MetroMonitor

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

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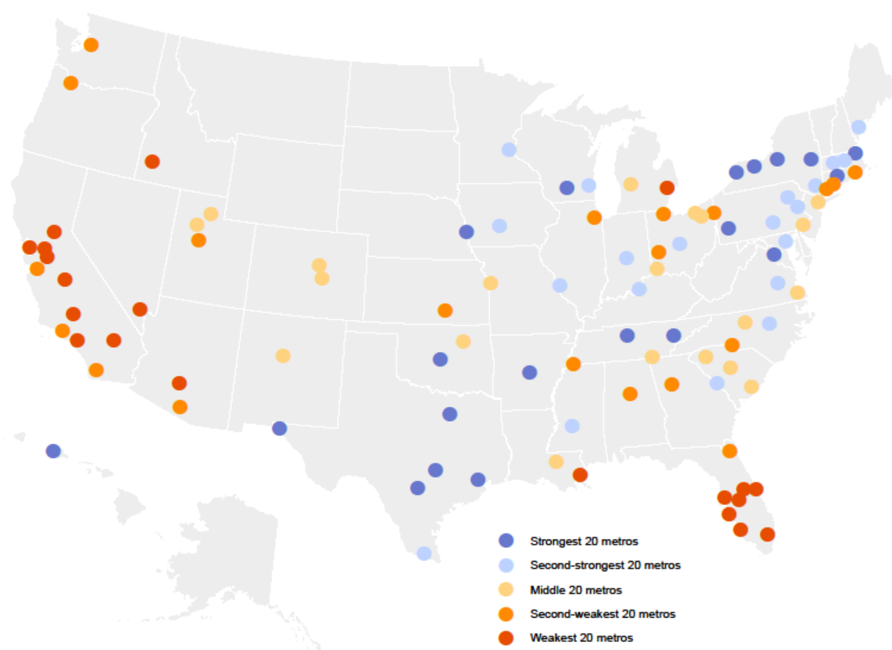
The most recent national economic data show a stalled economic recovery. The national unemployment rate in August remained at 9.1 percent for the second month in a row, while the economy added no new jobs. GDP grew at a glacial annual rate of 1 percent in the first quarter of the year. House prices remained below their levels of a year ago. Wages were lower than they were in the fall of last year. The growth of manufacturing, previously a bright spot in an otherwise gloomy economic picture, seems to have slowed. Government employment, which helps support jobs and output in the private sector, continued to fall.

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 second quarter of 2011 (ending in June). The metropolitan data through the second quarter show widespread but generally very slow growth in both jobs and economic output. Unemployment rates, although lower than at the beginning of 2010 in most large metropolitan areas, remained very high. House prices hit new lows in all large metropolitan areas even as the pace of foreclosures slowed in half of those areas. Workers' earnings, available at the metropolitan level through the first quarter of 2011, fell in slightly more than half of the nation's large metropolitan areas since the beginning of the recession. Manufacturing employment continued to rise through the second quarter of the year in most large metropolitan areas. Government employment continued to fall in most. As always, metropolitan economic performance varied greatly among the 100 largest metropolitan areas.

Overall Performance: Recession and Recovery



The 20 strongest-performing metro areas		The 20 weakest-performing metro areas	
Albany, NY	Little Rock, AR	Bakersfield, CA	New Orleans, LA
Austin, TX	Madison, WI	Boise, ID	North Port, FL
Boston, MA-NH	Nashville, TN	Cape Coral, FL	Orlando, FL
Buffalo, NY	Oklahoma City, OK	Detroit, MI	Palm Bay, FL
Dallas, TX	Omaha, NE	Fresno, CA	Phoenix, AZ
El Paso, TX	Pittsburgh, PA	Lakeland, FL	Riverside, CA
Hartford, CT	Rochester, NY	Las Vegas, NV	Sacramento, CA
Honolulu, HI	San Antonio, TX	Los Angeles, CA	San Francisco, CA
Houston, TX	Syracuse, NY	Miami, FL	Stockton, CA
Knoxville, TN	Washington, DC-VA-MD	Modesto, CA	Tampa, FL

