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# Mountain Monitor-4th Quarter 2009

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# Mountain Monitor

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

Mark Muro and Jonathan Rothwell

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The Mountain West's recovery from the Great Recession is spreading. Output is growing in every metropolitan area. Still, hiring remains elusive—a fact frustrating the entire nation, but perhaps more so in a region used to snapping, even roaring, back from recessions faster than the rest of the nation.

Drawing on data covering the fourth quarter of 2009 (ending in December), this new *Mountain Monitor*—a companion product to Brookings' national *MetroMonitor* and a quarterly resource produced by Brookings Mountain West, a partnership between Brookings and the University of Nevada at Las Vegas—surveys a region that is at once recovering and still struggling.

Previously, the Intermountain West has been almost impervious to national declines over the last 30 years. Construction growth looked automatic. Job growth seemed a given. And when there were recessions as in the 1980s and 1990s they were—in retrospect—mere blips in a steady upward trajectory.

And yet now, the region's very strengths have become its greatest weaknesses as what was taken for granted now remains elusive. For example, the once unstoppable housing sector now represents one of the heaviest drags on the region's recovery, dampening the usual rapid snap-back of hiring.

In sum, the region is having to consider what may fuel the next era of growth, job creation, and broadly-shared prosperity.

To this end, this edition of the *Mountain Monitor* examines data on employment, unemployment, output, home prices, and foreclosure rates for Intermountain West's 10 large metropolitan areas, the nation's 100 largest metros, and 17 smaller metros dispersed around the Mountain region through the fourth quarter of 2009.

It finds that:

- **The Mountain region's recovery spread during the fourth quarter of 2009, with all 10 of the region's large metros posting robust output growth for the second quarter in a row.** Two metros—Ogden and Albuquerque—have, in fact, fully achieved their pre-recession output peaks. Over the third and fourth quarters, Colorado Springs, Denver, and Ogden posted the largest gains in gross metropolitan product (GMP) among large Mountain metros with quarterly growth rates above 2.0 percent. Only Las Vegas significantly trailed the national average of 1.6 percent on GMP growth.

- **Employment recovery continues to elude the Intermountain West, however, as employment in the region's largest metropolitan areas declined another 0.4 percent in the fourth quarter—a performance that tracked with broad national trends.** So far only Albuquerque and Ogden have achieved job growth, though metro Phoenix at least saw further losses cease in the fourth quarter. In no case, though, has any of the region's metros returned to its peak pre-recession employment level. In fact, Las Vegas and Tucson continued to shed jobs at a faster rate than their regional neighbors and the average large metro.

- **The slowness of the job recovery is new for the region: For the first time in at least three decades the Mountain West's job recovery is lagging the nation's.** Subsequent to the last three national recessions, employment in each of the Intermountain West metro areas recovered faster than the national average and, with one exception, fully recovered eight quarters after the start of the recession. The 1981 recession began in the third quarter of 1981. Two years later, the large metros of the Intermountain West had 2.9 percent more jobs than they had at the beginning of the recession. Only Las Vegas lagged behind its pre-recession employment level with 1.4 percent fewer. The recession of 1990–1991 was even milder: Every Intermountain West metro ended up with more jobs two years later than they had when the recession started—an average of 4.9 percent more. The 2001 recession was somewhat more severe. The average Intermountain metro had 1.7 percent fewer jobs two years later than when the recession started, but Las Vegas, Phoenix, and Boise had more. Now, two years after the start of the Great Recession, the Intermountain West possesses 6.1 percent fewer jobs than it had when the recession started.

- **Also troubling is the continued failure of a housing market recovery to materialize in the region; housing market declines actually accelerated in the fourth quarter.** In fact, for nine of the 10 major metros in the Intermountain West year-over-year house price declines were more severe in the fourth quarter than in the third. House prices fell an inflation-adjusted 12.6 percent in the Mountain region from the fourth quarter of 2008 to the fourth quarter of 2009, compared to 6.5 percent nationally and 7.2 percent in the nation's largest metros. The rate of real-estate-owned properties (REOs) remained exceedingly high in some of the region's metros, but the most severe cases—Las Vegas and Phoenix—saw large and much needed declines in REOs over the last quarter.

- **Despite these developments, however, the 2000s have not been an entirely lost decade for the large metros of the region.** Nationally, the recession has erased almost all of the decade's previous job growth. By contrast, the large metros of the Intermountain West still possess nine percent more jobs than they started the decade with, given their torrid pre-recession growth rates. Las Vegas—notwithstanding the devastation of the last two years—still retained 23.3 percent more jobs at the end of 2009 than it did at the end of 1999. Provo retained 17.7 percent more jobs; Phoenix and Boise were 11 percent ahead of where they were a decade ago. In this respect, while job losses during the recession knocked metropolitan job growth back by 4.5 years in the region, that blow was actually less severe than the national set-back of 5.75 years and the 5.25-year blow suffered by large metros on average. In other words, despite everything, the Intermountain West is still a larger and more important engine of economic activity now than it was at the beginning of the decade.

- **Also encouraging has been the ability of metropolitan education levels to minimize distress in some metros.** On balance, metropolitan education levels continued to predict better economic performance and lower unemployment rates across the Mountain West. Denver and Colorado Springs, which have weathered the recession rather well, excel by this measure. Another metro with solid performance on GMP and unemployment, Ogden, is fourth among large metros on high school diploma completion.

- **Similar to their larger neighbors, finally, the small metros of the Intermountain West also exhibited considerable progress toward a full output recovery, but have yet to begin to recoup the massive number of jobs they have lost.** All but four of these 17 metros have recovered their pre-recession output levels. This achievement owes largely to rapid growth at the end of 2009. Like their larger regional counterparts, moreover, the smaller Intermountain West metros have fared relatively well on unemployment rates—perhaps, in part, because of out-migration—but seen massive job losses and housing price busts. Even as job losses continued to mount, in this respect, the 2.6 percent increase in the unemployment rate for the year ending in the fourth quarter was lower than it was for year ending in the third quarter (3.1 percent). This means that a job recovery has not yet taken hold, but it may not be far off. There remains, of course, considerable variation across these metropolitan areas, with metros in states like Arizona (take Yuma and Lake Havasu City) and Nevada (Reno) suffering far worse than their counterparts in New Mexico (Las Cruces, for example) and Colorado (Fort Collins and Boulder).

Overall, the economic pulse of the Mountain metros tracks with the national story of a modest, tentative, variegated, and jobless recovery. Growth is back but not job growth, and so the winter of 2009–2010 is a time of anxiety both nationally and in the West. And yet, the moment may be especially troubling to those who reside in the Intermountain region. For the first time in 30 years, after all, the Mountain metros—large and small—are this winter living through a troubling new experience of tested resilience and slower rather than faster job recovery by comparison with the nation.

Along with the persistent unevenness of the Great Recession in the Mountain West, this sobering experience should serve as a summons to both Western and federal policymakers to look beyond business-as-usual and attend to the deeper wellsprings of metropolitan recovery and prosperity.

## Methodology

The *Mountain Monitor*—a companion product to the Brookings Metropolitan Policy Program's national *MetroMonitor*—tracks quarterly indicators of economic recession and recovery in the Mountain region's metropolitan areas. The focus is on the 10 major metros in the six-state Intermountain West that lie within the largest 100 nationally in terms of population, but a sub-set of indicators for smaller metros is presented at the end. The states include 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 metro area's peak employment quarter to the most recent quarter, measuring the extent to which employment has recovered from the recession's impact. Peaks are defined as the highest employment level attained since the first quarter of 2004. 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 recovery. Given the uniqueness of growth in the Intermountain West, the table also shows employment growth leading up to the recession. Source: Moody's Economy.com.

