, which was published in 2000.

Increased Demand in the Near Future?

One objective of this survey was to determine (if possible) whether there would be an increase in the need for EE jobs in the near future. Unfortunately, the question regarding how many vacancies there were for a particular occupation was left largely blank. From the detail grid on pages 2 and 3 of the survey instrument, 11 respondents listed at least one vacancy for a given occupation. Only five of these vacancies were for an EE job. A companion survey titled the New Hires Survey (see page 3), which is an ongoing survey that focuses on newly hired employees, may shed more light on the issues of increased demand for new or emerging occupations.

Analysis of Non-Response

Is there anything systematically different between respondents and non-respondents? Tables 7 and 8 (see page 31) indicate the number of respondents, the number of nonrespondents, and the ratio of number of respondents to the total number of questionnaires mailed (excluding non-deliverable questionnaires). Table 7 is organized by major industry classification, while Table 8 is organized by the size class of the firm based on total employment. Table 7 shows that the response rates for the manufacturing and public administration sectors had higher response rates than the other sectors. In Table 8, the two smaller size classes had the best response rates.

No strong inference has been drawn from these results. However, there are many factors that could affect response rates. Responding to this survey was not mandatory. Therefore, the response rate will be affected by a potential respondents' willingness to complete the questionnaire. This is in turn affected by their feelings regarding the worth of the survey's objectives, and whether they have enough time to complete the questionnaire. Another important factor is whether or not the questionnaire was seen by a person in the firm who would have enough knowledge of the firm's operations (e.g. a human resource specialist or a manager) to respond

to the survey effectively. This may be one reason that the firms in the lower two size classes responded at a higher rate than larger firms. For example, a potential respondent at a firm with eight employees is more likely to be informed about all the firm's activities than a potential respondent at a firm with 500 employees.

Further Research

There are other issues regarding EE employment that could be the focus of future research. For example, how much job creation is temporary (i.e. during construction) versus long-term (i.e. ongoing operation and

Industry	Respondents	Respondents	Total ¹	Ratio of Respondents
Natural Resources & Mining	30	40	70	42.9
Construction	51	75	126	40.5
Manufacturing	27	16	43	62.8
Trade, Transportation, & Utilities	97	129	226	42.9
Information	10	12	22	45.5
Financial Activities	45	44	89	50.6
Professional & Business Services	55	72	127	43.3
Educational & Health Services	51	52	103	49.5
Leisure & Hospitality	39	49	88	44.3
Other Services	39	36	75	52.0
Public Administration	11	3	14	78.6
Overall	455	528	983	46.3

maintenance)? The creation of a wind turbine farm is a good example of this issue. How much is true job creation vs. job replacement? The longitudinal nature of the UI database will prove useful in assessing this issue.

References

- Bleizeffer, D. (2010, November 16). Wyoming pursues carbon sequestration near Rock Springs. *WyoFile*. Retrieved March 9, 2011, from http://wyofile. com/2010/11/wyoming-pursues-carbonsequestration-rock-springs/
- Hardcastle, A. (2009). 2009 Washington State Green Economy Jobs. Retrieved March 9, 2011, from http://www. workforceexplorer.com/admin/ uploadedPublications/10258_Green_ Jobs_Report_for_Web_2009.pdf
- Hauf, D. (2010, March). Wyoming Wage Survey March 2010. Retrieved March 9,

Table	8: Response			
Size Class	# of Respondents	# of Non- Respondents	Total ¹	Ratio of Respondents to Total
1-4	286	316	602	47.5
5-9	103	105	208	49.5
10-19	38	67	105	36.2
20-49	21	31	52	40.4
50+	7	9	16	43.8
Total	455	528	983	46.3

¹Non-deliverable surveys were removed.

2011, from http://wydoe.state.wy.us/LMI/ oes2010/oes10.pdf

Northern Plains and Rocky Mountain Consortium. (2010). *Researching the Green Economy* (Technical Proposal).

