



Legislative Council Staff

Nonpartisan Services for Colorado's Legislature

Room 029 State Capitol, Denver, CO 80203-1784

Phone: (303) 866-3521 • Fax: (303) 866-3855

lcs.ga@state.co.us • leg.colorado.gov/lcs

Memorandum

October 7, 2022

TO: Interested Persons

FROM: Elizabeth Ramey, Principal Economist, 303-866-3522

SUBJECT: Regional Trends in Labor Force and Employment During the Pandemic Recovery

Summary

This memorandum highlights regional and sectoral differences in Colorado's labor market and employment recovery from the pandemic-induced recession, including in labor force, job openings, and employment.

Labor force has exceeded pre-pandemic levels in all regions.

Labor force data, based on a survey of households through July 2022, indicate that the labor force has exceeded pre-pandemic levels in all nine state regions following dramatic declines in the early months of the pandemic. Relatively robust labor force recovery is supporting the stronger employment recovery (and vice versa) in the Colorado Springs and western regions.

Job openings indicate ongoing mismatches. In spite of the labor force recovery, job openings data, based on a survey of employers through July 2022, indicate ongoing labor market tightness and mismatches, with Colorado job openings elevated, and national data by sector indicating imbalances in several key services sectors.

Regional reliance on sectoral employment guides employment recovery. Data on employment by region and industry suggest that regions particularly reliant on lagging sectors, including natural resources and mining, construction, education and health services, leisure and hospitality, and public administration tend to lag in the overall employment recovery, although there are some regional differences in which sectors are lagging. Regions more reliant on professional and business services, along with trade, transportation, and utilities, have tended to lead the employment recovery. Regions in which employment recovery lags include the mountain, northern, southwest mountain, and eastern plains regions, while the Colorado Springs region was the first in which employment exceeded pre-pandemic levels, in March 2022.

Contents

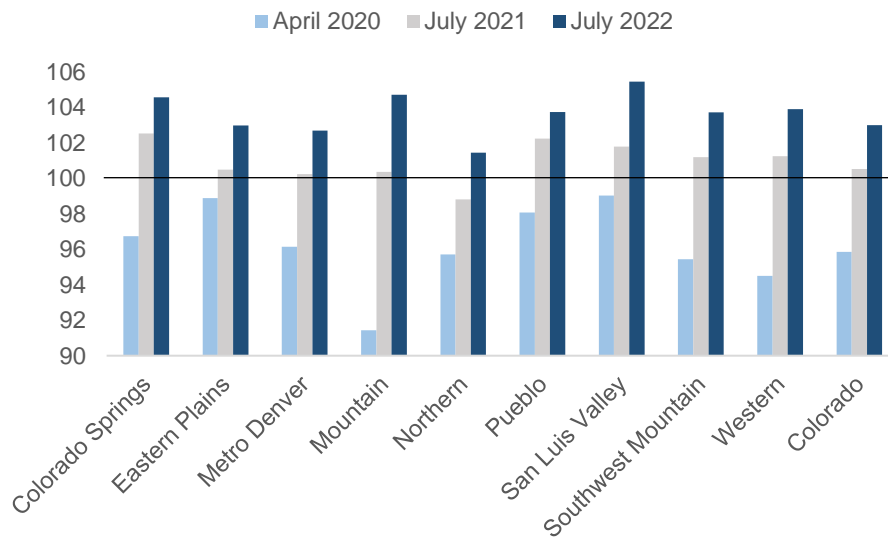
Summary	1
Regional Labor Force Trends	2
Job Openings	4
Regional Employment by Industry	4

Regional Labor Force Trends

Labor force populations declined precipitously, then rebounded quickly from the COVID-19 recession. The COVID-19 pandemic dramatically reduced the labor force in its early months, with declines from January 2020 to April 2020 ranging from 8.6 percent and 5.5 percent in the mountain and western regions, respectively, to about 1 percent in the eastern plains and San Luis Valley. Statewide, the labor force declined by 4.1 percent (Table 1). Compared with the Great Recession, the COVID-19 pandemic recession had a more dramatic immediate impact, but effects have been less lasting over the longer term. While the pandemic exacerbated longer term trends dampening labor force growth, such as the aging of the population, it does not appear to have shifted the trajectory of the state’s labor force growth.

