

Gross Domestic Product by Metropolitan Area

Advance Statistics for 2010 and Revised Statistics for 2007–2009

By Sharon D. Panek, Slavea A. Assenova, Jake R. Hinson, and Ralph M. Rodriguez

REAL gross domestic product (GDP) by metropolitan area—a measure of nationwide economic growth calculated as the sum of GDP of all metropolitan areas deflated by a national price measure—increased 2.5 percent in 2010 after declining 2.5 percent in 2009 (chart 1 and table 1). Economic growth in 2010 was widespread among U.S. metropolitan areas; real GDP increased in 304 of the nation’s 366 metropolitan areas. In 2009, real GDP declined in 296 metropolitan areas (chart 2).¹

GDP by metropolitan area is the most comprehensive measure of overall economic activity in individual metropolitan areas—the metropolitan area counterpart to GDP in the national income and product accounts (NIPAs). In September, the Bureau of Economic Analysis (BEA) released advance current-dollar and real (chained-dollar) statistics of GDP by metropolitan area for 2010. Additional highlights for 2010 include the following:

- Durable-goods manufacturing rebounded in 2010 and led growth in many metropolitan areas.
- Durable-goods manufacturing spurred growth in real GDP in the Great Lakes region, which in previous years had experienced declines in real GDP.
- Trade growth was strong in the Plains and Mideast regions. Growth due to financial activities was more widespread.
- Construction activity continued to decline. In 2010, real GDP decreased by more than 20.0 percent in areas that were particularly hard hit by the industry’s decline in 2009, especially in Las Vegas-Paradise, NV.

This article first focuses on the industries contributing to real GDP growth in metropolitan areas. Next, it discusses declining industries that offset national growth and the metropolitan areas where these industries were concentrated. It then examines patterns in per capita real GDP by metropolitan area before con-

cluding with a discussion of revisions to the statistics on GDP by metropolitan area.

Industry Contributions to Regions and Metropolitan Areas

Growth in real GDP across the United States in 2010 was primarily attributable to growth in the durable-goods manufacturing, trade, and financial activities industries. For the nation, durable-goods manufacturing increased 9.9 percent in 2010 after falling 12.7 percent in 2009, trade increased 4.7 percent after a small increase of 0.4 percent, and financial activities increased 1.7 percent after increasing 1.1 percent. The U.S. metropolitan portion of national GDP showed similar trends. Real GDP grew in all eight BEA regions in 2010.

Of the 10 largest metropolitan areas in 2010, the three with the fastest real GDP growth were Boston-Cambridge-Quincy, MA-NH (4.8 percent), New York-Northern New Jersey-Long Island, NY-NJ-PA (4.7 percent), and Washington-Arlington-Alexandria, DC-VA-