Oregon Employment Department. (2009, June). *The Greening of Oregon's Workforce: Jobs, Wages, and Training.* Retrieved March 9, 2011, from http:// www.qualityinfo.org/pubs/green/ greening.pdf

- State of California, Employment Development Department, Labor Market Information Division. (2010, October). *California's Green Economy: Summary of Survey Results*. Retrieved March 9, 2011, from http://www.energy.ca.gov/ cleanenergyjobs/GrSurveyRpt_1115.pdf
- U.S. Energy Information Administration. (2009). Retrieved March 9, 2011, from http://www.eia.gov/state/state_energy_ profiles.cfm?sid=WY
- U.S. Energy Information Administration. (2011). Annual Energy Review. Retrieved March 9, 2011, from http://www.eia.gov/ aer/pdf/pages/sec1.pdf
- Washington State Employment Security Department. (2009, July). 2008 Washington State Green Economy Jobs Addendum. Retrieved March 9, 2011, from http://www.workforceexplorer.com/ admin/uploadedPublications/9832_ Green_Jobs_Report_Addendum_2009. pdf

Wyoming Career Explorer 2011 is Now Available Online

http://doe.state.wy.us/LMI/explore/2011/2011.pdf

Occupation Spotlight

There are an estimated 1,530 workers classified as automotive service technicians and mechanics in Wyoming.

According to the Occupational Employment Statistics (OES) survey, these mechanics earn a mean wage of \$18.12 per hour. Those in the 90th percentile earn as much as \$28.12 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 September 2010)" link.



Automotive Service Technicians and Mechanics

Wyoming Unemployment Rate Falls to 6.4% in December 2010

by: David Bullard, Senior Economist

The Research & Planning section of the Wyoming Department of Employment has reported that the state's seasonally adjusted¹ unemployment rate decreased from 6.6% in November to 6.4% in December. It remained much lower than its December 2009 level of 7.5% and the current U.S. rate of 9.4%. Nonfarm employment continued to increase, growing by 1.4% from December 2009 to December 2010.

Over the year, Wyoming nonfarm employment increased by 3,900 jobs (1.4%). Natural resources & mining (including oil & gas) posted the largest job gains (3,200 jobs, or 13.1%). Growth was also seen in educational & health services (800 jobs, or 3.1%), government (including public schools, colleges, & hospitals; 700 jobs, or 1.0%), wholesale trade (500 jobs, or 5.8%), construction (200 jobs, or 0.9%), manufacturing (200 jobs, or 2.2%), and other services (200 jobs, or 1.8%). Job losses occurred in retail trade (-1,400 jobs, or -4.5%), leisure & hospitality (-600 jobs, or -2.0%), and financial activities (-100 jobs, or -0.9%). Employment was unchanged from a year earlier in professional & business services and information.

From November to December, Wyoming added 600 jobs (0.2%). This level of increase is consistent with normal seasonal patterns. Seasonal job losses in construction (-1,900 jobs, or -8.2%) were more than offset by seasonal job gains in leisure & hospitality (1,600 jobs, or 5.8%), retail trade (400 jobs, or 1.4%), natural resources & mining (200 jobs, or 0.7%), and transportation & utilities (200 jobs, or 1.4%).

Most county unemployment rates were stable or increased slightly from November to December. The lowest unemployment rates were found in Sublette (3.7%), Albany

(4.2%), Campbell (4.8%), and Converse (4.8%) counties. From December 2009 to December 2010 unemployment decreased in all 23 counties.



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.







State	Unemployment Rates
	December 2010
(Se	easonally Adjusted)

State	Unemp. Rate
Puerto Rico	15 7
Novada	17.7
California	14.5
Elorida	12.5
Michigan	12.0
Phodo Island	11.7
South Carolina	10.7
Oregon	10.7
Kontucky	10.0
Goorgia	10.5
Mississippi	10.2
North Carolina	0.1
District of Columbia	9.0
Obio	9.7
West Virginia	9.6
Idaho	9.5
Indiana	9.5
Missouri	9.5
Arizona	9.5
Tennessee	9.4
United States	9.4
Illinois	93
Washington	93
Alahama	9.5
New Jersey	9.1
Connecticut	9.0
Colorado	8.8
Delaware	8.5
New Mexico	8.5
Pennsylvania	8.5
Texas	8.3
Massachusetts	8.2
New York	8.2
Alaska	8.1
Louisiana	8.0
Arkansas	7.9
Utah	7.5
Wisconsin	7.5
Maryland	7.4
Maine	7.3
Montana	7.2
Minnesota	7.0
Kansas	6.8
Oklahoma	6.8
Virginia	6.7
Hawaii	6.4
Wyoming	6.4
lowa	6.3
Vermont	5.8
New Hampshire	5.5
South Dakota	4.6
Nebraska	4.4
North Dakota	3.8

Wyoming Nonagricultural Wage and Salary Employment

by: David Bullard, Senior Economist

Employment was unchanged from a year earlier in professional & business services and information.