- **Unemployment rate**: Percentage of the labor force that is currently unemployed, not seasonally adjusted, last month of quarter. Because the data are not seasonally adjusted, change in the unemployment rate is shown from the same month in previous year. Source: Bureau of Labor Statistics.

- **Gross metropolitan product (GMP)**: Total value of goods and services produced within a metro area. The percentage change in GMP is shown from each metro area's peak GMP quarter (since the first quarter of 2004) to the most recent quarter, and from the previous quarter to the most recent quarter. Source: Moody's Economy.com.

- **Housing prices**: Prices of single-family properties whose mortgages have been purchased or securitized by Fannie Mae or Freddie Mac, not seasonally adjusted. Because the data are not seasonally adjusted, the percentage change in housing prices is shown from the same quarter in the previous year to the most recent quarter. Source: Federal Housing Finance Agency House Price Index.

- **Housing price-to-rent ratio:** Average housing values are divided by average annual contract rents using yearly data. The differences in this ratio (2007 less 2000 and 2008 less 2007) are reported. Source: U.S. Census Bureau; 2000 Decennial Census, 2007 American Community Survey, 2008 American Community Survey.

- **Real estate-owned (REO) properties**: Foreclosed properties that fail to sell at auction and thus become owned by the lending institution. Shown as the share of all mortgageable properties in each metro area in the last month of the most recent quarter, and change in share from last month in previous quarter. Source: McDash Analytics.

- **Long-term employment indicators:** Each of these long-term indicators compares the level of employment in one period, measured as total wage and salary jobs, seasonally adjusted, and the level of employment in another period. Ten year employment change equals the percent change in employment between the fourth quarter of 1999 and the fourth quarter of 2009. Years of net job growth lost measures the number of years since the most recent quarter when employment was at or below its current level. The percent of employment recovery in each recession is measured by employment in the eighth quarter following the official first quarter of a national recession (as defined by the National Bureau of Economic Research) as a percentage of employment in that first quarter of the recession.

An Overall Performance index has also been constructed. The *Mountain Monitor*'s Overall Performance index combines metropolitan rankings on four key indicators:

- Percent employment change from peak quarter to 4th quarter 2009
- Percentage point change in unemployment rate from December 2008 to December 2009
- Percent GMP change from peak quarter to 4th quarter 2009
- Percent change in House Price Index from 4th quarter 2008 to 4th quarter 2009

Metropolitan areas are then grouped into quintiles (groups of 20) based on their average ranking across all four indicators, among the 100 largest U.S. metro areas.

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

## Overall performance of the largest Mountain-region metros during the recession

**Relatively speaking, conditions in the Intermountain West's large metropolitan areas improved between the third and fourth quarters of 2009 as measured by the *Monitor's* overall performance index.** Three of the 10 metros—Denver, Ogden, and Colorado Springs—moved up to a higher performance quintile among the nation's largest 100 metros while two—Salt Lake City and Albuquerque—slipped down a quintile. Overall, the region has gained ground over the last quarter in relation to the rest of the country. The recovery has been spreading.

**Even so, the large metros of the Intermountain West have experienced dramatic—but varied—retrenchment during the current recession after years of growth, and still stand as one of the worst hit areas of the country.** The Overall Performance Index of the Brookings *MetroMonitor* and this companion piece ranks metros on changes in employment, unemployment rate, gross metropolitan product (GMP), and housing prices over the course of the recession. On all but one of those indicators—change in the unemployment rate—the performance of the average large Intermountain West metro continues to trail the average of the 100 largest metros.

**As with last quarter's report, three of the Intermountain West metros—Boise, Las Vegas, and Phoenix—lie in the bottom quintile in terms of recession-induced declines.** On the positive side, Colorado Springs and Denver have indeed lost jobs and seen their output decline, but they rank in the second-strongest quintile in terms of overall performance during the recession, and their unemployment rates, in particular, have remained remarkably stable: third and fifth overall amongst the 100 largest metros.

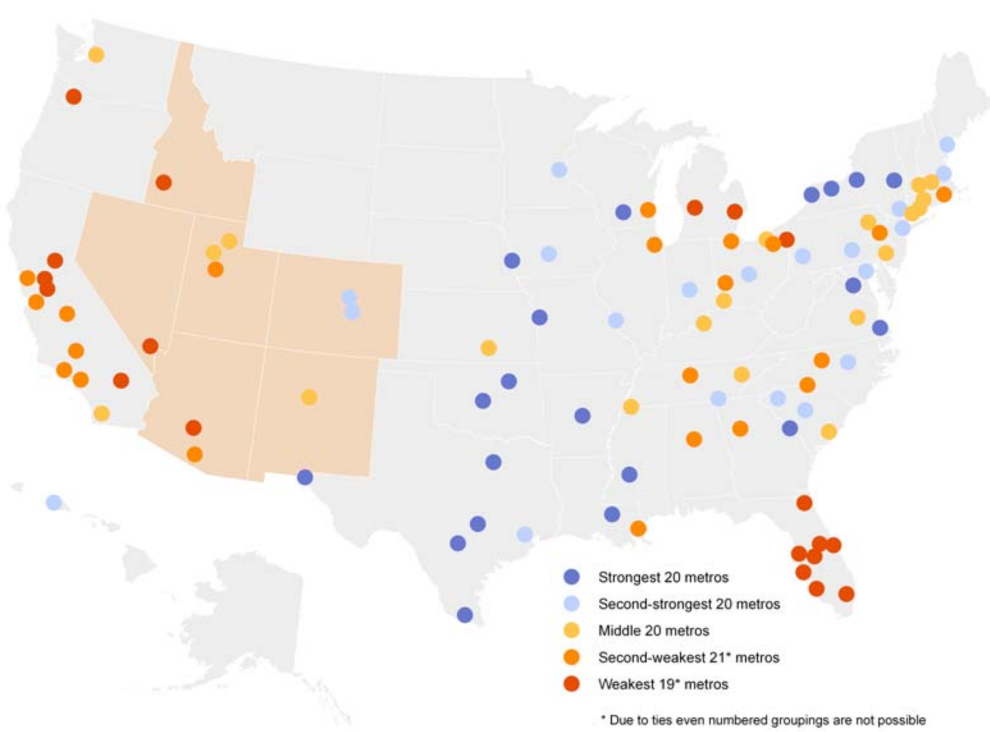
## Overall performance on change in employment, unemployment rate, GMP, and housing prices during the recession for major Intermountain West metros

| Metro | Percent change in employment, metro peak to 2009Q4 | Nat'l Rank | Percentage point change in unemployment, Dec. 2008 to Dec. 2009 | Nat'l Rank | Percent GMP change, metro peak to 2009Q4 | Nat'l Rank | Percent change in real HPI, 2008Q4 to 2009Q4 | Nat'l Rank |
|---|---|---|---|---|---|---|---|---|
| Colorado Springs, CO | -4.7% | 51 | 0.9% | 3 | -0.9% | 37 | -5.1% | 42 |
| Denver-Aurora-Broomfield, CO | -4.9% | 56 | 1.1% | 5 | -2.5% | 58 | -3.3% | 21 |
| Albuquerque, NM | -3.7% | 34 | 3.2% | 77 | 1.8% | 7 | -7.0% | 59 |
| Ogden-Clearfield, UT | -5.5% | 63 | 2.2% | 40 | 1.8% | 8 | -7.9% | 68 |
| Salt Lake City, UT | -4.9% | 55 | 2.4% | 47 | -1.9% | 48 | -11.2% | 85 |
| Provo-Orem, UT | -6.3% | 72 | 2.2% | 42 | -1.5% | 42 | -13.7% | 92 |
| Tucson, AZ | -6.8% | 74 | 1.9% | 27 | -3.0% | 69 | -13.0% | 90 |
| Phoenix-Mesa-Glendale, AZ | -10.6% | 94 | 2.1% | 31 | -3.3% | 73 | -17.6% | 98 |
| Boise City-Nampa, ID | -10.7% | 95 | 2.9% | 69 | -4.1% | 83 | -16.4% | 96 |
| Las Vegas-Paradise, NV | -9.8% | 91 | 4.4% | 100 | -4.4% | 86 | -20.8% | 100 |
| Intermountain West Metros | -7.4% | | 2.3% | | -2.2% | | -12.6% | |
| 100 Largest Metros | -4.6% | | 2.6% | | -0.9% | | -7.2% | |
| United States | -4.9% | | 2.5% | | 0.0% | | -6.5% | |

