

# THE *Rocky Mountain* ECONOMIST:

*Economic information for Colorado, New Mexico and Wyoming*



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## *Key Industries in the Mountain States*

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Colorado, New Mexico and Wyoming each have a unique economy with different concentrations of industries. Area specializations arise when industries select a particular location based on the availability of natural and human capital resources, the existing economic environment and the economic goals of the local communities. The recent recession reduced employment in almost every industry, but the magnitude of the downturn varied across industries. One consequence of the uneven effects across industries is that individual states and communities fared differently during the recession and recovery. This issue of *The Rocky Mountain Economist* will examine the economic specializations of the Rocky Mountain region and the effects of the recession and recovery on each state's key industries.

### **DEFINING THE KEY INDUSTRIES OF COLORADO, NEW MEXICO AND WYOMING**

States are known for their distinctive features. For example, Colorado is famous for its strong skiing and leisure industry, Wyoming is known for its natural resources and New Mexico is known for cultural diversity. However, defining a state's strengths and key industries goes beyond its

reputation. Regional economists frequently use a measure called the location quotient to compare the concentration of an industry in a region to the concentration at the national level. To calculate a location quotient, the share of total employment in a particular industry for a local region is divided by the share of total employment for the same industry nationally. A location quotient greater than one indicates that the region has a higher concentration of employment in a particular industry compared to the nation. Employment shares and location quotients are shown in Table 1 for each industry in the United States, Colorado, New Mexico and Wyoming.



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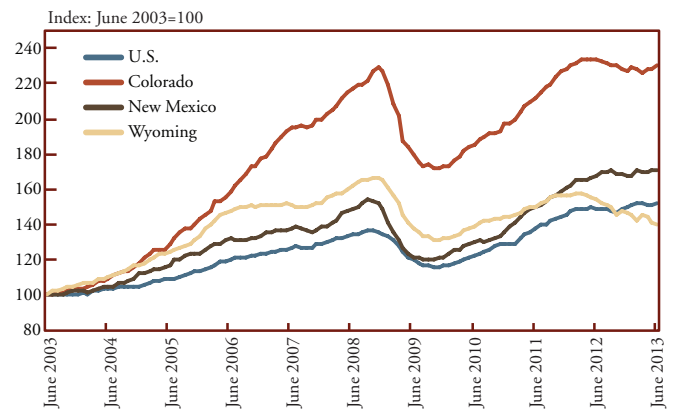
**TABLE 1**  
*Employment Shares and Location Quotients by Industry, June 2013*

	U.S.	Colorado		New Mexico		Wyoming	
	Share	Share	Location Quotient	Share	Location Quotient	Share	Location Quotient
Mining and Logging	0.6%	1.3%	2.00	3.0%	4.73	8.8%	13.72
Construction	4.3%	5.2%	1.22	5.2%	1.22	8.1%	1.89
Manufacturing	8.8%	5.6%	0.64	3.5%	0.40	3.3%	0.37
Wholesale Trade	4.2%	4.0%	0.96	2.6%	0.62	3.4%	0.80
Retail Trade	11.1%	10.4%	0.93	11.2%	1.01	10.4%	0.93
Transportation and Utilities	3.7%	3.0%	0.80	2.9%	0.78	5.2%	1.40
Information	2.0%	2.9%	1.48	N/A	N/A	1.3%	0.66
Financial Activities	5.8%	6.2%	1.06	4.3%	0.74	3.8%	0.65
Professional and Business Services	13.6%	15.7%	1.15	12.2%	0.89	5.9%	0.43
Private Education and Health Services	15.2%	12.2%	0.80	15.3%	1.00	9.3%	0.61
Leisure and Hospitality	10.5%	12.5%	1.19	11.1%	1.06	11.9%	1.14
Other Services	4.0%	4.1%	1.01	3.5%	0.87	3.6%	0.90
Government	16.1%	16.9%	1.05	23.4%	1.46	25.2%	1.56

Source: Authors' calculations based on data from the U.S. Bureau of Labor Statistics.