	Fmpl	ovment	in	% Cha Tot Employ	ange al vment
	The	ousands		Nov 10 l	Dec 09
	Dec	Nov	Dec	Dec	Dec
	10(p)	10(r)	09	10	10
WYOMING STATEWIDE					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT TOTAL PRIVATE GOODS PRODUCING Natural Resources & Mining	282.8 208.9 58.3 27.6	282.2 208.4 60.0 27.4	278.9 205.7 54.7 24.4	0.2 0.2 -2.8 0.7	1.4 1.6 6.6 13.1
Mining	27.5	27.3	24.3	0.7	13.2
Oil & Gas Extraction	4.2	4.3	3.9	-2.3	7.7
Mining Except Oil & Gas	9.8	9.8	9.6	0.0	2.1
Coal Mining	7.0	7.0	7.1	0.0	-1.4
Support Activities for Mining Support Act, for Oil & Gas Construction Construction of Buildings Heavy & Engineering Constr.	8.8 21.3 3.6 6.2	8.7 23.2 3.9 7.2	7.9 21.1 4.0 6.5	2.5 1.1 -8.2 -7.7 -13.9	23.0 11.4 0.9 -10.0 -4.6
Specialty Trade Contractors	11.5	12.1	10.6	-5.0	8.5
Manufacturing	9.4	9.4	9.2	0.0	2.2
Durable Goods	4.7	4.7	4.6	0.0	2.2
Nondurable Goods	4.7	4.7	4.6	0.0	2.2
SERVICE PROVIDING	224.5	222.2	224.2	1.0	0.1
Trade, Trans., Warehousing, & Util.	52.7	52.1	53.4	1.2	-1.3
Wholesale Trade	9.1	9.1	8.6	0.0	5.8
Merch. Wholesalers, Durable	5.3	5.3	5.5	0.0	-3.6
Retail Trade	29.4	29.0	30.8	1.4	-4.5
Motor Vehicle & Parts Dealers	4.0	4.0	4.1	0.0	-2.4
Food & Beverage Stores	4.6	4.6	4.8	0.0	-4.2
Grocery Stores	3.9	4.0	4.0	-2.5	-2.5
Gasoline Stations General Merchandise Stores Miscellaneous Store Retailers Trans., Warehousing, & Utilities	3.5 6.5 1.7 14.2 2.5	3.6 6.4 1.7 14.0 2.5	3.7 6.8 1.8 14.0 2 5	-2.8 1.6 0.0 1.4	-5.4 -4.4 -5.6 1.4
Transp. & Warehousing	11.7	11.5	11.5	1.7	1.7
Truck Transportation	3.9	3.9	3.9	0.0	0.0
Information	3.9	3.8	3.9	2.6	0.0
Finance & Insurance Real Estate & Rental & Leasing Professional & Business Services Prof Scientific & Tech Services	7.0 3.9 16.4	7.0 3.9 16.4	7.0 4.0 16.4	0.0 0.0 0.0	0.0 -2.5 0.0 1 1
Architect., Engineering, & Rel.	2.7	2.7	2.7	0.0	0.0
Mgmt. of Co.s & Enterprises	0.8	0.8	0.7	0.0	14.3
Admin., Support, & Waste Svcs.	6.7	6.7	6.9	0.0	-2.9
Educational & Health Services	26.5	26.6	25.7	-0.4	3 1
Educational Services	3.0	3.1	2.7	-3.2	11.1
Health Care & Social Assistance	23.5	23.5	23.0	0.0	2.2
Ambulatory Health Care	8.8	8.8	8.5	0.0	3.5
Offices of Physicians	3.2	3.2	3.2	0.0	0.0
Hospitals	3.3	3.3	3.3	0.0	0.0
Nursing & Res. Care Facilities	4.6	4.6	4.5	0.0	2.2
Social Assistance	6.8	6.8	6.7	0.0	1.5
Leisure & Hospitality	29.0	27.4	29.6	5.8	-2.0
Arts. Entertainment. & Rec.	2.3	2.2	2.3	4.5	0.0
Accommodation & Food Svcs.	26.7	25.2	27.3	6.0	-2.2
Accommodation	8.9	7.4	9.3	20.3	-4.3
Food Svcs. & Drinking Places	17.8	17.8	18.0	0.0	-1.1
Other Services	11.2	11.2	11.0	0.0	1.8
Repair & Maintenance	3.7	3.7	3.6	0.0	2.8
TOTAL GOVERNMENT	73.9	73.8	73.2	0.1	1.0
Federal Government	7.0	7.0	7.3	0.0	-4.1
State Government Education	17.0	17.2	16.5	-1.2	3.0
State Government Education	7.5	7.7	7.2	-2.6	4.2
Local Government	49.9	49.6	49.4	0.6	1.0
Local Government Education	26.4	26.0	25.8	1.5	2.3
Hospitals	6.7	6.7	6.8	0.0	-1.5