Through July 2022, Colorado’s statewide seasonally adjusted labor force population was 3.0 percent above its January 2020 level. At 69.5 percent, the statewide labor force participation rate was just shy of the pre-pandemic high of 69.6 percent reached in March 2020 and well above the nationwide rate of 62.4 percent reached in August 2022. At the regional level, data indicate that all regions have exceeded their pre-pandemic peak labor force populations (Figure 1). Through July 2022, the northern and metro Denver areas lag in the labor force recovery, while the San Luis Valley, mountain, and Colorado Springs regions lead. It should be noted that data for smaller regions is more variable and less reliable due to small sample sizes and may be subject to revision.

Figure 1
Labor Force by Region
Change from Pre-Pandemic Levels
Index 100 = January 2020



Source: Bureau of Labor Statistics with LCS calculations. Data through July 2022.

Table 1
Regional Trends in Colorado Labor Force

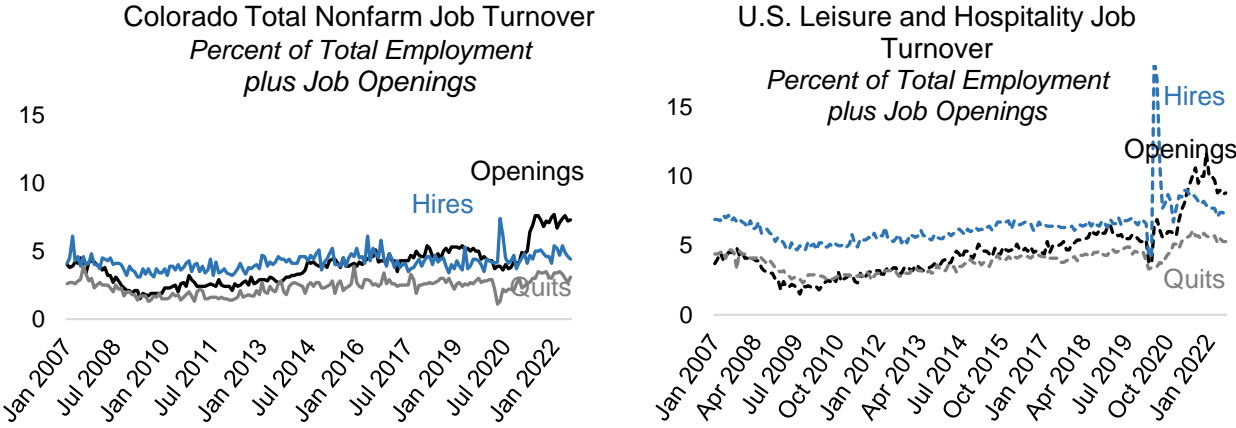
	Colorado Springs	Eastern Plains	Metro Denver	Mountain	Northern	Pueblo	San Luis Valley	Southwest Mountain	Western	Colorado
July 2007 - July 2010	1.5%	2.7%	2.6%	-4.9%	3.0%	1.0%	4.4%	-6.4%	-3.3%	0.6%
July 2010 - July 2013	0.5%	-2.5%	3.3%	-0.2%	4.4%	-2.0%	-2.1%	0.3%	-3.2%	2.2%
July 2013 - July 2016	2.4%	6.1%	5.0%	4.8%	7.6%	-1.0%	6.9%	4.5%	-0.1%	4.5%
July 2016 - July 2019	7.7%	5.2%	7.1%	7.6%	10.1%	2.2%	6.7%	1.7%	5.4%	7.0%
July 2019 - July 2022	6.3%	0.9%	4.2%	5.1%	2.9%	5.6%	3.4%	4.7%	4.4%	4.2%
Jan 2020 - April 2020	-3.3%	-1.1%	-3.9%	-8.6%	-4.3%	-1.9%	-1.0%	-4.6%	-5.5%	-4.1%
April 2020 - July 2022	8.1%	4.1%	6.8%	14.5%	6.0%	5.8%	6.5%	8.7%	10.0%	7.4%

Job Openings

Job openings remain high in Colorado. Data on job openings, hires, and quits are available at the state level for total nonfarm jobs and at the industry level nationally. These data continue to indicate extraordinary levels of labor market tightness with possible signs of cooling. In Colorado, there were 225,000 nonfarm job openings in July, down from 236,000 in May, but almost twice the 2019 monthly average of 110,000. Job openings as a percent of total employment plus job openings stood at 7.3 percent in July, down from 7.6 percent in May (Figure 2, left). The national rate was 6.9 percent in July. In Colorado, there are 0.5 unemployed people per job opening, equal to the 2019 average.