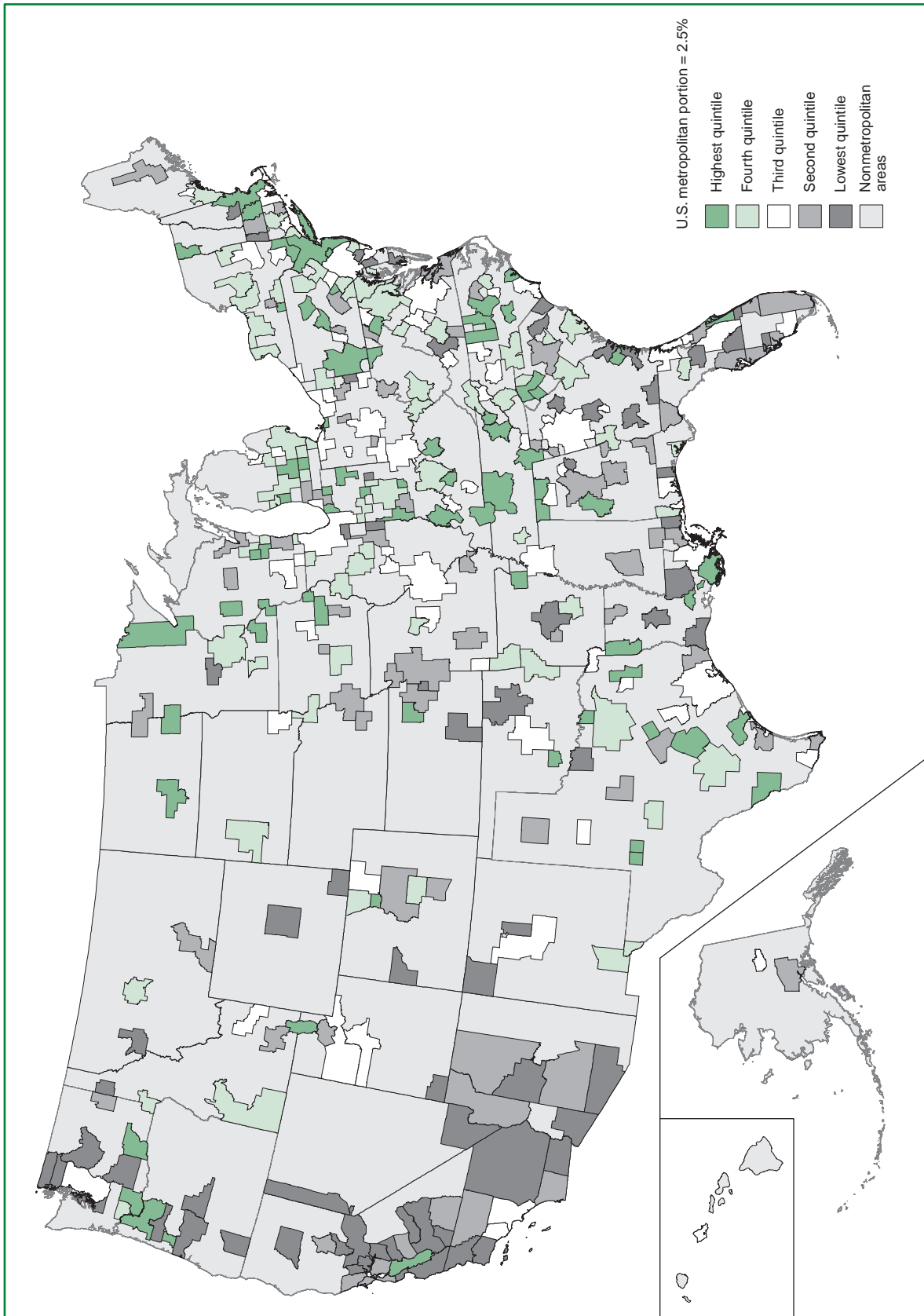
Acknowledgments

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1. The Bureau of Economic Analysis (BEA) used the county-based definitions of metropolitan statistical areas developed by the Office of Management and Budget (OMB) for federal statistical purposes as updated in December 2009.

Chart 1. Percent Change in Real Gross Domestic Product by Metropolitan Area, 2010



MD-WV (3.6 percent.)² These metropolitan areas are located in either the Mideast (3.8 percent) region or the New England (3.4 percent) region, which were the top two fastest growing regions in 2010. Financial activities and durable-goods manufacturing were large contributors to growth in both regions. The 10 largest metropolitan areas accounted for 38 percent of U.S. metropolitan area GDP and averaged 2.5 percent growth in 2010 after falling 2.2 percent in 2009.

Durable-goods manufacturing. In 2010, durable-goods manufacturing contributed to real GDP growth in 291 of the nation's 366 metropolitan areas and all U.S. regions. The industry accounted for 6.4 percent of total GDP in 2010 and contributed more than any other to growth in real GDP (0.61 percentage point) (table 2).

The effects of the growth in durable-goods manufacturing was most pronounced in the Great Lakes region, where the industry added to growth in 52 of the 56 wholly contained metropolitan areas. Elkhart-Goshen, IN, and Columbus, IN, two small metropolitan areas in the region, had double-digit growth in real GDP primarily due to growth in durable-goods manufacturing; in these two areas, durable-goods manufacturing added more than 9 percentage points to real GDP growth. Detroit-Warren-Livonia, MI, the second largest metropolitan area in the region, grew 2.8 percent.

The Great Lakes region experienced the largest upturn in durable-goods manufacturing of all the regions; the industry grew 12.0 percent after declining 19.2 percent in 2009. This industry contributed 1.16 percentage points to the 2.6 percent growth in the region.

Durable-goods manufacturing was the second-largest contributor to growth in the Far West region. In this region, the largest growth in real GDP was in San Jose-Sunnyvale-Santa Clara, CA (13.4 percent).

Trade. The effects of continued growth in both the wholesale and retail trade industries were felt across the country. These two industries contributed to growth in 351 of the nation's 366 metropolitan areas in 2010. These industries contributed to growth in all of the metropolitan areas in the Plains and in the majority of the areas in the Mideast. Growth was particularly strong in Elmira, NY, Williamsport, PA, Lebanon, PA, and Mankato-North Mankato, MN. Growth was also strong in Florence-Muscle Shoals, AL, Cape Gi-

ardeau-Jackson, MO-IL, and Midland, TX; in each of these areas, the trade sector turned sharply upward.

