Metropolitan Policy Program at BROOKINGS

MetroMonitor

Tracking Economic Recession and Recovery in America's 100 Largest Metropolitan Areas

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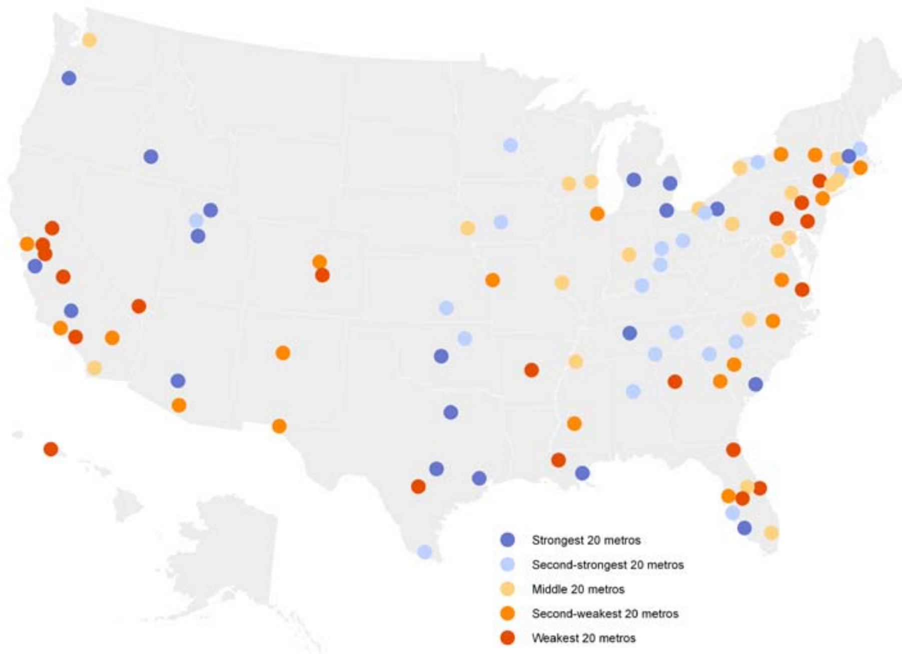
National economic indicators suggest that the economic recovery, though still very slow, may be picking up speed. The national unemployment rate in February held steady at 8.3 percent. For the third consecutive month the economy gained more than 200,000 jobs in February; the last time the nation saw three straight months of jobs gains of this magnitude was in 2006. During the last quarter of 2011, inflation-adjusted GDP grew at an annual rate of 3 percent, well above its growth rates for the previous three quarters of the year.

Data for the nation's 100 largest metropolitan areas do not fully reflect the most recent national trends because most metropolitan economic indicators are available only through the fourth quarter of 2011 (ending in December). The metropolitan data through the fourth quarter show widespread but generally very slow growth in both jobs and economic output. These data do not provide a clear indication of whether economic growth is speeding up. Most large metropolitan areas saw accelerating rates of job growth between the third and fourth quarters of the year and most also saw accelerating rates of output growth. However, accelerations in output growth were more common than accelerations in jobs growth, and only 19 large metropolitan areas had accelerations in both the rate of job growth and the rate of output growth. Unemployment rates, although lower than at the end of 2010 in most large metropolitan areas, remained very high. Housing markets showed widespread but slow improvement.

Manufacturing, high technology, and government were important drivers of growth in the nation's largest metropolitan areas. However, the rate of manufacturing job growth slowed throughout 2011 and a number of large metropolitan areas specializing in high technology saw slowing rates of job and/or output growth in the last quarter of the year. If these trends continue, metropolitan areas specializing in manufacturing and/or high technology may see their economic recoveries slow in the future. In a more positive development for economic recovery, the rate of government job growth accelerated during the last quarter of 2011. As always, metropolitan economic performance varied greatly among the 100 largest metropolitan areas.