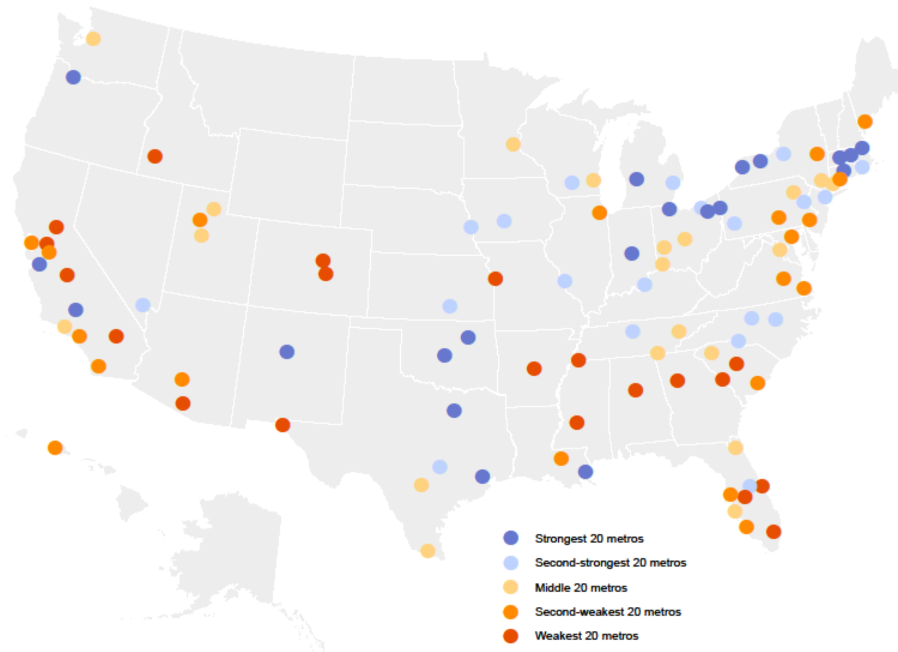
Nearly all the metropolitan areas whose economies suffered the least since the start of the Great Recession rely substantially on government, education, or energy production and had increases in government employment since the start of the recession. Washington and several state capitals were among the 20 strongest performers since the start of the recession, as were such educational centers as Boston and Pittsburgh and the oil and gas production centers of Dallas, Houston, and Oklahoma City. Meanwhile, nearly all the metropolitan areas that suffered the most since the beginning of the recession either experienced a large house price boom and bust or (in the case of Detroit) depend heavily on auto and auto parts manufacturing.

In addition, nearly all the strongest-performing metropolitan areas had increases in government employment, while most of those that suffered the most lost government jobs. Sixteen of the 20 metropolitan areas that have had the strongest overall economic performance since the start of the recession (all except Albany, Boston, Buffalo, and Rochester) gained government jobs since their periods of peak total employment. Seventeen of the 20 that had the weakest overall performance (all except Boise, Cape Coral, and Tampa) lost government jobs since hitting their total employment peaks.

In general, the metropolitan areas of the inland Northeast and Texas and nearby states had strong economic performance since the start of the recession, as did parts of the mid-Atlantic and the less auto-specialized parts of the Great Lakes region. Performance was weakest in the Southeast, West, parts of the coastal Northeast, and the auto communities of the Great Lakes region.

The map above shows how the 100 largest metropolitan areas rank on a combination of four economic indicators: percent job change from the peak quarter to the second quarter of 2011, change in the unemployment rate from June 2008 to June 2011, percent change in economic output (gross metropolitan product) from the peak quarter to the second quarter of 2011, and percent change in an index of house prices from the peak quarter to the second quarter of 2011.

Recovery Performance[1]



The 20 strongest-performing metro areas		The 20 weakest-performing metro areas	
Akron, OH	New Orleans, LA	Atlanta, GA	Kansas City, MO-KS
Albuquerque, NM	Oklahoma City, OK	Augusta, GA-SC	Lakeland, FL
Bakersfield, CA	Portland, OR-WA	Birmingham, AL	Little Rock, AR
Boston, MA-NH	Rochester, NY	Boise, ID	Memphis, TN-MS-AR
Buffalo, NY	San Jose, CA	Colorado Springs, CO	Miami, FL
Dallas, TX	Springfield, MA	Columbia, SC	Palm Bay, FL
Grand Rapids, MI	Toledo, OH	Denver, CO	Riverside, CA
Hartford, CT	Tulsa, OK	El Paso, TX	Sacramento, CA
Houston, TX	Worcester, NA	Fresno, CA	Stockton, CA
Indianapolis, IN	Youngstown, OH-PA	Jackson, MS	Tucson, AZ

Auto-producing metropolitan areas in the Great Lakes, energy producing areas, and some high technology centers are recovering strongly. Great Lakes metropolitan areas that specialize in the production of autos, auto parts, and related durable goods are recovering strongly from the recession. Akron, Buffalo, Grand Rapids, Indianapolis, Toledo, and Youngstown are among the 20 metropolitan areas that have had the strongest economic recoveries, and other auto-producing centers of the Great Lakes are also recovering relatively rapidly. The recession hit many of these metropolitan areas very hard. Many remain far below their pre-recession levels of economic performance, as evidenced by their relatively low rankings on our overall (recession and recovery) index. Yet their economies have begun to turn around.