	Empl The Dec 10(n)	oyment busands Nov 10(r)	in Dec	% Cha Tot Employ Nov 10 Dec 10	ange al /ment Dec 09 Dec 10
LARAMIE COUNTY	10(p)	10(1)		10	
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	43.8	43.8	43.9	0.0	-0.2
TOTAL PRIVATE GOODS PRODUCING Natural Res., Mining, & Const. Manufacturing	29.7 4.0 2.6 1.4	29.7 4.2 2.8 1.4	29.9 4.4 2.9 1.5	0.0 - 4.8 -7.1 0.0	- 0.7 - 9.1 -10.3 -6.7
SERVICE PROVIDING Trade, Transportation, & Utilities Wholesale Trade Retail Trade Trans., Warehousing, & Utilities Information Financial Activities Professional & Business Services Educational & Health Services Leisure & Hospitality Other Services	39.8 9.1 0.8 5.3 3.0 1.1 2.2 3.2 4.2 4.3 1.6	 39.6 9.1 0.8 5.3 3.0 1.1 2.2 3.2 4.1 4.2 1.6 	39.5 9.2 0.8 5.4 3.0 1.1 2.2 3.0 4.1 4.3 1.6	0.5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.4 2.4 0.0	0.8 -1.1 0.0 -1.9 0.0 0.0 0.0 6.7 2.4 0.0 0.0
TOTAL GOVERNMENT Federal Government State Government Local Government Local Education	14.1 2.7 4.0 7.4 3.9	14.1 2.7 4.0 7.4 3.9	14.0 2.7 4.0 7.3 3.8	0.0 0.0 0.0 0.0	0.7 0.0 0.0 1.4 2.6
NATRONA COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	38.3	38.1	38.3	0.5	0.0
TOTAL PRIVATE GOODS PRODUCING Natural Resources & Mining Construction Manufacturing	31.9 7.3 3.2 2.5 1.6	32.0 7.4 3.2 2.6 1.6	32.0 6.9 2.8 2.6 1.5	- 0.3 -1.4 0.0 -3.8 0.0	-0.3 5.8 14.3 -3.8 6.7
SERVICE PROVIDING Trade, Transportation, & Utilities Wholesale Trade Retail Trade Trans., Warehousing, & Utilities Information Financial Activities Professional & Business Services Educational & Health Services Leisure & Hospitality Other Services	31.0 8.3 2.3 4.9 1.1 0.5 1.9 2.6 5.7 3.6 2.0	30.7 8.2 2.3 4.8 1.1 0.5 1.9 2.6 5.7 3.7 2.0	31.4 8.7 2.3 5.2 1.2 0.5 2.0 2.6 5.5 3.9 1.9	1.0 1.2 0.0 2.1 0.0 0.0 0.0 0.0 0.0 0.0 -2.7 0.0	-1.3 -4.6 0.0 -5.8 -8.3 0.0 -5.0 0.0 3.6 -7.7 5.3
TOTAL GOVERNMENT Federal Government State Government Local Government Local Education	6.4 0.7 0.7 5.0 3.4	6.1 0.7 4.7 3.1	6.3 0.7 0.7 4.9 3.4	4.9 0.0 0.0 6.4 9.7	1.6 0.0 0.0 2.0 0.0

Note: Current Employment Statistics (CES) estimates include all full- and parttime wage and salary workers in nonagricultural establishments who worked or received pay during the week that includes the 12th of the month. Self-employed, domestic services, and personnel of the armed forces are excluded. Data are not seasonally adjusted. Data for Wyoming, Laramie County, and Natrona County are published in cooperation with the Bureau of Labor Statistics. (p) Preliminary. (r) Revised.

Wyoming Nonagricultural Wage and Salary Employment

(Continued)