Overall Performance: Recovery



The 20 strongest-performing metros		The 20 weakest-performing metros	
Austin, TX	New Orleans, LA	Allentown, PA	Little Rock, AR
Bakersfield, CA	Ogden, UT	Atlanta, GA	Los Angeles, CA
Boise City, ID	Oklahoma City, OK	Baton Rouge, LA	Modesto, CA
Cape Coral, FL	Phoenix, AZ	Colorado Springs, CO	Palm Bay, FL
Charleston, SC	Portland, OR	Fresno, CA	Philadelphia, PA
Dallas, TX	Provo, UT	Harrisburg, PA	Poughkeepsie, NY
Detroit, MI	San Jose, CA	Honolulu, HI	Sacramento, CA
Grand Rapids, MI	Toledo, OH	Jacksonville, FL	San Antonio, TX
Houston, TX	Worcester, MA	Lakeland, FL	Stockton, CA
Nashville, TN	Youngstown, OH	Las Vegas, NV	Virginia Beach, VA

High technology centers and Great Lakes auto-producing areas are recovering strongly from the Great Recession. High technology centers are recovering strongly, in part because of the current upturn in the information technology industry. Austin, Boise, Ogden, Portland (OR), Provo, San Jose (information technology centers), and Worcester (which has a specialization in biotechnology) are among the 20 strongest-recovering metropolitan areas. Boston, Hartford, Minneapolis, Salt Lake City, and Rochester are among the 40 areas that are recovering the fastest. (See the map above, which divides the 100 largest metropolitan areas into groups of 20 on the basis of the strength of their economic recoveries.) However, as noted below, the growth rate of output and/or employment slowed in late 2011 in a number of high technology centers. If this continues, the economic recovery in those areas will probably weaken.

Great Lakes metropolitan areas that specialize in the production of autos, auto parts, and related durable goods are also recovering strongly from the recession. Detroit, Grand Rapids, Toledo, and Youngstown are among the 20 metropolitan areas that have had the strongest economic recoveries, while Akron, Columbus, Dayton, and Louisville are among the 40 that have recovered most strongly. The recession hit many of these metropolitan areas very hard. Many remain far below their pre-recession levels of employment and output. Their economies have begun to turn around, in most cases because they have had strong growth in manufacturing activity during the past two years. As noted below, however, manufacturing job growth in some Great Lakes auto centers slowed during 2011. If this trend continues, the economic recovery in those metropolitan areas is likely to weaken.

Most of the metropolitan areas hit hardest by the housing crisis are having weak economic recoveries, but a few are recovering very strongly. Fresno, Jacksonville, Lakeland, Las Vegas, Los Angeles, Modesto, Palm Bay, and Sacramento are among the 20 weakest recoverers and Riverside, Oxnard, Tampa, and Tucson are among the bottom 40. Yet Bakersfield, Boise, Cape Coral, Detroit, and Phoenix are among the 20 strongest performers in the recovery and North Port is among the top 40.

The metropolitan areas with the strongest economic recoveries generally gained government jobs, while those with the weakest recoveries generally lost them. Eleven of the 20 strongest-recovering metropolitan areas (Austin, Bakersfield, Boise, Dallas, Houston, Nashville, New Orleans, Phoenix, Provo, Worcester, and Youngstown) gained government jobs (federal (including military), state, and local combined), while the rest lost them. Eleven of the 20 metropolitan areas with the weakest economic recoveries (Allentown, Atlanta, Colorado Springs, Jacksonville, Las Vegas, Little Rock, Los Angeles, Modesto, Philadelphia, San Antonio, and Stockton) lost government jobs since their total employment hit bottom, while six (Baton Rouge, Fresno, Honolulu, Palm Bay, Poughkeepsie, and Sacramento) gained them, and the rest had no change in government employment.

Nearly all the metropolitan areas with the strongest recoveries gained manufacturing jobs, while most of those with the weakest recoveries lost them. Of the 20 strongest-recovering metropolitan areas, all but two gained manufacturing jobs since their total employment hit bottom; Cape Coral and Dallas lost manufacturing jobs. Of the 20 metropolitan areas with the weakest economic recoveries, 11 lost manufacturing jobs since their total employment bottomed out (Atlanta, Colorado Springs, Honolulu, Jacksonville, Las Vegas, Little Rock, Los Angeles, Palm Bay, Philadelphia, Poughkeepsie, and Sacramento), six gained manufacturing jobs (Allentown, Baton Rouge, Fresno, Modesto, San Antonio, and Stockton), and the rest had no change in manufacturing employment.

The Recent Pace of Recovery

In the fourth quarter of 2011, most of the nation's 100 largest metropolitan areas continued to experience a very slow recovery of both employment and output. Slowdowns in the pace of output recovery were more common than slowdowns in the rate of job recovery.

