

Wyoming  
Statewide  
Short-Term  
Employment  
Projections  
**2010-2011**



# Wyoming Statewide Short-Term Employment Projections 2010-2011

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## Short-term Forecast for Wage & Salary Jobs in Wyoming 2010-2011

by: David Bullard and Douglas W. Leonard, Senior Economists

### Economic Assumptions

The current national recession started in December 2007, but the decline in output was relatively modest until fourth quarter 2008, when real Gross Domestic Product<sup>1</sup> decreased by 5.4%. Output decreased even more in the subsequent quarter (-6.4%). Although the National Bureau of Economic Research has not made an official announcement of the end of the recession, many analysts believe that the U.S. economy began growing again in the second half of 2009. Economists expect moderate growth in the U.S. economy in 2010. According to the Survey of Professional

Forecasters, the average forecast is for 2.4% growth in real GDP in 2010. These projections are similar to those used by the Federal Reserve, which expects 2.5% to 3.5% growth in 2010.

Analysts expect economic growth to accelerate in 2011 (see Table 1). The Survey of Professional Forecasters calls for 3.1% growth while the Federal Reserve expects growth of 3.4% to 4.5%. The Congressional Budget Office projects the U.S. economy to grow more than twice as fast in 2011 as in 2010 (3.5% compared to 1.7%).

The average spot price for natural gas fell from \$8.98 per million Btus in 2008 to \$3.78 in 2009. Projections from the Energy Information Administration (EIA) indicate that the price will recover to \$5.36 in 2010 and \$6.12 in 2011. Even if natural gas prices increase as expected

<sup>1</sup> Gross Domestic Product (GDP): The total market value of goods and services produced domestically during a given period. That value is conceptually equal to gross domestic income, but measurement difficulties result in a statistical discrepancy between the two. The components of GDP are consumption (both household and government), gross investment (both private and government), and net exports. (Source: Congressional Budget Office)

**Table 1: Economic Assumptions**

	United States Percent Change in Real Gross Domestic Product						
	Actual				Forecast		
	2005	2006	2007	2008	2009	2010	2011
International Monetary Fund	3.1	2.7	2.1	0.4	-2.7	1.5	
Federal Reserve low (Q4 to Q4)	2.7	2.4	2.5	-1.9	-0.4	2.5	3.4
Federal Reserve high (Q4 to Q4)	2.7	2.4	2.5	-1.9	-0.1	3.5	4.5
Livingston Survey	3.1	2.7	2.1	0.4	-2.5	2.7	2.9
Survey of Professional Forecasters	3.1	2.7	2.1	0.4	-2.5	2.4	3.1
Organization for Economic Co-operation and Development	3.1	2.7	2.1	0.4	-2.5	2.5	2.8
Congressional Budget Office	3.1	2.7	2.1	0.4	-2.5	1.7	3.5

	Henry Hub Average Spot Price for Natural Gas (\$/Million Btu)						
	Actual					Forecast	
	2005	2006	2007	2008	2009	2010	2011
Average Henry Hub Price (ICE, DOE/EIA)	\$8.32	\$6.49	\$6.96	\$8.98	\$3.78	\$5.36	\$6.12

Note: 2005-2009 historic natural gas price data provided by Intercontinental Exchange, used by permission. Forecasted price data provided by the U.S. Department of Energy, Energy Information Administration, Short Term Energy Outlook, January 2010.

in 2011, they will remain much lower than the prices that prevailed from 2005 to 2008.

On January 20, 2010, economists from the Department of Employment Research & Planning section met with their counterparts from the Economic Analysis Division of the Department of Administration & Information and reviewed the economic assumptions above.

### *Projections Methodology*

Using Quarterly Census of Employment and Wages data, analysts developed a historical time series with monthly employment data for Wyoming from January 1990 to September 2009. Analysts then incorporated the economic assumptions detailed above to produce monthly employment projections for 2010 and 2011.

### *Projections Results*

Table 2 (see page 7) displays the projections developed by analysts for 2010 and 2011 by industrial sector. Average annual statewide wage and salary employment for 2009 is projected to decline 3.9% from 2008 levels. Analysts expect job growth to be close to zero in 2010 (-0.3%) and

return to positive territory in 2011 (+1.2%). Even if the projected scenario for 2011 holds true, wage and salary employment will still be 8,651 jobs less than in 2008.

As stated in our economic assumptions, much of what we expect depends upon what happens in the natural gas market. The full-capacity use of the Rockies Express Pipeline (REX) fundamentally changed how Wyoming gas producers interact with national markets. Should the demand for natural gas in the areas served by REX increase more than expected, Wyoming's economy could recover much more quickly than it would have in the past. Coupled with this is the tentative approval given by the Federal Energy Regulatory Commission to construct the Ruby Pipeline which originates in Opal, Wyo., and terminates in Malin, Ore (Brown, 2010). This project is tentatively scheduled to be online in 2011, and could further increase the responsiveness of Wyoming natural gas prices to national resource demands.