Some service sector job openings indicate ongoing mismatches. Job openings are above pre-pandemic peaks, but have begun to flatten or decline in recent months in most industries. At 8.8 percent, the highest job opening rate belongs to the leisure and hospitality supersector, well above the pre-pandemic average of 5.7 percent, but below the December 2021 high of 11.7 percent (Figure 2, right). Other sectors with elevated job openings rates in July included professional and business services (8.5 percent), education and health services (8.2 percent), transportation, warehousing, and utilities (7.5 percent), and other services (7.3 percent). Recent cooling in hires and quits may indicate that labor market churn is easing as the Great Resignation abates, while labor market mismatches clearly remain in several services sectors.

Figure 2
Colorado and U.S. Job Turnover



Source: Bureau of Labor Statistics. Data are through July 2022.

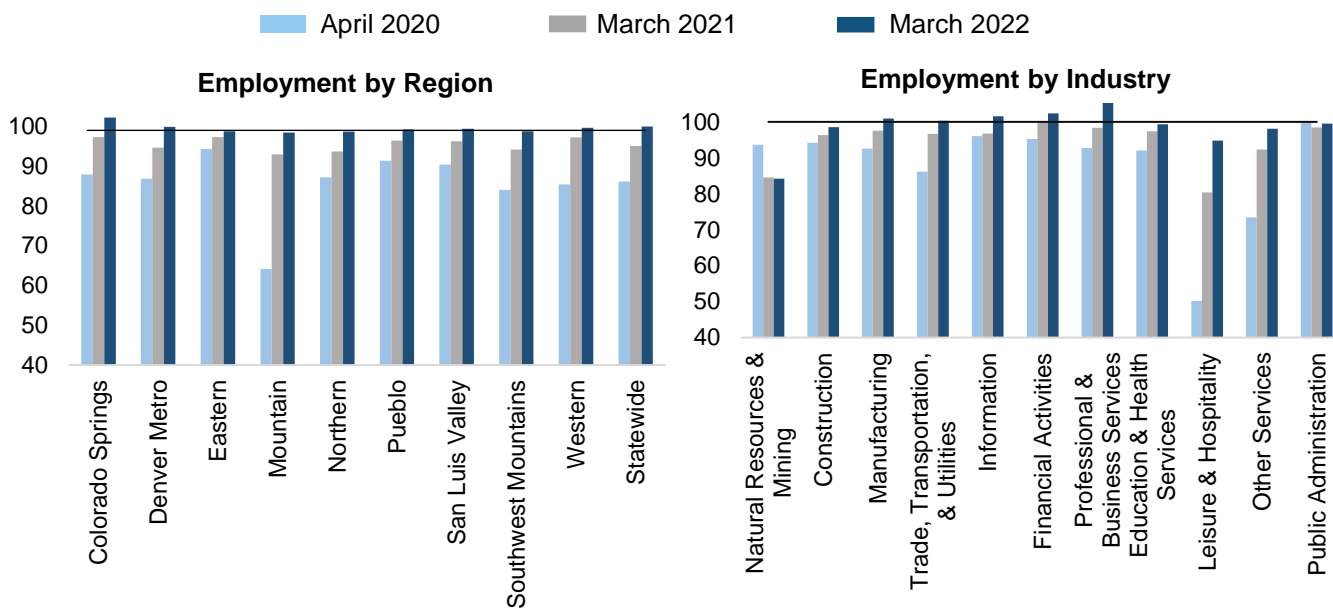
Regional Employment by Industry

Initial impacts of the pandemic varied by region and industry. The most complete data available at the regional level is from a quarterly census of employers (QCEW) covering 95 percent of U.S jobs down to the county level by detailed industry, but is available only through March 2022.¹ The extent