Overall metropolitan performance, and performance on each component indicator, is grouped by quintile (20 metro areas each) based on metros' rank among the largest 100 U.S. metropolitan areas (for the full list see the Brookings Metropolitan Policy Program's *MetroMonitor*). The following shading system indicates these quintile rankings:

| Strongest | Second-strongest | Middle | Second-weakest | Weakest |
|---|---|---|---|---|

## Overall performance during the recession

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## Employment

**Employment recovery continues to elude the Intermountain West as employment in the region's large metropolitan areas declined another 0.4 percent in the fourth quarter—performance that tracked with broad national trends.** Within the region, only Albuquerque and Ogden saw positive net job growth from the third to fourth quarter while Phoenix managed to avoid losing any more jobs on net. Las Vegas, for its part, remained one of the most troubled performers in the country, having lost another 1.8 percent of its jobs in the fourth quarter beyond the 1 percent loss from the second quarter to the third. For two of the metros, Las Vegas and Tucson, not only was job growth absent from the third to the fourth quarter, but job losses actually accelerated. Las Vegas absorbed the loss of roughly 12,000 jobs this past quarter in construction, the public sector, and the accommodation and food service industries alone. Tucson's changes were driven by the same sectors, except that retail was hit harder than construction.

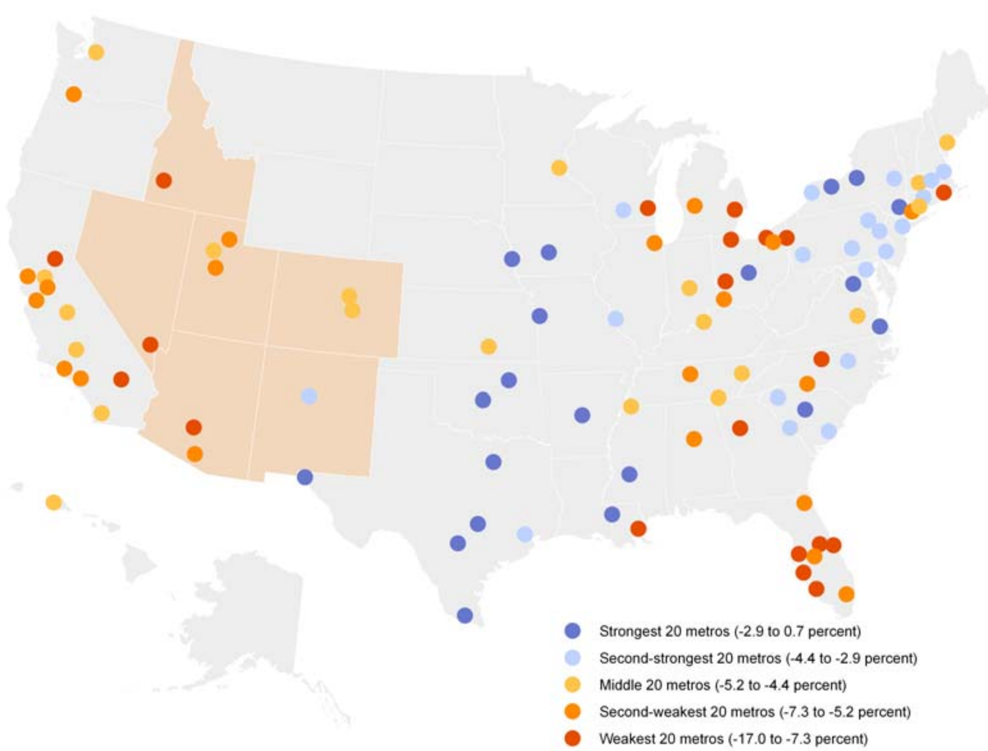
Conversely, for Albuquerque and Ogden, growth was driven by the large and relatively healthy public sector, which includes employees of public education and public medical institutions. The public sector accounted for 23 percent of all jobs in Albuquerque and 26 percent Ogden. Likewise, strong growth in accommodation and food service helped to offset on-going losses in construction.

**All told, up through the fourth quarter of 2009, the large Intermountain West metros lost a net 7.4 percent of their jobs since their employment peaks in 2007 and 2008, compared to a 4.9 percent loss for the United States as a whole.** This marks an abrupt change in fortunes. Job growth in the Mountain region exploded over the five-year period leading up to its zenith in the fourth quarter of 2007. During that time, employment in the Mountain metros nearly tripled the national growth rate of 15.2 percent. This dizzying growth served to make the sudden plummet over the next two years all the more jarring. The Intermountain West metros most dislocated by the years' employment contraction—Las Vegas, Boise, and Phoenix—all had high house price inflation and were all very highly concentrated in low skill on-site construction jobs, as shown in last quarter's *Mountain Monitor*.

## Change in employment by metro

| Rank | Metros ranked by percent change in employment from peak | Percent change in employment, metro peak to 2009Q4 | Percent change in employment, 2009Q3 to 2009Q4 | Pre-recession employment growth, 2002Q3 to 2007Q3 |
|---|---|---|---|---|
| 1 | Albuquerque, NM | -3.7% | 0.1% | 8.8% |
| 2 | Colorado Springs, CO | -4.7% | -0.3% | 5.5% |
| 3 | Salt Lake City, UT | -4.9% | -0.3% | 13.9% |
| 4 | Denver-Aurora-Broomfield, CO | -4.9% | -0.4% | 6.2% |
| 5 | Ogden-Clearfield, UT | -5.5% | 0.3% | 12.6% |
| 6 | Provo-Orem, UT | -6.3% | -0.1% | 23.8% |
| 7 | Tucson, AZ | -6.8% | -0.9% | 12.5% |
| 8 | Las Vegas-Paradise, NV | -9.8% | -1.8% | 26.1% |
| 9 | Phoenix-Mesa-Glendale, AZ | -10.6% | 0.0% | 20.0% |
| 10 | Boise City-Nampa, ID | -10.7% | -0.5% | 16.7% |
| | **Comparison Aggregates** | | | |
| | Intermountain West Metros | -7.4% | -0.4% | 15.2% |
| | 100 Largest Metros | -4.6% | -0.4% | 5.9% |
| | United States | -4.9% | -0.3% | 5.6% |
| | **Comparison Metros** | | | |
| | Riverside-San Bernardino-Ontario, CA | -10.5% | -0.1% | 17.4% |
| | Sacramento--Arden-Arcade--Roseville, CA | -8.4% | -1.1% | 8.7% |