	Emp in Th Dec 10	oloymen iousand Nov 10	t s Dec 09	% Change Total Employment Nov 10 Dec 09 Dec Dec 10 10		
CAMPBELL COUNTY						
TOTAL NONAG. WAGE & SALARY EMPLOYMENT TOTAL PRIVATE GOODS PRODUCING Natural Resources & Mining Construction Manufacturing SERVICE PROVIDING Trade, Transport., & Utilities Information Financial Activities Professional & Bus. Services Educational & Health Serv. Leisure & Hospitality Other Services GOVERNMENT	28.2 23.5 11.7 7.7 3.5 0.5 16.5 5.3 0.2 0.7 1.7 1.0 1.9 1.0 4.7	28.3 23.6 11.8 7.7 3.6 0.5 16.5 5.3 0.2 0.7 1.7 1.0 1.9 1.0 4.7	28.5 24.0 11.9 7.7 3.7 0.5 16.6 5.5 0.2 0.7 1.7 1.0 2.0 0.0 1.0 4.5	-0.4 -0.4 -0.8 0.0 -2.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	-1.1 -2.1 -1.7 0.0 -5.4 0.0 -0.6 -3.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	
	Emp in Th Dec	oloymen Iousand Nov	t s I Dec	% Change Total Employment Nov 10 Dec 09 Dec Dec		
	10	10	09	10	10	
TOTAL NONAG. WAGE & SALARY EMPLOYMENT TOTAL PRIVATE GOODS PRODUCING Natural Resources & Mining Construction Manufacturing SERVICE PROVIDING Trade, Transport., & Utilities Information Financial Activities Professional & Bus. Services Educational & Health Serv. Leisure & Hospitality Other Services GOVERNMENT	24.5 19.6 8.4 5.5 1.6 1.3 16.1 5.0 0.2 0.9 1.1 1.1 2.2 0.7 4.9	24.6 19.8 8.7 5.5 1.9 1.3 15.9 4.9 0.2 0.9 1.1 1.1 2.2 0.7 4.8	23.5 18.7 7.8 5.1 1.4 1.3 15.7 0.2 0.8 1.0 1.1 2.2 0.7 4.8	-0.4 -1.0 -3.4 0.0 -15.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	4.3 4.8 7.7 7.8 14.3 0.0 2.5 2.0 0.0 12.5 10.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1	
	Emp in Th Dec 10	oloymen nousand Nov 10	% Change Total Employment Nov 10 Dec 09 Dec Dec 10 10			
TETON COUNTY						
TOTAL NONAG. WAGE & SALARY EMPLOYMENT TOTAL PRIVATE GOODS PRODUCING Nat. Res., Mining & Const. Manufacturing SERVICE PROVIDING Trade, Transport., & Utilities Information Financial Activities Professional & Bus. Services Educational & Health Serv. Leisure & Hospitality Other Services GOVERNMENT	15.8 13.5 1.7 1.5 0.2 14.1 2.1 0.2 0.2 0.2 0.7 1.4 1.0 6.0 0.4 2.3	14.1 11.8 1.6 0.2 12.3 1.9 0.2 0.7 1.5 1.0 4.3 0.4 2.3	16.5 14.2 2.0 1.8 0.2 14.5 2.4 0.2 0.8 1.5 0.9 5.9 0.5 2.3	12.1 14.4 -5.6 -6.3 0.0 14.6 10.5 0.0 14.6 10.5 0.0 -6.7 0.0 39.5 0.0 0.0	-4.2 -4.9 -15.0 -16.7 0.0 -2.8 -12.5 0.0 -12.5 -6.7 11.1 1.7 -20.0 0.0	

State Unemployment Rates December 2010 (Not Seasonally Adjusted)

	Unemp.
State	Rate
Puerto Rico	14.7
Nevada	14.6
California	12.3
Florida	11.6
Rhode Island	10.9
South Carolina	10.9
Michigan	10.6
Oregon	10.4
Georgia	10.2
Kentucky	10.0
Mississippi	9.7
Idaha	9.7
Most Virginia	9.0
Obio	9.5
District of Columbia	9.5
Missouri	9.2
Washington	9.2
Arizona	9.2
Indiana	9.1
Tennessee	9.1
United States	9.1
Alabama	8.9
Illinois	8.8
New Jersev	8.7
Colorado	8.6
Connecticut	8.6
Delaware	8.2
Alaska	8.1
New Mexico	8.1
Pennsylvania	8.1
Massachusetts	8.0
New York	8.0
Texas	8.0
Arkansas	7.8
Maine	7.5
Montana	7.4
Louisiana	7.2
Maryland	7.1
Utah	/.1
Wisconsin	7.0
Minnesota	6.8
Vancas	0.0
Virginia	0.4 6.4
Wyoming	6.3
lowa	6.2
Hawaii	5.8
Vermont	5.6
New Hampshire	53
South Dakota	4.9
Nebraska	4.1
North Dakota	3.9

Economic Indicators

by: Margaret Hiatt, Administrative/Survey Support Specialist

The number of unemployed individuals in Wyoming decreased by 16.8% from December 2009 to December 2010.

