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Can Wyoming Employment Be Modeled Accurately?

by: David Bullard, Senior Economist

This article presents the results of projections for 2007 and 2008 and compares them to the sample-based estimates and the actual employment. It attempts to answer the questions of "How accurately can analysts model employment 12 months into the future?" and "Are these forecasts a useful tool for understanding sample-based estimates?"

Each month in Wyoming Labor Force Trends, employment estimates are published under the title "Wyoming Nonagricultural Wage and Salary Employment" (see page 22). These estimates come from a monthly survey of approximately 1,500 Wyoming employers known as the Current Employment Statistics (CES) program. CES estimates are an important economic indicator. Employment tends to rise when the economy is expanding and tends to decline when there is a recession. Additionally, wages and salaries are a large component of personal income, and when employment increases, analysts expect to see increases in wages, consumer spending, and local retail sales taxes.

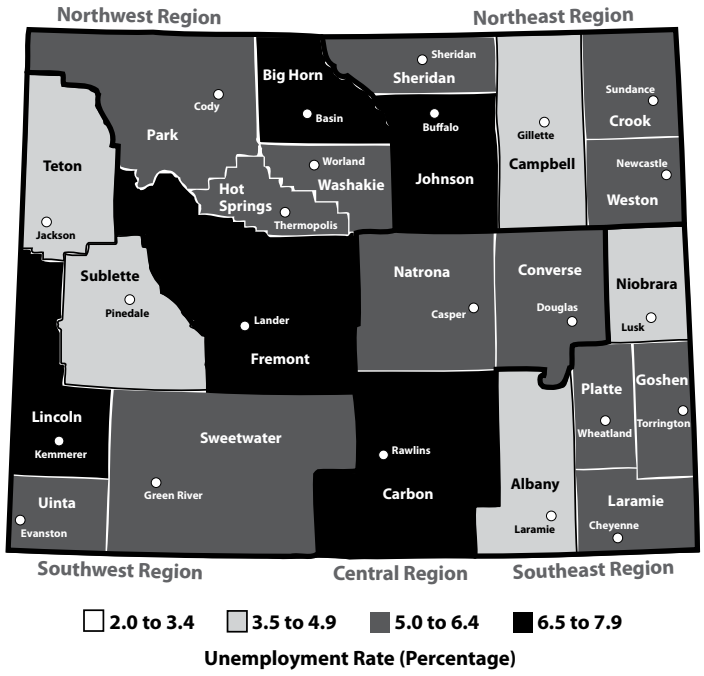
One of the key problems in using current sample-based estimates is the lack of tools to answer the question "relative to what?" In order to remedy this situation, analysts at Research & Planning (R&P) have produced short-term employment projections. Comparing these projections to the sample-based estimates each month helps them to know whether or not the current sample-based estimates are reasonable given prior trends in

(Text continued on page 3)

HIGHLIGHTS

- **Six different measures of labor underutilization have long been published monthly from the Current Population Survey (CPS) for the nation. This year, these measures were published as annual averages for 2007 and 2008 for the states. … *page 13***
- **As an expansion of previous research into work force behavior in nursing, Research & Planning in 2008 conducted a survey of all public health nurses in the state. The report *Public Health Nursing: Succession Planning and Satisfaction Measures* is now online. … *page 18***

Unemployment Rate by Wyoming County, June 2009 (Not Seasonally Adjusted)



IN THIS ISSUE

New!

The Growing and Declining Industries tables for First Quarter 2009 are now available on the Internet at: http://doe.state.wy.us/LMI/G_DInd/G_D_Industries.htm

Wyoming Labor Force Trends

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employment. In other words, it gives analysts a tool to address the question of whether or not the underlying economic characteristics creating the demand for labor have deviated from the historic trend.

2007 Data

In January 2007, R&P analysts ran projections of CES employment at the super-sector, or major industry level for each month of 2007. These projections represented their expectations of employment levels in 2007 based on historical data. Compared to 2006, analysts expected that total nonfarm employment would increase by approximately 6,900 jobs (2.5%).

During 2007, analysts conducted the CES survey and made estimates based on monthly reports from the sample of employers. In the figures, these sample-based estimates are labeled "production."

Figure 1 compares the projections for total nonagricultural employment developed in January 2007 to the sample-based production CES estimates as they were published during the subsequent year and the final benchmarked CES estimates as published in March 2009. To create the benchmarked estimates, analysts replace the original sample-based estimates with Quarterly Census of Employment and Wages (QCEW) data from the Unemployment Insurance (UI) tax file, which represent a virtual census of employment in the state. However, the QCEW data only become available approximately six months after the reference period. This six-month lag creates a considerable period of uncertainty about the accuracy of current sample-based estimates. Projections can help fill this knowledge gap. Figure 1 illustrates that the sample-based production CES estimates were higher every month than the projections. Moreover, the UI-based benchmarked series was even higher than the projections and the sample-based estimates. In short, employment grew faster than expected (based on historical trends) in 2007. At the total nonfarm employment level, the sample-based production CES estimates were valuable because they were closer to the actual employment levels than was the forecast. All three series followed the same seasonal pattern.

Figure 2 (see page 4) shows a different pattern. Actual employment in natural resources & mining (the benchmarked line) was much lower than the projections in every month of 2007. The benchmarked estimates were also lower than the sample-based production CES estimate for most of the 12-month period. It appears that analysts expected this sector to grow rapidly as it had in the three previous

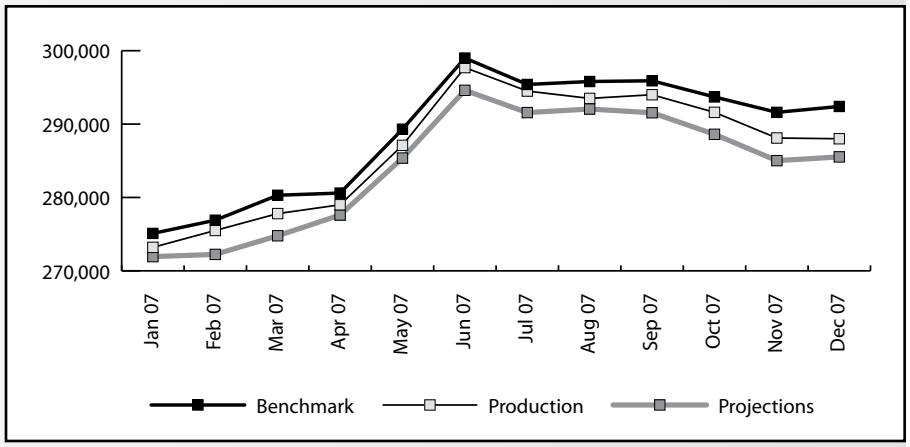


Figure 1: Total Nonfarm Employment in Wyoming, 2007

years (adding 1,900 jobs, 2,500 jobs, and 3,900 jobs in 2004, 2005, and 2006, respectively). Instead, it gained only 800 jobs (or 3.0%). Clearly, something changed from the historical trend in mining, and the sample-based estimates were picking it up. It is possible that new environmental regulations or a labor shortage caused employment growth to slow.

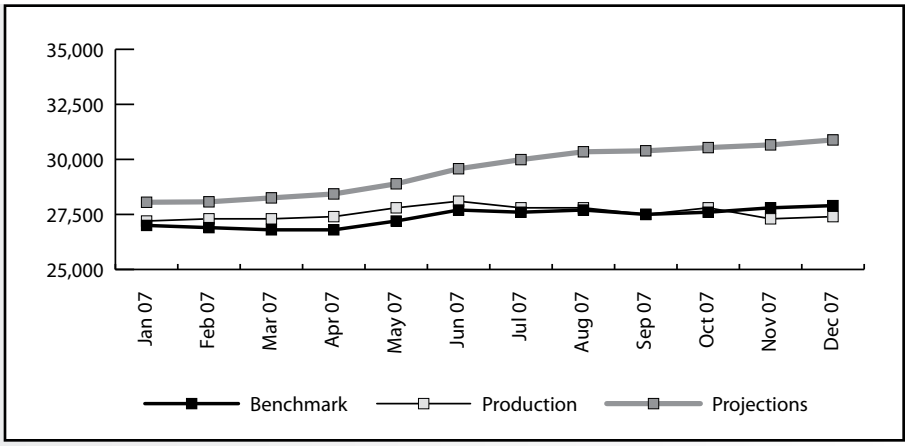


Figure 2: **Wyoming Natural Resources & Mining Employment, 2007**

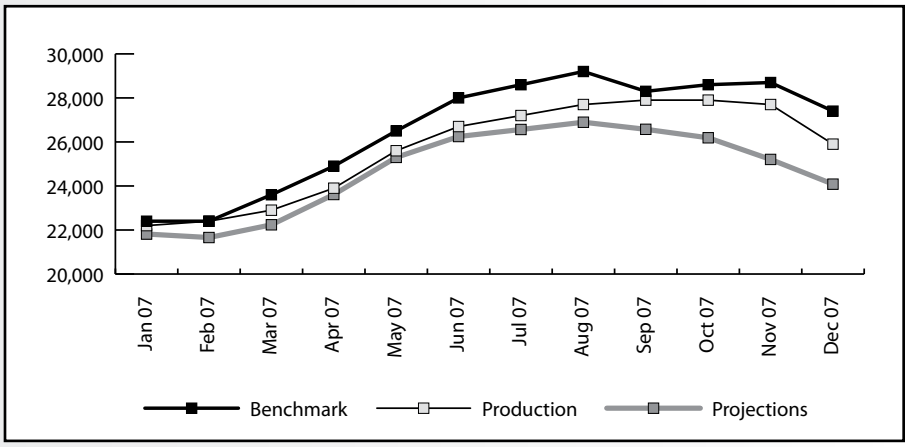


Figure 3: **Wyoming Construction Employment, 2007**

Construction employment can be difficult to estimate. Sometimes large employers come into the state for short-term projects, such as pipeline construction, causing large employment changes without historical precedent. It is almost impossible to account for employment at these nonresident firms in the sample-based production CES estimates. Figure 3 shows that the benchmarked estimates were higher than the projections every month of 2007. The production CES estimates failed to indicate the growth shown in the benchmarked series. Incidentally, in 2007, the construction sector added 2,700 jobs (11.3%), a rapid increase, but still slower than 2006 (3,200 jobs, or 15.5%). In July and August production estimates increased faster than the projections and it turned out more closely mirrored actual employment as measured by the UI tax universe. As with natural resources & mining, this sector was also changing direction from its historical trend.

In the manufacturing sector (see Figure 4, page 5) the projections seem to be a fairly good indicator of actual employment for 2007. Although the series deviated somewhat over the months, the annual averages of all three series were remarkably close.

For the wholesale trade sector, the benchmarked series was fairly close to the sample-based production series during the first half of the year (see Figure 5, page 5). However, in the second half, the production estimates increased faster than the benchmarked series. The projections were lower than both the production estimates and the benchmarked series. It appears that the sample of employers (reflected in

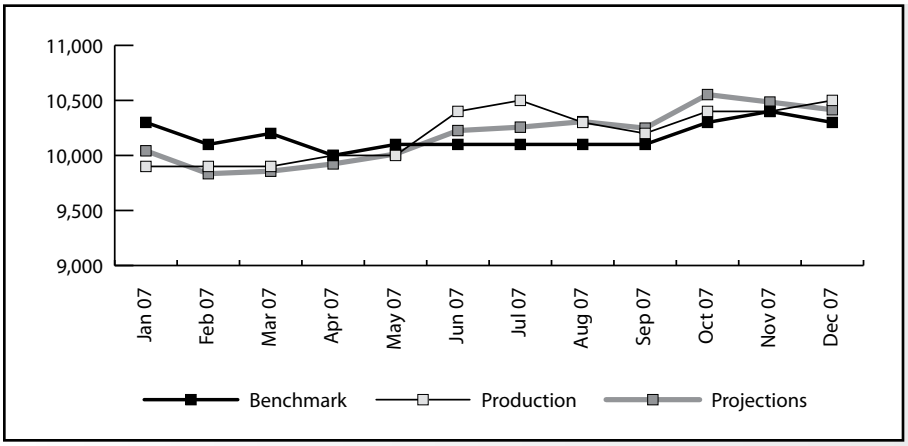


Figure 4: **Wyoming Manufacturing Employment, 2007**

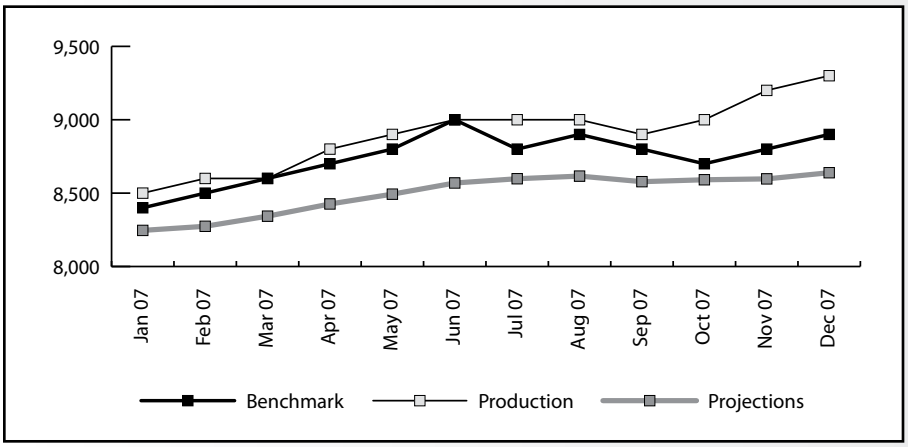


Figure 5: **Wyoming Wholesale Trade Employment, 2007**

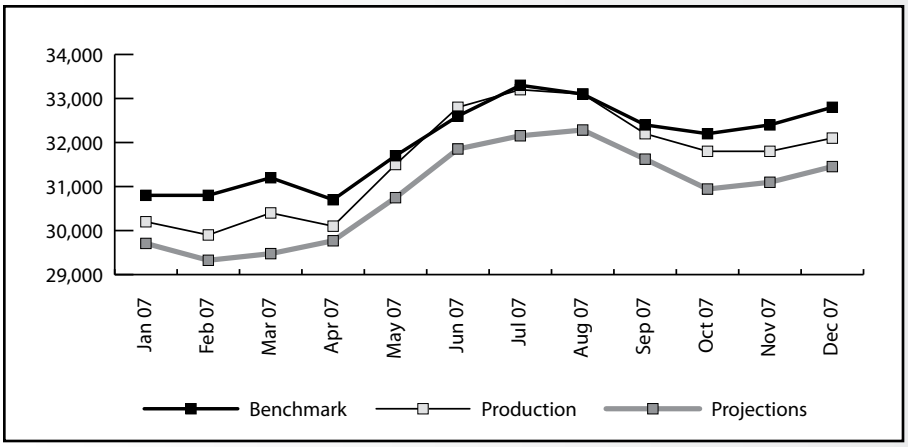


Figure 6: **Wyoming Retail Trade Employment, 2007**

the production estimates) missed the employment decrease in October.

