BROOKINGS MOUNTAIN WEST

Mountain Monitor

Tracking Economic Recession and Recovery in the Intermountain West's Metropolitan Areas

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Recovery was firmly underway in the Intermountain West by the fourth quarter of 2011 but its pace varied considerably across the region's 10 major metropolitan areas. Six of the 10 metros saw job growth in the fourth quarter but only four saw it accelerate over the previous one. Output grew everywhere but only in half of the region's metros did the pace of growth quicken. The unemployment rate was down across the board from one year earlier. House prices in most markets stabilized. Yet signs of a robust, sustained, and self-fueling recovery remained elusive.

National economic indicators from early 2012 may suggest that the economic recovery—though still very slow—is picking up speed, but the economic data for the country's metropolitan areas now available through the fourth quarter of 2011 paint a somewhat more complicated picture.

Brookings' national *Metro Monitor*, which tracks recession and recovery in the country's 100 largest metropolitan areas, reports that the country's major metropolitan areas saw widespread but generally slow growth in jobs, output, and housing prices in the fourth quarter of 2011. Unemployment rates fell steadily too. These broadly positive headline trends were accompanied by other more ambiguous developments: Manufacturing and high technology growth—important drivers of recovery throughout 2011—slowed over the course of the year. In only a handful of places where job growth accelerated did output growth accelerate to match.

Mountain metros, for their part, charted rather independent courses over the fourth quarter. Phoenix roared—comparatively—ahead of its housing bust peers Las Vegas and Tucson, as did Boise. Outside of Colorado, manufacturing had a much stronger quarter in the region than it did nationally; high tech more closely tracked the national trend except in Salt Lake City, where it grew strongly. At the same time, a slowdown brought unexpected job losses to Ogden and Provo. Despite lackluster performance on individual metrics, Denver and Tucson were the only two metros in which both job and output growth accelerated at the end of 2011.

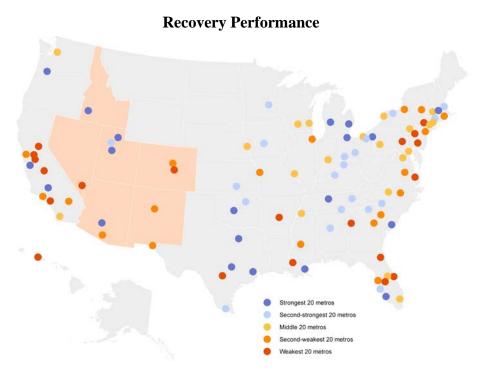
As always, conditions varied greatly across the 10 major metropolitan areas of the Intermountain West.



Overall performance

The Mountain West is home to some of the nation's strongest—and weakest—performers on measures of overall economic recovery. On the *Monitor's* measure of overall recovery—which takes into account changes in employment, unemployment, output, and house prices from each metropolitan area's respective troughs through the fourth quarter of 2011—four Intermountain West metros ranked in the top quintile (in the top 20) among the 100 largest metropolitan areas in the country. Boise and Phoenix, the region's two top rankers, were hit hard by the housing bust in early quarters of the recession but are now leading the region's recovery. Both were boosted in the fourth quarter by mutually reinforcing recoveries in the job and housing markets. Utah's three metros—Ogden, Provo, and Salt Lake City—round out the region's presence in the top quintiles of recovery.

Overall recovery looked weaker at the end of 2011 in Albuquerque, Denver, and Tucson, which fell into the fourth quintile nationally. Colorado Springs and Las Vegas, two and four quarters into their employment recoveries, respectively, continued to struggle to rebound overall after the national economic reset and fell into the bottom quintile of recovery. While Albuquerque, Colorado Springs, and Denver have comparatively less room for large snap-backs than some of their hard-hit peers, their slow recoveries contrast with Utah's strong performance. Similarly, the lagging rebounds in Las Vegas and Tucson contrast starkly with nearby Phoenix and Boise.



