

Gross Domestic Product by Metropolitan Area

Advance Statistics for 2011 and Revised Statistics for 2001–2010

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ECONOMIC growth in most U.S. metropolitan areas continued in 2011; real GDP increased in 242 of the nation’s 366 metropolitan areas (chart 1). In 2010, real GDP increased in 308 metropolitan areas (chart 2, page 44).¹ For the United States as a whole, real GDP by metropolitan area—the sum of current-dollar GDP for all metropolitan areas deflated by a national price measure—increased 1.6 percent in 2011 after increasing 3.1 percent in 2010 (table 1).

GDP by metropolitan area—the metropolitan area counterpart to GDP in the national income and product accounts (NIPAs)—is the most comprehensive measure of overall economic activity in a metropolitan area. In February, the Bureau of Economic Analysis (BEA) released advance current-dollar and real (chained-dollar) statistics on GDP by metropolitan area for 2011. Additional highlights for 2011 include the following:

- Professional and business services led growth in many metropolitan areas.
- Growth in durable-goods manufacturing was widespread and continued to rebound in the Great Lakes region.
- Wholesale and retail trade growth was strong in many metropolitan areas, particularly in the South-west region.
- Transportation and utilities and natural resources and mining detracted from growth in many metropolitan areas.

The remainder of this article discusses the following:

- Industry contributions to real GDP growth to regions and metropolitan areas.
- Metropolitan areas in which the industries driving economic growth differed from the national trend.
- The variability of growth rates of large and small metropolitan areas.
- Patterns in per capita real GDP by metropolitan area.
- Revisions to GDP by metropolitan area for 2001–2010.

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.

Industry Contributions to Regions and Metropolitan Areas

Growth in real GDP across U.S. metropolitan areas in 2011 was primarily attributable to growth in professional and business services, durable-goods manufacturing, and wholesale and retail trade. For the nation, professional and business services grew 4.2 percent in 2011 after growing 3.8 percent in 2010, durable-goods manufacturing grew 7.9 percent in 2011 after growing 17.0 percent in 2010, and wholesale and retail trade grew 2.6 percent in 2011 after growing 7.1 percent in 2010. The growth in these industries in the U.S. metropolitan portion of the country was similar.

Real GDP in the 10 largest metropolitan areas accounted for 38.1 percent of U.S. metropolitan area GDP (table A). Collectively, these metropolitan areas grew 2.0 percent in 2011 after growing 3.1 percent in 2010.

The three areas with the fastest real GDP growth in 2011 were Houston-Sugar Land-Baytown, TX (3.7 percent), Dallas-Fort Worth-Arlington, TX (3.1 percent), and San Francisco-Oakland-Fremont, CA (2.6 percent) (table B).