## Percent change in employment, peak quarter to 4th quarter 2009

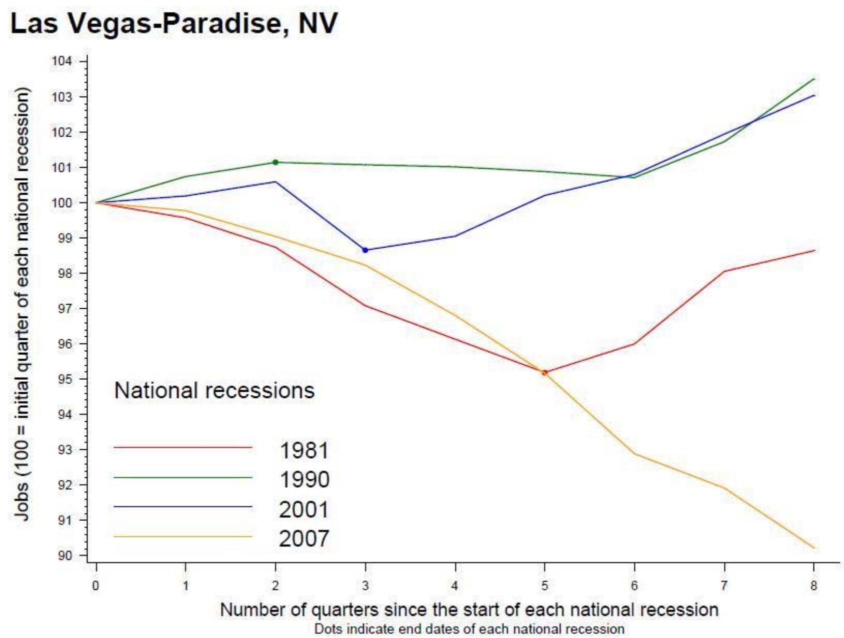


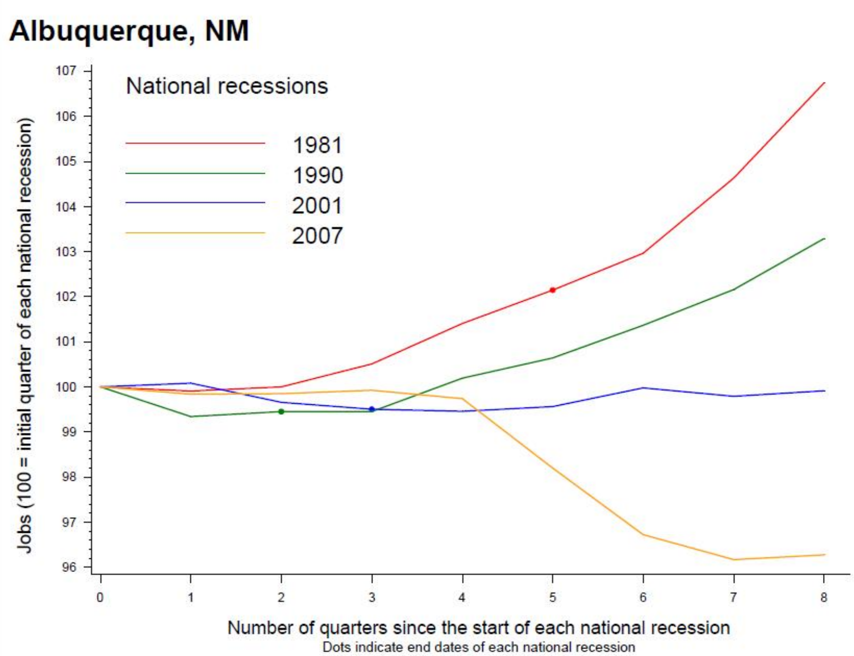
**This recession marks the first time in at least three decades that the Intermountain West has lagged the nation in terms of job recovery.** This too is jarring and new. In the three previous national recessions employment recovery in the Intermountain West metros occurred well ahead of the national recovery and, with one exception, employment had fully recovered eight quarters after the start. The 1981 recession began in the third quarter of 1981. Two years later, the large metros of the Intermountain West had 2.9 percent more jobs than they had at the beginning of the recession. Only Las Vegas lagged behind its pre-recession employment level with 1.4 percent fewer jobs. The recession of 1990 was even milder: Every Intermountain West metro ended up with more jobs two years later than it they had when the recession started—an average of 4.9 percent more. The 2001 recession was somewhat more severe. Two years after the start of that recession, Intermountain West metros, on average, had 1.7 percent fewer jobs; only Las Vegas, Phoenix, and Boise had more jobs. Now, two years after the start of the Great Recession, the large Intermountain West metros possess 6.1 percent fewer jobs than they had when the recession started.

**Employment recovery in each recession since 1981, measured by percent of jobs recovered eight quarters after initial quarter of recession**

| Metro | Percent employment recovery, 8 quarters since initial quarter of 1981(Q3) recession | Percent employment recovery, 8 quarters since initial quarter of 1990(Q3) recession | Percent employment recovery, 8 quarters since initial quarter of 2001(Q1) recession | Percent employment recovery, 8 quarters since initial quarter of 2007(Q4) recession |
|---|---|---|---|---|
| Albuquerque, NM | 106.7% | 103.3% | 99.9% | 96.4% |
| Boise City-Nampa, ID | 101.5% | 107.4% | 100.2% | 90.4% |
| Colorado Springs, CO | 106.4% | 108.2% | 96.0% | 95.3% |
| Denver-Aurora-Broomfield, CO | 102.9% | 103.9% | 95.2% | 95.6% |
| Las Vegas-Paradise, NV | 98.6% | 103.5% | 103.0% | 90.3% |
| Ogden-Clearfield, UT | 101.7% | 103.8% | 101.8% | 94.2% |
| Phoenix-Mesa-Glendale, AZ | 106.5% | 100.9% | 100.1% | 89.6% |
| Provo-Orem, UT | 100.0% | 109.8% | 98.2% | 93.7% |
| Salt Lake City, UT | 102.5% | 106.4% | 96.4% | 95.1% |
| Tucson, AZ | 103.8% | 104.8% | 99.3% | 93.8% |
| **Comparison Aggregates** | | | | |
| Intermountain West Metros | 103.7% | 103.8% | 98.8% | 92.6% |
| 100 Largest Metros | 100.1% | 98.2% | 98.1% | 95.4% |
| United States | 99.6% | 99.2% | 98.0% | 95.1% |

**Employment levels among the Intermountain West metros during this recession have largely followed two illustrative trends: sharp and continued employment declines (as in Las Vegas-Paradise, NV) or delayed and more modest retrenchment (as in Albuquerque, NM).**[1] In this respect, the region's metros largely coasted through the national recessions of the 1980s and 1990s, with the exception of Las Vegas in the wake of the 1981 recession. During and in the aftermath of this recession, however, job losses have been much deeper and the employment recovery elusive.




[1] Charts tracking employment recovery for all of the 100 largest U.S. metros, including those in the Intermountain West, are included as part of the individual state profiles available here: http://www.brookings.edu/metro/MetroMonitor/profiles.aspx.

**Despite these developments, however, the 2000s have not been an entirely lost decade for the large metros of the region.** Nationally, the recession has erased almost all of the decade's previous job growth. By contrast, the large metros of the Intermountain West still possess nine percent more jobs than they started the decade with. Las Vegas, despite the devastation of the last two years, still retained 23.3 percent more jobs at the end of 2009 than it had at the end of 1999. Provo retained 17.7 percent more jobs; Phoenix and Boise were 11 percent ahead of where they were a decade ago. In this respect, while job losses during the recession knocked metropolitan job growth back by 4.5 years in the region, that blow was actually less severe than the national set-back of 5.75 years and the 5.25-year blow felt by large metros. In other words, despite everything, the Intermountain West is still a larger and more important engine of economic activity now than it was at the beginning of the decade.