Despite recent gains, the impact of the Great Recession still registers strongest in the Sun Belt. Utah's three metros suffered comparatively shallow recessions and have successfully proceeded into solid recovery. Given that, they are closer to achieving a full recovery—a return to pre-recession employment and output levels, unemployment rates, and housing prices—than any of their peers in the region, which have further to climb back. Boise, Las Vegas, Phoenix, and Tucson, despite relatively strong recoveries

since hitting bottom, languish in the lowest quintile nationally in terms of overall recovery. Albuquerque, Colorado Springs, and Denver escaped the recession with only mild downturns, but slow recoveries keep their overall rankings lower.

Employment

Six Intermountain West metropolitan areas added jobs in the last quarter of 2011 while four lost them. In this respect, the jobs picture was mixed in the region as employment levels fell back over the quarter in Colorado Springs, Provo, and Ogden and slipped to a new low in Albuquerque. (By contrast only two metros registered job losses in the third quarter, and mild ones at that.) But over the fourth quarter, employment contracted 0.4 percent in Albuquerque—which is establishing a one-step forward one-step back pattern of job growth—and a surprising 1.2 percent in Ogden, where job growth had exceeded 1 percent in the previous two quarters. Provo's job growth also turned negative as employment levels contracted 0.3 percent. A 0.1 percent contraction eroded some of the previous quarter's job gains in Colorado Springs.

Salt Lake City, on the other hand, led the region with 0.8 percent quarterly job growth. It was the only Intermountain West metro to rank in the top quintile nationally on this measure. Employment levels in Phoenix meanwhile moved upwards 0.5 percent and Denver, Las Vegas, and Tucson all saw 0.3 percent job growth. In Boise employment grew 0.2 percent.

Five Mountain metros closed out 2011 with four consecutive quarters of job growth. Boise, Las Vegas, Phoenix, Salt Lake City, and Tucson have all now added jobs in each of the last four quarters. Provo and Ogden added jobs in three of the past four quarters and Denver in two. Albuquerque and Colorado Springs eked out one quarter of job growth apiece in 2011.

The rate of job growth accelerated from the third quarter to the fourth in four Mountain metros. Job growth rates in Denver, Las Vegas, Salt Lake City, and Tucson were all stronger in the fourth quarter than they were in the third. Growth slowed in Boise and Phoenix, however, and turned negative in Albuquerque, Colorado Springs, Ogden, and Provo.

Manufacturing contributed to progress in much of the region but contracted in a few pockets. Manufacturing had a better quarter in the Intermountain West than it did nationally. Manufacturing employment roared ahead by 3.6 percent in Tucson over the fourth quarter, and increased 2.3 percent in Ogden, 2.2 percent in Salt Lake City, and 1.1 percent in Boise. Those four metros ranked in the first quintile for quarterly manufacturing growth and Phoenix and Albuquerque landed in the second quintile nationally. Manufacturing employment contracted by more than 2 percent in Denver and Colorado Springs, however, and held even in Las Vegas and Provo.

The national manufacturing recovery slowed over the fourth quarter but it picked up steam and accelerated in Tucson, Salt Lake, Boise, Phoenix, Albuquerque, and Las Vegas. The manufacturing sector added jobs in all four quarters of 2011 in six Mountain metros: Boise, Ogden, Phoenix, Provo, Salt Lake City, and Tucson. In Colorado Springs, Denver, and Las Vegas, by contrast, the sector lost jobs in three of the four quarters of the year.

The impact of the public sector on quarterly job growth varied by state. In Arizona's two metros, large local government job gains canceled out smaller state government job losses so that the sector had a net positive impact on fourth quarter job growth in both Phoenix and Tucson. In Colorado, the opposite occurred: local government job losses outweighed state government gains for a net negative contribution to growth. In Utah, the public sector boosted employment as both state and local governments added jobs. Local government job losses outweighed state hires in Albuquerque and Boise. A small increase in state government employment in Las Vegas was more than negated by a 3.5 percent decline in local government employment over the quarter.

Unemployment

Seven out of 10 Mountain metros closed 2011 with prevailing unemployment rates below the national average. Unemployment rates in Utah's three metros had fallen to below 6 percent by December 2011, some of the best numbers in the country. Unemployment ran at 6.8 percent in Albuquerque, which ranked in the second quintile on this measure, and 7.9 percent in Phoenix and Tucson and 8.1 percent in Denver. The unemployment rate was above the national large metro average of 8.3 percent in Boise, Colorado Springs, and Las Vegas, where respectively 8.4 percent, 9.0 percent, and 12.7 percent of the labor force remained out of work.