Figure 6 shows the retail trade sector. There is a clear seasonal pattern with employment starting at a low level in January and peaking in the summer months. Both the projections and the sample-based production estimates reflect this seasonal pattern, but the production estimates more accurately captured the growth seen in 2007. Retail Trade is another sector where growth was stronger than analysts initially expected.

In transportation, warehousing, & utilities the sample-based production estimates were very close to the benchmarked series throughout the year (see Figure 7, page 6). However, the projections were much lower than the other series and were not a good predictor of actual employment.

The information sector is shown in Figure 8 (see page 6). This is a stable industry with little seasonal variation. The projections and the sample-based production CES series tended to over-estimate relative to the benchmarked series, but overall, the differences were small.

Figure 9 (see page 6) shows that there is a seasonal pattern to employment in financial activities. This industry has been growing fairly steadily in recent years, and the

projections appear to be a reasonable approximation of actual employment.

Figure 10 (see page 7) illustrates employment in the professional & business services sector. It appears that analysts noticed the consistent gap between the sample-based estimates and the benchmarked series in the first several months of the year so the CES estimates were adjusted upward in the last few months of the year. As a result, from August to December, the sample-based production CES estimates were very close to the benchmarked series. This was a case where information from outside the CES sample was used by analysts in making production CES estimates.

In Figure 11 (see page 7), educational & health services, the production CES series and the projections were close throughout the year. The sample-based production series did not seem to accurately capture the growth in the second half of the year. However, some of the positive errors were cancelled out by negative errors and the annual averages of the production and benchmarked series were similar.

Leisure & Hospitality has a stable seasonal pattern (see Figure 12, page 7) with employment peaking in July. The sample-based production series underestimated employment in the first quarter of the year and overestimated in

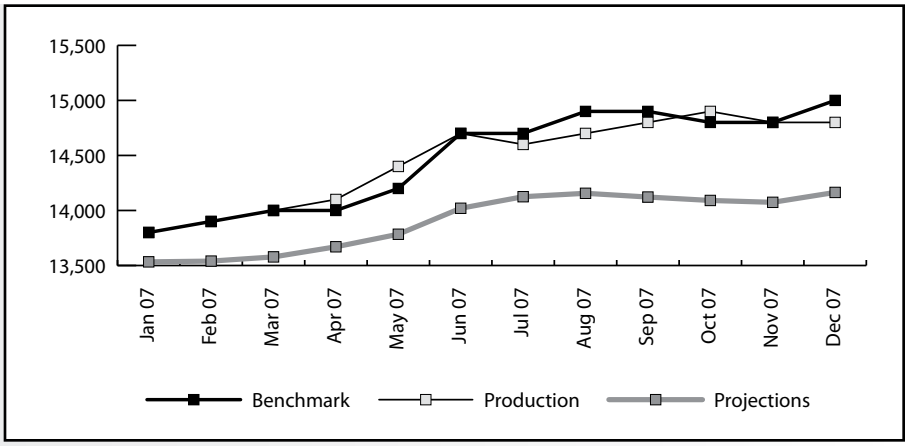


Figure 7: Wyoming Transportation, Warehousing, & Utilities Employment, 2007

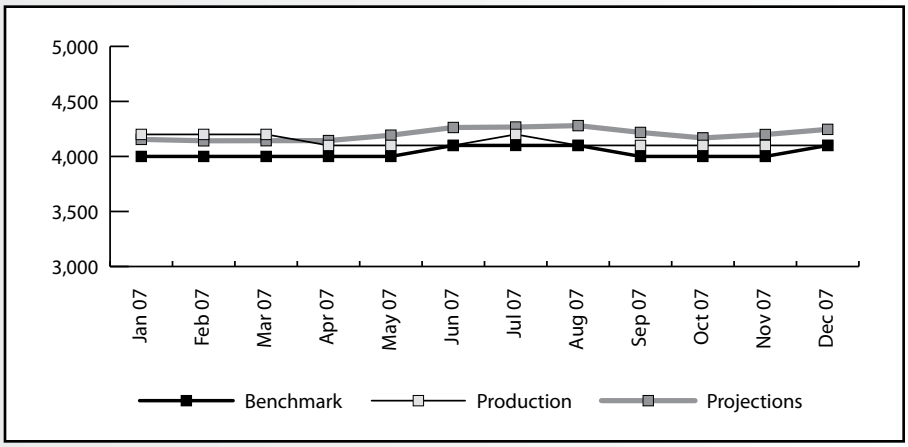


Figure 8: Wyoming Information Employment, 2007

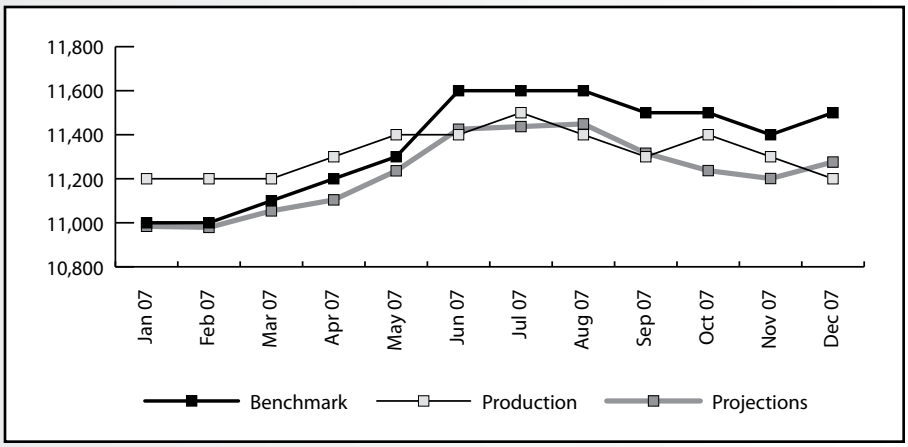


Figure 9: Wyoming Financial Activities Employment, 2007

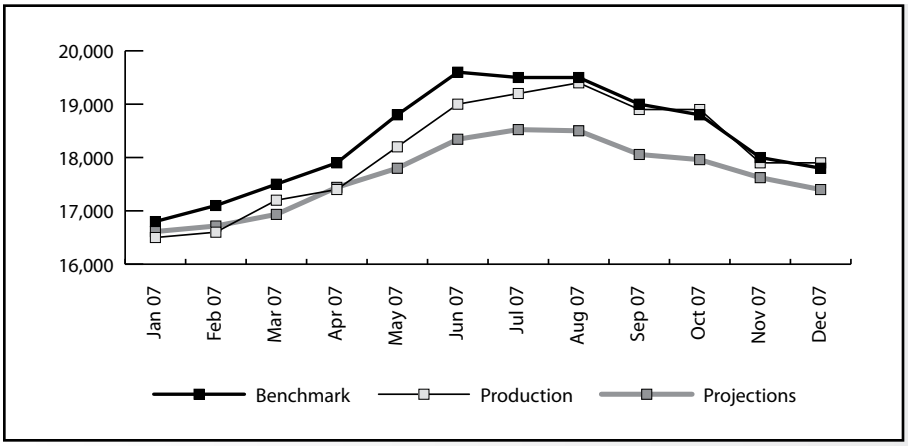


Figure 10: **Wyoming Professional & Business Services Employment, 2007**

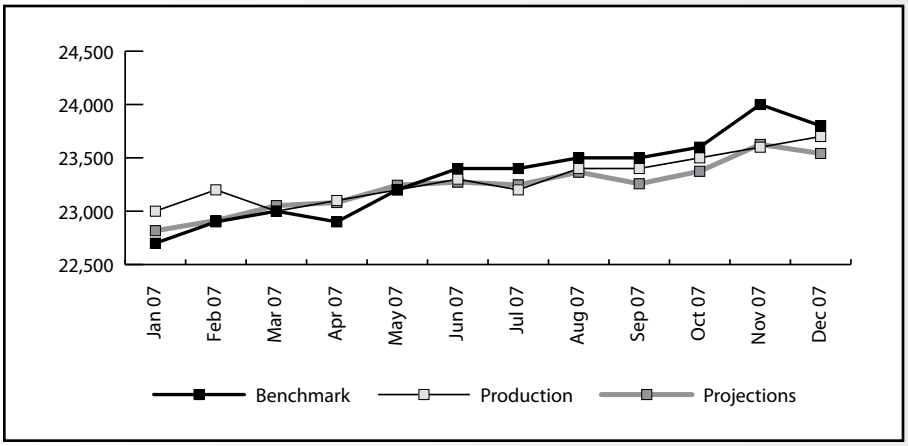


Figure 11: **Wyoming Educational & Health Services Employment, 2007**

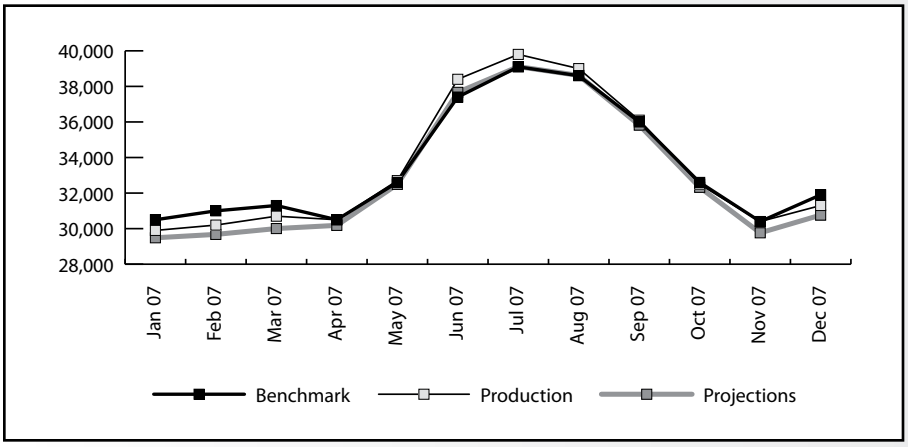


Figure 12: **Wyoming Leisure & Hospitality Employment, 2007**

June, July, and August. This may be a case where analyst intervention made the production estimates less accurate. The annual averages of the production and benchmark series were very close to each other and marginally higher than the projections.

Figure 13 (see page 8) shows that neither the projections nor the sample-based production estimates accurately predicted the benchmarked employment for other services. However, by December, the production estimates reflected some of the growth in this sector.

Government employment, as shown in Figure 14 (see page 8), has a definite seasonal pattern. The sample-based production CES estimates captured more of the growth than did the projections. On an annual average basis, the CES estimates were approximately 500 jobs lower than the benchmarked series, and the projections underestimated growth by more than 1,000 jobs.

2008 Data

In January 2008, analysts again developed annual projections. Their expectations were for annual growth of approximately 5,700 jobs (2.0%). It should be noted that the 2008 benchmarked series reflects replacement with QCEW

data through September. At the time the benchmark is done, fourth quarter QCEW data are not available, so the final three months of benchmarked 2008 data are sample-based estimates using September as a starting point.

Figure 15 looks similar to Figure 1. In both 2007 and 2008, the sample-based production estimates for total nonfarm employment were higher than the projections and both were lower than the benchmarked series.

Actual employment in natural resources & mining (the benchmarked line) was higher than projections and higher than the sample-based production series (see Figure 16, page 9). At least part of this situation can be explained by the large run-up in energy prices during the summer of 2008. It appears that analysts expected much slower growth (similar to what actually happened in 2007).

In Figure 17 (see page 9), the production estimates for construction started out fairly close to the projections line, but increased rapidly in May and June. In each month the benchmarked series is higher than the projections, again suggesting that growth in construction was stronger than originally thought.

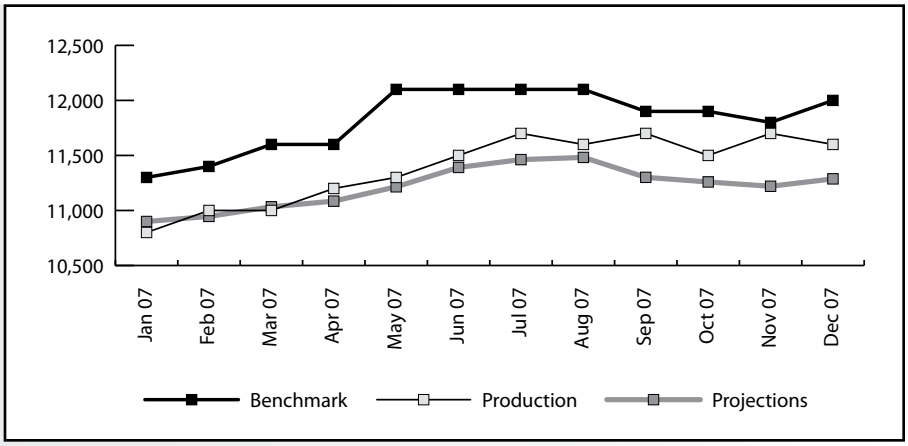


Figure 13: **Wyoming Other Services Employment, 2007**

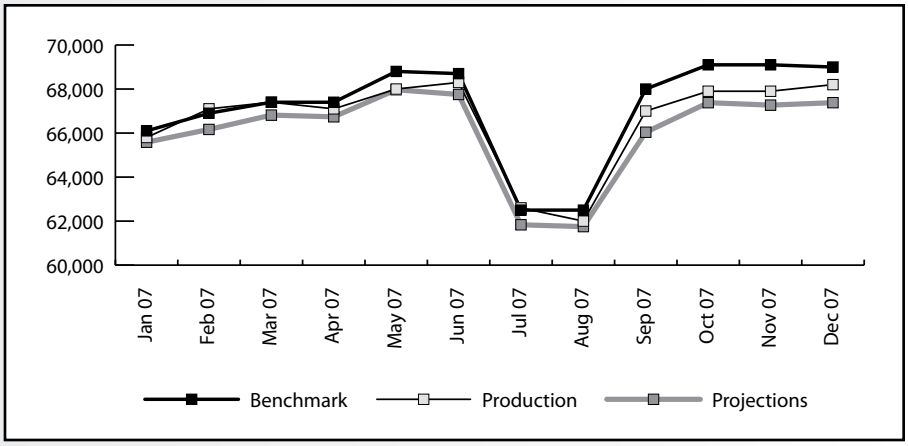


Figure 14: **Wyoming Government Employment, 2007**

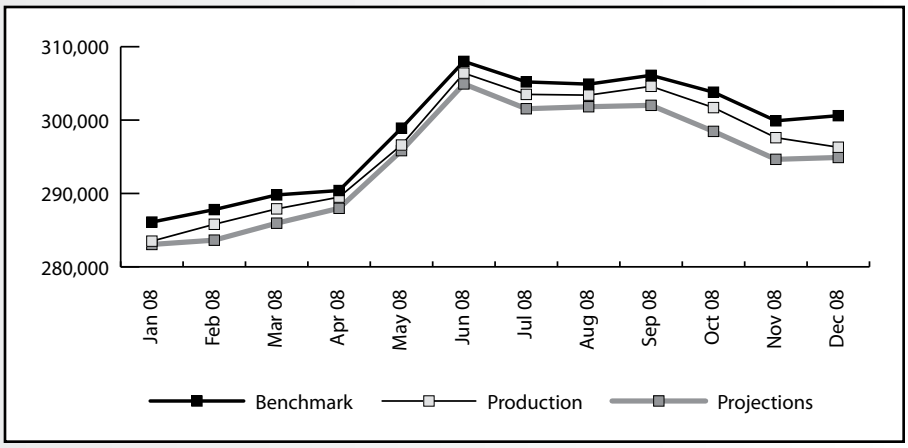


Figure 15: **Wyoming Total Nonfarm Employment, 2008**

In the manufacturing sector for most of the year, employment was less than projected (see Figure 18, page 9).