Financial activities. The expansion in financial activities—which includes finance and insurance and real estate, rental, and leasing—was widespread among all regions. Growth in this industry contributed 2 percentage points or more to real GDP growth in Houma-Bayou Cane-Thibodaux, LA, Des Moines-West Des Moines, IA, Hartford-West Hartford-East Hartford, CT, and New York-Northern New Jersey-Long Island, NY-NJ-PA. New York-Northern New Jersey-Long Island, NY-NJ-PA, the largest metropolitan area in the nation, grew 4.7 percent primarily as a result of strong growth in financial activities.

Construction. In contrast to most other industries, construction subtracted 0.15 percentage point from U.S. real GDP growth in 2010. Construction subtracted from real GDP growth in 229 of the nation's 366 metropolitan areas and added less than a percentage point to real GDP growth in all but four metropolitan areas. Construction declined in all regions, except New England.

The largest contraction in this industry was in the Far West, where construction declined 7.6 percent. Las

Advance Statistics on Gross Domestic Product by Metropolitan Area for 2010

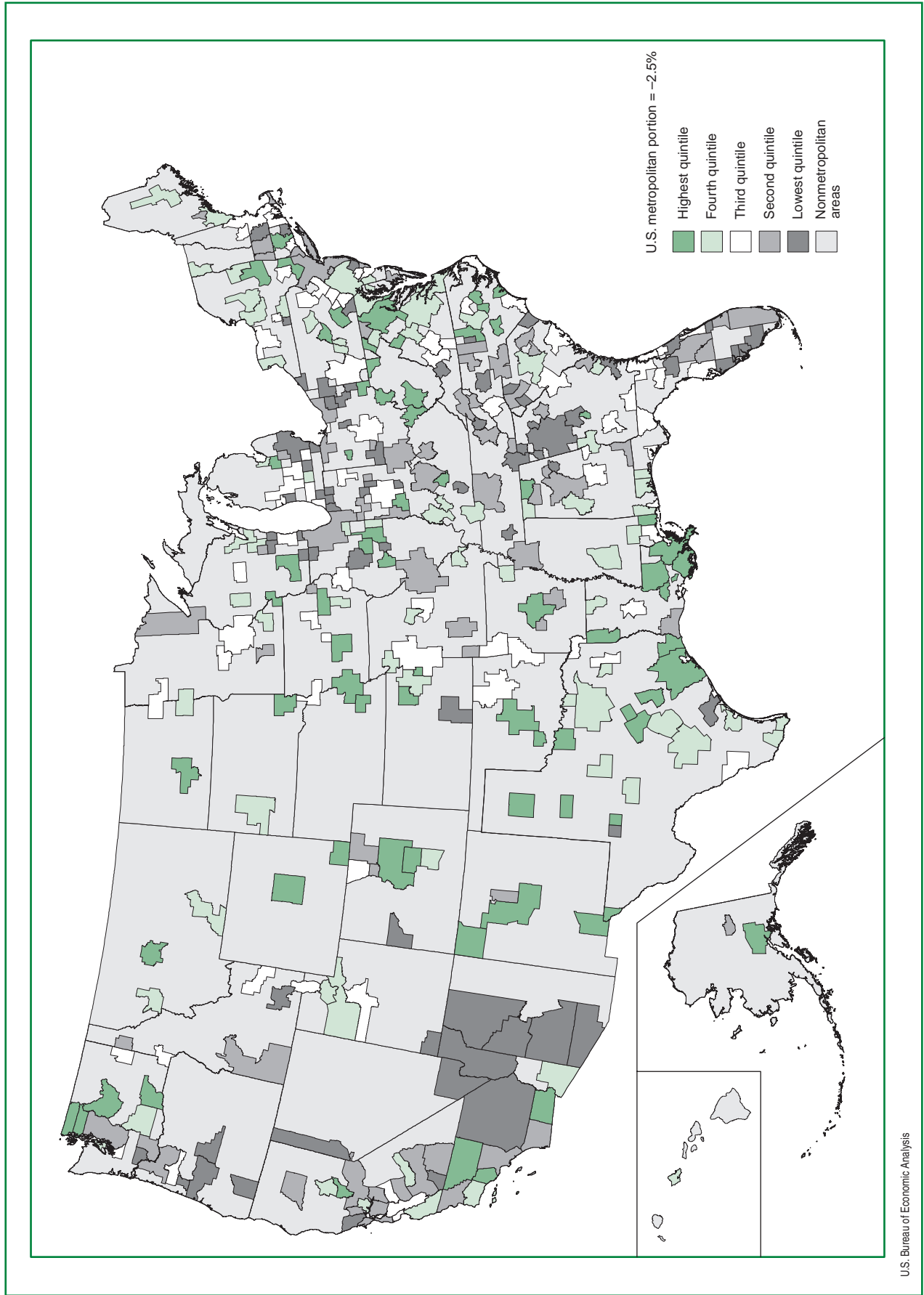
The advance statistics for 2010 are based on a more limited set of source data and on an abbreviated estimation methodology, compared with the data and estimation methodology used to prepare the revised statistics for 2001–2009. The advance statistics are prepared at the sector level of the North American Industry Classification System (NAICS). Subsector industry detail for gross domestic product (GDP) by state and county earnings are not yet available for 2010. The advance 2010 statistics on GDP by metropolitan area use sector-level industry detail for unpublished county earnings from the personal income for metropolitan areas released on August 9, 2011, and the advance 2010 current-dollar statistics on GDP by state released on June 7, 2011.