Another major group of strongly recovering metropolitan areas is in Texas and nearby states. These areas, including Dallas, Houston, Oklahoma City, and Tulsa, suffered far less from the recession than did auto-producing areas. Their specializations in oil and gas are contributing to their strong recoveries.

Finally, some high technology centers are recovering strongly, in part because of the current upturn in the information technology industry. These include San Jose and Portland, OR (information technology

1. House prices hit new lows in all 100 large metropolitan areas in the second quarter of 2011, which means no metro saw a measurable house price recovery during the quarter ending in June. Thus house prices do not factor into the second quarter 2011 recovery rankings in this *MetroMonitor*.

centers), Worcester (which has a specialization in biotechnology), and Boston (a center for both information technology and biotechnology). In addition, Rochester and Hartford, which specialize in technologically cutting-edge manufacturing, are among the metropolitan areas with the strongest economic recoveries.

Metropolitan areas that experienced severe house price declines are still struggling to recover, as are some other metropolitan areas in Colorado and much of the South. In contrast to auto-producing metropolitan areas, the other large group of metropolitan areas that the recession hit hardest is experiencing a weak recovery. The metropolitan areas in Florida, California, and the Intermountain West that experienced a housing price boom followed by a housing market collapse (e.g., Boise, Fresno, Miami, Palm Bay, Riverside, Sacramento, Stockton, and Tucson) are prominent on our list of the weakest recovering areas. Only one such metropolitan area (Bakersfield) is among the 20 large metropolitan areas with the strongest economic recoveries.

The remaining metropolitan areas with very weak recoveries are primarily located in the South and Colorado. No Northeastern metropolitan area appears on the list of the 20 worst performers during the recovery, and only one Midwestern metropolitan area (Kansas City) is on the list. Most of the metropolitan areas with the weakest recoveries, other than those with severe house price declines, are government (including military) centers (Atlanta, Augusta, Colorado Springs, Columbia, Denver, El Paso, Jackson, Little Rock) and/or transportation/warehousing hubs (Atlanta, Jackson, Kansas City, Little Rock, Memphis). Losses of government jobs and, to a lesser extent, transportation/warehousing jobs, accounted for much of the weakness in these metropolitan areas' recoveries.

The Recent Pace of Recovery

In the second quarter of 2011, most of the nation's 100 largest metropolitan areas continued to experience a very slow recovery of both employment and output, with the pace of employment recovery slowing since the previous quarter but the pace of output recovery accelerating.

Fifty-five of the 100 largest metropolitan areas gained both jobs and output in the second quarter. However, eight large metropolitan areas, including several Great Lakes auto- and auto parts-manufacturing centers (Cleveland, Columbus, Dayton, Detroit, and Toledo) lost both jobs and output during the quarter. Twenty-one large metropolitan areas gained output but lost jobs; there were concentrations of these in the Northeast, the coastal South, Colorado, and inland California. Sixteen lost output but gained jobs, including several metropolitan areas in the Great Lakes region and both of Arizona's major metropolitan areas.

In most of the 100 largest metropolitan areas output growth accelerated between the first and second quarters of 2011 but job growth slowed. In 32 of the nation's largest metropolitan areas, including those in upstate New York, most New England metropolitan areas, and several in the Southeast, both employment and output grew more rapidly in the second quarter than in the first quarter. In 42 metropolitan areas, including most of those in the Great Lakes region and in California, output growth accelerated but job growth slowed. Fourteen metropolitan areas, concentrated mainly in Texas and nearby states, saw accelerated employment growth but slowing output growth. Twelve metropolitan areas, including three in Florida, had slowdowns of both job growth and output growth.