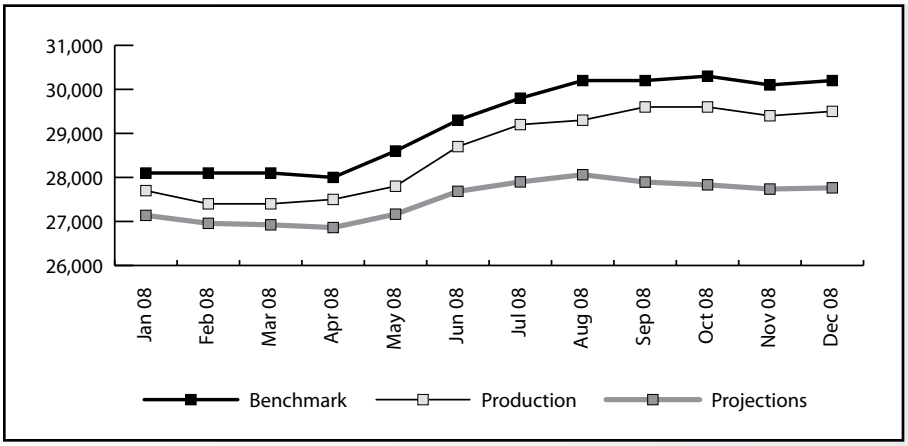


Figure 16: **Wyoming Natural Resources & Mining Employment, 2008**

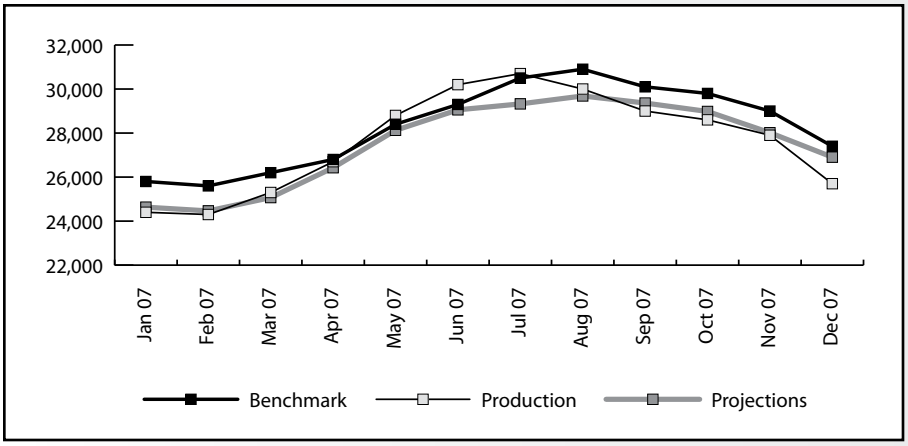


Figure 17: **Wyoming Construction Employment, 2008**

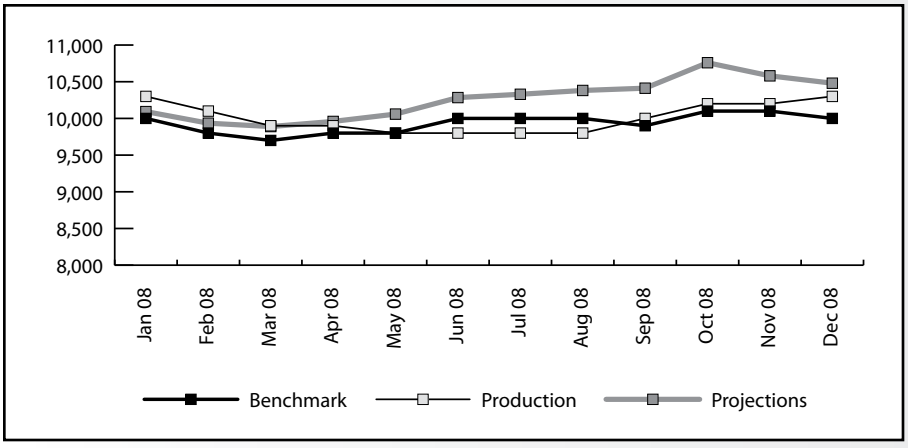


Figure 18: **Wyoming Manufacturing Employment, 2008**

On an annual average basis, the projections were approximately 300 jobs higher than the benchmarked series.

Figure 19 (see page 10) shows that in wholesale trade, the sample-based production estimates were practically the same as the benchmarked estimates for much of the year. The projections, however, were noticeably higher than the benchmarked series from May to December.

For the retail trade sector (see Figure 20, page 10), the projections appear to predict monthly employment reasonably accurately. However, the annual averages of all three series are very similar.

Projections of 2008 employment in transportation, warehousing & utilities were unreasonably high (see Figure 21, page 10). Employment in this sector had grown rapidly in recent years, adding 900 jobs in 2006 and 1,000 jobs in 2007. Analysts expected this fast paced growth to continue. The annual average of the projections series was approximately 500 jobs higher than the benchmarked series.

Figure 22 (see page 11) is similar to Figure 8. In both 2007 and 2008, employment in the information sector was stable and similar to projections.

All three series were similar in financial activities (see Figure 23, page 11). Both the projections and the sample-based

production estimates were good predictors of actual (or benchmarked) employment.

For employment in professional & business services (see Figure 24, page 11), the actual employment, or the benchmarked series, is lower than the projections and the sample-based production estimates in almost every month. In this sector, it appears that the projections were a better predictor of actual employment than the production estimates. Particularly from June to October, the production estimates were noticeably higher than the benchmarked series.

In the educational & health services sector, the benchmarked employment series was much higher than the projections and the sample-based production series (see Figure 25, page 12). In other words, job growth was faster than expected.

The projections for leisure & hospitality seemed to accurately predict employment for most of the year (see Figure 26, page 12). From January to March 2008, however, actual employment (the benchmarked series) was much higher than either the sample-based production series or the projections.

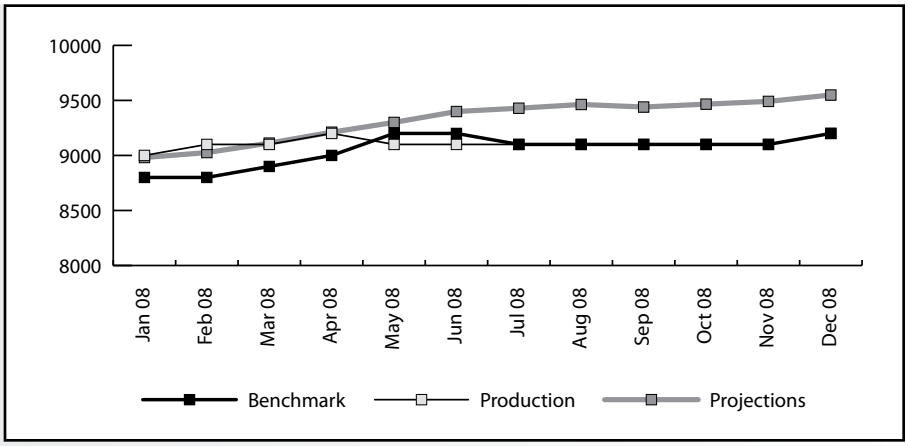


Figure 19: **Wyoming Wholesale Trade Employment, 2008**

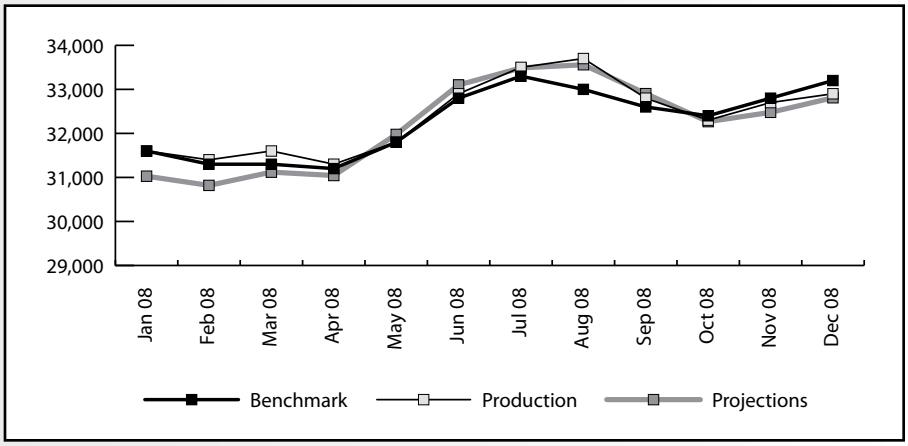


Figure 20: **Wyoming Retail Trade Employment, 2008**

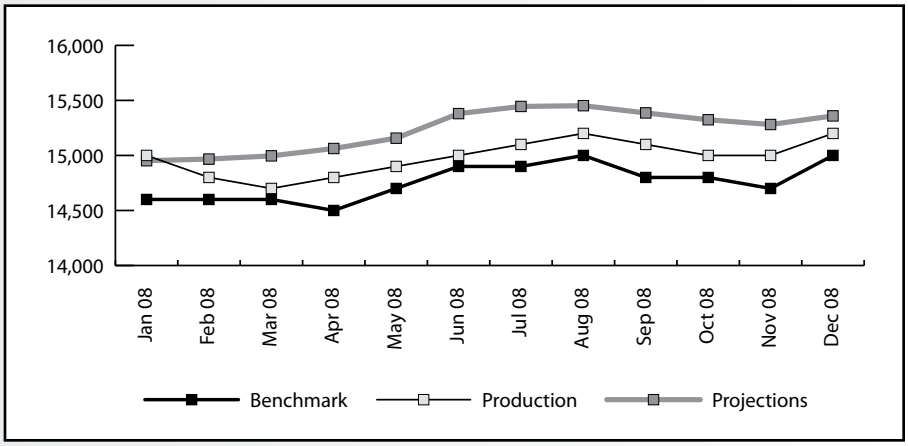


Figure 21: **Wyoming Transportation, Warehousing, & Utilities Employment, 2008**

In the other services sector, the annual averages for both the projections and sample-based production series were practically the same (see Figure 27, page

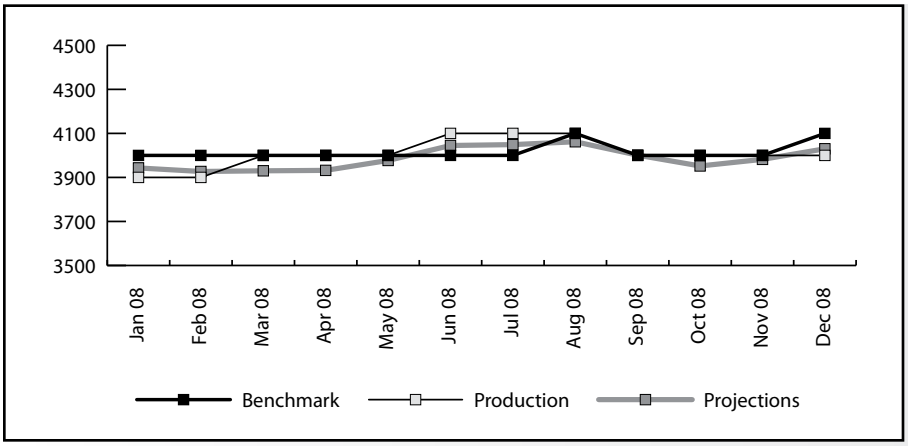


Figure 22: **Wyoming Information Employment, 2008**

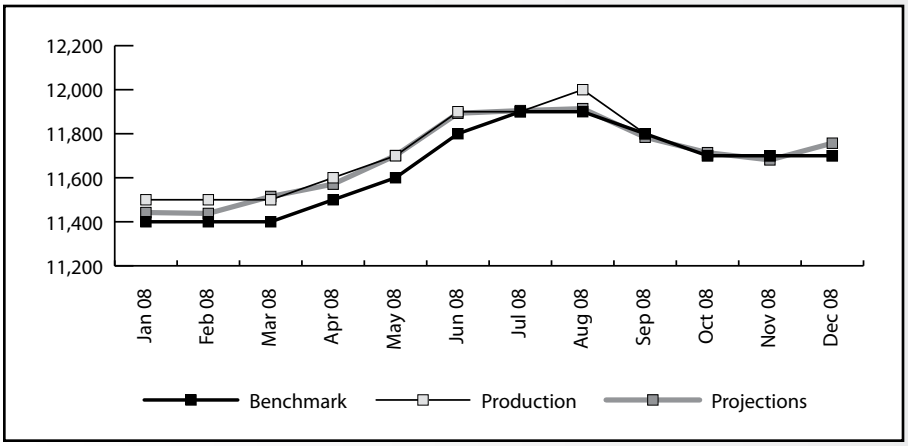


Figure 23: **Wyoming Financial Activities Employment, 2008**

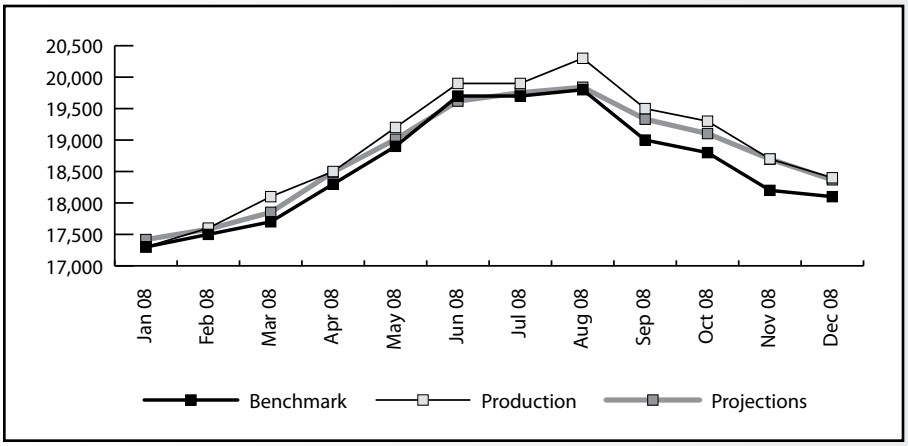


Figure 24: **Wyoming Professional & Business Services Employment, 2008**

12). The benchmarked series was much higher, suggesting that growth was again stronger than expected.

Government employment had a similar pattern in 2007 and 2008 (see Figure 28, page 13). For practically the whole year, sample-based production estimates were higher than projections and both were lower than the actual benchmarked series. Growth was much stronger than expected, but the production CES estimates did capture much of the increase.

Conclusions

In general, the figures illustrate the fact that although projections might accurately predict the seasonal pattern in total nonfarm employment and in many sectors, they are inferior to the sample-based production CES estimates made throughout the year. There are at least two reasons why production estimates are better. First, they are based on actual data reported by a sample of employers. In other words, the data employers in the sample report each month is a valuable indicator of overall employment trends. In Figures 1, 7, 14, 15, and 28, the production estimates seem more accurate than the projections.