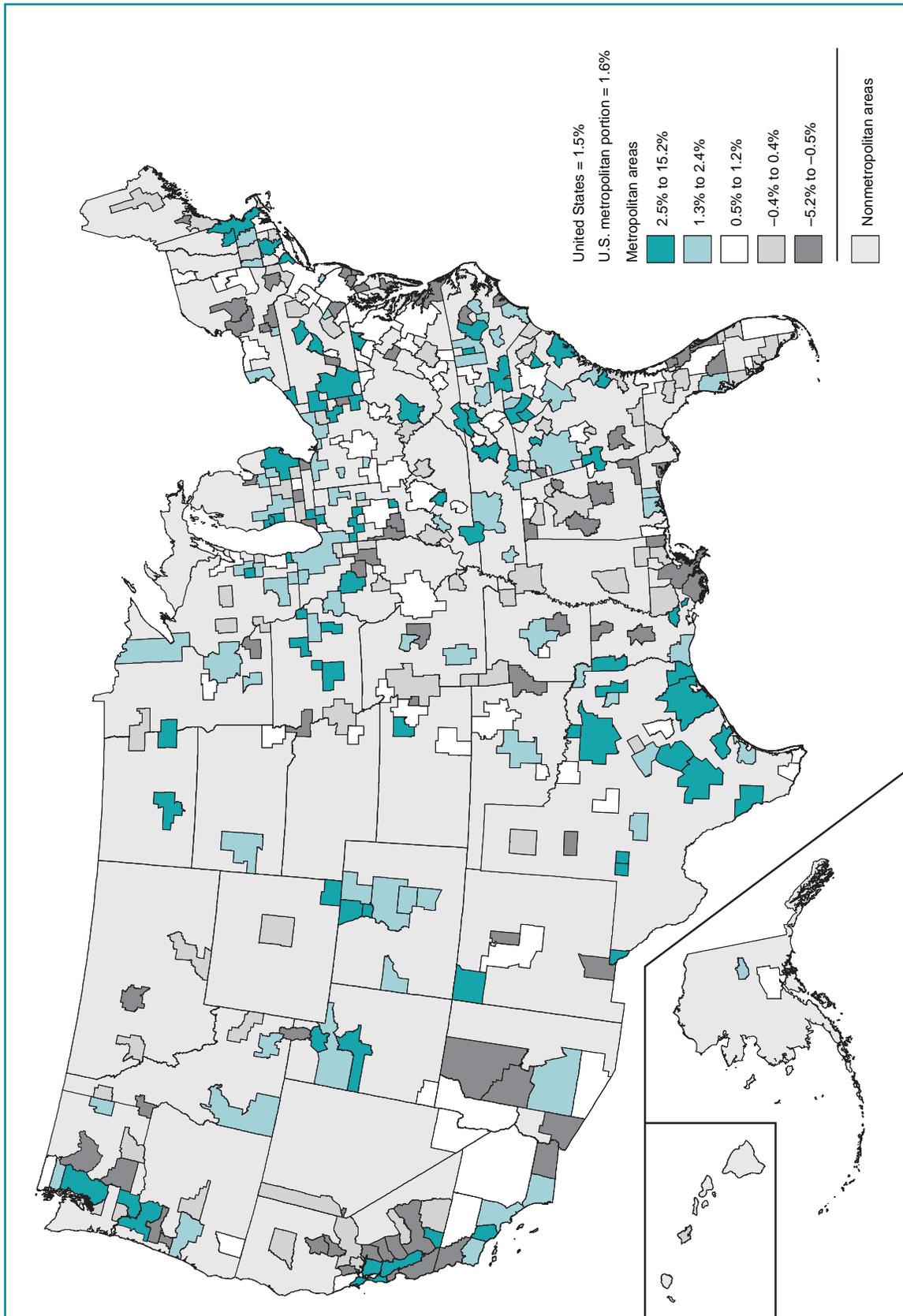
The fastest growing regions in 2011 were the South-west region (2.7 percent) and the Far West region (2.1 percent); the largest contributor to growth in both regions was durable-goods manufacturing.

Professional and business services. In 2011, professional and business services contributed to real GDP growth in 308 of the nation’s 366 metropolitan areas

Table A. Ten Largest Metropolitan Areas Ranked by Real Gross Domestic Product (GDP), 2011

Rank		Real GDP [millions of chained (2005) dollars]
1	New York-Northern New Jersey-Long Island, NY-NJ-PA.....	1,123,460
2	Los Angeles-Long Beach-Santa Ana, CA	663,054
3	Chicago-Joliet-Naperville, IL-IN-WI.....	476,487
4	Washington-Arlington-Alexandria, DC-VA-MD-WV	380,714
5	Houston-Sugar Land-Baytown, TX.....	365,560
6	Dallas-Fort Worth-Arlington, TX.....	351,002
7	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	308,377
8	San Francisco-Oakland-Fremont, CA	303,371
9	Boston-Cambridge-Quincy, MA-NH	291,017
10	Atlanta-Sandy Springs-Marietta, GA.....	249,509

Chart 1. Percent Change in Real Gross Domestic Product (GDP) by Metropolitan Area, 2011



and all BEA regions. This industry accounted for 13.5 percent of total GDP in 2011 and contributed more than any other industry to growth in real GDP (0.56 percentage point) (table 2).

The growth in this industry was prominent in the Far West region. Of the 15 metropolitan areas across the nation in which growth in this industry was more than \$1 billion, five were in the Far West region. This industry contributed more than a percentage point to growth in real GDP in the Far West metropolitan areas of San Francisco-Oakland-Fremont, CA, San Jose-Sunnyvale-Santa Clara, CA, San Diego-Carlsbad-San Marcos, CA, and Kennewick-Pasco-Richland, WA.

Professional and business services also drove growth in other regions. In the New England region, this industry contributed to growth in 14 of the region's 15 metropolitan areas. The industry's largest contributions to metropolitan area growth occurred in Peoria, IL (Great Lakes region) and Joplin, MO (Plains region) where the industry added nearly 2 percentage points to real GDP growth in 2011.

Durable-goods manufacturing. In 2011, durable-goods manufacturing contributed to real GDP growth in 318 of the nation's 366 metropolitan areas and in all BEA regions. The industry accounted for 6.4 percent of total GDP in 2011 and contributed 0.49 percentage point to growth in real GDP. Growth in this industry was strongest in the Far West region where durable-goods manufacturing accounted for 0.85 percentage point of overall economic growth of 2.1 percent and in the Great Lakes region where the industry contributed 0.70 percentage point to overall growth of 1.4 percent.