Employment

Seventy-one of the 100 largest metropolitan areas had job growth in the second quarter of 2011, the same number that had job growth in the first quarter of 2011, and about the same as in the fourth quarter of 2010 (69). However, the metropolitan areas that lost jobs were a diverse set of places that

changed considerably from quarter to quarter. In each quarter they included metropolitan areas in all regions of the country, areas that suffered from housing market collapses and those that did not, and areas with economic specializations as diverse as auto manufacturing and government. Only eight of the 29 metropolitan areas that lost jobs in the second quarter of 2011 also lost jobs in the first quarter.

Fifteen large metropolitan areas gained jobs in all of the last four quarters. Akron, Austin, Dallas, Grand Rapids, Hartford, Houston, Milwaukee, New Haven, Oklahoma City, Orlando, Pittsburgh, Provo, Salt Lake City, Worcester, and Youngstown gained jobs in every quarter from the third quarter of 2010 through the second quarter of 2011. Thirty-five more metropolitan areas gained jobs in both the first and second quarters of 2011. Kansas City and Palm Bay were the only large metropolitan areas to lose jobs in all of the last four quarters, while Augusta, Colorado Springs, Fresno, Modesto, Riverside, and Stockton also lost jobs in both the first and second quarters of 2011.

Seventy-four of the 100 largest metropolitan areas lost a greater share of jobs 14 quarters after the start of the Great Recession (the fourth quarter of 2007) than they did during the first 14 quarters after the start of any of the previous three national recessions. Fourteen 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, compared to 0.8 percent for the 2001 recession. However, in the first 14 quarters after the start of the 1981–1982 national recession employment in the 100 largest metropolitan areas had grown by 7 percent and in after the 1990–1991 recession it had grown by 1 percent.

Employment rebounded from its low point in 92 of the 100 largest metropolitan areas by the second quarter of 2011, but only 16 gained back more than half the jobs they lost between their employment peak and their post-recession employment low point, and only four made a complete jobs recovery. Only Austin, Boston, Dallas, El Paso, Hartford, Houston, Madison, McAllen, Oklahoma City, Omaha, Pittsburgh, Rochester, San Antonio, 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 24 additional large metropolitan areas regained as much as a quarter of the jobs they lost in the recession. Only El Paso, McAllen, Austin, and San Antonio made a complete jobs recovery by the second quarter. Meanwhile, Augusta, Colorado Springs, Des Moines, Kansas City, Lakeland, Palm Bay, Richmond, and Riverside had not yet recovered any of the jobs they lost since their employment peaks.

Federal government employment fell in all but one of the 100 largest metropolitan areas in the second quarter of 2011, while state government employment fell in 58 of those metropolitan areas, local government employment fell in 72, and overall government employment fell in 89. In the 100 largest metropolitan areas combined, federal government employment fell by 3.5 percent, its largest percentage drop since the end of the 2010 Census in the third quarter of 2010. State government employment fell by 0.5 percent (its largest percentage drop in at least the last year) and local government employment fell by 0.2 percent, reflecting the impact of state and local budget cuts. In the period since total employment began to recover, government employment fell in 69 large metropolitan areas and was unchanged in eight.

Between the second quarter of 2010 and the second quarter of 2011, manufacturing employment grew in 60 of the 100 largest metropolitan areas, including most of the manufacturing-based Great Lakes metropolitan areas. Tulsa, Modesto, Detroit, Columbia, Oklahoma City, and Grand Rapids had manufacturing job growth of 5 percent or more during this 12-month period. The only Great Lakes metropolitan areas that lost manufacturing jobs since the second quarter of 2010 were Buffalo, Columbus, 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 Akron, Grand Rapids, Toledo, and Youngstown into the ranks of the 20 best-performing metropolitan economies during the recovery. In addition, manufacturing job growth became more widespread during the second quarter of 2011; 72 large metropolitan areas gained manufacturing jobs during that quarter, compared to 60 in the first quarter.

Unemployment

The unemployment rate in June 2011 remained above 6 percent in all but three large metropolitan areas. Omaha's unemployment rate in March 2010, 5 percent, was the lowest among the 100 largest metropolitan areas. Oklahoma City and Honolulu had unemployment rates between 5.5 and 6 percent. Bakersfield, Fresno, Modesto, and Stockton had unemployment rates in excess of 15 percent and 28 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 experienced a house price boom and bust.