¹ QCEW employment data includes nonfarm and some farm employment, as well as government and private sectors. Covered employees in the private sector and in the state and local government include most corporate officials, all executives, all supervisory personnel, all professionals, all clerical workers, many farmworkers, all wage earners, all piece workers (workers paid based on work completed, rather than time spent working), and all part-time workers. Workers on paid sick leave, paid holiday, paid vacation, etc., are also covered.

of employment recovery provides an indication of possible barriers faced by region and industry, including the availability of labor. As shown in Figure 3, the impact of the pandemic recession varied by region and by industry, with employment declining as much as 35.8 percent in the mountain region, where over one third of jobs are in the leisure and hospitality sector and over 60 percent were lost, to only 5.7 percent in the eastern plains, with less than 10 percent of jobs in that sector, with 29.3 percent of them being lost (Table 2, Figure 4). Statewide employment declined 13.9 percent between December 2019 and April 2020. By industry, initial employment declines ranged from less than one percent in public administration to almost half in leisure and hospitality.

Figure 3
Statewide Employment
Change from Pre-Pandemic Levels
Index 100=December 2019



Source: Bureau of Labor Statistics and Colorado Department of Labor and Employment with LCS calculations.

Some hard-hit regions recovered quickly; recovery has slowed since March 2021. During the recovery, employment in the mountain region quickly rebounded, nearly catching up to other less hard-hit regions by March 2021. Recovery in all regions has slowed since March 2021. The Colorado Springs region has led the recovery, exceeding pre-pandemic employment by 2.2 percent by March 2022, while the mountain region lagged other regions, at 98.4 percent of pre-pandemic employment, nearly equal to the recovery in the northern and southwest mountain regions, at 98.7 percent of pre-pandemic employment in those regions. Statewide, employment just reached its December 2019 level in March 2022.

Table 2
Share of Regional Employment by Sector

	Sector	Region									Colorado
		Colorado Springs	Metro Denver	Eastern Plains	Mountain	Northern	Pueblo	San Luis Valley	Southwest Mountain	Western	
Goods Producing Sectors	Natural Resources & Mining	0.2%	0.8%	9.2%	1.0%	4.9%	1.1%	10.5%	2.1%	3.8%	1.7%
	Construction	6.1%	6.3%	5.4%	7.1%	8.5%	5.7%	4.4%	7.9%	8.6%	6.6%
	Manufacturing	4.1%	5.3%	8.8%	1.2%	10.4%	6.5%	2.3%	3.1%	4.1%	5.5%
Service Producing Sectors	Trade, Transportation, & Utilities	16.5%	19.1%	18.5%	14.0%	17.7%	19.2%	17.4%	19.7%	19.9%	18.5%
	Information	2.1%	3.6%	1.3%	0.8%	1.7%	1.1%	0.8%	1.3%	1.1%	2.9%
	Financial Services	6.3%	6.8%	3.2%	6.3%	3.9%	2.8%	3.7%	4.7%	4.7%	6.2%
	Professional and Business Services	16.5%	18.8%	4.1%	8.6%	11.2%	9.2%	2.8%	6.8%	7.7%	16.1%
	Education & Health Services	25.9%	20.3%	23.9%	12.0%	22.8%	30.5%	28.6%	22.1%	23.6%	21.4%
	Leisure & Hospitality	13.1%	11.1%	7.8%	33.6%	11.3%	10.5%	9.0%	17.6%	13.7%	12.8%
	Other Services	4.1%	3.1%	2.3%	2.8%	2.8%	2.8%	2.4%	3.1%	2.9%	3.1%
	Public Administration	4.9%	4.7%	11.4%	6.7%	4.8%	10.4%	11.6%	10.1%	6.5%	5.4%
Regional share of total*		10.3%	61.9%	1.9%	4.8%	10.1%	3.0%	0.6%	1.5%	5.0%	

* Shares may not add to 100 percent due to data suppression in small regions and sectors.

Source: Bureau of Labor Statistics and Colorado Department of Labor and Employment with LCS calculations.

Employment recovery varies by sector. Statewide employment recovery by industry ranges from 85.2 percent of pre-pandemic employment in natural resources and mining, which has continued to shed jobs since April 2020, and 94.8 percent in leisure and hospitality, to 105.6 percent in professional and business services. Public administration employment also declined further between April 2020 and March 2021. Among the state's top-employing sectors (Table 2), leisure and hospitality and education and health services lagged pre-pandemic levels of employment in March.