Strong contributions from this industry fueled growth in many small metropolitan areas where production of these goods constitutes a large portion of the area's economy. The largest contributions to growth in real GDP were in two metropolitan areas in the Great Lakes region—Kokomo, IN (7.0 percentage points) and Columbus, IN (6.9 percentage points). These two areas were among the fastest growing small metropolitan areas in 2011 (table C).

Trade. In 2011, trade—wholesale and retail trade—contributed to real GDP growth in 306 of the nation's 366 metropolitan areas and in all BEA regions. The industry accounted for 11.8 percent of total GDP and contributed 0.31 percentage point to growth in real GDP. The effect of trade growth was strongest in the Southwest region in 2011. Trade was the largest contributor to real GDP growth in Odessa, TX, accounting for 2.75 percentage points of the 15.2 percent growth. It contributed 1 percentage point or more to GDP growth in four other metropolitan areas in Texas—Midland, TX (1.23 percentage points), Austin-Round Rock-San Marcos, TX (1.12 percentage points),

Table B. Ten Fastest Growing Large Metropolitan Areas, 2011

Rank		Percent change
1	Houston-Sugar Land-Baytown, TX	3.7
2	Dallas-Fort Worth-Arlington, TX	3.1
3	San Francisco-Oakland-Fremont, CA	2.6
4	Boston-Cambridge-Quincy, MA-NH	2.4
5	Atlanta-Sandy Springs-Marietta, GA	2.2
6	Los Angeles-Long Beach-Santa Ana, CA	1.7
7	Chicago-Joliet-Naperville, IL-IN-WI	1.4
8	Washington-Arlington-Alexandria, DC-VA-MD-WV	1.1
9	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1.0
10	New York-Northern New Jersey-Long Island, NY-NJ-PA....	0.8

Advance Statistics on Gross Domestic Product (GDP) by Metropolitan Area for 2011

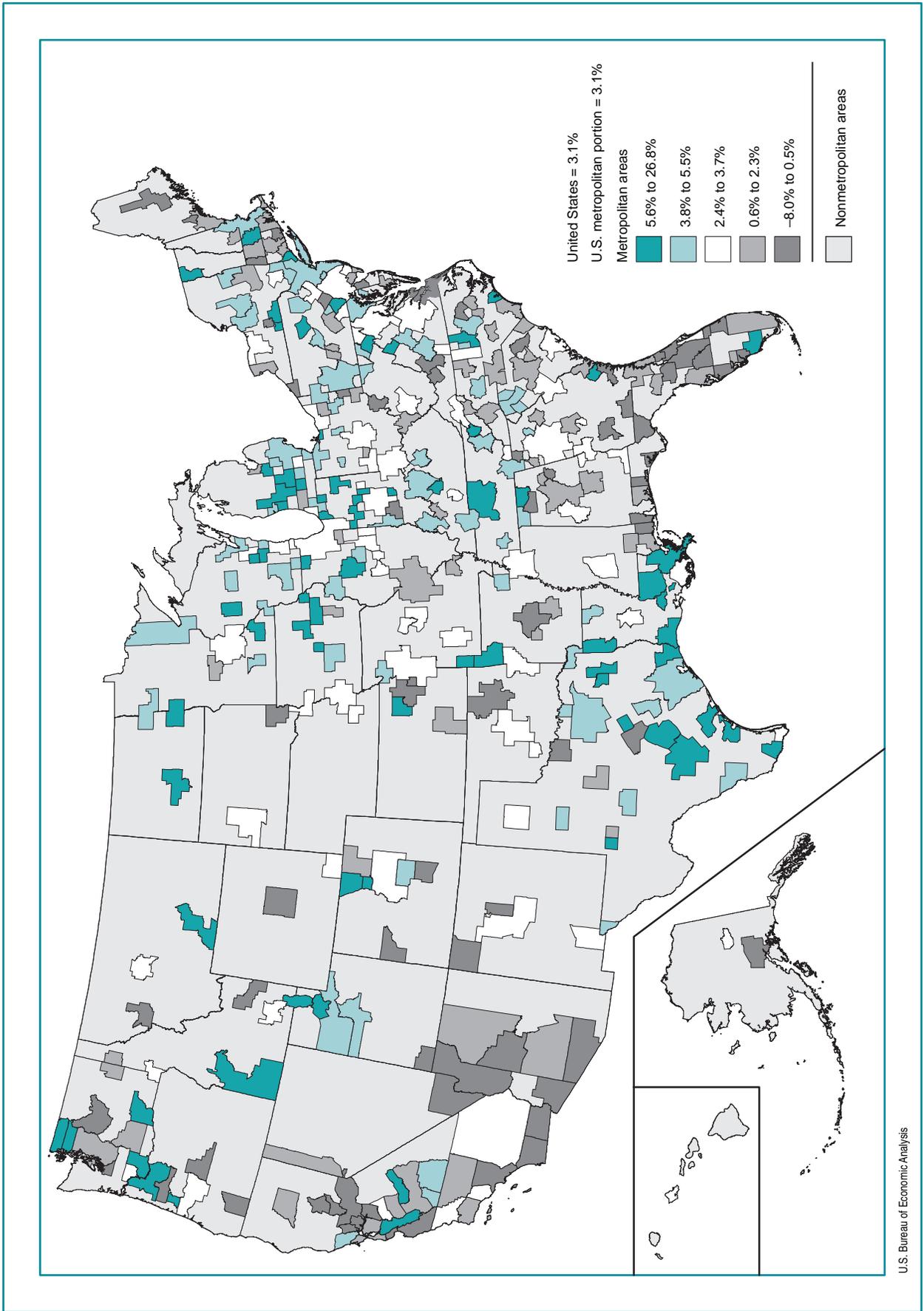
The advance statistics on GDP by metropolitan area are based on source data that are incomplete or subject to further revision by the source agency. Revised statistics, based on more complete data, will be released in September 2013. The advance statistics are prepared at the sector level of the 2002 North American Industry Classification System. Subsector industry detail for GDP by state for 2011 are not yet available. The advance 2011 statistics on GDP by metropolitan area use preliminary county earnings from the statistics on personal income for metropolitan areas released on November 26, 2012 and the advance current-dollar statistics on GDP by state for 2011 that were released on June 5, 2012.