Unemployment rates are on a downward trend across the region and fell over the year to December in every Mountain metro. Las Vegas registered the largest decrease in the region as its unemployment rate fell 2.5 percentage points over the year. Unemployment rates fell a full percentage point or more in Albuquerque, Boise, Ogden, Provo, and Salt Lake City from December 2010 to December 2011. Progress was slower but still significant Denver, Phoenix, and Tucson, where the unemployment rate fell between 0.6 and 0.8 percentage points. The unemployment rate fell only 0.4 percent over the year to December in Colorado Springs, to the second-highest level in the region.

The region—outside of Utah—remains burdened with larger than average increases in unemployment as a legacy of the Great Recession. The unemployment rate in the average large metro nationally was 3.6 percentage points higher in December 2011 than it was four years ago. In Boise, Colorado Springs, Denver, and Phoenix, the prevailing unemployment rate in December 2011 was more than 4.0 percentage points above its pre-recession level. In Las Vegas, the unemployment rate was still 7.7 percentage points higher than it was four years ago. In Utah's metros, December's unemployment rates were on average 2.8 percentage points higher than in December 2007.

Output

Output grew in every Mountain Metro in the fourth quarter of 2011—strongly in Utah, meagerly in Arizona. Growth was strong in Utah's metros, which posted quarterly growth rates of 1.3 to 1.4 percent and landed firmly in the top quintile of metros nationally. Growth was much weaker in Arizona, where output rose 0.3 percent in Phoenix and 0.1 percent in Tucson. Falling in the second quintile nationally were Boise, with 0.8 percent growth, and Denver, with 0.7 percent growth. Output increased by 0.6 percent in Colorado Springs and Las Vegas over the quarter and by 0.4 percent in Albuquerque.

Eight Intermountain West metros closed out 2011 with a fourth consecutive quarter of output growth. Output grew in all four quarters of 2011 in Albuquerque, Boise, Colorado Springs, Denver, Las



Vegas, Ogden, Provo, and Salt Lake City. Output grew in the last three quarters of the year in Phoenix. Tucson only posted one quarter of growth in 2011, the fourth.

The rate of output growth held steady or accelerated from the third quarter of 2011 to the fourth in eight of the region's metropolitan areas. Output recovery accelerated at the end of the year in Boise, Colorado Springs, Denver, Ogden, Phoenix, and Tucson. The rate of output growth held steady in Albuquerque and Las Vegas over the third and fourth quarters. In Provo and Salt Lake City, on the other hand, output recovery lost some of its vigor.

The Mountain West economy remains smaller than it was before the recession. The region's output peaked in the fourth quarter of 2007, fell through the third quarter of 2009, and has steadily recovered over the nine quarters since. Despite those gains, output—which is synonymous with gross metropolitan product or the value of goods and services produced in the economy—remains 2.5 percent below its prerecession peak across the region as a whole. National output, by contrast, has grown 1.4 percent above its pre-recession levels. One explanation: Housing-bust metros contending with vastly shrunken real estate and construction sectors pull down the regional average on this measure. By contrast, Albuquerque, Utah's metros, and Colorado's metros have all fully recovered output.

House prices

House prices rebounded slightly in the fourth quarter of 2011. Prices increased in every major market in the region except Las Vegas, where they were stagnant, in the fourth quarter. Boise and Phoenix showed the strongest signs of a return to health; in those markets home prices edged upwards 3.1 percent over the quarter. Price increases of 1.5 percent in Tucson and 1.3 percent in Colorado Springs ranked in the top quintile of major metros nationally. Price increases in Salt Lake City, Denver, and Provo met or beat the national average of 0.7 percent with jumps between that and 1 percent. Housing markets in Albuquerque and Ogden posted positive but small price increases over the quarter.

Eight Intermountain West metros saw house prices increase for the second straight quarter. Home prices rose in both the third and the fourth quarters of 2011 in Albuquerque, Boise, Colorado Springs, Denver, Ogden, Phoenix, Provo, and Salt Lake City. In these markets, house prices appear to have reached a floor in the second quarter of 2011 and begun the slow process of recovery. The data show that the Tucson housing market finally began to turn around in the fourth quarter after reaching bottom in the third. Las Vegas' housing market, on the other hand, can't seem to turn around.