Regional reliance on lagging sectors guides employment recovery. Figure 4 presents employment changes by industry for each of the nine LCS forecast regions. Regions particularly reliant on lagging sectors, including natural resources and mining, construction, education and health services, leisure and hospitality, and public administration tend to lag in the overall employment recovery, although there are some regional differences in which sectors are lagging. Regions more reliant on professional and business services, along with trade, transportation, and utilities, have tended to lead the employment recovery.

Colorado Springs. The Colorado Springs region accounted for 10 percent of pre-pandemic employment in Colorado and 11 percent in March 2022. Employment recovery by industry sector in the Colorado Springs region ranges from 67 percent in natural resources and mining to 109.3 in trade, transportation, and utilities, with 16.5 percent of the region's pre-pandemic jobs. Among the region's top-employing sectors, employment lagged below pre-pandemic levels in leisure and hospitality (2 percent below) and financial services (3 percent below) in March 2022.

Denver Metro. The Denver metro area accounts for 62 percent of pre-pandemic employment in Colorado. Employment recovery by industry sector in the region ranges from 87.1 percent in natural resources and mining and 92.1 percent in leisure and hospitality to 106.3 in professional and business services. Among the region's top employers, employment lagged below pre-pandemic levels in trade, transportation, and utilities (2 percent below) as well as leisure and hospitality (7.9 percent below).

Eastern Plains. The eastern plains accounts for only 1.9 percent of statewide employment, with an outsize share in natural resources and mining (which includes farm employment), manufacturing, and public administration. While it has a low share of professional and business services jobs, it is also less reliant on leisure and hospitality employment. Among the region's top employers, employment lagged below pre-pandemic levels in education and health services (1.9 percent below), natural resources and mining (5.9 percent below), and public administration (2.4 percent below).

Mountain Region. The mountain region accounts for only 4.8 percent of the state's employment, but over one-third of those jobs are in leisure and hospitality. Leisure and hospitality lagged pre-pandemic employment levels (2.3 percent below) in March 2022.

Northern Region. Like Colorado Springs, the northern region accounts for 10 percent of Colorado's employment, and like the eastern plains, the northern region is more reliant on natural resources and mining and manufacturing employment than the state as a whole. Employment recovery by industry sector in the region ranges from 74.7 percent in natural resources and mining to 103.9 percent in public administration. Key lagging sectors include manufacturing (3.1 percent below pre-pandemic employment) and leisure and hospitality (3.4 percent below pre-pandemic employment).

Pueblo. The Pueblo – Southern Mountains region, which accounts for 3 percent of the state’s employment, has a heavier reliance on education and health services and public administration than the state as a whole. Among the region’s top-employing sectors, those lagging pre-pandemic levels of employment include education and health services (7.1 percent below), public administration (1.1 percent below), and professional and business services (8.7 percent below). It is one of only two regions in which leisure and hospitality employment had exceeded pre-pandemic levels in March.

San Luis Valley. The San Luis Valley accounts for less than 1 percent of the state’s employment, and relies more heavily on natural resources and mining and public administration than the state as a whole. Among its top-employing sectors, those lagging pre-pandemic employment levels are education and health services (down 3.7 percent), public administration (down 14.9 percent), natural resources and mining (down 10.1 percent), and leisure and hospitality (down 0.5 percent).

Southwest Mountains. Like the Eastern Plains and the San Luis Valley, the southwest mountains are among the less-populated regions, accounting for 1.5 percent of the state’s pre-pandemic employment. The region’s reliance on leisure and hospitality employment as well as public administration is greater than for the state as a whole. Its top-employing lagging sectors include education and health services (down 4.0 percent), leisure and hospitality (down 6.8 percent), public administration (down 1.7 percent), and construction (down 9.8 percent).

Western Region. The western region, accounting for 5 percent of the state’s employment, also has above-state-average employment in the natural resources and mining and construction sectors. Employment recovery in the region ranges from 90 percent in natural resources and mining to 103.7 percent in professional and business services. Among the region’s top-employing sectors, only education and health services employment lagged pre-pandemic levels in March, down 1.3 percent. The region is one of only two in which leisure and hospitality employment exceeded pre-pandemic levels in March (up 2.6 percent).