Seventy of the 100 largest metropolitan areas gained both jobs and output in the fourth quarter of 2011. Twenty-seven large metropolitan areas gained output but lost jobs; there were concentrations of these in the Great Lakes region, Intermountain West, and Texas. Two (Cape Coral and Pittsburgh) lost output but gained jobs. Harrisburg lost both jobs and output.

The rate of output growth accelerated in 67 of the 100 largest metropolitan areas between the third and fourth quarters of 2011 while the rate of job growth accelerated in 52 metropolitan areas. Both nationwide and in the 100 largest metropolitan areas combined, the rates of job growth and output growth rose between the third and fourth quarters of 2011. However, there was substantial variation among the 100 largest metropolitan areas. Thirty-four metropolitan areas, including a number of high technology centers (Austin, Boise, Boston, Minneapolis, Ogden, and Worcester), Great Lakes manufacturing centers (Akron, Detroit, Grand Rapids, Milwaukee, Toledo, and Youngstown), metropolitan areas hit hard by the housing crisis (Boise, Cape Coral, Detroit, Lakeland, Phoenix, Sacramento, and Tampa), and five of the six large metropolitan areas in Texas (Austin, Dallas, El Paso, Houston, and San Antonio) saw accelerating output growth but slowing job growth. Both job and output growth rates accelerated in 33 metropolitan areas, including several that were hit hard by the housing crisis (Bakersfield, Jacksonville, Miami, North Port, Orlando, Palm Bay, and Tucson) and many other metropolitan areas in the South (Atlanta, Baton Rouge, Charlotte, Columbia, Greensboro, Jackson, Knoxville, Little Rock, McAllen, Memphis, Nashville, Raleigh, and Richmond). In 19 of the nation's largest metropolitan areas, job growth accelerated but output growth slowed between the third and fourth quarters of the year; these included most of the California and Nevada metropolitan areas hit hard by the housing crisis (Fresno, Las Vegas, Los Angeles, Modesto, Riverside, San Diego, and Stockton) and several metropolitan areas in the Northeast and mid-Atlantic (Allentown, Baltimore, Bridgeport, Lancaster, New Haven, Philadelphia, and Scranton). In 14 large metropolitan areas, including several high technology centers (Albany, Oxnard, Provo, San Francisco, San Jose, and Washington), both employment and output grew more slowly in the fourth quarter than in the third quarter.

Employment

Twenty-four large metropolitan areas gained jobs in all of the last four quarters. These included metropolitan areas in the Great Lakes region (Akron, Cincinnati, Louisville, Minneapolis, Pittsburgh, and Syracuse) and the Southwest (Austin, Houston, Oklahoma City, Phoenix, Tucson, and Tulsa), and high technology centers throughout the nation (Boston, Portland (OR), San Diego, San Jose, and Seattle). Twenty-three more metropolitan areas gained jobs in both the third and fourth quarters of 2011. Modesto was the only large metropolitan area to lose jobs in all of the last four quarters. Lakeland lost jobs in all of the last three quarters.

Seventy-six of the 100 largest metropolitan areas lost a greater share of jobs 16 quarters after the start of the Great Recession (the fourth quarter of 2007) than they did during the first 16 quarters after the start of any of the previous three national recessions. Sixteen quarters after the start of the national recession, the 100 largest metropolitan areas combined had lost 5 percent of the jobs they had at the start of the Great Recession that began in 2007. In the first 16 quarters after the start of the 1981–1982 national recession employment in the 100 largest metropolitan areas had grown by 8 percent, after the 1990–1991 recession it had grown by 2 percent, and after the 2001 recession it had grown by 0.02 percent.

Employment rebounded from its low point in 94 of the 100 largest metropolitan areas by the fourth quarter of 2011, but only 25 gained back more than half the jobs they lost between their employment peak and their post-recession employment low point, and only five made a complete jobs recovery. Only Austin, Boston, Dallas, El Paso, Grand Rapids, Hartford, Houston, Knoxville, Louisville, Madison, McAllen, Nashville, New Orleans, Ogden, Oklahoma City, Omaha, Pittsburgh, Provo, Rochester, San Antonio, San Jose, Springfield, Washington, and Worcester regained more than half of the jobs they had lost between their pre-recession high and their post-recession low, while 23 additional large metropolitan areas regained at least a quarter of the jobs they lost in the recession. Only Austin, El Paso, Houston, McAllen, Pittsburgh, and Worcester made a complete jobs recovery by the third quarter. Meanwhile, Albuquerque, Augusta, Birmingham, Harrisburg, Lakeland, and Virginia Beach had not yet recovered any of the jobs they lost since their employment peaks. In general, metropolitan areas in Texas and those that are centers of high technology industry or government recovered larger percentages of their lost jobs than areas in Florida and the Southwest, which suffered the most severe house price declines during and after the recession.