Second, as the year progresses and analysts receive QCEW data, they are able to incorporate this information into their production estimates. This

is particularly seen in the construction sector in 2007 (see Figure 3), professional & business services in 2007 (see Figure 10), and natural resources & mining in 2008 (see Figure 16).

Another important lesson from this exercise is that the ability of projections to accurately predict employment depends on the state of the economy. If the economy is growing at a steady rate over a few years, it is much more likely that time-series methods will produce accurate projections. Time-series methods are not able to accurately predict turning points, or inflection points in economic time series. This can be seen in natural resources & mining in 2007 (see Figure 2) as the projections indicated strong growth that didn't actually happen. In the future, analysts could use causal models to more accurately predict employment levels.

In summary, most of the projections accurately reflected the seasonal patterns of the sectors, but their ability to predict

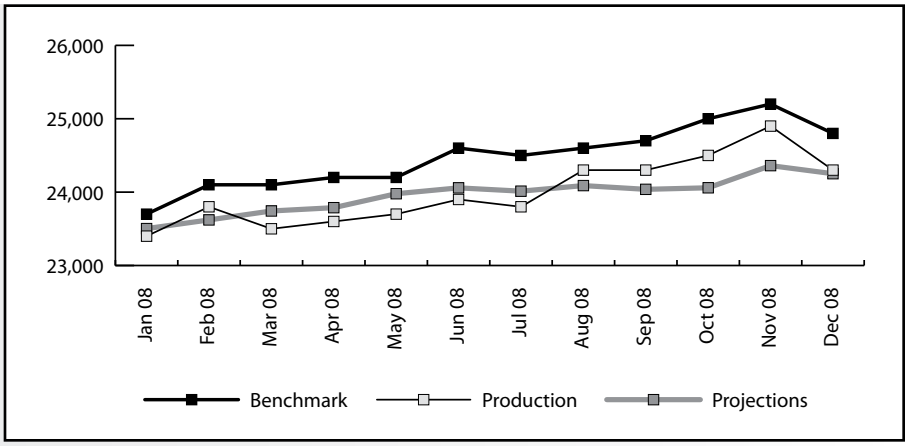


Figure 25: **Wyoming Educational & Health Services Employment, 2008**

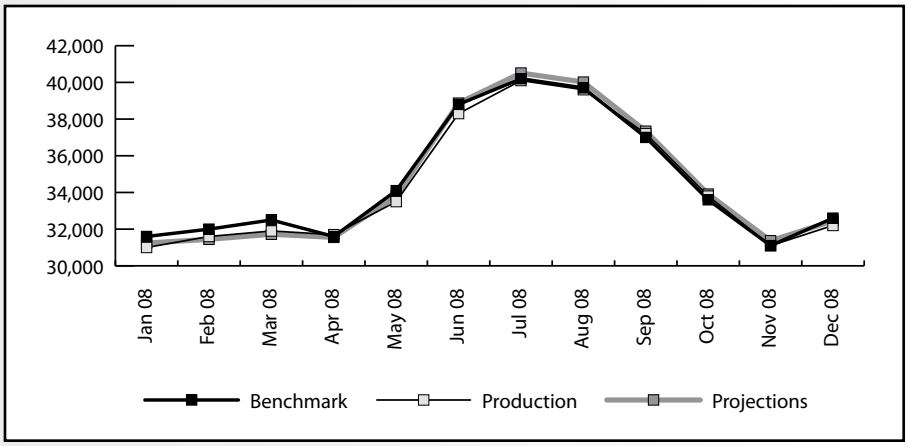


Figure 26: **Wyoming Leisure & Hospitality Employment, 2008**

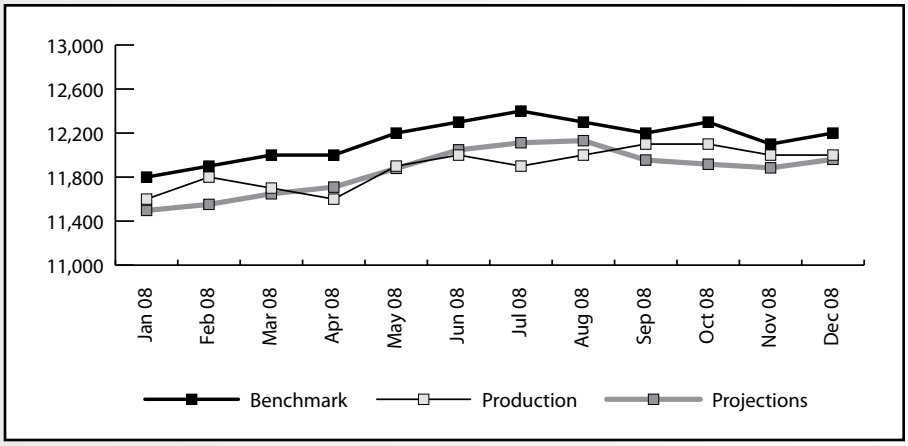


Figure 27: **Wyoming Other Services Employment, 2008**

QUESTION: Where can I find the average wages for a particular occupation in a particular county?

ANSWER: The **Wyoming Wage Survey!** See http://doe.state.wy.us/lmi/OES_toc.htm

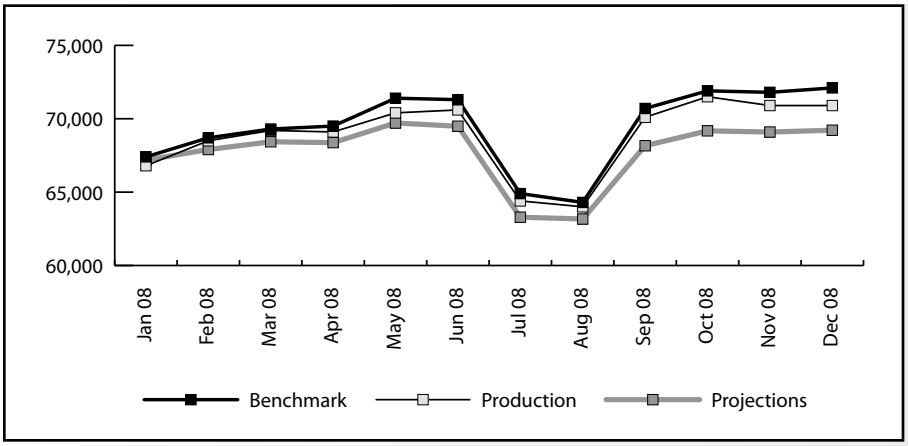


Figure 28: **Wyoming Government Employment, 2008**

growth or decline was mixed. There are many reasons why employment levels can deviate from historical trends; however, the projections are a useful tool for evaluating the sample-based estimates.

Alternative Measures of Labor Underutilization

by: Carola Cowan, BLS Programs Supervisor

The state's unemployment rate is a key economic indicator on how well the labor market in Wyoming is performing. Wyoming's unemployment rate has been estimated to have increased from 3.3% in July 2008 to 6.5% in July 2009, but is still well below the national average of 9.4% (seasonally adjusted). In the past few months, the media have mentioned alternative measures of unemployment. These numbers previously have only been available on a national level. In March, the Bureau of Labor Statistics (BLS) released the same numbers as annual averages for 2007 and 2008 for states.

Alternative measures of unemployment have been developed to look at the labor market from different perspectives. Not all possible labor market difficulties can be assessed with just one number. Therefore, six different measures of labor underutilization have long been published monthly from the Current Population Survey (CPS) for the nation. The six measures are referred to as U-1 to U-6. The number we see in the news as the official unemployment rate for the nation is U-3.

Seasonally Adjusted Data

Seasonally adjusted data take out seasonal fluctuations in a data series. This makes data comparable across states and transforms them into an economic indicator. If data are not seasonally adjusted, we see more ups and downs due to things such as weather or tourist seasons. For example, as the winter starts, we see a decrease in employment in construction. In northern states you may see this trend earlier than in southern states. If data are not seasonally adjusted, we don't know whether an increase in unemployment is due to the seasonal factor or the economy. If the data are seasonally adjusted we can attribute changes in the unemployment rate to the economy.

The official number for Wyoming is modeled by the Local Area Unemployment Statistics program using numbers from CPS, UI claims data, and the Current Employment Statistics because the CPS sample on the

Table 1: Alternative Measures of Labor Underutilization by State, 2007 Annual Averages

State	U-1	U-2	U-3	U-4	U-5	U-6
Alabama	1.4	1.8	4.0	4.3	4.9	7.1
Alaska	1.3	3.0	6.2	6.4	7.6	11.5
Arizona	1.0	1.9	3.9	4.1	4.6	7.4
Arkansas	1.4	2.7	5.6	5.8	6.3	9.7
California	1.7	2.8	5.3	5.5	6.2	10.0
Colorado	0.9	1.7	3.7	3.8	4.3	7.4
Connecticut	1.5	2.3	4.5	4.8	5.4	8.4
Delaware	1.1	1.7	3.5	3.8	4.4	6.5
District of Columbia	2.2	2.2	5.5	5.7	6.8	9.4
Florida	1.2	2.0	4.1	4.3	4.9	8.1
Georgia	1.4	2.1	4.3	4.7	5.4	8.1
Hawaii	0.8	1.1	2.9	3.0	3.6	6.4
Idaho	0.6	1.4	3.0	3.0	3.4	6.2
Illinois	1.9	2.7	5.1	5.4	5.9	8.7
Indiana	1.5	2.5	4.6	4.8	5.3	7.9
Iowa	1.1	1.6	3.7	3.8	4.3	7.1
Kansas	1.1	1.7	4.1	4.2	4.7	7.5
Kentucky	1.6	2.6	5.4	5.7	6.3	9.3
Louisiana	1.5	1.9	4.3	4.6	5.1	7.3
Maine	1.4	2.2	4.7	4.9	5.6	9.1
Maryland	1.2	1.4	3.6	3.8	4.4	6.4
Massachusetts	1.6	2.4	4.6	4.8	5.3	7.3
Michigan	3.0	4.0	7.1	7.6	8.5	13.0
Minnesota	1.4	2.4	4.6	4.7	5.5	8.4
Mississippi	2.0	3.0	6.1	6.7	7.6	10.9
Missouri	1.8	2.3	5.0	5.1	5.5	8.5
Montana	0.9	1.9	3.6	3.7	3.9	7.3
Nebraska	0.8	1.4	3.1	3.2	3.7	5.8
Nevada	1.3	2.3	4.6	4.8	5.3	7.6
New Hampshire	0.9	1.8	3.6	3.7	4.2	6.6
New Jersey	1.6	2.6	4.2	4.4	5.1	7.4
New Mexico	1.0	1.7	3.7	3.8	4.5	7.4
New York	1.8	2.3	4.6	5.0	5.6	8.1
North Carolina	1.6	2.4	4.5	4.8	5.6	8.6
North Dakota	0.8	1.7	3.2	3.3	3.6	5.9
Ohio	1.8	2.8	5.6	5.7	6.5	9.8
Oklahoma	1.3	2.0	4.4	4.7	5.3	7.6
Oregon	1.3	2.8	5.2	5.3	6.1	10.1
Pennsylvania	1.4	2.1	4.3	4.5	5.3	7.8
Rhode Island	1.7	2.7	4.9	5.0	5.7	8.4
South Carolina	1.9	2.6	5.6	5.9	6.6	9.6
South Dakota	0.7	1.2	2.9	3.1	3.4	5.8
Tennessee	1.4	2.5	4.6	4.7	5.3	8.1
Texas	1.2	1.7	4.3	4.5	5.0	7.7
United States	**1.5**	**2.3**	**4.6**	**4.9**	**5.5**	**8.3**
Utah	0.5	1.3	2.6	2.7	3.1	5.1
Vermont	1.2	1.8	4.0	4.2	4.8	7.0
Virginia	0.8	1.6	3.1	3.2	3.7	6.2
Washington	1.1	2.2	4.6	4.8	5.5	9.0
West Virginia	1.4	2.1	4.6	4.9	5.7	9.3
Wisconsin	1.8	2.5	5.0	5.2	5.8	8.5
Wyoming	**0.5**	**1.2**	**2.9**	**3.0**	**3.4**	**5.7**

Bureau of Labor Statistics, Current Population Survey

state level is too small to make a reliable estimate. It is therefore not the same as U-3, which comes from the CPS, but both use the same definition regarding who is included or not included in the count. Two of the other measures (U-1 and U-2) are, by definition, more restrictive than the U-3 rate. The other three measures (U-4, U-5, and U-6) are defined more broadly than U-3, and include individuals not included in U-3. All six measures are calculated using data collected by the CPS.

The six measures of labor underutilization are defined by the BLS (U.S. Department of Labor):

- U-1 – people unemployed 15 weeks or longer, as a percentage of the civilian labor force;
- U-2 – job losers and people who completed temporary jobs, as a percentage of the civilian labor force;
- U-3 – total unemployed, as a percentage of the civilian labor force (the official unemployment rate for the nation);
- U-4 – total unemployed, plus discouraged workers, as a percentage of the civilian labor force plus discouraged workers;
- U-5 – total unemployed, plus discouraged

workers, plus all other marginally attached workers, as a percentage of the civilian labor force plus all marginally attached workers;
- U-6 – total unemployed, plus all marginally attached workers, plus total employed part-time for economic reasons, as a percentage of the civilian labor force plus all marginally attached workers.

As can be seen in Tables 1 and 2, U-1 has the lowest unemployment rate because it is the most restrictive by counting only the long-term unemployed (at least 15 weeks). If this number increases we know people have a harder time finding new employment after losing their job. In Wyoming, the number of people affected was approximately 1,450 for 2007 and 2008.

The second lowest is U-2. It only counts people who lost their jobs but not people who voluntarily quit or who entered the labor market for the first time or reentered the labor market. An increase in U-2 suggests that more people are unemployed because they got laid off, as opposed to those who left their job voluntarily. This translates into approximately 3,450 and 3,800 unemployed in Wyoming in 2007 and 2008, respectively.