Figure 4
Regional Employment by Industry
Change from Pre-Pandemic Levels
Index 100=December 2019

April 2020 March 2021 March 2022

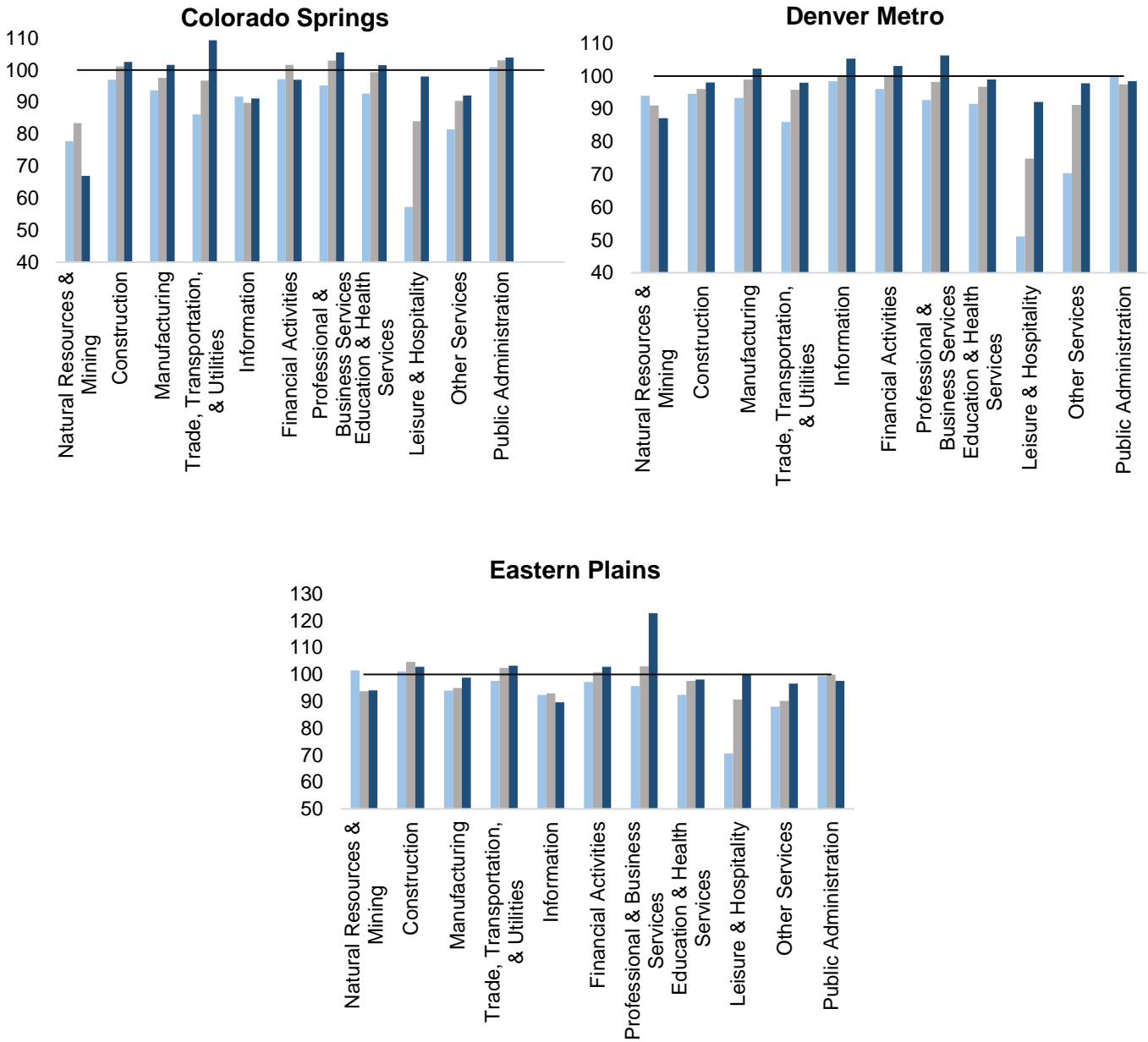
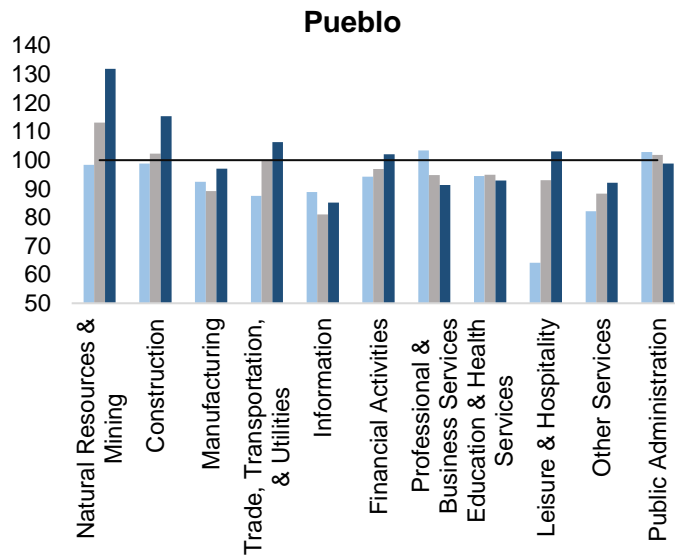
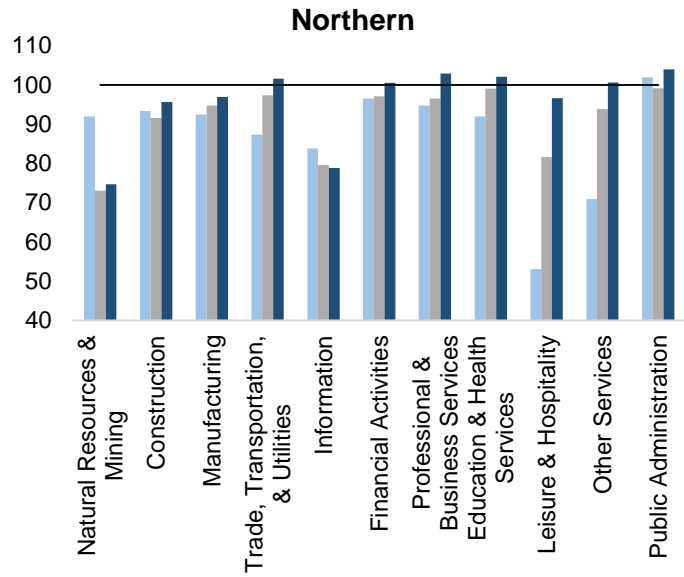
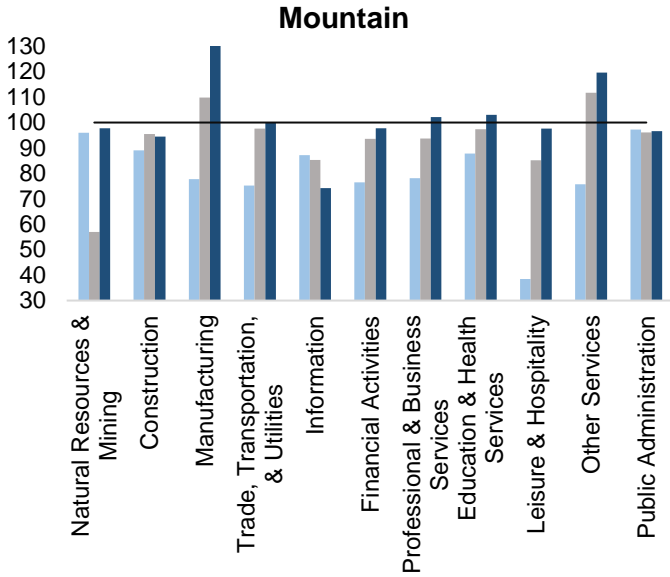


Figure 4 (Cont.)
Regional Employment by Industry
Change from Pre-Pandemic Levels
Index 100=December 2019

April 2020 March 2021 March 2022



**Figure 4 (Cont.)
Regional Employment by Industry
Change from Pre-Pandemic Levels**
Index 100=December 2019

■ April 2020
 ■ March 2021
 ■ March 2022