Unlike previous advance statistics on GDP by metropolitan area in which the estimation method used for the advance statistics differed from that used for the revised statistics, the same methodology was used for both the advance and the revised statistics—a top-down approach that allocated GDP by state to metropolitan areas. The state ratio of GDP-to-earnings by industry was calculated and then applied to the corresponding statistics on county earnings, and these county statistics were then summed to their related metropolitan areas to yield GDP by metropolitan area.

Table C. Ten Fastest Growing Small Metropolitan Areas, 2011

Rank		Percent change
1	Odessa, TX	15.2
2	Williamsport, PA	9.1
3	Columbus, IN	7.8
4	Hinesville-Fort Stewart, GA	7.6
5	Kokomo, IN	7.1
6	Victoria, TX	7.1
7	Elizabethtown, KY	6.1
8	Bismarck, ND	5.7
9	Laredo, TX	5.6
10	Dubuque, IA	5.4

Chart 2. Percent Change in Real Gross Domestic Product (GDP) by Metropolitan Area, 2010



McAllen-Edinburg-Mission, TX (1.12 percentage points), and Laredo, TX (1.02 percentage points).

Natural resources and mining. In contrast to the national trend, this industry contributed more than 3 percentage points to growth in several metropolitan areas, including two that were among the fastest growing in the country—Midland, TX (9.5 percent) and Williamsport, PA (9.1 percent).

Variability of Growth Rates by Size of Metropolitan Area

The growth rates in large metropolitan areas ranged from 0.6 percent in Miami-Fort Lauderdale-Pompano Beach, FL, to 7.7 percent in San Jose-Sunnyvale-Santa Clara, CA. Other large metropolitan areas with fast real GDP growth in 2011 were Portland-Vancouver-Hillsboro, OR-WA (6.5 percent) and Austin-Round Rock-San Marcos, TX (4.4 percent).

In this article, large metropolitan areas are those with real GDP of more than \$100 billion, medium-sized areas are those with real GDP of \$10–100 billion, and small areas are those with real GDP of less than \$10 billion.

As expected, growth in small metropolitan areas, which tend to depend on a few industries, showed more variability than growth in large metropolitan areas.

The growth rates for the fastest growing small met-

ropolitan areas ranged from –5.2 percent in Sioux City, IA-NE-SD, to 15.2 percent in Odessa, TX. Other small metropolitan areas with strong real GDP growth were Williamsport, PA (9.1 percent), and Columbus, IN (7.8 percent).