	Dec 2010 (p)	Nov 2010 (r)	Dec 2009 (b)	Percent Month	Change Year
Wyoming Total Civilian Labor Force ¹	291,099	292,560	290,112	-0.5	0.3
Unemployed	18,370	18,613	22,085	-1.3	-16.8
Employed	272,729	273,947	268,027	-0.4	1.8
Wyoming Unemployment Rate/Seas. Adj.	6.3%/6.4%	6.4%/6.6%	7.6%/7.5%	N/A	N/A
U.S. Unemployment Rate/Seas. Adj.	9.1%/9.4%	9.3%/9.8%	9.7%/9.9%	N/A	N/A
U.S. Multiple Jobholders	6,884,000	6,816,000	6,886,000	1.0	0.0
As a percent of all workers	4.9%	4.9%	5.0%	N/A	N/A
U.S. Discouraged Workers	1,318,000	1,282,000	929,000	2.8	41.9
U.S. Part Time for Economic Reasons	9,205,000	8,670,000	9,354,000	6.2	-1.6
Hours & Earnings for Production Workers					
Wyoming Manufacturing Hours & Earnings					
Average Weekly Earnings	\$854.81	\$848.30	\$837.89	0.8	2.0
Average Weekly Hours	40.9	41.3	41.5	-1.0	-1.4
U.S. Manufacturing Hours & Earnings					
Average Weekly Earnings	\$788.35	\$779.35	\$759.53	1.2	3.8
Average Weekly Hours	41.8	41.6	41.1	0.5	1.7
Wyoming Unemployment Insurance					
Weeks Compensated	30,800	28,656	50,922	7.5	-39.5
Benefits Paid	\$9,618,508	\$8,793,196	\$17,079,739	9.4	-43.7
Average Weekly Benefit Payment	\$312.29	\$306.85	\$335.41	1.8	-6.9
State Insured Covered Jobs	257,224	257,185	255,614	0.0	0.6
Insured Unemployment Rate	2.5%	2.3%	3.3%	N/A	N/A
Consumer Price Index (U) for All U.S. Urban Consumers					
(1982 to 1984 = 100)					
All Items	219.2	218.8	215.9	0.2	1.5
Food & Beverages	221.3	221.0	218.0	0.1	1.5
Housing	216.1	215.8	215.5	0.1	0.3
Apparel	118.1	121.5	119.4	-2.8	-1.1
Transportation	198.3	195.7	188.3	1.3	5.3
Medical Care	391.9	391.7	3/9.5	0.1	3.3
Recreation (Dec. 1997=100)	112.3	112.8	113.2	-0.4	-0.8
Education & Communication (Dec. 1997=100)	130.5	130.9	128.9	-0.3	1.3
Other Goods & Services	384.5	383.6	3/7.3	0.2	1.9
Producer Prices (1982 to 1984 = 100)					
All Commodities	189.9	188.0	178.1	1.0	6.6
Wyo. Bldg. Permits (New Privately Owned Housing Units Authorized)					
Total Units	91	186	88	-51.1	3.4
Valuation	\$17,586,000	\$27,055,000	\$18,431,000	-35.0	-4.6
Single Family Homes	74	67	64	10.4	15.6
Valuation	\$16,107,000	\$16,773,000	\$17,231,000	-4.0	-6.5
Casper MSA ² Building Permits	17	67	26	-74.6	-34.6
Valuation	\$3,173,000	\$7,068,000	\$4,196,000	-55.1	-24.4
Cheyenne MSA Building Permits	9	31	22	-71.0	-59.1
Valuation	\$1,403,000	\$3,345,000	\$3,572,000	-58.1	-60.7
Baker Hughes North American Rotary Rig Count for Wyoming	45	44	40	2.3	12.5

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

¹Local Area Unemployment Statistics Program estimates.

²Metropolitan Statistical Area.

Note: Hours and earnings data for mining have been dropped from the Economic Indicators page as data for Wyoming mining are no longer available.



Wyoming County Unemployment Rates

by: Carola Cowan, BLS Programs Supervisor

From December 2009 to December 2010, unemployment decreased in all 23 counties.