By scanning across the percentage changes for industrial sectors, a distinct pattern emerges. The industries with the greatest percentages of job loss are those traditionally dominated

by young to middle-age males: mining, construction, manufacturing, transportation, and wholesale trade. Conversely, sectors that will either recover more quickly or had lesser percentages of job loss were those traditionally staffed by females, including retail trade, finance & insurance, real estate, rental & leasing, leisure & hospitality, and government (Jones, 2007).

A visual representation of employment levels (historic and projected) is shown in Figures 1 and 2 (see page 6). Figure 1 displays the rapid growth of Wyoming's workforce from 2003 to 2008. The shaded area on the right side of the chart indicates the projected employment levels for 2010 and 2011. Figure 2 shows the percentage changes in Wyoming's employment levels from one year to the next. Although the state experienced slower wage and salary employment growth earlier in the decade, the employment declines brought about by the current recession are much more severe.

Additionally, the state's population is aging. Effects of an aging population could impact the state's employment

(Text continued on page 7)

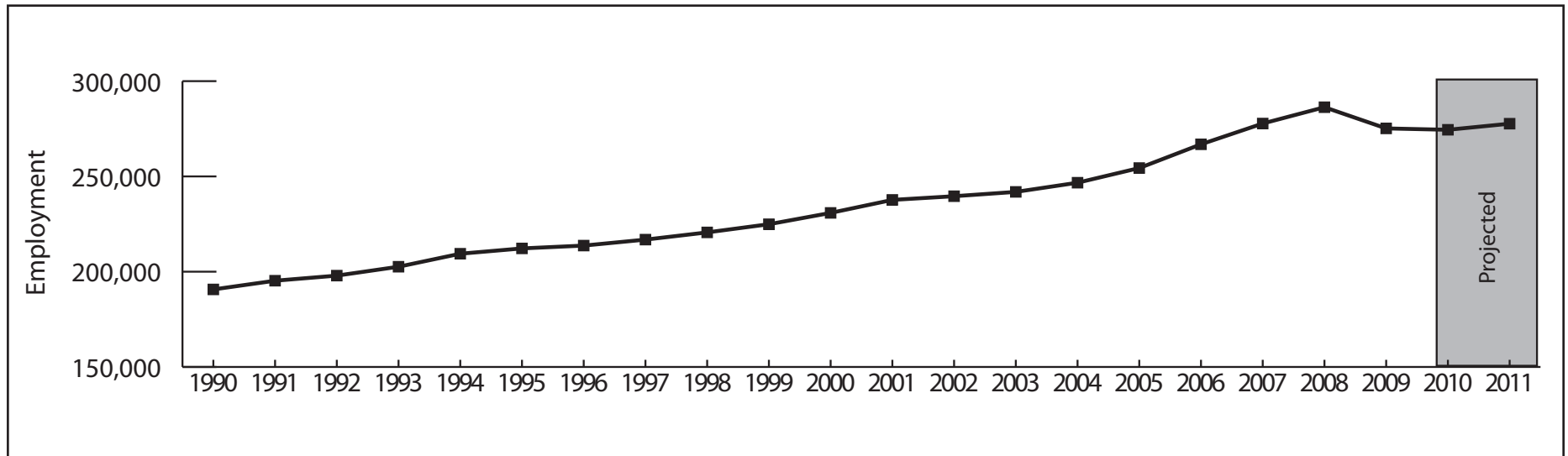


Figure 1: Wyoming Statewide Employment, Historic and Projected

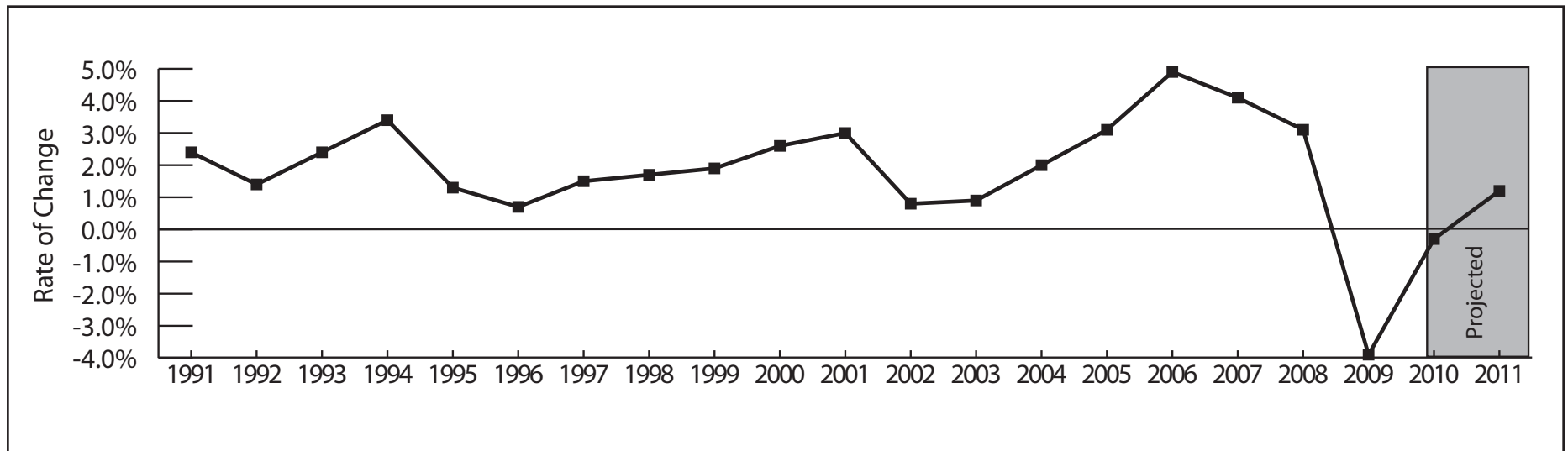


Figure 2: Annual Rates of Change in Wyoming and Employment, Historic and Projected

**Table 2: Wyoming Statewide Short-Term Employment Forecasts**

Industry Title	Actual Employment					Rate of Change 2008- 2009	Projected			
	2005	2006	2007	2008	2009		2010	Rate of Change 2009- 2010	2011	Rate of Change 2010- 2011
All Industries	254,401	266,855	277,760	286,317	275,190	-3.9%	274,473	-0.3%	277,666	1.2%
Agriculture, Forestry, & Fishing	2,389	2,394	2,375	2,431	2,470	1.6%	2,516	1.9%	2,516	0.0%
Mining	22,574	26,357	27,358	29,265	25,285	-13.6%	23,920	-5.4%	24,135	0.9%
Utilities	2,431	2,453	2,587	2,659	2,653	-0.2%	2,645	-0.3%	2,645	0.0%
Construction	20,974	24,132	26,742	28,184	24,065	-14.6%	24,098	0.1%	24,855	3.1%
Manufacturing	9,835	10,185	10,254	10,056	9,189	-8.6%	9,050	-1.5%	8,988	-0.7%