In June 2011, the unemployment rate was lower than it was a year ago in 72 of the 100 largest metropolitan areas. The metropolitan areas with the greatest declines in the unemployment rate over the year included Grand Rapids, Youngstown, Detroit, Akron, and some other metropolitan areas (such as Oklahoma City and Tulsa) that gained manufacturing jobs since the second quarter of last year. Some metropolitan areas that had severe house price declines (Las Vegas, Cape Coral, North Port) were also among the areas with the greatest unemployment rate reductions. Metropolitan areas throughout the South generally had higher unemployment rates in June 2011 than in June 2010. All of the 100 largest metropolitan areas had higher unemployment rates in June 2011 than in June 2008.

Output

Fifty-three of the 100 largest metropolitan areas had made a complete output recovery by the second quarter of 2011. In all but one large metropolitan area (Cape Coral), output had increased from its recent low point.

In the second quarter, only six 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.[2] That annual growth rate is equivalent to a quarterly output growth rate of just under 0.8 percent. In the second quarter of this year, only six large metropolitan areas (Houston, Austin, Las Vegas, McAllen, Dallas, and Baltimore) had output growth rates that high.

Housing

In the second quarter of 2011, house prices hit new lows in all of the 100 largest metropolitan areas. In all 100 metropolitan areas, house prices in the first quarter of 2011 were lower than at any time since their previous peak. Prices were less than 10 percent below peak levels in Buffalo, Pittsburgh, and Syracuse. However, they were more than 40 percent below peak levels in Detroit and 21 metropolitan areas that experienced a house price boom and bust (Bakersfield, Boise, Cape Coral, Fresno, Jacksonville, Lakeland, Las Vegas, Los Angeles, Miami, Modesto, North Port, Orlando, Oxnard, Palm Bay, Phoenix, Riverside, Sacramento, San Diego, Stockton, Tampa, and Tucson).

House prices declined in both of the last two quarters in all of the 100 largest metropolitan areas. Prices declined all of the last three quarters in all but major metropolitan areas (Cape Coral, Harrisburg, and Scranton).

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2. 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.

The 100 largest metropolitan areas were almost evenly split between those where the number of foreclosures rose in the second quarter of 2011 and those where the number of foreclosures fell. The number of real estate-owned properties fell in 10 of the 20 large metropolitan areas with the most foreclosures (Bakersfield, Cape Coral, Fresno, Modesto, Orlando, Phoenix, Riverside, Sacramento, San Diego, and Stockton), rose in nine (Atlanta, Denver, Detroit, Grand Rapids, Las Vegas, Miami, Minneapolis, San Francisco, and Tucson), and was unchanged from the previous quarter in one (Boise). The 20 metropolitan areas with the most foreclosures were mainly areas that had experienced a house price boom and bust or auto- and auto parts-producing centers in Michigan. Minneapolis was the only one of the 20 that did not fit into either of these categories.

Earnings

Between the beginning of the Great Recession (fourth quarter of 2007) and the first quarter of 2011, inflation-adjusted average annual earnings fell in 51 of the 100 largest metropolitan areas and rose in 49. Earnings fell in Great Lakes metropolitan areas, except in Columbus, Dayton, and Indianapolis. They also fell in most of the metropolitan areas that experienced a house price boom and bust and in the very large metropolitan areas of New York, Chicago, Detroit, Boston, Dallas, Houston, and Philadelphia. Metropolitan areas in California and the Intermountain West and government (including military) centers throughout the nation generally saw earnings rise.

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 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 three 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 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.
- **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.
- **Earnings**: Average annualized earnings, defined as total annualized earnings divided by the total number of jobs. Percentage change, adjusted for inflation, is shown from the last quarter of 2001 through the first quarter of 2011, the most recent quarter for which data are available. Source: Moody's Analytics.
- **Recession Comparisons:** The percent of employment recovery in each recession is measured by employment in the thirteenth 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. There are two sets of rankings:

- **Overall performance** from the beginning of the recession to the most recent quarter: Employment, GMP, and House Price Index changes are measured from peak quarter to the first quarter of 2011. If a metropolitan area had no peak quarter for a particular indicator, the national peak quarter for that indicator is used for the purpose of determining the area's overall performance ranking. Unemployment rate change is measured from June 2008 to June 2011.
- **Performance during the recovery:** Employment, GMP, and House Price Index changes are measured from trough quarter to the second quarter of 2011. Unemployment rate change is measured from June 2010 to June 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 one-page profiles of each of the 100 largest metropolitan areas are also available at www.brookings.edu/metromonitor.

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