**One observation by way of partial explanation: Metropolitan education levels continue to predict better economic performance and especially lower unemployment rates.**[2] More highly educated workers have skills that are more in demand, and so they are less likely to lose their jobs; they have greater flexibility and higher mobility between occupations and regions; they are also more likely to start businesses or spark wider innovation that spills over to the metropolitan economy. Large Mountain region metros with above-average college attainment rates have seen their employment levels fall by 2.5 percentage points less than their less-educated regional counterparts during the recession. Denver, Provo, and Colorado Springs are particularly strong on this measure of human capital, which partly explains their resilience.

**Years of employment growth lost to the Great Recession**

| Metros ranked by years of employment growth lost | Years of employment growth lost to Great Recession | Ten year employment change (1999 Q4 to 2009Q4) |
|---|---|---|
| Provo-Orem, UT | 3.50 | 17.7% |
| Salt Lake City, UT | 3.50 | 9.9% |
| Ogden-Clearfield, UT | 4.00 | 10.7% |
| Albuquerque, NM | 4.25 | 8.2% |
| Denver-Aurora-Broomfield, CO | 4.25 | 1.1% |
| Boise City-Nampa, ID | 5.00 | 11.0% |
| Colorado Springs, CO | 5.00 | 2.7% |
| Las Vegas-Paradise, NV | 5.00 | 23.3% |
| Phoenix-Mesa-Glendale, AZ | 5.25 | 11.0% |
| Tucson, AZ | 5.25 | 5.5% |
| **Comparison Aggregates** | | |
| Intermountain West Metros | 4.50 | 9.0% |
| 100 Largest Metros | 5.25 | 1.6% |
| United States | 5.75 | 0.3% |

[2] Employment changes since peak employment were more positive for metros with a higher share of adults aged 25 or older with a Bachelor's degree in 2007 for the full sample of the 100 largest metros. The relationship between education attainment and employment growth is statistically significant unconditionally and after adjusting for the average effects of specific regions, racial demographics, the poverty rate, pre-recession housing inflation, employment in various industries, and pre-recession GMP per capita. A ten percentage point increase in attainment corresponds to 2.9 percent higher employment growth.

## Unemployment

**Increases in the unemployment rate from the fourth quarter to 2008 to the fourth quarter of 2009 put the region's metros on opposite ends of the spectrum.** The annual unemployment rate change for the period ending in the fourth quarter ranged from 4.4 percentage points in Las Vegas, which was second to last among the largest 100 metros, to just 0.9 percentage points in Colorado Springs, which was third best. Colorado Spring's concentration in public sector jobs as well as professional, scientific, and technical services likely explains part of its success. It has, for example, a greater percentage of engineering jobs than any metro in the nation and nine times the national percentage. Eight percent of Las Vegas' workforce, in contrast, is still employed in the ailing construction industry—almost twice the national rate.

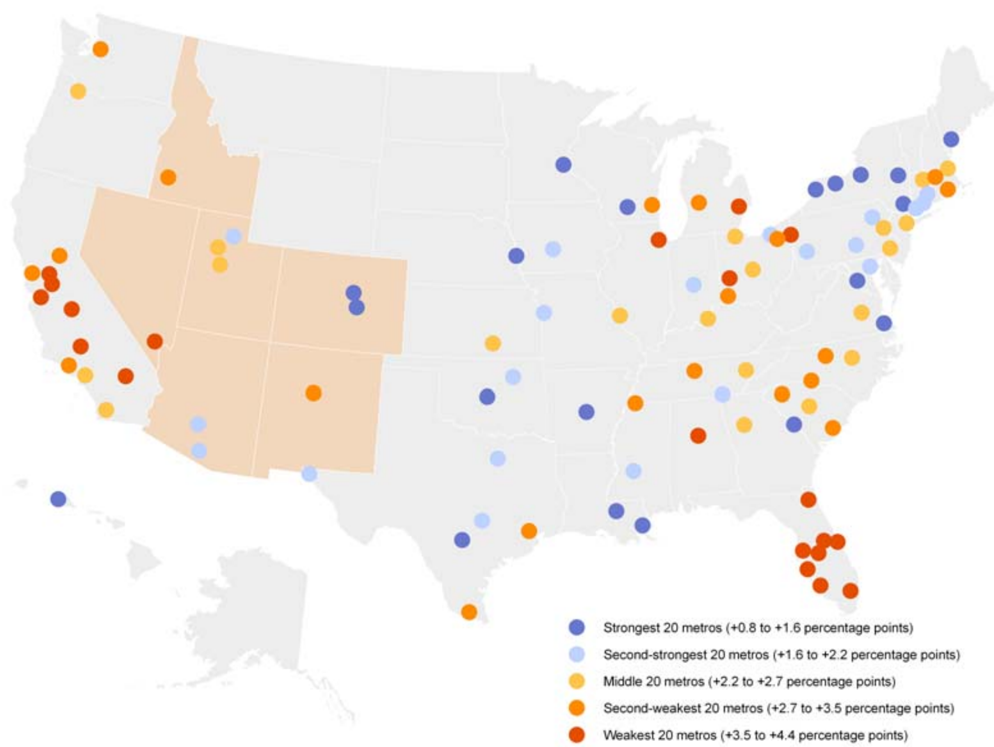
**The average unemployment rate for the Intermountain West's large metros is one percentage point below the national rate and just over a point lower than the average rate prevailing in large metros nationally.** Thus, as in the third quarter, unemployment rates in the region have followed the upward national trend, but not as severely. Only Boise and, especially, Las Vegas, have unemployment rates higher than the nation.

One reason for these dynamics is the high skill attainment of many large metros in the region, which predicts lower unemployment nationally. Educated workers are better equipped to stay employed, and their metro economies benefit as a result. Utah's main metros—Provo, Salt Lake City, and Ogden—for example, are all comparatively highly-educated and rank nationally among the 10 metros least affected by joblessness. Provo's notable unemployment rate of just 6.0 percent may result in large part from the high college attainment rates of its residents—as of 2007, 34.1 percent of its workforce had at least a Bachelor's degree. Salt Lake City's workforce is similarly highly skilled, and a strong financial sector—including the corporate offices of Wells Fargo and American Express and heavy concentrations of pension funds and trusts—has softened the recession's impact there. High school completion rates also make joblessness less likely. Ogden is average on college attainment, but fourth among the 100 largest metros for high school completion. Las Vegas is 80$^{th}$. Of adults aged at least twenty-five years, 92 percent in Ogden have a diploma, compared to 84.5 percent nationally.

## Change in unemployment by metro

| Rank | Metros ranked by percentage point change in the unemployment rate | Percentage point change in the unemployment rate, Dec. 2008 to Dec. 2009 | Unemployment rate, Dec. 2009 |
|---|---|---|---|
| 1 | Colorado Springs, CO | 0.9% | 7.9% |
| 2 | Denver-Aurora-Broomfield, CO | 1.1% | 7.5% |
| 3 | Tucson, AZ | 1.9% | 8.0% |
| 4 | Phoenix-Mesa-Glendale, AZ | 2.1% | 8.2% |
| 5 | Ogden-Clearfield, UT | 2.2% | 6.6% |
| 6 | Provo-Orem, UT | 2.2% | 6.0% |
| 7 | Salt Lake City, UT | 2.4% | 6.2% |
| 8 | Boise City-Nampa, ID | 2.9% | 9.9% |
| 9 | Albuquerque, NM | 3.2% | 7.9% |
| 10 | Las Vegas-Paradise, NV | 4.4% | 13.1% |
| | **Comparison Aggregates** | | |
| | Intermountain West Metros | 2.3% | 8.5% |
| | 100 Largest Metros | 2.6% | 9.6% |
| | United States | 2.5% | 9.7% |
| | **Comparison Metros** | | |
| | Riverside-San Bernardino-Ontario, CA | 3.6% | 14.0% |
| | Sacramento--Arden-Arcade--Roseville, CA | 3.5% | 12.3% |

## Percentage point change in the unemployment rate, December 2008 to December 2009



## Gross Metropolitan Product

**The Mountain region's recovery spread during the fourth quarter of 2009, with all 10 of the region's large metros posting robust output growth for the second quarter in a row.** Two metros—Ogden and Albuquerque—have, in fact, fully achieved their pre-recession output peaks. Over the third and fourth quarters, Colorado Springs, Denver, and Ogden posted the largest gains in gross metropolitan product (GMP) among large Mountain metros with quarterly growth rates of at least 2.0 percent. Only Las Vegas significantly trailed the nation's quarterly growth rate.