The annual percent change in county earnings by sector from 2009 to 2010 was calculated and then applied to the county GDP statistics underlying the statistics on GDP by metropolitan area for 2009. These extrapolated statistics for all sectors were scaled to the advance statistics on GDP by state for 2010 by allocating the difference between the two measures among the counties. The resulting county statistics were then summed to their related metropolitan areas to yield GDP by metropolitan area.

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2. As measured by real GDP in 2010, the 10 largest metropolitan areas are New York-Northern New Jersey-Long Island, NY-NJ-PA; Los Angeles-Long Beach-Santa Ana, CA; Chicago-Joliet-Naperville, IL-IN-WI; Washington-Arlington-Alexandria, DC-VA-MD-WV; Houston-Sugar Land-Baytown, TX; Dallas-Fort Worth-Arlington, TX; Philadelphia-Camden-Wilmington, PA-NJ-DE-MD; San Francisco-Oakland-Fremont, CA; Boston-Cambridge-Quincy, MA-NH; and Atlanta-Sandy Springs-Marietta, GA.

Chart 2. Percent Change in Real Gross Domestic Product by Metropolitan Area, 2009



Vegas-Paradise, NV, the ninth largest metropolitan area in the region and the thirty-third largest metropolitan area in the nation, declined 1.9 percent primarily because of decreased construction activity, which sank below its 2001 level.

Declines in this industry led to declines in real GDP in several small metropolitan areas, including Grand Junction, CO (3.3 percent), Steubenville-Weirton, OH-WV (1.0 percent), and Carson City, NV (0.9 percent).³

Per Capita Real GDP by Metropolitan Area

Nationwide, per capita real GDP was \$42,346 in 2010. Metropolitan area per capita real GDP was \$45,557 in 2010, 7.6 percent higher than the national average.⁴ The five metropolitan areas with the highest per capita real GDP in 2010 were San Jose-Sunnyvale-Santa Clara, CA, Casper, WY, Bridgeport-Stamford-Norwalk, CT, Midland, TX, and Durham-Chapel Hill, NC (table 3). San Jose-Sunnyvale-Santa Clara, CA had the highest per capita real GDP in the nation, at \$90,959, which was 115 percent above the national average; a strong concentration in durable-goods manufacturing contributed greatly to this area's high per capita real GDP.

3. Small metropolitan areas are those with real GDP of less than \$10 billion.

4. Per capita real GDP by metropolitan area was computed using revised Census Bureau midyear population estimates that were released on September 29, 2011.

The five metropolitan areas with the lowest per capita real GDP in 2010 were Palm Coast, FL, McAllen-Edinburg-Mission, TX, Lake Havasu City-Kingman, AZ, Brownsville-Harlingen, TX, and Punta Gorda, FL. Palm Coast, FL had the lowest per capita real GDP in the nation, at \$12,510, which was 70 percent lower than the national average.

Revisions

The revisions to GDP by metropolitan area for 2007–2009 reflect revisions to the underlying source data. The revised statistics incorporate revisions to BEA's local area personal income statistics released on April 21, 2011, and to the GDP by state statistics released on June 7, 2011.