House price increases accelerated from the third quarter to the fourth in four Mountain metros—but a full recovery remains a distant prospect everywhere. The sustained jobs and output recovery underway in Boise and Phoenix could explain the accelerating housing market recovery in these two metros. Accelerating price increases in Tucson and Colorado Springs, two metros with some of the region's weakest recoveries, are more difficult to explain.

Intermountain West housing markets remain a long way from full recovery. Despite these late 2011 increases, prices remain down about one fifth in Denver and Colorado Springs, one quarter in Salt Lake City (and nationally), just over one half in Phoenix, and over two-thirds in Las Vegas.

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The housing market—the recession's original catalyst—finally stabilized in the fourth quarter of 2011 and all 10 metros in the Intermountain West ended the year with lower unemployment rates. But the most auspicious signs of a robust and sustained recovery—strong and accelerating growth in jobs and output—eluded the region in the fourth quarter of 2011. Output growth was positive in every metro but accelerated only in half of them.

Meanwhile the region's struggle to translate output growth into jobs continued. Job growth reversed unexpectedly in parts of Utah. Employment levels in Albuquerque hit new lows, despite slow but steady output growth throughout the year. Boise and Phoenix, on the other hand, benefited from mutually-reinforcing recoveries in job and housing markets.

Stepping back, a comparison of progress from the market's bottom through the fourth quarter of 2011 across indicators and metros offers perspective: recoveries in Boise, Phoenix, and Utah's metros are some of the strongest in the nation. These metros are enacting more of the role that Mountain metros have historically played in national recoveries by leading the way. This time is different, however: In general recovery is weaker and its drivers sparser and more difficult to pinpoint. As such, diverse metros such as Colorado Springs, Denver, Las Vegas, and Tucson continued to grope toward recovery at the end of 2011.

Appendix Table. Changes in employment and gross metro product (output) over the time periods reported in the *Mountain Monitor*

	Change in Employment				Change in Output			
Metros	Peak to 2011Q4	Peak to trough	Trough to 2011Q4	2011Q3 to 2011Q4	Peak to 2011Q4	Peak to trough	Trough to 2011Q4	2011Q3 to 2011Q4
Albuquerque, NM	-7.0%	-7.0%	0.0%	-0.4%	5.5%	-2.7%	8.4%	0.4%
Boise City-Nampa, ID	-7.8%	-9.8%	2.2%	0.2%	-3.4%	-6.6%	3.5%	0.8%
Colorado Springs, CO	-3.6%	-3.9%	0.3%	-0.1%	0.6%	-3.1%	3.7%	0.6%
Denver-Aurora, CO	-4.7%	-5.7%	1.0%	0.3%	1.6%	-1.6%	3.3%	0.7%
Las Vegas-Paradise, NV	-13.1%	-14.1%	1.2%	0.3%	-12.1%	-14.0%	2.3%	0.6%
Ogden-Clearfield, UT	-2.9%	-5.8%	3.1%	-1.2%	2.9%	-2.7%	5.8%	1.4%
Phoenix-Mesa-Glendale, AZ	-10.3%	-12.5%	2.4%	0.5%	-7.0%	-8.5%	1.7%	0.3%
Provo-Orem, UT	-3.8%	-7.7%	4.3%	-0.3%	2.5%	-3.8%	6.5%	1.3%
Salt Lake City, UT	-3.2%	-6.1%	3.1%	0.8%	4.5%	-1.6%	6.2%	1.3%
Tucson, AZ	-7.3%	-8.6%	1.5%	0.3%	-4.3%	-5.6%	1.3%	0.1%
Intermountain West metros	-7.4%	-8.7%	1.4%	0.3%	-2.5%	-4.9%	2.5%	0.6%
Top 100 metros	-4.7%	-6.1%	1.5%	0.3%	2.0%	-3.8%	6.0%	0.7%
United States	-4.4%	-5.9%	1.6%	0.2%	1.4%	-4.9%	6.6%	0.8%

For individual metro profiles with data and rankings on every measure reported in the *Mountain Monitor* (overall performance, employment, unemployment, gross metropolitan product, housing prices, and real estate-owned properties from peak to present, trough to present, and quarter to quarter), please visit www.brookings.edu/metromonitor.