	L	abor Force			Employed		Unemployed		Unemployment Rates			
REGION	Dec 2010	Nov 2010	Dec 2009	Dec 2010	Nov 2010	Dec 2009	Dec 2010	Nov 2010	Dec 2009	Dec 2010	Nov 2010	Dec 2009
County	(p)	(r)	(b)	(p)	(r)	(b)	(p)	(r)	(b)	(p)	(r)	(b)
NORTHWEST	44,724	45,307	44,467	41,586	42,237	40,799	3,138	3,070	3,668	7.0	6.8	8.2
Big Horn	4,967	5,074	4,979	4,603	4,727	4,532	364	347	447	7.3	6.8	9.0
Fremont	18,851	19,112	18,652	17,473	17,757	17,036	1,378	1,355	1,616	7.3	7.1	8.7
Hot Springs	2,487	2,523	2,438	2,356	2,390	2,284	131	133	154	5.3	5.3	6.3
Park	13,988	14,156	14,075	12,978	13,161	12,902	1,010	995	1,173	7.2	7.0	8.3
Washakie	4,431	4,442	4,323	4,176	4,202	4,045	255	240	278	5.8	5.4	6.4
NORTHEAST	53,657	54,162	54,780	50,568	51,139	50,658	3,089	3,023	4,122	5.8	5.6	7.5
Campbell	26,985	27,170	28,303	25,683	25,873	26,333	1,302	1,297	1,970	4.8	4.8	7.0
Crook	3,516	3,591	3,430	3,330	3,418	3,201	186	173	229	5.3	4.8	6.7
Johnson	3,844	3,920	3,874	3,553	3,642	3,505	291	278	369	7.6	7.1	9.5
Sheridan	16,018	16,144	15,976	14,901	15,055	14,669	1,117	1,089	1,307	7.0	6.7	8.2
Weston	3,294	3,337	3,197	3,101	3,151	2,950	193	186	247	5.9	5.6	7.7
SOUTHWEST	62,349	62,278	61,622	58,294	57,856	56,792	4,055	4,422	4,830	6.5	7.1	7.8
Lincoln	7,942	7,983	7,928	7,259	7,319	7,208	683	664	720	8.6	8.3	9.1
Sublette	7,128	7,245	6,744	6,861	6,982	6,408	267	263	336	3.7	3.6	5.0
Sweetwater	23,688	23,901	23,020	22,353	22,558	21,257	1,335	1,343	1,763	5.6	5.6	7.7
Teton	12,745	12,147	12,857	11,635	10,665	11,729	1,110	1,482	1,128	8.7	12.2	8.8
Uinta	10,846	11,002	11,073	10,186	10,332	10,190	660	670	883	6.1	6.1	8.0
SOUTHEAST	75,302	75,440	74,323	70,721	70,902	69,225	4,581	4,538	5,098	6.1	6.0	6.9
Albany	20,155	20,112	19,959	19,317	19,269	19,034	838	843	925	4.2	4.2	4.6
Goshen	6,416	6,571	6,233	6,087	6,221	5,867	329	350	366	5.1	5.3	5.9
Laramie	43,362	43,269	42,966	40,263	40,258	39,560	3,099	3,011	3,406	7.1	7.0	7.9
Niobrara	1,235	1,274	1,216	1,173	1,207	1,142	62	67	74	5.0	5.3	6.1
Platte	4,134	4,214	3,949	3,881	3,947	3,622	253	267	327	6.1	6.3	8.3
CENTRAL	55,065	55,374	54,919	51,559	51,813	50,554	3,506	3,561	4,365	6.4	6.4	7.9
Carbon	7,449	7,642	7,448	6,939	7,129	6,832	510	513	616	6.8	6.7	8.3
Converse	7,537	7,652	7,383	7,173	7,274	6,871	364	378	512	4.8	4.9	6.9
Natrona	40,079	40,080	40,088	37,447	37,410	36,851	2,632	2,670	3,237	6.6	6.7	8.1
STATEWIDE	291,099	292,560	290,112	272,729	273,947	268,027	18,370	18,613	22,085	6.3	6.4	7.6
Statewide Seaso	onally Adjust	ted						•••••		6.4	6.6	7.5
U.S										9.1	9.3	9.7
U.S. Seasonally A	Adjusted									9.4	9.8	9.9

Prepared in cooperation with the Bureau of Labor Statistics. Benchmarked 03/2010. Run Date 01/2011.

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

Initial claims declined by 11.6% from November and 23.2% from December 2009. A substantial decline was observed both over the month (-24.1%) and over the year (-14.1%) in service-providing industries.



http://doe.state.wy.us/LMI

Wyoming Normalized^a Unemployment Insurance Statistics: Continued Claims

by: Douglas W. Leonard, Senior Economist

Continued weeks claimed climbed 21.0% over the month and declined 27.6% over the year. Over-the-year declines were observed in natural resources & mining (-63.9%), manufacturing (-54.6%), and wholesale trade (-50.0%).