Current-dollar statistics

The revisions to the current-dollar GDP statistics, measured as a percentage of the previously published statistics, were moderate for most metropolitan areas (table 4). The mean absolute revision for all metropolitan areas for 2007–2009 was 1.0 percent. The mean absolute revision was less than 3.0 percent for all areas except Casper, WY (5.4 percent), Midland, TX (4.4 percent), Fairbanks, AK (4.3 percent), El Centro, CA (3.8 percent), Winston-Salem, NC (3.5 percent), Vallejo-Fairfield, CA (3.5 percent), Lake Charles, LA (3.4 percent), and Oklahoma City, OK (3.1 percent). Revisions in mining led to revisions to current-dollar GDP for Oklahoma City, OK, Midland, TX, and

Gross Domestic Product (GDP) by Metropolitan Area

Metropolitan statistical areas, defined by the U.S. Office of Management and Budget, are standardized county-based areas that have at least one urbanized area with a population of 50,000 or more plus adjacent territory that has a high degree of social and economic integration with the core, as measured by commuting ties.

GDP by metropolitan area is the most comprehensive measure of overall economic activity in a metropolitan area—it is the metropolitan area counterpart to the nation's GDP. The methodology developed for these statistics is relatively simple and allows for the production of timely statistics.

GDP by metropolitan area is derived as the sum of the value added originating in all of the industries in the metropolitan area. Real GDP by metropolitan area is an inflation-adjusted measure that is based on national prices for the goods and services produced within that area. The statistics on real GDP by metropolitan area and on quantity indexes with a base year of 2005 were derived by applying national chain-type price indexes to the sta-

istics on current-dollar GDP by metropolitan area for the 61 NAICS-based subsectors. Then, the chain-type index formula that is used in the national accounts is used to calculate the statistics on total real GDP by metropolitan area and on real GDP by metropolitan area at more aggregated industry levels.

U.S. growth rates of real GDP by metropolitan area may differ from the growth rates of national real GDP released in the July 2011 annual revision of the national income and product accounts (NIPAs). Further, the growth rates of U.S. real GDP by Metropolitan area may differ from the U.S. growth rates of GDP by state released in June 2011 because of the exclusion of nonmetropolitan areas. Differences among the national growth rates of real GDP are primarily due to the direct linkage and consistency of the statistics on GDP by metropolitan area with the most recently released statistics on GDP by state and statistics on GDP by industry in the annual industry accounts released in April 2011, which are based on the annual NIPA revision released in July 2010.

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Casper, WY. Revisions in nondurable-goods manufacturing led to revisions to current-dollar GDP for Vallejo-Fairfield, CA, and Lake Charles, LA. Revisions in finance and insurance were the leading cause of re-

visions to current-dollar GDP for Winston-Salem, NC. Revisions in transportation and warehousing led to revisions to current-dollar GDP for Fairbanks, AK. Revisions in agriculture, forestry, and fishing led to revisions to current-dollar GDP for El Centro, CA.

Data Availability

Summary statistics on gross domestic product (GDP) by metropolitan area in current dollars and in real chained (2005) dollars for 2007–2010, as well as quantity indexes, are presented in tables 1–6 in this article. More detailed statistics for metropolitan areas and the U.S. metropolitan portion can be accessed interactively on BEA's Web site.

The following annual statistics are available at www.bea.gov:

Advance statistics of current-dollar GDP by metropolitan area, real GDP by metropolitan area in chained (2005) dollars, and quantity indexes for 2010 for 24 NAICS-based sectors.

Current-dollar and real GDP by metropolitan area and quantity indexes for 2001–2009 for 61 NAICS-based subsectors and 24 NAICS-based sectors.

Per capita real GDP by metropolitan area for 2001–2010.

E-mail gdpbymetro@bea.gov or call 202–606–5341 for further information.

Real growth rates

The revisions to real GDP growth rates are measured as a percentage point difference from the previously published growth rate. The mean absolute revision of growth rates for all metropolitan areas for 2007–2009 was 0.9 percentage point. The mean absolute revision of growth rates was less than 4.0 percentage points for all areas except Midland, TX (7.7 percentage points), Casper, WY (6.8 percentage points), Oklahoma City, OK (4.6 percentage points), Vallejo-Fairfield, CA (4.2 percentage points), and Fairbanks, AK (4.0 percentage points). Revisions to mining led to revisions to the real GDP growth rates for Midland, TX, Casper, WY, and Oklahoma City, OK. Revisions to transportation and warehousing led to revisions to the real GDP growth rates for Fairbanks, AK. Revisions to nondurable-goods manufacturing led to revisions to real GDP growth rates for Vallejo-Fairfield, CA.

Tables 1–6 follow.