In the third quarter of 2011, overall government employment rose in 56 of the 100 largest metropolitan areas because increases in federal and state government employment outweighed local government job cuts. Federal government employment rose in 83 large metropolitan areas. State government employment rose in 60, which suggests that the state job cuts that were widespread during the past year are gradually coming to an end. Local government job cuts, however, are continuing in the majority of large metropolitan areas; local government employment fell in 55 large metropolitan areas. In the period since total employment began to recover, overall government employment fell in 55 large metropolitan areas and was unchanged in two.

Between the third and fourth quarters of 2011, the rate of government job growth increased in the nation as a whole and in 49 of the 100 largest metropolitan areas. State government employment and, to a lesser extent, local government employment were responsible for this pickup in the rate of government job growth. The rate of state government job growth rose nationwide and in 61 of the 100 largest metropolitan areas. The rate of local government job growth increased nationwide and in 46 large metropolitan areas. The rate of federal government job growth fell nationwide and in 61 large metropolitan areas.

Between the first quarter of 2010 and the fourth quarter of 2011, manufacturing employment grew in 57 of the 100 largest metropolitan areas, including all but four Great Lakes metropolitan areas. During this period, when nationwide manufacturing employment grew by 1.5 percent, Akron, Charleston, Modesto, Ogden, Provo, Tulsa, and Youngstown had manufacturing job growth of more than 10 percent, while 12 additional large metropolitan areas (Bakersfield, Boise, Cincinnati, Columbia, Detroit, Grand Rapids, Houston, Milwaukee, Oklahoma City, Salt Lake City, San Antonio, and Seattle) had manufacturing job growth between 5 percent and 10 percent. The only Great Lakes metropolitan areas that lost manufacturing jobs since the first quarter of 2010 were Buffalo, Dayton, Indianapolis, and Syracuse. The strong rebound of manufacturing, especially in autos, auto parts, and related durable goods, is responsible for the strong economic recoveries of many Great Lakes metropolitan areas. It propelled Detroit, Grand Rapids, Toledo, and Youngstown into the ranks of the 20 best-performing metropolitan economies during the recovery.

The manufacturing job recovery slowed and became less widespread during the last three quarters of 2011. In the 100 largest metropolitan areas combined, manufacturing job growth slowed from 0.7 percent in the second quarter to 0.2 percent in the third quarter to 0.02 percent in the fourth quarter. In the Great Lakes manufacturing centers of Akron, Cleveland, Detroit, Louisville, Milwaukee, Toledo, and Youngstown, the rate of manufacturing job growth was slower during the fourth quarter of 2011 than during any of the three previous quarters. Meanwhile, the number of large metropolitan areas experiencing manufacturing job growth fell from 72 in the second quarter to 54 in the third quarter to 46 in the fourth quarter.

Unemployment

The unemployment rate in December 2011 remained above 6 percent in all but 11 large metropolitan areas. Omaha and Madison had an unemployment rate of 4.7 percent in December, the lowest among the 100 largest metropolitan areas. Provo, Honolulu, Salt Lake City, Minneapolis, Washington, Oklahoma City, Boston, Ogden, and Des Moines also had unemployment rates below 6 percent. Fresno, Modesto, and Stockton had unemployment rates in excess of 15 percent and 13 other metropolitan areas had unemployment rates between 10 percent and 15 percent. State capitals and other government or military centers generally had the lowest unemployment rates, while unemployment rates were generally highest in the California, Nevada, and Florida metropolitan areas that suffered severe house price declines during and after the recession.

In December 2011, the unemployment rate was lower than it was a year ago in 93 of the 100 largest metropolitan areas. Only Augusta, Chicago, Honolulu, Jackson, New York, and Raleigh had higher unemployment rates in December 2011 than in December 2010, and Omaha's unemployment rate was the same in both months. The greatest declines in the unemployment rate generally occurred in three types of metropolitan areas: those that suffered severe house price declines during and after the recession (Las Vegas, Cape Coral, North Port, Orlando, Jacksonville, Riverside, Lakeland, and Miami), those that had very strong gains in manufacturing employment since the beginning of last year (Grand Rapids, Detroit, Youngstown, and Tulsa), and high technology centers (Portland (OR), San Jose, and Worcester). Metropolitan areas throughout the South generally had higher unemployment rates in December 2011 than in December 2010. All of the 100 largest metropolitan areas had higher unemployment rates in December 2011 than in December 2007.