Table 2: Alternative Measures of Labor Underutilization by State, 2008 Annual Averages

State	U-1	U-2	U-3	U-4	U-5	U-6
Alabama	2.3	3.0	5.6	5.9	6.6	9.8
Alaska	1.8	3.3	6.8	7.1	8.2	12.0
Arizona	1.6	3.1	5.9	6.1	6.7	10.7
Arkansas	1.5	2.7	5.2	5.5	5.9	10.2
California	2.8	4.0	7.1	7.4	8.3	13.4
Colorado	1.5	2.5	4.8	4.9	5.4	9.2
Connecticut	2.2	3.2	5.7	6.1	6.8	10.3
Delaware	1.9	2.7	5.0	5.2	5.7	9.0
District of Columbia	2.8	2.8	6.6	6.8	7.8	10.0
Florida	2.4	3.4	6.1	6.4	7.1	11.9
Georgia	2.5	3.5	6.4	6.7	7.3	11.1
Hawaii	1.1	1.8	4.2	4.4	5.2	8.8
Idaho	1.4	3.0	5.4	5.6	6.1	10.4
Illinois	2.6	3.6	6.6	6.9	7.6	11.7
Indiana	2.2	3.3	6.0	6.3	6.9	10.6
Iowa	1.0	1.9	4.0	4.1	4.6	7.6
Kansas	1.1	2.1	4.5	4.6	5.2	7.8
Kentucky	2.1	3.2	6.3	6.6	7.6	10.8
Louisiana	1.8	2.3	5.0	5.2	5.8	7.8
Maine	1.6	2.9	5.4	5.6	6.6	10.9
Maryland	1.4	2.0	4.2	4.5	5.2	7.8
Massachusetts	2.1	3.0	5.3	5.6	6.3	9.0
Michigan	3.6	4.7	8.3	8.9	9.9	15.1
Minnesota	2.1	3.0	5.5	5.8	6.5	10.2
Mississippi	2.2	3.2	6.5	7.0	7.9	11.2
Missouri	2.1	3.4	6.1	6.3	6.9	10.1
Montana	1.2	2.6	5.2	5.3	5.6	10.3
Nebraska	0.8	1.5	3.3	3.3	3.7	6.1
Nevada	2.3	3.7	6.1	6.4	6.7	11.1
New Hampshire	1.2	2.1	3.8	4.0	4.6	7.8
New Jersey	2.2	3.2	5.4	5.7	6.3	9.5
New Mexico	1.0	1.6	4.4	4.7	5.3	8.9
New York	2.1	3.1	5.5	5.9	6.6	9.6
North Carolina	2.6	3.3	6.4	6.7	7.5	11.3
North Dakota	0.7	1.6	3.2	3.3	3.7	6.1
Ohio	2.2	3.3	6.5	6.7	7.7	11.4
Oklahoma	1.3	1.7	3.7	3.9	4.5	6.5
Oregon	1.9	4.2	6.4	6.6	7.2	12.6
Pennsylvania	1.8	2.8	5.3	5.5	6.2	9.3
Rhode Island	3.3	4.8	7.9	8.2	9.2	13.2
South Carolina	2.9	3.7	6.7	7.0	7.8	12.1
South Dakota	0.6	1.4	3.0	3.4	3.8	6.2
Tennessee	2.2	3.4	6.6	6.9	7.6	11.4
Texas	1.3	2.3	4.8	5.1	5.8	9.1
United States	**2.1**	**3.1**	**5.8**	**6.1**	**6.8**	**10.5**
Utah	0.8	1.6	3.5	3.6	4.0	6.2
Vermont	1.5	2.6	4.9	5.1	5.8	9.1
Virginia	1.2	2.0	4.0	4.1	4.6	7.5
Washington	1.5	2.8	5.3	5.5	6.3	10.4
West Virginia	1.5	2.2	4.4	4.8	5.2	9.1
Wisconsin	1.6	2.5	4.7	4.8	5.4	8.6
Wyoming	**0.5**	**1.3**	**3.0**	**3.0**	**3.4**	**5.7**

Bureau of Labor Statistics, Current Population Survey

Table 3: Percentage Point Change in Alternative Unemployment Measures from 2007 to 2008, by State

State	U-1	U-2	U-3	U-4	U-5	U-6
Alabama	0.9	1.2	1.6	1.6	1.7	2.7
Alaska	0.5	0.3	0.6	0.7	0.6	0.5
Arizona	0.6	1.2	2.0	2.0	2.1	3.3
Arkansas	0.1	0.0	-0.4	-0.3	-0.4	0.5
California	1.1	1.2	1.8	1.9	2.1	3.4
Colorado	0.6	0.8	1.1	1.1	1.1	1.8
Connecticut	0.7	0.9	1.2	1.3	1.4	1.9
Delaware	0.8	1.0	1.5	1.4	1.3	2.5
District of Columbia	0.6	0.6	1.1	1.1	1.0	0.6
Florida	1.2	1.4	2.0	2.1	2.2	3.8
Georgia	1.1	1.4	2.1	2.0	1.9	3.0
Hawaii	0.3	0.7	1.3	1.4	1.6	2.4
Idaho	0.8	1.6	2.4	2.6	2.7	4.2
Illinois	0.7	0.9	1.5	1.5	1.7	3.0
Indiana	0.7	0.8	1.4	1.5	1.6	2.7
Iowa	-0.1	0.3	0.3	0.3	0.3	0.5
Kansas	0.0	0.4	0.4	0.4	0.5	0.3
Kentucky	0.5	0.6	0.9	0.9	1.3	1.5
Louisiana	0.3	0.4	0.7	0.6	0.7	0.5
Maine	0.2	0.7	0.7	0.7	1.0	1.8
Maryland	0.2	0.6	0.6	0.7	0.8	1.4
Massachusetts	0.5	0.6	0.7	0.8	1.0	1.7
Michigan	0.6	0.7	1.2	1.3	1.4	2.1
Minnesota	0.7	0.6	0.9	1.1	1.0	1.8
Mississippi	0.2	0.2	0.4	0.3	0.3	0.3
Missouri	0.3	1.1	1.1	1.2	1.4	1.6
Montana	0.3	0.7	1.6	1.6	1.7	3.0
Nebraska	0.0	0.1	0.2	0.1	0.0	0.3
Nevada	1.0	1.4	1.5	1.6	1.4	3.5
New Hampshire	0.3	0.3	0.2	0.3	0.4	1.2
New Jersey	0.6	0.6	1.2	1.3	1.2	2.1
New Mexico	0.0	-0.1	0.7	0.9	0.8	1.5
New York	0.3	0.8	0.9	0.9	1.0	1.5
North Carolina	1.0	0.9	1.9	1.9	1.9	2.7
North Dakota	-0.1	-0.1	0.0	0.0	0.1	0.2
Ohio	0.4	0.5	0.9	1.0	1.2	1.6
Oklahoma	0.0	-0.3	-0.7	-0.8	-0.8	-1.1
Oregon	0.6	1.4	1.2	1.3	1.1	2.5
Pennsylvania	0.4	0.7	1.0	1.0	0.9	1.5
Rhode Island	1.6	2.1	3.0	3.2	3.5	4.8
South Carolina	1.0	1.1	1.1	1.1	1.2	2.5
South Dakota	-0.1	0.2	0.1	0.3	0.4	0.4
Tennessee	0.8	0.9	2.0	2.2	2.3	3.3
Texas	0.1	0.6	0.5	0.6	0.8	1.4
United States	**0.6**	**0.8**	**1.2**	**1.2**	**1.3**	**2.2**
Utah	0.3	0.3	0.9	0.9	0.9	1.1
Vermont	0.3	0.8	0.9	0.9	1.0	2.1
Virginia	0.4	0.4	0.9	0.9	0.9	1.3
Washington	0.4	0.6	0.7	0.7	0.8	1.4
West Virginia	0.1	0.1	-0.2	-0.1	-0.5	-0.2
Wisconsin	-0.2	0.0	-0.3	-0.4	-0.4	0.1
Wyoming	**0.0**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**

Note: Shaded cells indicate increases equal to or greater than 1.0 percentage points.
Bureau of Labor Statistics, Current Population Survey

U-3 is the official unemployment rate for the nation and the rate reported most widely in the news. It includes all jobless people who are available to work and have actively looked for work in the past four weeks. This fits the basic definition of unemployed because people have to actively look for work to be counted as unemployed. In Wyoming in 2007, there were an estimated 8,346 unemployed people on an annual average basis; in 2008 there were 9,008. This number, as well as U-1 and U-2, has been produced since 1948 and therefore is useful in making long-term historical comparisons.

U-4 and U-5 include persons who are not considered to be in the civilian labor force. People not in the labor force are ordinarily not considered employed or unemployed. These two rates, as well as U-6, were first reported nationally in 1994. U-4 includes discouraged workers, who want a job but have given up searching because they believe they will not be able to find one. The number of discouraged workers is relatively small, and U-4 is very close to the U-3 rate. In 2008, the rate for U-3 and U-4 was the same in Wyoming (see Table 2). The approximate numbers were 8,650 and

8,700 for 2007 and 2008, respectively. If U-1 rises, we may find U-4 increasing, because the longer it takes people to find a new job, the more likely they are to become discouraged in their job search.

U-5 includes all marginally attached workers, defined as the number of discouraged workers plus the number of workers who, for a variety of reasons, did not look for a job in the last month but have looked for one in the past year. This estimate is around 10,000 in Wyoming. An increase here will mostly likely be tied to long-term unemployment and therefore an increase in U-1.

The broadest measure of the unemployment rate is U-6. This number includes the unemployed, all marginally attached workers, and the underemployed. Underemployed workers have a job, and therefore would ordinarily not be counted as unemployed, but work fewer hours than they would prefer. In Wyoming, this translates to about 16,650 people. A faster increase in U-6 than U-3 suggests that employers are not laying off people, but instead are reducing the hours worked to adjust for economic conditions.

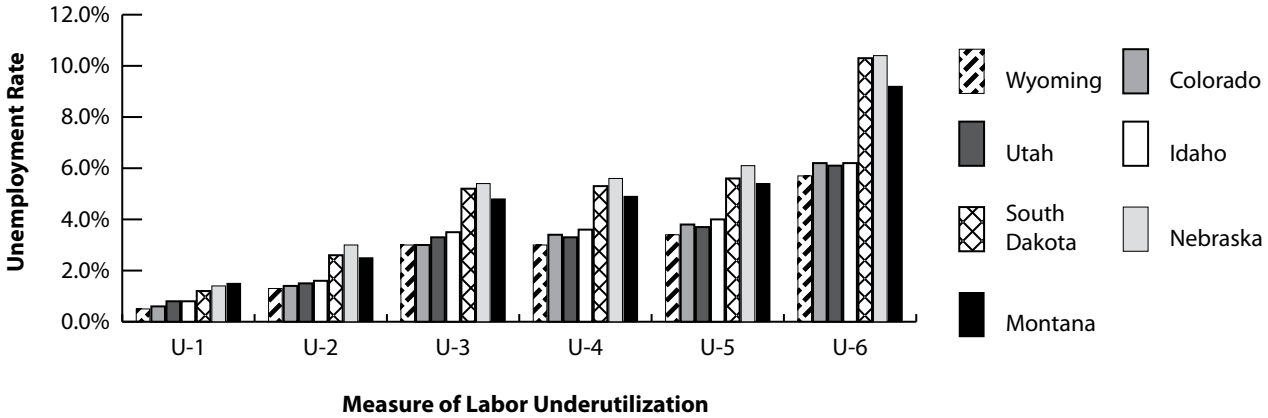
These six measures differ in magnitude from each other but usually move in the same direction over time. Table 2 shows that Michigan had the highest rates for all six measures. Wyoming and South Dakota were tied with the lowest unemployment rate in 2008. Wyoming's other five measures were the lowest in the nation.

Do these numbers suggest Wyoming had a labor shortage in 2008? The very low U-1 rate of 0.5% suggests that most people in the state don't have difficulty finding new employment. The U-3 and U-4 rate are tied at 3.0%, suggesting that Wyoming doesn't have very many people who are discouraged in their job search either. We can therefore conclude that there is not an over-abundance of workers in the state.

Depending on one's viewpoint, the

(Text continued on page 20)

Figure: Alternate Measures of Labor Underutilization for Wyoming and Surrounding States, 2008 Annual Averages



Source: Bureau of Labor Statistics. Alternative Measures of Labor Underutilization for States. Retrieved May 5, 2009, from http://www.bls.gov/lau/stalt.htm

Measuring Job Satisfaction of Public Health Nurses in Wyoming

Now online at http://doe.state.wy.us/LMI/phn_09/title.htm

In 2002 and 2003, Research & Planning conducted research to study work force behavior of nurses in Wyoming. This research, which used administrative databases including Board of Nursing files, yielded information on retention, turnover, and other transition behaviors. While the data were useful to the nursing community, more information was required to fully understand the issues facing Wyoming nurses.

The objective of this research was to enhance retention and supply strategies as the current population of baby boom generation nurses advances toward a traditional retirement age. Prior nursing studies have been used to seek funding to implement these strategies. However, the time between research and retention strategy implementation may be a period of years, making it difficult to directly link research to outcomes.

Through feedback by a nurse advisory council, the Wyoming Hospital Association, the Wyoming Long-Term Care Association, the Wyoming Healthcare Commission, Wyoming Medical Center staff, and members of the nursing community at statewide nursing summits, R&P initiated a three-faceted approach to study nurse behavior.

In 2007, two groups of nurses were surveyed: nurses working in ambulatory care (includes private doctor's offices and surgery centers) and nurses working in hospitals and long-term care centers.

It was decided that a questionnaire should be developed for public health nurses because they are dissimilar to both groups previously surveyed. State Public Health Supervisor Karen Ouzts served as the project's advisor as the goals of the research were identified and the questionnaire was modified.

The questionnaire previously used for hospitals and long-term care facilities was nearly identical to the questionnaire for ambulatory care. The difference was the addition of questions regarding overtime and shift changes. As public health nurses typically work a standard daytime schedule, it was decided to base the questionnaire on the form used to survey nurses working in ambulatory care. Questions regarding

Inside the report:

satisfaction (overall satisfaction with workplace issues, overall satisfaction with the nursing occupation, and satisfaction with the community) were left unaltered. Questions about education, tenure, and motivation for working in public health were added.

On September 19, 2008, all Wyoming public health nurses were mailed an advance letter to their home address in order to inform them of the upcoming survey. The mailing also served as a form of address refinement. The final response rate was 83.4% (136 returned questionnaires) after two mailings.

Responses to questions about workplace satisfaction showed that public health nurses were more satisfied than were nurses working in hospitals and long-term care facilities (see Table). Nearly three-fourths (74.1%) of the responses to the workplace measures were statistically different. All of the statistically significant differences indicated higher levels of workplace satisfaction among the public health nurses than the levels stated by nurses working in hospitals and long-term care facilities and ambulatory care.

Of the 136 who returned questionnaires, only 7 stated they planned to leave their job within a year; of those, 3 said they were planning to retire.

When asked about factors that would influence a decision to leave nursing entirely, nurses in public health were more likely than nurses in ambulatory care or hospitals and long-term care to select "I plan to retire," "I feel burned out from nursing," and "Better work schedules outside nursing." However, they were less likely to select "Feel overworked, "I need more autonomy," and "Better work schedules available outside nursing." They were also less likely to leave because of concerns about injury, either to self or patients.

For more information, see the full report at http://doe.state.wy.us/LMI/phn_09/title.htm.

Table: Stated Satisfaction Levels of Nurses Working in Public Health

	Public Health	Hospitals & Long-Term Care Facilities	Ambulatory Care
Overall satisfaction	4.1 (a)	3.6	3.9
Professional Development factor	3.8 (a,b)	3.5	3.5
Interpersonal factor	4.1 (a,b)	3.7	4.0
Compensation factor	3.6 (a,b)	3.1	3.2
Non-Nursing Tasks factor	3.6 (a,b)	3.0	3.3
Local Economic Conditions factor	3.4 (a,b)	3.3	3.3
Community Services factor	3.2	3.4	3.3
Disposable Income factor	2.6	2.7	2.8

(a) Significantly more satisfied than nurses working in hospitals and long-term care facilities.

(b) Significantly more satisfied than nurses working in ambulatory care.

(Text continued from page 17)

average unemployment rate in 2008 for Wyoming ranged from 0.5% to 5.7%. For the nation, those numbers are between 2.1% and 10.5%. These alternative measures of labor underutilization can help policy makers address different problems with the labor market such as underemployment.