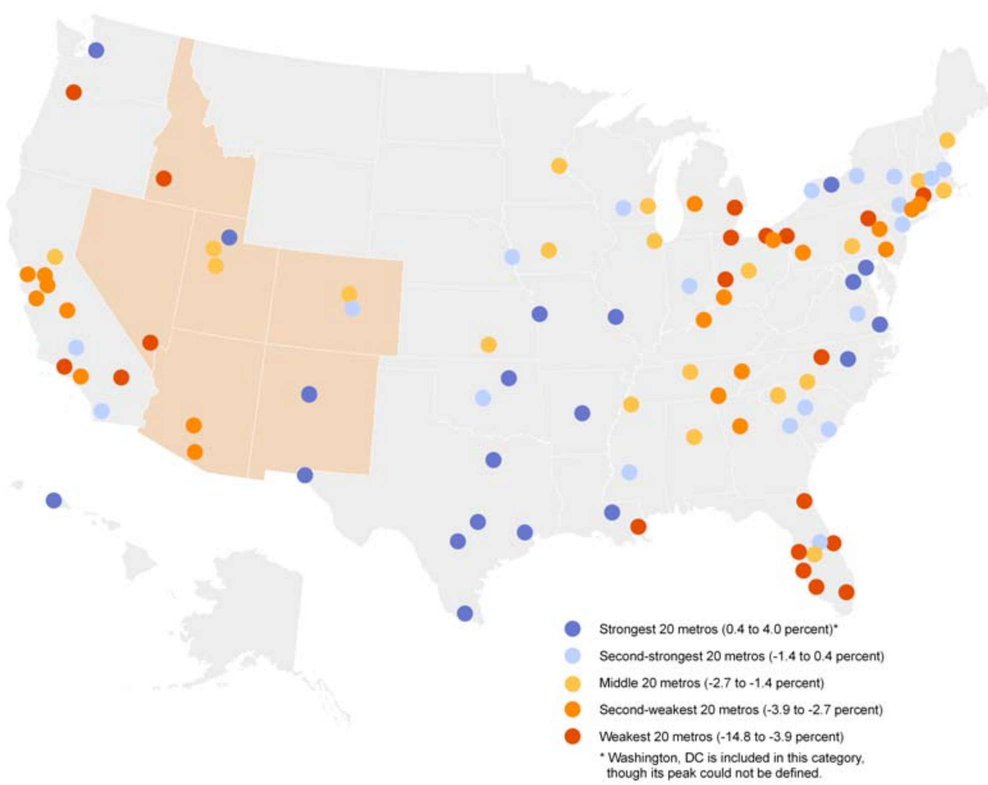
**Among the Intermountain West's largest metros, two—Albuquerque and Ogden—managed to fully recover and surpass their pre-recession level of economic output by the end of the fourth quarter.** As of December 2009, Albuquerque and Ogden were the only metros to accomplish full recovery in terms of GMP, as they have now both exceeded by 1.8 percent their pre-recession levels of peak output. Ogden is an average metro in terms of the diversity of its economy across different sectors and its level of education attainment, but it had exceptionally rapid export growth leading up to the recession, which is strongly associated with better GMP performance. Its software publishing output increased 10-fold from 2003 to 2008 and print publishing increased almost four-fold, helping Ogden export millions in royalties to Europe and East Asia from companies like Electronic Arts. The fact that this international export growth was largely in services also seems to have shielded Ogden, since metros oriented towards service exports have fared better on GMP changes, even though metros oriented towards domestic service consumption have not.

**And yet, as a group, the Mountain metros' output in the fourth quarter remained significantly below the region's pre-recession peak.** Indeed, for eight out of the region's 10 larger metros the percentage of output lost exceeded the national loss. In other words, the region has not yet attained its pre-recession level of economic activity even though the national economy almost has. In this respect, the aggregate GMP of the largest Mountain West metros still trails their pre-recession level by 2.2 percent—which leaves these economies further from recovery than the average large U.S. metro. The largest declines from peak GMP remain in Boise, Las Vegas, Tucson, and Phoenix—all metros whose economies have suffered from the housing market busts. The decrease in economic output in each of these four metros has been roughly three times as severe as that experienced by the average large metro nationally.

## Percent change in GMP by metro

| Rank | Metros ranked by percent GMP change from peak | Percent GMP change, metro peak to 2009Q4 | Percent GMP change, 2009Q3 to 2009Q4 |
|---|---|---|---|
| 1 | Albuquerque, NM | 1.8% | 1.6% |
| 2 | Ogden-Clearfield, UT | 1.8% | 2.2% |
| 3 | Colorado Springs, CO | -0.9% | 2.3% |
| 4 | Provo-Orem, UT | -1.5% | 1.7% |
| 5 | Salt Lake City, UT | -1.9% | 1.8% |
| 6 | Denver-Aurora-Broomfield, CO | -2.5% | 2.0% |
| 7 | Tucson, AZ | -3.0% | 1.5% |
| 8 | Phoenix-Mesa-Glendale, AZ | -3.3% | 1.5% |
| 9 | Boise City-Nampa, ID | -4.1% | 1.5% |
| 10 | Las Vegas-Paradise, NV | -4.4% | 0.5% |
| | **Comparison Aggregates** | | |
| | Intermountain West Metros | -2.2% | 1.5% |
| | 100 Largest Metros | -0.9% | 1.7% |
| | United States | 0.0% | 1.6% |
| | **Comparison Metros** | | |
| | Riverside-San Bernardino-Ontario, CA | -3.9% | 1.4% |
| | Sacramento--Arden-Arcade--Roseville, CA | -2.7% | 2.1% |