Although there are some similarities across the U.S. and the Mountain States, several industries emerge as key industries for each state. In particular, there are several industries in Colorado, New Mexico and Wyoming for which the location quotient significantly exceeds one—meaning that the industry's employment share in that state significantly exceeds the industry's employment share at the national level. The mining and logging sector (or energy sector) has the highest location quotient in Colorado, New Mexico and Wyoming. While the energy sector makes up only 0.6 percent of employment nationally, energy employment contributes 1.3 percent, 3 percent and 8.8 percent to total employment in Colorado, New Mexico and Wyoming, respectively. The concentration of employment in the energy sector has increased over the past 10 years as the oil and natural gas sectors expanded in each state (Chart 1). During the recent recession, employment in the energy sector fell sharply—dropping almost 16 percent at the national level between the fall of 2008 and the fall of 2009. Since then, energy employment has surpassed pre-recession peaks in

**CHART 1**  
*Energy Employment*



Source: U.S. Bureau of Labor Statistics.

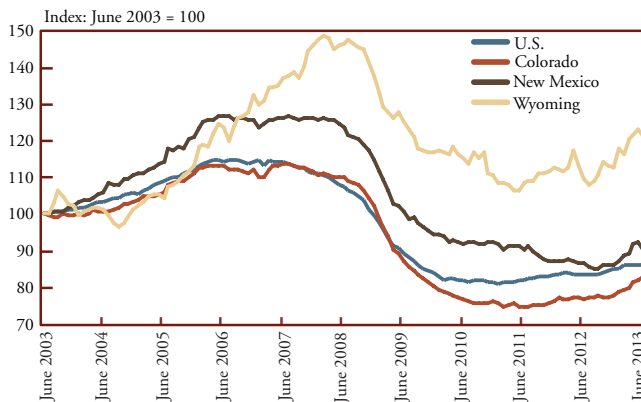
Colorado and New Mexico, but has struggled somewhat in Wyoming over the past year due to a weak natural gas and coal sector.

The construction sector is also a key industry in all three states, employing 5.2 percent of workers in Colorado and New Mexico and 8.1 percent of workers in Wyoming,



compared to 4.3 percent at the national level. The construction sector was hit particularly hard during the recent recession, leading to a sharp decrease in employment (Chart 2). Construction employment has rebounded over the past two years in Colorado and Wyoming and over the past year in New Mexico, but remains well below peak levels in all three states.

**CHART 2**  
*Construction Employment*

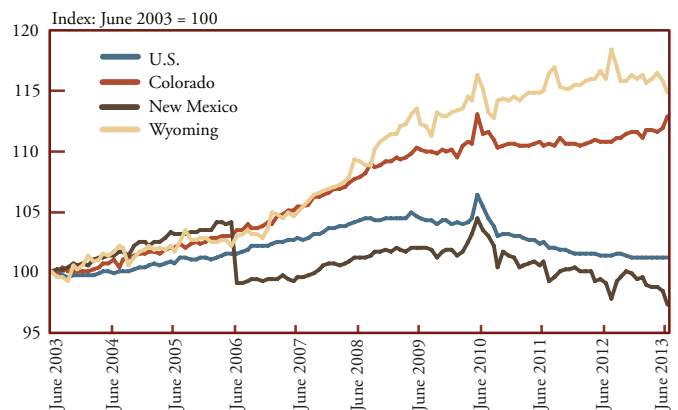


Source: U.S. Bureau of Labor Statistics.

The government sector employs a much larger share of the total workforce in New Mexico and Wyoming than at the national level. Local, state and federal government workers make up 23.4 percent of workers in New Mexico and 25.2 percent of workers in Wyoming. Some of the larger share of government workers can be explained by the relatively small population in each state and the need to provide services in less-populated areas. In addition, Wyoming employs a larger number of federal employees due to the presence of national parks, and New Mexico employs more federal employees due to the presence of federal healthcare facilities and federal research laboratories. Government employment held up relatively well during the recent recession and increased temporarily in 2010 due to hiring for census data collection (Chart 3). However, budget strains for state and local governments and federal budget austerity measures have put pressure on government employment since then. Government employment has fallen about 3 percent in New Mexico since September 2010 while it has increased slightly

(0.6 percent) in Wyoming over the same period. (For more information on the government sector in Colorado, New Mexico and Wyoming, see the third quarter 2012 issue of *The Rocky Mountain Economist*.)

**CHART 3**  
*Government Employment*



Source: U.S. Bureau of Labor Statistics.

Note: The sharp decline in New Mexico government employment in June 2006 is due to a reclassification of Los Alamos National Laboratory workers from state government to the private sector.