References

U.S. Department of Labor, U.S. Bureau of Labor Statistics. (Summary 08-06/ June 2008). Issues in Labor Statistics, "The Unemployment Rate and Beyond: Alternative Measures of Labor Underutilization."

Seasonally Adjusted Unemployment Rate Rises to 5.9% in June

by: David Bullard, Senior Economist

Wyoming's seasonally adjusted[1] unemployment rate increased from 5.0% in May to 5.9% in June. Despite this increase, Wyoming's unemployment rate remained much lower than the U.S. rate of 9.5%. Over-the-year job losses continued in the state (-7,900 jobs, or -2.6%). The state's labor force (the sum of employed and unemployed individuals) decreased by 1,964, or 0.7% compared to June 2008.

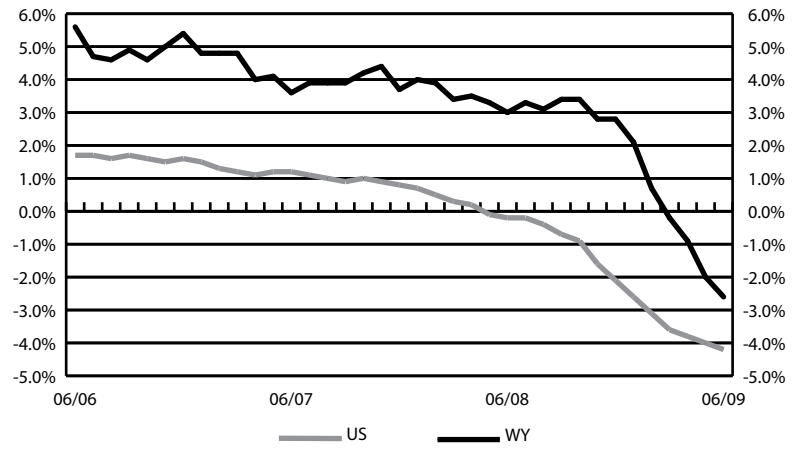
From May to June Wyoming added 7,200 jobs, or 2.5%. This is somewhat smaller than the normal seasonal increase of approximately 9,800 jobs. Seasonal job gains were seen in retail trade (1,000 jobs, or 3.2%), professional & business services (500 jobs, or 2.8%), educational & health services (400 jobs, or 1.6%), and leisure & hospitality (5,000 jobs, or 15.2%). Employment decreased in natural resources & mining (-200 jobs, or -0.8%), construction (-100 jobs, or -0.4%), and government (including public schools, colleges, and hospitals; -200 jobs, or -0.3%).

Over the year, employment decreased by 7,900 jobs, or 2.6%. The largest job losses occurred in natural resources & mining (including oil & gas; -3,500 jobs, or -11.9%) and construction (-3,500 jobs, or -11.9%). Employment also decreased in professional & business services (-1,100 jobs, or -5.6%), leisure & hospitality (-1,000 jobs, or -2.6%), and retail trade (-400 jobs, or -1.2%). Job gains were seen in educational & health services (500 jobs, or 2.0%) and government (including public schools, colleges, & hospitals; 1,400 jobs, or 2.0%).

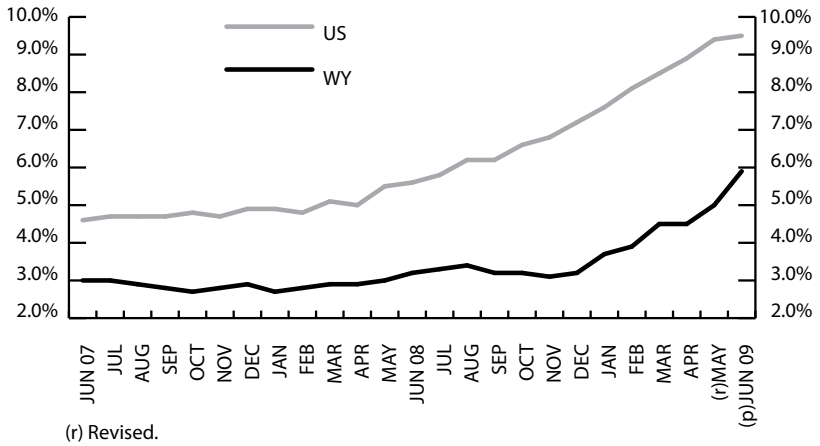
Unemployment rates in Wyoming's 23 counties all increased from their 2008 levels. The highest rates were found in Big Horn (7.9%), Fremont (7.4%), Lincoln (6.7%), and Johnson (6.7%) counties. Albany and Sublette counties posted the lowest unemployment rates (both 4.2%) followed by Teton County (4.7%).

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 in order to obtain a better understanding of changes in economic conditions from month to month.

Nonagricultural Employment Growth
(Percentage Change Over Previous Year)

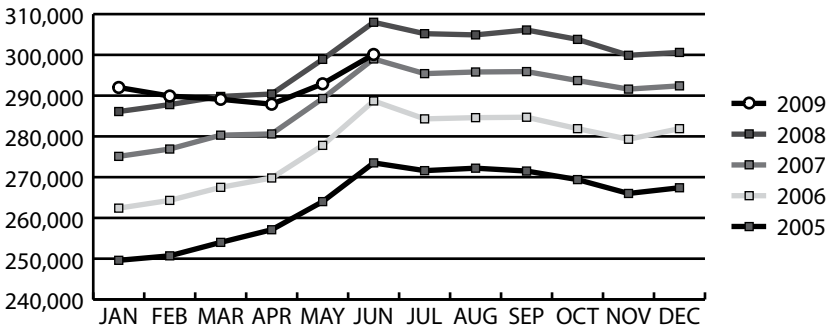


Seasonally Adjusted Unemployment Rate (Percentage)



(r) Revised.
(p) Preliminary.

Wyoming Nonagricultural Wage and Salary Employment



State Unemployment Rates
June 2009
(Seasonally Adjusted)

State	Unemp. Rate
Michigan	15.2
Puerto Rico	14.5
Rhode Island	12.4
Oregon	12.2
South Carolina	12.1
Nevada	12.0
California	11.6
Ohio	11.1
North Carolina	11.0
District of Columbia	10.9
Kentucky	10.9
Tennessee	10.8
Indiana	10.7
Florida	10.6
Illinois	10.3
Alabama	10.1
Georgia	10.1
United States	**9.5**
Missouri	9.3
Washington	9.3
New Jersey	9.2
West Virginia	9.2
Mississippi	9.0
Wisconsin	9.0
Arizona	8.7
New York	8.7
Massachusetts	8.6
Maine	8.5
Alaska	8.4
Delaware	8.4
Idaho	8.4
Minnesota	8.4
Pennsylvania	8.3
Connecticut	8.0
Colorado	7.6
Texas	7.5
Hawaii	7.4
Maryland	7.3
Arkansas	7.2
Virginia	7.2
Vermont	7.1
Kansas	7.0
Louisiana	6.8
New Hampshire	6.8
New Mexico	6.8
Montana	6.4
Oklahoma	6.3
Iowa	6.2
Wyoming	**5.9**
Utah	5.7
South Dakota	5.1
Nebraska	5.0
North Dakota	4.2

Wyoming Nonagricultural Wage and Salary Employment

by: David Bullard, Senior Economist

Employment in the state decreased by 7,900 jobs (-2.6) from June 2008 to June 2009.

	Employment in Thousands			% Change Total Employment	
	June 09(p)	May 09(r)	June 08	May 09 June 09	June 08 June 09
WYOMING STATEWIDE					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	**300.1**	**292.9**	**308.0**	**2.5**	**-2.6**
TOTAL PRIVATE	227.4	220.0	236.7	3.4	-3.9
GOODS PRODUCING	61.4	61.6	68.6	-0.3	-10.5
Natural Resources & Mining	25.8	26.0	29.3	-0.8	-11.9
Mining	25.6	25.8	29.3	-0.8	-12.6
Oil & Gas Extraction	4.2	4.3	4.7	-2.3	-10.6
Mining Except Oil & Gas	9.9	9.8	9.9	1.0	0.0
Coal Mining	7.3	7.3	7.0	0.0	4.3
Support Activities for Mining	11.5	11.7	14.7	-1.7	-21.8
Support Act. for Oil & Gas	10.3	10.3	10.9	0.0	-5.5
Construction	25.8	25.9	29.3	-0.4	-11.9
Construction of Buildings	4.2	4.1	5.1	2.4	-17.6
Heavy & Engineering Constr.	8.9	9.0	9.7	-1.1	-8.2
Specialty Trade Contractors	12.7	12.8	14.5	-0.8	-12.4
Manufacturing	9.8	9.7	10.0	1.0	-2.0
Durable Goods	5.2	5.1	5.3	2.0	-1.9
Nondurable Goods	4.6	4.6	4.7	0.0	-2.1
SERVICE PROVIDING	238.7	231.3	239.4	3.2	-0.3
Trade, Trans., Warehousing, & Util.	56.5	55.3	56.9	2.2	-0.7
Wholesale Trade	9.3	9.3	9.2	0.0	1.1
Merch. Wholesalers, Durable	6.2	6.1	6.0	1.6	3.3
Retail Trade	32.4	31.4	32.8	3.2	-1.2
Motor Vehicle & Parts Dealers	4.5	4.4	4.7	2.3	-4.3
Food & Beverage Stores	4.6	4.6	4.7	0.0	-2.1
Grocery Stores	4.0	3.9	4.0	2.6	0.0
Gasoline Stations	4.1	4.0	4.2	2.5	-2.4
General Merchandise Stores	6.7	6.5	6.8	3.1	-1.5
Miscellaneous Store Retailers	2.1	2.0	2.1	5.0	0.0
Trans., Warehousing, & Utilities	14.8	14.6	14.9	1.4	-0.7
Utilities	2.5	2.5	2.5	0.0	0.0
Transp. & Warehousing	12.3	12.1	12.4	1.7	-0.8
Truck Transportation	4.4	4.4	4.5	0.0	-2.2
Information	4.1	4.0	4.0	2.5	2.5
Financial Activities	11.7	11.6	11.8	0.9	-0.8
Finance & Insurance	7.2	7.2	7.2	0.0	0.0
Real Estate & Rental & Leasing	4.5	4.4	4.6	2.3	-2.2
Professional & Business Services	18.6	18.1	19.7	2.8	-5.6
Prof., Scientific, & Tech. Services	9.8	9.7	10.0	1.0	-2.0
Architect., Engineering, & Rel.	3.1	3.0	3.2	3.3	-3.1
Mgmt. of Co.s & Enterprises	0.7	0.7	0.8	0.0	-12.5
Admin., Support, & Waste Svcs.	8.1	7.7	8.9	5.2	-9.0
Educational & Health Services	25.1	24.7	24.6	1.6	2.0
Educational Services	2.4	2.3	2.5	4.3	-4.0
Health Care & Social Assistance	22.7	22.4	22.1	1.3	2.7
Ambulatory Health Care	8.5	8.3	8.2	2.4	3.7
Offices of Physicians	3.2	3.2	3.1	0.0	3.2
Hospitals	3.3	3.3	3.3	0.0	0.0
Nursing & Res. Care Facilities	4.5	4.4	4.5	2.3	0.0
Social Assistance	6.4	6.4	6.1	0.0	4.9
Leisure & Hospitality	37.8	32.8	38.8	15.2	-2.6
Arts, Entertainment, & Rec.	3.3	2.6	3.6	26.9	-8.3
Accommodation & Food Svcs.	34.5	30.2	35.2	14.2	-2.0
Accommodation	14.6	11.3	14.9	29.2	-2.0
Food Svcs. & Drinking Places	19.9	18.9	20.3	5.3	-2.0
Other Services	12.2	11.9	12.3	2.5	-0.8
Repair & Maintenance	4.2	4.2	4.1	0.0	2.4
TOTAL GOVERNMENT	72.7	72.9	71.3	-0.3	2.0
Federal Government	**8.2**	**7.7**	**8.2**	**6.5**	**0.0**
State Government	15.8	16.8	15.8	-6.0	0.0
State Government Education	6.5	7.6	6.4	-14.5	1.6
Local Government	48.7	48.4	47.3	0.6	3.0
Local Government Education	24.1	25.2	23.3	-4.4	3.4
Hospitals	6.6	6.6	6.4	0.0	3.1

	Employment in Thousands			% Change Total Employment	
	June 09(p)	May 09(r)	June 08	May 09 June 09	June 08 June 09
LARAMIE COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	**45.5**	**44.8**	**46.0**	**1.6**	**-1.1**
TOTAL PRIVATE	31.5	30.7	32.3	2.6	-2.5
GOODS PRODUCING	4.8	4.6	5.3	4.3	-9.4
Natural Res., Mining, & Const.	3.2	3.0	3.6	6.7	-11.1
Manufacturing	1.6	1.6	1.7	0.0	-5.9
SERVICE PROVIDING	40.7	40.2	40.7	1.2	0.0
Trade, Transportation, & Utilities	9.6	9.5	9.8	1.1	-2.0
Wholesale Trade	0.9	0.9	0.9	0.0	0.0
Retail Trade	5.6	5.5	5.7	1.8	-1.8
Trans., Warehousing, & Utilities	3.1	3.1	3.2	0.0	-3.1
Information	1.1	1.1	1.1	0.0	0.0
Financial Activities	2.2	2.1	2.2	4.8	0.0
Professional & Business Services	3.3	3.2	3.6	3.1	-8.3
Educational & Health Services	4.1	4.0	3.9	2.5	5.1
Leisure & Hospitality	4.7	4.5	4.7	4.4	0.0
Other Services	1.7	1.7	1.7	0.0	0.0
TOTAL GOVERNMENT	14.0	14.1	13.7	-0.7	2.2
Federal Government	2.7	2.7	2.6	0.0	3.8
State Government	4.1	4.1	4.1	0.0	0.0
Local Government	7.2	7.3	7.0	-1.4	2.9
Local Education	3.6	3.8	3.5	-5.3	2.9
NATRONA COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	**40.8**	**40.1**	**41.4**	**1.7**	**-1.4**
TOTAL PRIVATE	34.4	33.8	35.3	1.8	-2.5
GOODS PRODUCING	8.0	7.9	8.7	1.3	-8.0
Natural Resources & Mining	3.2	3.2	3.6	0.0	-11.1
Construction	3.1	3.0	3.2	3.3	-3.1
Manufacturing	1.7	1.7	1.9	0.0	-10.5
SERVICE PROVIDING	32.8	32.2	32.7	1.9	0.3
Trade, Transportation, & Utilities	9.0	8.9	9.1	1.1	-1.1
Wholesale Trade	2.7	2.7	2.8	0.0	-3.6
Retail Trade	5.2	5.1	5.2	2.0	0.0
Trans., Warehousing, & Utilities	1.1	1.1	1.1	0.0	0.0
Information	0.5	0.5	0.6	0.0	-16.7
Financial Activities	2.0	2.0	2.1	0.0	-4.8
Professional & Business Services	2.9	2.8	3.1	3.6	-6.5
Educational & Health Services	5.5	5.5	5.2	0.0	5.8
Leisure & Hospitality	4.2	4.0	4.3	5.0	-2.3
Other Services	2.3	2.2	2.2	4.5	4.5
TOTAL GOVERNMENT	6.4	6.3	6.1	1.6	4.9
Federal Government	0.6	0.6	0.7	0.0	-14.3
State Government	0.7	0.7	0.7	0.0	0.0
Local Government	5.1	5.0	4.7	2.0	8.5
Local Education	3.4	3.3	3.1	3.0	9.7