## Percent change in real GMP, peak quarter to 4th quarter 2009



## Housing Prices

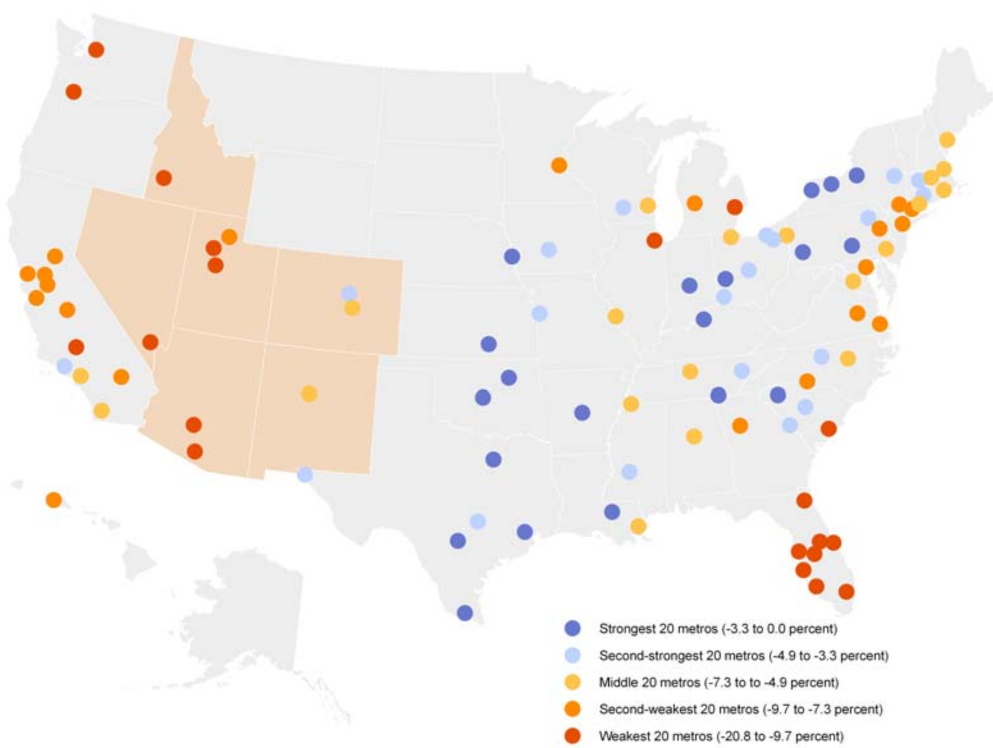
**House prices fell an inflation-adjusted 12.6 percent in the Mountain region from the fourth quarter of 2008 to the fourth quarter of 2009, compared to 6.5 percent nationally and 7.2 percent in the nation's largest metros.** Not one of the region's large metros experienced housing appreciation over the year ending in the fourth quarter of 2009. Most notably, unrelenting and dramatic price declines in Las Vegas, Phoenix, and Boise placed those metros among the five worst performing out of 100 in terms of the annualized change in the fourth quarter. Alarmingly, Provo, Salt Lake City, and Tucson too saw accelerating housing price declines that ranked them in the bottom quintile. Moreover, Ogden and Albuquerque, which had been top performers last quarter, this time around witnessed their housing markets take a quick downward fall—not as severely as their regional neighbors, but out of sorts with their performance up to that point.

**Across the country and within the region, the metros that have seen the sharpest drops in housing prices over the year-long period ending in the fourth quarter of 2009 experienced the largest increases in housing price inflation from the start of the decade until the crash of 2007.** A speculative bubble in housing markets was clearly at the heart of this recession, and after the California metros, Las Vegas, Phoenix, and Boise were as caught up in the bubble as much as any locale. These markets went from reasonably priced in 2000 to inflated housing markets in 2007 as growth in housing prices greatly exceeded growth in rents. The metros that avoided this escalation—such as Colorado Springs and Denver—dodged not only a housing bust but also the worst effects of the recession.

## Percent change in real House Price Index and house price inflation by metro

| Rank | Metros ranked by percent change in real HPI | Percent change in real HPI, 2008Q4 to 2009Q4 | Change in house price-to-rent ratio 2000-2007 | Change In house price-to-rent ratio 2007-2008 |
|---|---|---|---|---|
| 1 | Denver-Aurora-Broomfield, CO | -3.3% | 7.4 | -1.0 |
| 2 | Colorado Springs, CO | -5.1% | 6.8 | -1.6 |
| 3 | Albuquerque, NM | -7.0% | 7.5 | -0.5 |
| 4 | Ogden-Clearfield, UT | -7.9% | 7.7 | -2.9 |
| 5 | Salt Lake City, UT | -11.2% | 11.8 | -1.7 |
| 6 | Tucson, AZ | -13.0% | 9.3 | -2.2 |
| 7 | Provo-Orem, UT | -13.7% | 8.7 | -1.2 |
| 8 | Boise City-Nampa, ID | -16.4% | 12.3 | -3.6 |
| 9 | Phoenix-Mesa-Glendale, AZ | -17.6% | 14.1 | -3.0 |
| 10 | Las Vegas-Paradise, NV | -20.8% | 14.4 | -4.4 |
| | **Comparison Aggregates** | | | |
| | Intermountain West Metros | -12.6% | 10.0 | -2.2 |
| | 100 Largest Metros | -7.2% | 8.3 | -1.5 |
| | United States | -6.5% | 9.1 | -1.4 |
| | **Comparison Metros** | | | |
| | Riverside-San Bernardino-Ontario, CA | -8.4% | 15.4 | -8.7 |
| | Sacramento--Arden-Arcade--Roseville, CA | -9.2% | 15.9 | -7.8 |

## Percent change in real House Price Index, 4th quarter 2008 to 4th quarter 2009



## Real Estate Owned (REO) Properties

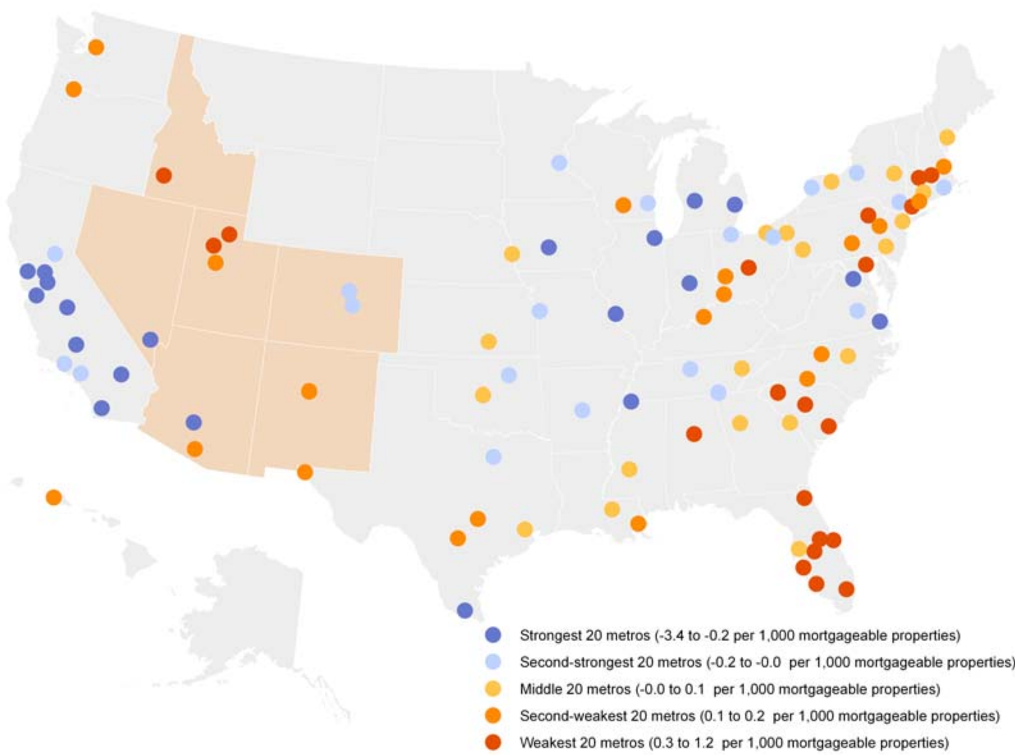
**Inventories of real estate-owned (REO) properties remain dangerously elevated in the Intermountain West's large metros, but unlike in most metros nationally, the trend started to reverse over the last quarter of 2009.** In every metro across the region, the incidence of REOs increased by less than it did in the average large U.S. metro. The opposite had been true as recently as the third quarter of 2009, during which REOs increased disproportionately everywhere in the Intermountain West. In this respect Ogden was the only large metro in the region to see quarter-to-quarter REO increases speed up, and Boise was the only one to post a large increase absolutely, which itself represented no greater an uptick than the previous quarter's rise. In general, REO rates are highest where the housing bubble was most swollen and housing prices subsequently fell the fastest.