Continued Claims	Conti Dec 10	inued We Claimed Nov 10	Percent Change Weeks Claimed Dec 10 Dec 10 Nov 10 Dec 09			
Wyoming Statewide TOTAL WEEKS CLAIMED EXTENDED WEEKS CLAIMED TOTAL UNIQUE CLAIMANTS ^b Benefit Exhaustions Benefit Exhaustion Rates	35,654 18,852 8,903 737 8.3%	29,460 18,548 8,718 738 8.5%	49,275 25,624 12,138 1,294 10.7%	21.0 1.6 2.1 -0.1 -0.2%	- 27.6 - 26.4 -26.7 -43.0 -2.4%	
TOTAL GOODS-PRODUCING Natural Res. & Mining Oil & Gas Extraction Construction Manufacturing TOTAL SERVICE-PROVIDING Trade, Transp., & Utilities Wholesale Trade Retail Trade Transp., Warehousing & Utilities Information Financial Activities Prof. & Business Services Educational & Health Svcs. Leisure and Hospitality Other Svcs., exc. Public Admin. TOTAL GOVERNMENT Federal Government State Government Local Education UNCLASSIFIED	11,390 1,582 1,328 103 8,953 16,830 4,391 558 2,827 1,006 168 792 2,793 1,709 6,305 672 3,909 2,229 2,58 1,422 336 3,525	7,505 1,149 1,005 68 5,681 675 16,003 3,983 506 2,636 841 171 737 2,132 1,629 6,724 6,275 7,274 6,274 6,275 7,274 6,275 7,274 6,274 6,275 7,274 6,274 6,275 7,274 6,274 6,274 6,274 6,274 6,274 6,275 7,274 6,274 6,275 7,274 6,275 7,274 6,275 7,274 6,275 7,274 6,275 7,274 6,275 7,274 6,275 7,274 6,275 7,274 6,275 7,274 6,275 7,274 6,275 7,274 6,275 7,276 7,275	19,096 4,386 4,071 279 12,828 1,882 21,448 6,288 1,115 3,439 1,734 243 916 4,190 1,826 6,671 1,3149 1,496 4,04 1,549 410 5,282	51.8 37.7 32.1 51.5 57.6 26.7 5.2 10.3 7.2 19.6 -1.8 7.5 31.0 4.9 -6.2 7.22 16.3 23.4 -2.6 10.2 -13.0 36.1	-40.4 -63.9 -67.4 -63.1 -30.2 -54.6 -21.5 -30.2 -50.0 -17.8 -42.0 -30.9 -13.5 -33.3 -6.4 -5.5 -48.9 13.3 49.0 -36.1 -8.2 -18.0 -33.3	
Laramie County TOTAL WEEKS CLAIMED TOTAL UNIQUE CLAIMANTS	4,496 1,136	3,514 1,042	5,702 1,423	27.9 9.0	-21.2 -20.2	
Total Goods-Producing Construction Total Service-Providing Trade, Transp., and Utilities Financial Activities Prof. & Business Svcs. Educational and Health Svcs. Leisure & Hospitality TOTAL GOVERNMENT UNCLASSIFIED	1,655 1,499 2,113 611 149 497 426 293 569 159	1,024 870 1,821 544 150 355 352 269 568 101	2,253 1,913 2,873 1,031 174 695 354 430 420 156	61.6 72.3 16.0 12.3 -0.7 40.0 21.0 8.9 0.2 57.4	-26.5 -21.6 -26.5 -40.7 -14.4 -28.5 20.3 -31.9 35.5 1.9	
Natrona County TOTAL WEEKS CLAIMED TOTAL UNIQUE CLAIMANTS	3,887 953	3,396 1,002	5,641 1,409	14.5 -4.9	- 31.1 -32.4	
Total Goods-Producing Construction TOTAL SERVICE-PROVIDING Trade, Transp., and Utilities Financial Activities Professional & Business Svcs. Educational & Health Svcs. Leisure & Hospitality TOTAL GOVERNMENT UNCLASSIFIED	1,154 830 2,386 1,004 107 401 326 392 285 62	824 524 2,205 952 108 315 345 331 285 82	2,322 1,420 2,972 1,009 126 515 390 430 232 115	40.0 58.4 8.2 5.5 -0.9 27.3 -5.5 18.4 0.0 -24.4	-50.3 -41.5 -19.7 -0.5 -15.1 -22.1 -16.4 -8.8 22.8 -46.1	

^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 included claimants receiving extended benefits.



Wyoming Department of Employment Research & Planning P.O. Box 2760 Casper, WY 82602

Official Business Penalty for Private Use \$300 Return Service Requested