Wholesale Trade	7,751	8,333	8,827	9,110	8,737	-4.1%	8,562	-2.0%	8,562	0.0%
Retail Trade	30,544	30,922	32,132	32,312	30,910	-4.3%	30,794	-0.4%	31,151	1.2%
Transportation	7,954	8,633	9,368	9,675	9,273	-4.2%	9,065	-2.2%	9,052	-0.2%
Information	4,819	4,683	4,655	4,699	4,671	-0.6%	4,660	-0.2%	4,660	0.0%
Finance & Insurance	6,816	6,951	6,995	7,247	7,149	-1.3%	7,155	0.1%	7,237	1.1%
Real Estate, Rental & Leasing	3,938	4,165	4,393	4,480	4,182	-6.6%	4,163	-0.5%	4,264	2.4%
Professional & Business Services	16,290	17,478	18,678	18,871	17,709	-6.2%	17,919	1.2%	18,587	3.7%
Education <sup>1</sup>	24,719	25,082	25,664	26,313	27,469	4.4%	27,744	1.0%	27,744	0.0%
Health Care and Social Assistance <sup>2</sup>	28,836	29,219	30,170	31,372	32,569	3.8%	33,257	2.1%	33,966	2.1%
Leisure & Hospitality	33,132	33,984	34,775	36,061	34,751	-3.6%	34,758	0.0%	34,758	0.0%
Other Services	7,678	8,289	8,728	8,805	8,731	-0.8%	8,607	-1.4%	8,740	1.5%
Government <sup>3</sup>	23,721	23,595	24,060	24,777	25,378	2.4%	25,561	0.7%	25,807	1.0%

Table run January 20, 2010, by D. Bullard and D. Leonard, DOE/R&P.

<sup>1</sup> Includes private and public education facilities such as school districts and institutions of higher learning.

<sup>2</sup> Includes public and private hospitals, clinics, and related facilities.

<sup>3</sup> Includes federal, state, and local public administration in addition to the U.S. Postal Service.

(Text continued from page 4)

picture in a couple of ways (Economic Analysis Division). If workers who are close to retirement age decide to postpone exiting the workforce, younger workers could have more difficulty obtaining work given the projected slow-growth scenario. Another possibility would be that older workers exit the workforce on schedule, thereby creating replacement needs that could be filled by younger workers.

### Conclusion

Based upon available data, it appears that Wyoming's wage and salary employment is expected to be unchanged from 2009 to 2010, and is projected to turn slightly positive in 2011. The changes presented in these forecasts represent only one set of possible scenarios. Given the available possibilities, we estimate the presented projections to be the most likely outcome.

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