**Two of the places struggling with the most REOs—Las Vegas and Phoenix—have started to stabilize.** Las Vegas, which had the highest REO rate in the country amongst large metros, saw a tremendous 3.38 percentage point drop in its rate from the third quarter to the fourth—the largest decrease in the nation for large metros. Meanwhile, Phoenix saw the sixth-largest decrease and Boise, for its part, is the only metro in the region to be hit hard by REOs that hasn't been able to reverse the trend—indeed the situation worsened there considerably.

## Change in REOs by metro

| Rank | Metros ranked by change in REOs | Change in REOs per 1,000 mortgageable properties, Sep. 2009 to Dec. 2009 | REOs per 1,000 mortgageable properties, Dec. 2009 |
|---|---|---|---|
| 1 | Las Vegas-Paradise, NV | -3.38 | 14.01 |
| 2 | Phoenix-Mesa-Glendale, AZ | -0.74 | 11.45 |
| 3 | Denver-Aurora-Broomfield, CO | -0.14 | 4.43 |
| 4 | Colorado Springs, CO | -0.13 | 3.57 |
| 5 | Tucson, AZ | 0.11 | 4.70 |
| 6 | Albuquerque, NM | 0.18 | 1.84 |
| 7 | Provo-Orem, UT | 0.24 | 3.05 |
| 8 | Ogden-Clearfield, UT | 0.25 | 2.09 |
| 9 | Salt Lake City, UT | 0.28 | 2.67 |
| 10 | Boise City-Nampa, ID | 0.58 | 5.78 |
| | **Comparison Aggregates** | | |
| | Intermountain West Metros | -0.64 | 7.51 |
| | 100 Largest Metros | -0.05 | 4.27 |
| | United States | -0.02 | 3.49 |
| | **Comparison Metros** | | |
| | Riverside-San Bernardino-Ontario, CA | -1.29 | 12.56 |
| | Sacramento--Arden-Arcade--Roseville, CA | -0.03 | 7.82 |

## Change in REOs per 1,000 mortgageable properties, September 2009 to December 2009



## Overall Performance of Smaller Intermountain West Metros

**Similar to their larger neighbors, finally, the small metros of the Intermountain West also exhibited considerable progress toward a full output recovery though they have yet to begin to recoup the massive number of jobs they have lost.** All but four of these 17 metros have recovered their pre-recession output levels. This achievement owes largely to rapid growth at the end of 2009. Like their larger regional counterparts, moreover, the smaller Intermountain West metros have fared relatively well on unemployment rates—perhaps, in part, because of out-migration—but seen massive job losses and housing price busts. Even as job losses continued to mount, in this respect, the 2.6 percent increase in the unemployment rate for the year ending in the fourth quarter was lower than it was for year ending in the third quarter (3.1 percent). This means that a job recovery has not yet taken hold, but it may not be far off. There remains, of course, considerable variation across these metropolitan areas, with metros in states like Arizona (take Yuma and Lake Havasu City) and Nevada (Reno) suffering far worse than their counterparts in New Mexico (Las Cruces, for example) and Colorado (Fort Collins and Boulder).

**As in the larger metros, the dynamics of the housing market bubble strongly predicted subsequent crashes.** The worst performing small metros—such as Grand Junction, Flagstaff, Prescott, Lake Havasu City-Kingman, and Reno—registered house-price inflation figures ranging from 40 percent in Grand Junction to over 70 percent in Lake Havasu from 2000 to 2007. Most metro housing markets have since undergone massive "corrections," with the House Price Index tumbling almost 10 percent year-on-year. The exceptions are Colorado's high-performing metros, whose relatively stable housing markets likely reflect the balance and therefore resilience of their underlying economies.

**Human capital continues to explain much—but not all—of the varied performance of smaller metros across the Intermountain West.** Some of the region's smaller metros rank among the nation's least and most educated—with predictable results. On the up side, two of the top performing metros in the region—Fort Collins and Boulder—boast Bachelor's degree attainment rates of 41 and 54 percent respectively, with the latter figure making Boulder the most college-educated metro in the country. On the down side, by contrast, two of the most troubled small metros in the region in the fourth quarter—Lake Havasu City-Kingman and Yuma, AZ—contend with some of the lowest college graduation rates in the country: 11 and 14 percent, respectively. Likewise, unemployment had ticked up a whopping 5.4 percentage points year-over-year in Farmington, NM, a metro in which only 15 percent of the population has Bachelor's degree, and nearly 20 percent lack a diploma. And yet while education levels have been important they have not been everything. Some metros were aided by fortuitous industry characteristics. Las Cruces has a sizeable, historically stable healthcare industry that employs almost one-quarter of the metro's workforce and is also the home of New Mexico State University—another large and stable job provider. Pueblo, CO is highly specialized in the health industry and Greeley, for its part, has benefited from rich endowments in natural resources and rebounding commodities demand.

### Overall performance of smaller Intermountain West metros

| Rank | Intermountain West metros not among 100 largest ranked by average overall performance | Percent change in employment, metro peak to 2009Q4 | Percentage point change in the unemployment rate, Dec. 2008 to Dec. 2009 | Percent GMP change, metro peak to 2009Q4 | Percent change in HPI, 2008Q4 to 2009Q4 |
|---|---|---|---|---|---|
| 1 | Fort Collins-Loveland, CO | -3.3% | 1.1% | 2.0% | -3.3% |
| 1 | Boulder, CO | -5.5% | 0.8% | 2.2% | -3.3% |
| 3 | Las Cruces, NM | -2.9% | 3.1% | 2.0% | -5.3% |
| 4 | Pueblo, CO | -3.4% | 1.0% | 0.0% | -5.0% |
| 5 | Greeley, CO | -6.3% | 2.2% | 1.8% | -4.1% |
| 6 | Farmington, NM | -5.7% | 5.4% | 2.3% | -3.5% |
| 7 | Spokane, WA | -3.6% | 2.0% | 0.6% | -8.3% |
| 7 | Santa Fe, NM | -5.6% | 2.7% | 1.9% | -6.6% |
| 9 | Logan, UT-ID | -8.5% | 1.5% | -0.7% | -4.6% |
| 10 | Prescott, AZ | -12.7% | 2.0% | 2.0% | -14.4% |
| 11 | Flagstaff, AZ | -8.9% | 2.3% | 1.6% | -14.2% |
| 12 | Grand Junction, CO | -7.6% | 4.3% | 0.9% | -7.4% |
| 13 | Lake Havasu City-Kingman, AZ | -16.0% | 1.7% | 0.3% | -16.5% |
| 14 | Carson City, NV | -10.0% | 3.7% | 1.5% | -16.7% |
| 15 | St. George, UT | -12.0% | 2.6% | -0.3% | -17.5% |
| 16 | Yuma, AZ | -13.3% | 4.1% | -2.3% | -13.4% |
| 17 | Reno-Sparks, NV | -13.5% | 3.9% | -1.7% | -19.2% |
|  | **Intermountain West Small Metro Average** | **-8.2%** | **2.6%** | **0.8%** | **-9.6%** |

## About the Metropolitan Policy Program at the Brookings Institution

Created in 1996, the Brookings Institution's Metropolitan Policy Program provides decision makers with cutting-edge research and policy ideas for improving the health and prosperity of cities and metropolitan areas including their component cities, suburbs, and rural areas. To learn more visit: www.brookings.edu/metro

## 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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