Methodology

The *Mountain Monitor*—a companion product to Brookings' national *MetroMonitor*—tracks quarterly indicators of economic recession and recovery in the six-state Mountain region's 10 major metropolitan areas that lie within the 100 most populous nationally. The six states are Arizona, Colorado, Idaho, Nevada, New Mexico, and Utah. The indicators include:

- Employment: Total wage and salary jobs, seasonally adjusted. Percentage change in employment is shown from each metropolitan area's peak employment quarter to the most recent quarter, measuring the extent to which employment has returned to its prerecession level, and from each area's trough employment quarter to the most recent quarter, measuring the extent of employment recovery since the employment low point. Peaks are defined as the highest employment level attained since the first quarter of 2004. Troughs are defined as lowest employment level reached since the peak. Percentage change in employment is also shown from the previous quarter to the most recent quarter, measuring the extent to which employment is moving toward or away from recovery. Source: Moody's Analytics.
- Unemployment rate: Percentage of the labor force that was unemployed in the last month of the quarter. The data are not seasonally adjusted. Therefore, changes in the unemployment rate are shown from the same month four years ago to the most recent month, and from the same month one year ago to the most recent month. Source: Bureau of Labor Statistics.
- Gross metropolitan product (GMP): Total value of goods and services produced in a metropolitan area. Percentage change in GMP is shown from each metropolitan area's peak GMP quarter to the most recent quarter, and from each area's trough GMP quarter to the most recent quarter. Peak and trough quarters are defined as above. Percentage change in GMP is also shown from the previous quarter to the most recent quarter. Source: Moody's Analytics.
- Housing prices: Prices of single-family properties whose mortgages have been purchased or securitized by Fannie Mae or Freddie Mac. Percentage change in housing prices is shown from each metropolitan area's peak housing price quarter to the most recent quarter, and from each area's trough housing price quarter to the most recent quarter. Peaks are defined as the highest house price level attained between the first quarter of 2005 and the second quarter of 2009. Troughs are defined as the lowest house price level reached since the peak. Percentage change in housing prices is also shown from the previous quarter to the most recent quarter and year-over-year. Source: Federal Housing Finance Agency House Price Index.
- The *Mountain Monitor*'s rankings of metropolitan economic performance combine four key indicators: (1) percent change in employment, (2) percentage point change in unemployment rate, (3) percent change in GMP, and (4) percent change in House Price Index. **Performance during the recovery measures changes in** employment, GMP, and the House Price Index from trough quarter to the fourth quarter of 2011. Unemployment rate change is measured from December 2010 to December 2011.

For each set of rankings, metropolitan areas are classified into groups of 20 based on their rank, among the 100 largest metropolitan areas in the country, on the average of the standardized scores for the four key indicators.

Interactive *MetroMonitor* maps, underlying indicator data, and one-page profiles of each of the 100 largest metropolitan areas are also available at www.brookings.edu/metromonitor.

About the Metropolitan Policy Program at the Brookings Institution

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Brookings Mountain West

Established in 2009 as a partnership between the Brookings Institution and the University of Nevada, Las Vegas (UNLV), Brookings Mountain West (BMW) seeks to bring high-quality independent and influential public policy research to the critical issues facing the dynamic metropolitan areas of the Mountain West region. In this, the new initiative builds upon the work of Brookings' Metropolitan Policy Program, which focuses on helping metropolitan areas like Las Vegas grow in robust, inclusive, and sustainable ways through attention to the fundamental drivers of prosperity such as innovation, infrastructure, human capital, and quality of place, as well as regional governance. Along those lines, BMW, along with partners throughout the Mountain West, takes a deep interest in such areas as infrastructure improvement, economic growth, demographic change, environmental impact, alternative energy, and real estate investment.

As the Mountain West emerges as a new American Heartland, it will play an increasingly significant role in shaping national policy discussions. BMW provides a forum for this dialogue and offers knowledge-based policy solutions to help improve the quality of life in the West. Learn more at http://brookingsmtnwest.unlv.edu/

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