Note: Current Employment Statistics (CES) estimates include all full- and part-time 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)

	Employment in Thousands			% Change Total Employment	
	June 09	May 09	June 08	May 09 June 09	June 08 June 09
CAMPBELL COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	**31.3**	**30.7**	**30.0**	**2.0**	**4.3**
TOTAL PRIVATE	**26.8**	**26.4**	**25.6**	**1.5**	**4.7**
GOODS PRODUCING	**13.7**	**13.3**	**12.9**	**3.0**	**6.2**
Natural Resources & Mining	8.6	8.4	8.3	2.4	3.6
Construction	4.5	4.3	4.0	4.7	12.5
Manufacturing	0.6	0.6	0.6	0.0	0.0
SERVICE PROVIDING	**17.6**	**17.4**	**17.1**	**1.1**	**2.9**
Trade, Transport., & Utilities	5.8	5.8	5.6	0.0	3.6
Information	0.2	0.2	0.2	0.0	0.0
Financial Activities	0.8	0.8	0.8	0.0	0.0
Professional & Bus. Services	2.1	2.1	2.0	0.0	5.0
Educational & Health Serv.	1.0	1.0	1.0	0.0	0.0
Leisure & Hospitality	2.1	2.1	2.0	0.0	5.0
Other Services	1.1	1.1	1.1	0.0	0.0
GOVERNMENT	**4.5**	**4.3**	**4.4**	**4.7**	**2.3**

	Employment in Thousands			% Change Total Employment	
	June 09	May 09	June 08	May 09 June 09	June 08 June 09
SWEETWATER COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	**26.8**	**26.9**	**26.2**	**-0.4**	**2.3**
TOTAL PRIVATE	**22.3**	**22.1**	**21.7**	**0.9**	**2.8**
GOODS PRODUCING	**9.7**	**9.7**	**9.7**	**0.0**	**0.0**
Natural Resources & Mining	6.3	6.3	6.0	0.0	5.0
Construction	2.0	2.1	2.3	-4.8	-13.0
Manufacturing	1.4	1.3	1.4	7.7	0.0
SERVICE PROVIDING	**17.1**	**17.2**	**16.5**	**-0.6**	**3.6**
Trade, Transport., & Utilities	5.5	5.4	5.4	1.9	1.9
Information	0.2	0.2	0.2	0.0	0.0
Financial Activities	1.0	1.0	0.9	0.0	11.1
Professional & Bus. Services	1.2	1.2	1.3	0.0	-7.7
Educational & Health Serv.	1.0	1.0	0.9	0.0	11.1
Leisure & Hospitality	2.9	2.8	2.5	3.6	16.0
Other Services	0.8	0.8	0.8	0.0	0.0
GOVERNMENT	**4.5**	**4.8**	**4.5**	**-6.3**	**0.0**

	Employment in Thousands			% Change Total Employment	
	June 09	May 09	June 08	May 09 June 09	June 08 June 09
TETON COUNTY					
TOTAL NONAG. WAGE & SALARY EMPLOYMENT	**20.7**	**17.3**	**21.7**	**19.7**	**-4.6**
TOTAL PRIVATE	**18.3**	**15.0**	**19.2**	**22.0**	**-4.7**
GOODS PRODUCING	**2.8**	**2.6**	**2.8**	**7.7**	**0.0**
Nat. Res., Mining & Const.	2.7	2.5	2.7	8.0	0.0
Manufacturing	0.1	0.1	0.1	0.0	0.0
SERVICE PROVIDING	**17.9**	**14.7**	**18.9**	**21.8**	**-5.3**
Trade, Transport., & Utilities	2.6	2.3	2.8	13.0	-7.1
Information	0.2	0.2	0.2	0.0	0.0
Financial Activities	1.0	0.9	1.0	11.1	0.0
Professional & Bus. Services	2.0	1.8	2.0	11.1	0.0
Educational & Health Serv.	0.9	0.9	1.0	0.0	-10.0
Leisure & Hospitality	8.3	5.8	8.9	43.1	-6.7
Other Services	0.5	0.5	0.5	0.0	0.0
GOVERNMENT	**2.4**	**2.3**	**2.5**	**4.3**	**-4.0**

State Unemployment Rates June 2009 (Not Seasonally Adjusted)

State	Unemp. Rate
Michigan	15.4
Puerto Rico	15.2
South Carolina	12.3
Rhode Island	12.2
Nevada	12.1
Oregon	12.1
California	11.6
District of Columbia	11.3
North Carolina	11.2
Ohio	11.2
Kentucky	11.1
Tennessee	11.1
Florida	10.8
Alabama	10.6
Indiana	10.6
Georgia	10.5
Illinois	10.5
Mississippi	9.8
United States	**9.7**
Missouri	9.5
West Virginia	9.4
New Jersey	9.2
Washington	9.2
Wisconsin	9.2
Arizona	8.9
Delaware	8.7
Massachusetts	8.7
New York	8.6
Alaska	8.5
Minnesota	8.4
Pennsylvania	8.4
Maine	8.2
Connecticut	8.1
Hawaii	8.1
Idaho	8.0
Texas	8.0
Colorado	7.8
Louisiana	7.8
Arkansas	7.5
Maryland	7.5
New Mexico	7.3
Virginia	7.3
Kansas	7.0
Vermont	7.0
New Hampshire	6.8
Oklahoma	6.5
Montana	6.4
Iowa	6.1
Utah	5.9
Wyoming	**5.7**
Nebraska	5.1
South Dakota	4.9
North Dakota	4.6

Economic Indicators

by: Margaret Hiatt, Administrative/Survey Support Specialist

Wyoming's labor force (the sum of employed and unemployed persons) decreased by 1,964 (-0.7%) from June 2008 to June 2009.

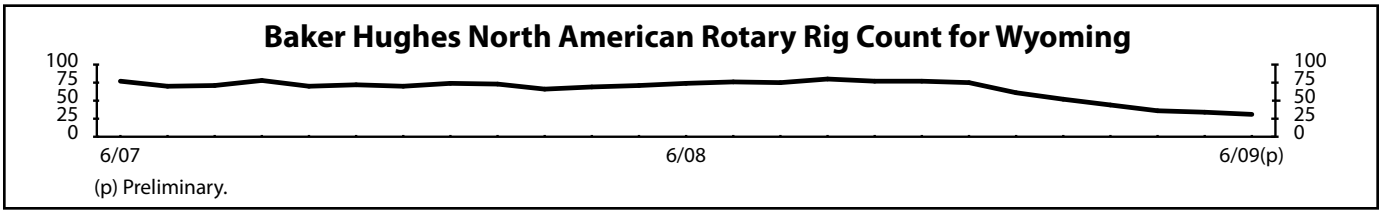
	June 2009 (p)	May 2009 (r)	June 2008 (b)	Percent Change Month	Percent Change Year
Wyoming Total Civilian Labor Force[1]	**296,071**	**289,763**	**298,035**	**2.2**	**-0.7**
Unemployed	16,982	14,522	8,816	16.9	92.6
Employed	279,089	275,241	289,219	1.4	-3.5
Wyoming Unemployment Rate/Seas. Adj.	5.7%/5.9%	5.0%/5.0%	3.0%/3.2%	N/A	N/A
U.S. Unemployment Rate/Seas. Adj.	9.7%/9.5%	9.1%/9.4%	5.7%/5.6%	N/A	N/A
U.S. Multiple Jobholders	7,067,000	7,265,000	7,694,000	-2.7	-8.1
As a percent of all workers	5.0%	5.2%	5.2%	N/A	N/A
U.S. Discouraged Workers	793,000	792,000	420,000	0.1	88.8
U.S. Part Time for Economic Reasons	9,301,000	8,785,000	5,697,000	5.9	63.3
Hours & Earnings for Production Workers					
Wyoming Manufacturing Hours & Earnings					
Average Weekly Earnings	$799.59	$785.70	$859.67	1.8	-7.0
Average Weekly Hours	40.1	38.8	42.6	3.4	-5.9
U.S. Manufacturing Hours & Earnings					
Average Weekly Earnings	$719.76	$710.94	$730.48	1.2	-1.5
Average Weekly Hours	39.7	39.3	41.2	1.0	-3.6
Wyoming Unemployment Insurance					
Weeks Compensated	47,876	43,315	9,219	10.5	419.3
Benefits Paid	$16,845,399	$15,120,702	$2,802,868	11.4	501.0
Average Weekly Benefit Payment	$351.85	$349.09	$304.03	0.8	15.7
State Insured Covered Jobs[1]	288,260	279,951	282,192	3.0	2.2
Insured Unemployment Rate	3.3%	3.5%	0.8%	N/A	N/A
Consumer Price Index (U) for All U.S. Urban Consumers					
(1982 to 1984 = 100)					
All Items	215.7	213.9	218.8	0.9	-1.4
Food & Beverages	218.0	218.1	213.4	0.0	2.2
Housing	218.1	217.0	217.9	0.5	0.1
Apparel	118.8	121.8	117.0	-2.4	1.5
Transportation	183.7	176.0	211.8	4.4	-13.2
Medical Care	375.1	375.0	363.6	0.0	3.2
Recreation (Dec. 1997=100)	114.6	114.3	113.0	0.3	1.5
Education & Communication (Dec. 1997=100)	126.5	126.5	122.8	0.0	3.0
Other Goods & Services	370.6	369.9	345.9	0.2	7.1
Producer Prices (1982 to 1984 = 100)					
All Commodities	174.1	170.2	200.5	2.3	-13.2
Wyo. Bldg. Permits (New Privately Owned Housing Units Authorized)					
Total Units	166	149	330	11.4	-49.7
Valuation	$34,201,000	$36,800,000	$54,169,000	-7.1	-36.9
Single Family Homes	137	141	208	-2.8	-34.1
Valuation	$32,586,000	$36,165,000	$47,714,000	-9.9	-31.7
Casper MSA[2] Building Permits	18	25	59	-28.0	-69.5
Valuation	$2,824,000	$3,753,000	$10,623,000	-24.8	-73.4
Cheyenne MSA Building Permits	29	17	18	70.6	61.1
Valuation	$4,341,000	$3,049,000	$3,043,000	42.4	42.7
Baker Hughes North American Rotary Rig Count for Wyoming	31	34	74	-8.8	-58.1

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

[1]Local Area Unemployment Statistics Program estimates.

[2]Metropolitan Statistical Area.

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



Wyoming County Unemployment Rates

by: Carola Cowan, BLS Programs Supervisor

Unemployment rates in all 23 counties in Wyoming increased from their 2008 levels.

	Labor Force			Employed			Unemployed			Unemployment Rates		
REGION	Jun 2009	May 2009	Jun 2008	Jun 2009	May 2009	Jun 2008	Jun 2009	May 2009	Jun 2008	Jun 2009	May 2009	Jun 2008
County	(p)	(r)	(b)	(p)	(r)	(b)	(p)	(r)	(b)	(p)	(r)	(b)
NORTHWEST	**46,318**	**44,669**	**46,644**	**43,348**	**42,120**	**45,041**	**2,970**	**2,549**	**1,603**	**6.4**	**5.7**	**3.4**
Big Horn	5,048	4,954	5,228	4,649	4,580	5,014	399	374	214	7.9	7.5	4.1
Fremont	18,835	18,537	18,611	17,441	17,359	17,891	1,394	1,178	720	7.4	6.4	3.9
Hot Springs	2,427	2,367	2,491	2,278	2,245	2,404	149	122	87	6.1	5.2	3.5
Park	15,745	14,601	15,916	14,965	13,930	15,472	780	671	444	5.0	4.6	2.8
Washakie	4,263	4,210	4,398	4,015	4,006	4,260	248	204	138	5.8	4.8	3.1
NORTHEAST	**55,789**	**54,460**	**54,978**	**52,796**	**51,920**	**53,554**	**2,993**	**2,540**	**1,424**	**5.4**	**4.7**	**2.6**
Campbell	28,081	27,511	27,344	26,703	26,379	26,766	1,378	1,132	578	4.9	4.1	2.1
Crook	3,588	3,474	3,654	3,408	3,297	3,547	180	177	107	5.0	5.1	2.9
Johnson	4,302	4,123	4,275	4,013	3,867	4,124	289	256	151	6.7	6.2	3.5
Sheridan	16,560	16,162	16,452	15,607	15,348	15,962	953	814	490	5.8	5.0	3.0
Weston	3,258	3,190	3,253	3,065	3,029	3,155	193	161	98	5.9	5.0	3.0
SOUTHWEST	**67,620**	**64,919**	**67,638**	**63,757**	**61,408**	**66,024**	**3,863**	**3,511**	**1,614**	**5.7**	**5.4**	**2.4**
Lincoln	8,597	8,220	8,574	8,019	7,681	8,300	578	539	274	6.7	6.6	3.2
Sublette	7,524	7,217	7,249	7,206	6,954	7,145	318	263	104	4.2	3.6	1.4
Sweetwater	24,627	24,630	23,938	23,106	23,409	23,351	1,521	1,221	587	6.2	5.0	2.5
Teton	15,462	13,597	16,299	14,741	12,731	15,993	721	866	306	4.7	6.4	1.9
Uinta	11,410	11,255	11,578	10,685	10,633	11,235	725	622	343	6.4	5.5	3.0
SOUTHEAST	**70,638**	**71,146**	**72,228**	**66,856**	**68,074**	**69,694**	**3,782**	**3,072**	**2,534**	**5.4**	**4.3**	**3.5**
Albany	18,023	19,069	18,412	17,269	18,489	17,897	754	580	515	4.2	3.0	2.8
Goshen	5,967	5,912	6,057	5,656	5,664	5,820	311	248	237	5.2	4.2	3.9
Laramie	41,493	40,979	42,550	39,048	38,951	40,975	2,445	2,028	1,575	5.9	4.9	3.7
Niobrara	1,228	1,214	1,264	1,168	1,163	1,218	60	51	46	4.9	4.2	3.6
Platte	3,927	3,972	3,945	3,715	3,807	3,784	212	165	161	5.4	4.2	4.1
CENTRAL	**55,707**	**54,566**	**56,548**	**52,332**	**51,717**	**54,906**	**3,375**	**2,849**	**1,642**	**6.1**	**5.2**	**2.9**
Carbon	8,161	7,850	8,527	7,630	7,377	8,274	531	473	253	6.5	6.0	3.0
Converse	7,330	7,209	7,433	6,950	6,872	7,237	380	337	196	5.2	4.7	2.6
Natrona	40,216	39,507	40,588	37,752	37,468	39,395	2,464	2,039	1,193	6.1	5.2	2.9
STATEWIDE	**296,071**	**289,763**	**298,035**	**279,089**	**275,241**	**289,219**	**16,982**	**14,522**	**8,816**	**5.7**	**5.0**	**3.0**
Statewide Seasonally Adjusted										5.9	5.0	3.2
U.S.										9.7	9.1	5.7
U.S. Seasonally Adjusted										9.5	9.4	5.6

Prepared in cooperation with the Bureau of Labor Statistics. Benchmarked 02/2009. Run Date 07/2009.