In Colorado, the information and leisure and hospitality sectors also employ a larger share of workers than at the national level. The information sector, which makes up almost 3 percent of the Colorado workforce, includes telecommunications, broadcasting and publishing. The information industry fared poorly during the last two recessions, and its employment share in Colorado has declined sharply—falling from 5 percent in early 2001 (Chart 4). The leisure and hospitality sector makes up 12.5 percent of all workers in Colorado. Although the industry faced a decline in employment during the recession due to cutbacks in tourism, business travel and entertainment spending, Colorado employment in the leisure and hospitality sector has surpassed its previous peak. The leisure and hospitality sector is also an important contributor in the New Mexico and Wyoming economies, as shown in Table 1.

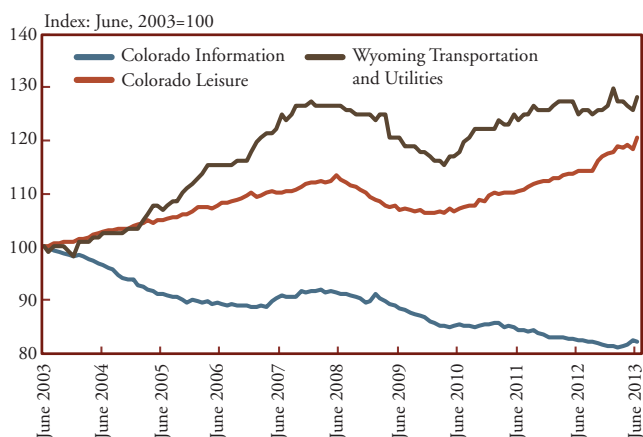
In Wyoming, the transportation and utilities sector is a key industry with employment contributing 5.2 percent of total jobs. Employment in the transportation sector is tied, in part, to the health of Wyoming's energy sector. Transportation



employment increased rapidly in the years leading up to the recession; employment fell sharply during the recession and has recovered over the past few years (Chart 4). Employment in the transportation sector has been roughly flat over the past year in Wyoming as the energy sector has slowed.

### CHART 4

#### Information, Leisure and Transportation Employment



Source: U.S. Bureau of Labor Statistics.

### TABLE 2

#### Average Annual Wages by Industry, 2012

	U.S.	Colorado	New Mexico	Wyoming
Natural Resources and Mining	\$55,933	\$80,163	\$58,476	\$78,358
Construction	\$52,294	\$50,151	\$41,649	\$49,319
Manufacturing	\$60,491	\$62,229	\$55,495	\$55,881
Wholesale Trade	\$68,221	\$73,377	\$49,977	\$57,567
Retail Trade	\$27,729	\$27,819	\$26,041	\$27,069
Transportation and Warehousing	\$46,611	\$45,512	\$43,728	\$47,377
Information	\$82,013	\$88,502	\$45,593	\$41,607
Financial Activities	\$80,097	\$68,541	\$49,045	\$49,106
Professional and Business Services	\$64,494	\$70,310	\$55,581	\$48,624
Private Education and Health Services	\$45,286	\$44,900	\$38,339	\$40,182
Leisure and Hospitality	\$20,213	\$20,536	\$16,028	\$17,364
Other Services	\$30,093	\$34,713	\$29,030	\$34,797
Government	\$49,755	\$48,759	\$44,501	\$45,445
Average	\$49,289	\$50,559	\$40,680	\$44,579

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

### OTHER WAYS TO DEFINE KEY INDUSTRIES

Comparing industry employment shares at the state level to national employment shares is only one way to examine key industries in a state. Total industry employment and average wages also measure the importance of an industry to a state's economy. Five industries—retail trade, professional and business services, private education and health services, leisure and hospitality and government—make up more than 60 percent of total employment in the U.S., Colorado, New Mexico and Wyoming (Table 1). The high employment levels in these industries reflect the growing importance of the service sector to the U.S. economy.

In addition to trying to attract new jobs to a state, policy makers also frequently try to attract high-paying jobs specifically. Wages vary significantly across industries. Within each industry, wages can vary dramatically by occupation, geography, experience, education and company (Table 2).

Across Colorado, New Mexico and Wyoming, there are many similarities in high-paying and low-paying industries. The mining sector is one of the highest paying industries in each state which, in addition to the increased employment level in that industry, contributes to the industry's growing importance in each state. Average annual wages in the manufacturing, wholesale trade, finance and professional and business services industries are also significantly above state averages. The information sector in Colorado is the highest paying sector in the state despite its decreased employment levels over the past decade. In contrast, although the retail trade and leisure and hospitality sectors are large employment contributors to the Mountain States, average annual wages in these sectors are well below state averages in other industries.

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