Output

Sixty-five of the 100 largest metropolitan areas had made a complete output recovery by the fourth quarter of 2011. In all but one large metropolitan area (Cape Coral), output had increased from its recent low point. However, six other metropolitan areas (, Las Vegas, Phoenix, Sacramento, Stockton, Tampa, and Tucson), all of which suffered severe housing price declines during and after the recession, recovered less than a quarter of the output they had lost during the recession and another eight recovered less than half of their lost output.

Fifty-eight large metropolitan areas gained output in all of the last four quarters. However, Cape Coral lost output in all of the last four quarters. Metropolitan areas that suffered severe housing price declines during and after the recession generally had fewer quarters of output growth during the past year than those in Texas and the Northeast. Great Lakes auto-producing metropolitan areas and high technology centers had mixed performance; some had four quarters of output growth during the year but others had only two or three.

In the fourth quarter, only 23 large metropolitan areas had a rate of output growth that was consistent with sustained economic recovery. When sustained economic growth returned after each of the three recessions before the Great Recession, national GDP grew consistently at an annual rate of more than 3 percent.[1] That annual growth rate is equivalent to a quarterly output growth rate of just under 0.8 percent. In the third quarter of this year, 23 large metropolitan areas (Atlanta, Austin, Baton Rouge, Boston, Charlotte, Dallas, El Paso, Houston, McAllen, Milwaukee, New Orleans, Ogden, Oklahoma City, Portland (OR), Provo, Raleigh, Richmond, Salt Lake City, San Antonio, San Jose, Seattle, Tulsa, and Virginia Beach) had output growth rates that high.

Housing

In the fourth quarter of 2011, house prices had recovered from their recent lows in 98 of the 100 largest metropolitan areas. In those 98 metropolitan areas, house prices bottomed out in either the second or third quarter of 2011. The large metropolitan areas where house prices recovered most strongly from those low points were places where house price declines were severe during and after the recession (Boise, Cape Coral, Detroit, North Port, and Phoenix); in all these areas, fourth-quarter house prices were more than 3 percent above their second- or third-quarter lows. At the other extreme, prices hit new lows in Jacksonville and Poughkeepsie in the fourth quarter of the year.

House prices in the fourth quarter remained more than 40 percent below peak levels in 22 metropolitan areas that suffered severe house price declines during and after the recession. Those 22 were Bakersfield, Boise, Cape Coral, Detroit, Fresno, Jacksonville, Lakeland, Las Vegas, Los Angeles, Miami, Modesto, North Port, Orlando, Oxnard, Palm Bay, Phoenix, Riverside, Sacramento, San Diego,

[1] Following the recession of 2001 annual output growth did not exceed 3 percent until 2004, though annualized quarterly rates met this level in the first quarter of 2002 and in each of the last three quarters of 2003.

Stockton, Tampa, and Tucson. Prices were more than 60 percent below peak levels in Las Vegas, Modesto, and Stockton. At the other extreme, they were less than 10 percent below peak levels in Buffalo, Oklahoma City, Pittsburgh, Rochester, and Wichita.

Methodology

The *MetroMonitor* tracks quarterly indicators of economic recession and recovery in the nation's 100 largest metropolitan areas—those with at least 500,000 residents in 2007—which collectively contain two-thirds of the nation's jobs and generate three-quarters of GDP. These 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 pre-recession 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 between the first quarter of 2004 and the second quarter of 2009; in some metro areas where this peak occurred in the second quarter of 2009, the peak was defined as the highest level attained between 2004 and the most recent quarter of employment losses prior to the second quarter of 2009. Troughs are defined as the 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 in 2007 (the month when the Great Recession began) to the most recent month, and from the same month in 2009 (when the national unemployment rate was highest) 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 in the same way as peak and trough employment quarters, but using GMP rather than employment. 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.
- **Recession Comparisons:** The percent of employment recovery in each recession is measured by employment in the sixteenth 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 in question. Source: Moody's Analytics.

The *MetroMonitor*'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 2009 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, on the average of the standardized scores for the four key indicators.

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

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For More Information

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