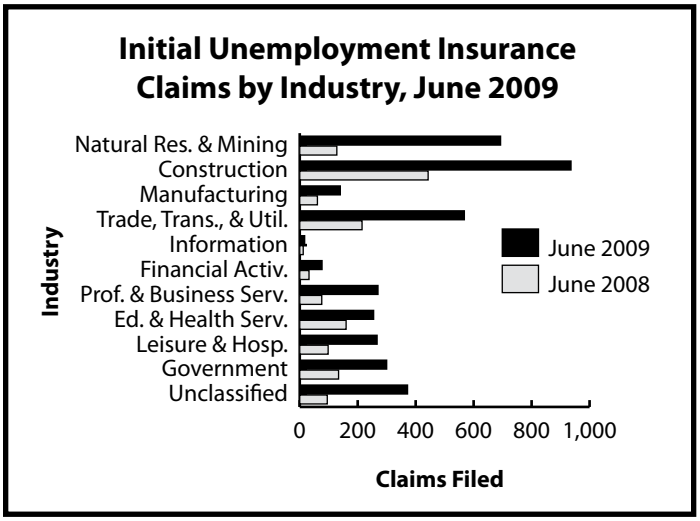
Data are not seasonally adjusted except where otherwise specified.

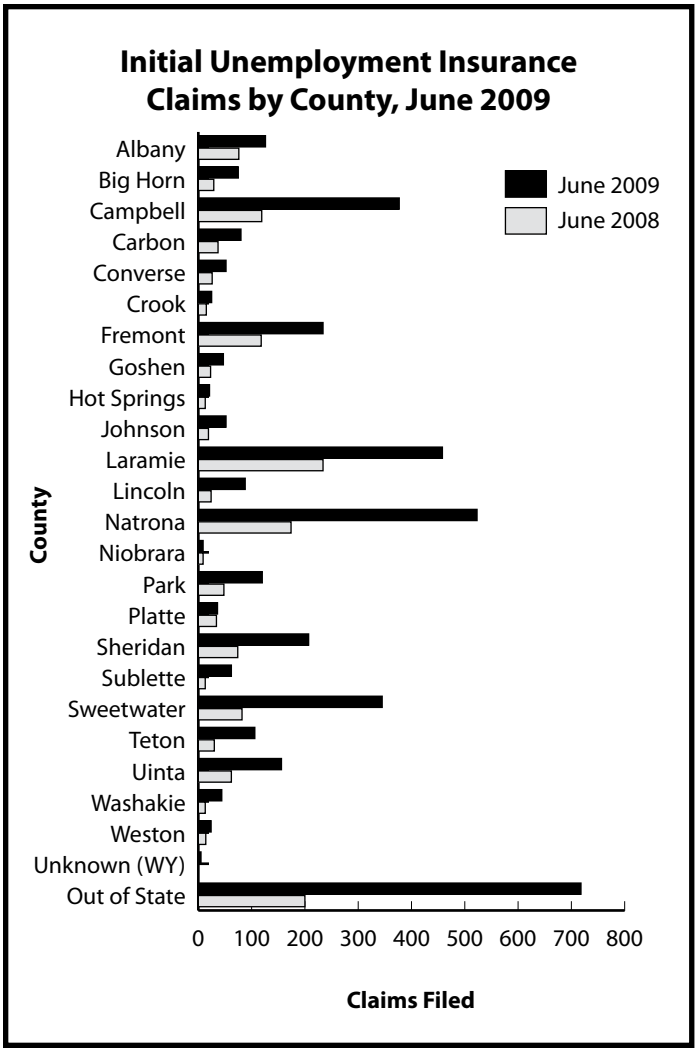
(p) Preliminary. (r) Revised. (b) Benchmarked.

Wyoming Normalized[a] Unemployment Insurance Statistics: Initial Claims

by: Douglas W. Leonard, Senior Economist

Initial claims increased 4.5% compared to May and 168.6% compared to June 2008. On average, initial claims decline an average of 6.9% from May to June.





Initial Claims

	Claims Filed			Percent Change Claims Filed	
	Jun 09	May 09	Jun 08	Jun 09 May 09	Jun 09 Jun 08
Wyoming Statewide					
TOTAL CLAIMS FILED	**3,986**	**3,813**	**1,484**	**4.5**	**168.6**
TOTAL GOODS-PRODUCING	1,769	1,744	632	1.4	179.9
Natural Res. & Mining	693	702	128	-1.3	441.4
Mining	666	686	127	-2.9	424.4
Oil & Gas Extraction	14	30	8	-53.3	75.0
Construction	936	834	443	12.2	111.3
Manufacturing	140	208	61	-32.7	129.5
TOTAL SERVICE-PROVIDING	1,545	1,521	623	1.6	148.0
Trade, Transp., & Utilities	568	526	215	8.0	164.2
Wholesale Trade	119	106	43	12.3	176.7
Retail Trade	254	242	121	5.0	109.9
Transp., Warehousing & Utilities	195	178	51	9.6	282.4
Information	17	26	12	-34.6	41.7
Financial Activities	77	81	32	-4.9	140.6
Prof. and Business Svcs.	270	255	76	5.9	255.3
Educational & Health Svcs.	255	192	160	32.8	59.4
Leisure & Hospitality	267	339	98	-21.2	172.4
Other Svcs., exc. Public Admin.	91	102	30	-10.8	203.3
TOTAL GOVERNMENT	300	214	134	40.2	123.9
Federal Government	79	47	31	68.1	154.8
State Government	54	29	17	86.2	217.6
Local Government	167	138	86	21.0	94.2
Local Education	94	32	39	193.8	141.0
UNCLASSIFIED	372	334	95	11.4	291.6
Laramie County					
TOTAL CLAIMS FILED	**457**	**426**	**231**	**7.3**	**97.8**
TOTAL GOODS-PRODUCING	179	134	79	33.6	126.6
Construction	142	110	66	29.1	115.2
TOTAL SERVICE-PROVIDING	229	247	126	-7.3	81.7
Trade, Transp., & Utilities	77	72	48	6.9	60.4
Financial Activities	13	11	8	18.2	62.5
Prof. & Business Svcs.	34	76	19	-55.3	78.9
Educational & Health Svcs.	54	47	28	14.9	92.9
Leisure & Hospitality	33	29	14	13.8	135.7
TOTAL GOVERNMENT	26	36	21	-27.8	23.8
UNCLASSIFIED	23	9	5	155.6	360.0
Natrona County					
TOTAL CLAIMS FILED	**522**	**511**	**173**	**2.2**	**201.7**
TOTAL GOODS-PRODUCING	228	239	73	-4.6	212.3
Construction	87	80	48	8.8	81.3
TOTAL SERVICE-PROVIDING	264	238	88	10.9	200.0
Trade, Transp., & Utilities	109	85	32	28.2	240.6
Financial Activities	15	13	8	15.4	87.5
Prof. & Business Svcs.	33	32	8	3.1	312.5
Educational & Health Svcs.	33	27	21	22.2	57.1
Leisure & Hospitality	37	49	9	-24.5	311.1
TOTAL GOVERNMENT	19	18	8	5.6	137.5
UNCLASSIFIED	11	16	4	-31.3	175.0

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

Wyoming Normalized[a] Unemployment Insurance Statistics: Continued Claims

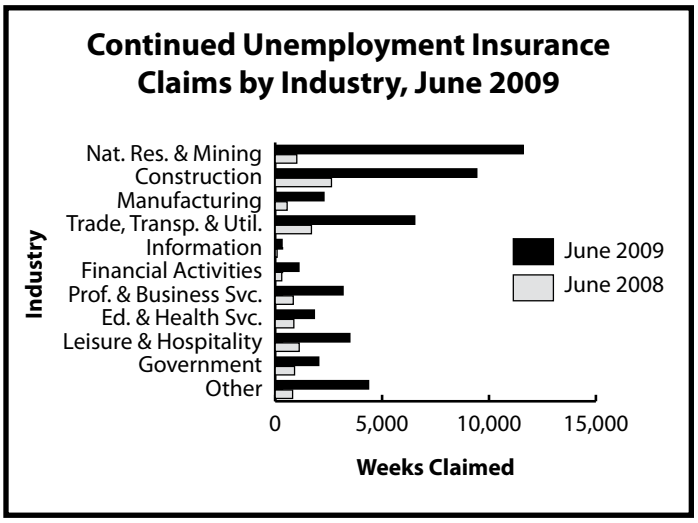
by: Douglas W. Leonard, Senior Economist

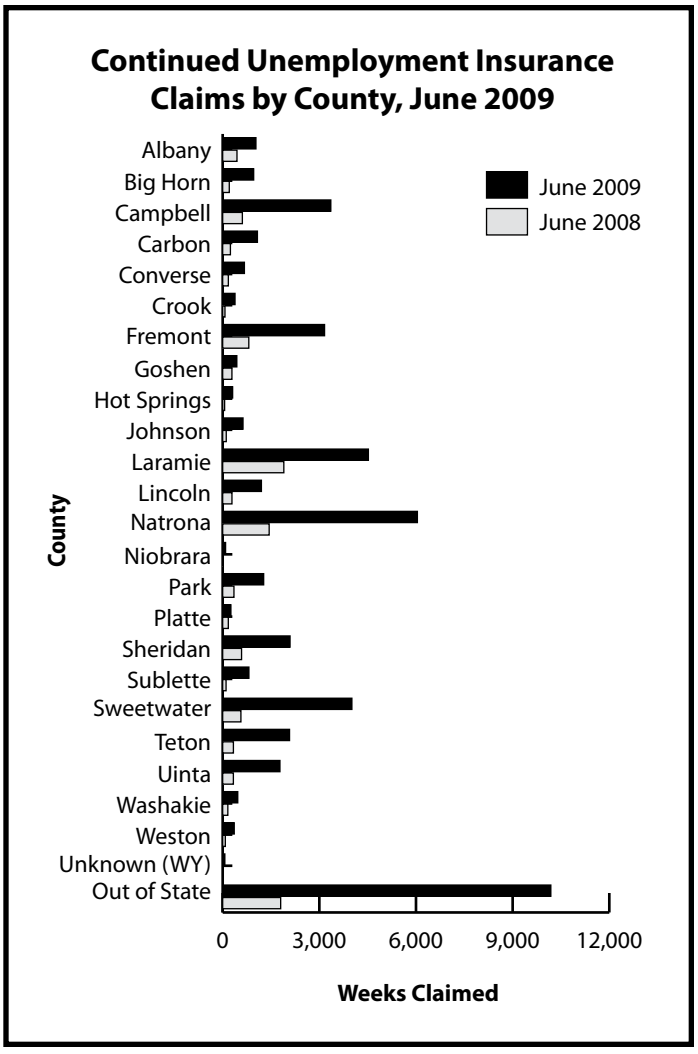
Continued claims increased 323.8% compared to June 2008. The over-the-month decline of 5.7% was less than the 11-year average decline of 17.7%.

Continued Claims

	Continued Weeks Claimed			Percent Change Weeks Claimed	
	Jun 09	May 09	Jun 08	Jun 09 May 09	Jun 09 Jun 08
Wyoming Statewide					
TOTAL WEEKS CLAIMED	**47,257**	**50,097**	**11,152**	**-5.7**	**323.8**
TOTAL UNIQUE CLAIMANTS	**13,487**	**14,293**	**3,411**	**-5.6**	**295.4**
Benefit Exhaustions	1,007	923	232	9.1	334.1
Benefit Exhaustion Rates	7.5%	6.5%	6.8%	1.0%	0.7%
TOTAL GOODS-PRODUCING	23,316	25,143	4,201	-7.3	455.0
Natural Res. & Mining	11,602	11,904	1,010	-2.5	1048.7
Mining	11,339	11,621	889	-2.4	1175.5
Oil & Gas Extraction	596	633	80	-5.8	645.0
Construction	9,431	10,657	2,632	-11.5	258.3
Manufacturing	2,283	2,582	559	-11.6	308.4
TOTAL SERVICE-PROVIDING	17,532	18,538	5,232	-5.4	235.1
Trade, Transp., & Utilities	6,529	6,662	1,695	-2.0	285.2
Wholesale Trade	1,527	1,477	315	3.4	384.8
Retail Trade	2,938	3,068	861	-4.2	241.2
Transp., Warehousing & Utilities	2,064	2,117	519	-2.5	297.7
Information	323	309	89	4.5	262.9
Financial Activities	1,113	1,049	306	6.1	263.7
Prof. & Business Services	3,176	3,308	845	-4.0	275.9
Educational & Health Svcs.	1,834	1,443	872	27.1	110.3
Leisure and Hospitality	3,493	4,787	1,123	-27.0	211.0
Other Svcs., exc. Public Admin.	1,064	980	302	8.6	252.3
TOTAL GOVERNMENT	2,039	1,898	905	7.4	125.3
Federal Government	412	460	172	-10.4	139.5
State Government	337	327	148	3.1	127.7
Local Government	1,290	1,111	585	16.1	120.5
Local Education	304	205	144	48.3	111.1
UNCLASSIFIED	4,370	4,518	814	-3.3	436.9
Laramie County					
TOTAL WEEKS CLAIMED	**4,520**	**4,539**	**1,898**	**-0.4**	**138.1**
TOTAL UNIQUE CLAIMANTS	**1,341**	**1,314**	**580**	**2.1**	**131.2**
Total Goods-Producing	1,337	1,450	497	-7.8	169.0
Construction	936	1,021	389	-8.3	140.6
Total Service-Providing	2,579	2,511	1,138	2.7	126.6
Trade, Transp., and Utilities	982	1,026	399	-4.3	146.1
Financial Activities	111	121	64	-8.3	73.4
Prof. & Business Svcs.	532	504	245	5.6	117.1
Educational and Health Svcs.	411	294	191	39.8	115.2
Leisure & Hospitality	376	408	177	-7.8	112.4
TOTAL GOVERNMENT	362	336	171	7.7	111.7
UNCLASSIFIED	242	242	92	0.0	163.0
Natrona County					
TOTAL WEEKS CLAIMED	**6,042**	**6,109**	**1,442**	**-1.1**	**319.0**
TOTAL UNIQUE CLAIMANTS	**1,701**	**1,748**	**439**	**-2.7**	**287.5**
Total Goods-Producing	2,941	3,147	538	-6.5	446.7
Construction	799	1,024	273	-22.0	192.7
TOTAL SERVICE-PROVIDING	2,792	2,640	842	5.8	231.6
Trade, Transp., and Utilities	1,168	1,111	244	5.1	378.7
Financial Activities	193	182	103	6.0	87.4
Professional & Business Svcs.	428	429	143	-0.2	199.3
Educational & Health Svcs.	264	245	150	7.8	76.0
Leisure & Hospitality	371	332	106	11.7	250.0
TOTAL GOVERNMENT	127	127	36	0.0	252.8
UNCLASSIFIED	182	195	26	-6.7	600.0

[a]An 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.





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