Data Availability

Summary statistics on gross domestic product (GDP) by metropolitan area in current dollars and in real chained (2005) dollars for 2001–2011 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 on current-dollar GDP by metropolitan area, real GDP by metropolitan area in chained (2005) dollars, and quantity indexes for 2011 for 24 NAICS-based sectors.

Current-dollar and real GDP by metropolitan area and quantity indexes for 2001–2010 for 24 NAICS-based sectors and for 61 NAICS-based subsectors.

Per capita real GDP by metropolitan area for 2001–2011.

For further information, call 202–606–5341 or e-mail gdpbymetro@bea.gov.

Gross Domestic Product (GDP) by Metropolitan Area Statistics

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 and 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 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 statistics on current-dollar GDP by metropolitan area for 61 industry subsectors based on the 2002 North American

Industry Classification System. 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.

The statistics on GDP by metropolitan area are consistent with those on GDP by state released on June 5, 2012, which are based on the annual revision of the national income and product accounts (NIPAs) released in July 2011 and the U.S. GDP by industry statistics released on December 13, 2011 and on April 26, 2012. The growth rate of real GDP in the nation's metropolitan areas usually differs from the NIPA real GDP growth rates released annually in July, partly because of the inclusion of non-metropolitan areas in the national statistics. The growth rates also differ because of differences in the timing of production cycles and the availability of data in preparing national and regional statistics, which preclude the incorporation of the immediately preceding annual NIPA revisions into the advance statistics on GDP by metropolitan area.

Per Capita Real GDP by Metropolitan Area

Per capita real GDP for metropolitan areas was \$45,222 in 2011, 7.5 percent higher than the national average.² The five metropolitan areas with the highest per capita real GDP in 2011 were Midland, TX, San Jose-Sunnyvale-Santa Clara, CA, Bridgeport-Stamford-Norwalk, CT, Casper, WY, and Durhan-Chapel Hill, NC (table 3). Midland, TX, had the highest per capita real GDP in the nation: \$95,531, which was 127 percent higher than the national average. A strong concentration in the mining industry contributed greatly to real GDP per capita in this area.

The five metropolitan areas with the lowest per capita real GDP in 2011 were Palm Coast, FL, Lake Havasu City-Kingman, AZ, McAllen-Edinburg-Mission, TX, Brownsville-Harlingen, TX, and Prescott, AZ. Palm Coast, FL, had the lowest per capita real GDP in the nation, at \$11,311, which was 73 percent lower than the national average.

Revisions

The statistics on GDP by metropolitan area for 2001–2010 that were released in February have been revised. The revisions are consistent with the “flexible” annual revision of GDP by state for 2001–2010; in addition, the revisions for 2008–2010 reflect revisions to underlying source data.³ The revised statistics also incorporate revisions to BEA’s local area personal income statistics released on November 26, 2012, and to the statistics on GDP by state released on June 5, 2012.

Current-dollar statistics

The revisions to the current-dollar GDP statistics, measured as a percentage of the previously published statistics, were modest for most metropolitan areas (table 4). The mean absolute revision for all metropolitan areas for 2008–2010 was 2.3 percent. The mean absolute revision was less than 10.0 percent for all areas except Lake Charles, LA (10.2 percent), Kokomo, IN (11.4 percent), Corvallis, OR (11.7 percent), Beaumont-Port Arthur, TX (13.0 percent), Pascagoula, MS (13.4 percent), and Midland, TX (18.9 percent).

Revisions in nondurable-goods manufacturing led to revisions to current-dollar GDP for Lake Charles, LA, Beaumont-Port Arthur, TX, and Pascagoula, MS. Revisions in durable-goods manufacturing led to revisions to current-dollar GDP for Kokomo, IN, and Corvallis, OR. Revisions in mining led to revisions in current-dollar GDP for Midland, TX.

2. Per capita real GDP by metropolitan area was computed using Census Bureau midyear population estimates.

3. For information on the improvements incorporated with the flexible annual revision of GDP by state, see “[Gross Domestic Product by State: Advance Statistics for 2011 and Revised Statistics for 1997–2010](#),” SURVEY OF CURRENT BUSINESS 92 (July 2012): 101–130.

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 2008–2010 was 1.8 percentage points. The mean absolute revision

Gross Domestic Product (GDP) by Metropolitan Area and U.S. GDP by Industry

The annual statistics on GDP by metropolitan area were released on February 22, 2013, a 5-month delay. This one-time delay enabled the Bureau of Economic Analysis (BEA) to permanently accelerate the availability of annual statistics on local area personal income by 5 months; these statistics are the primary data source used to compute GDP by metropolitan area. BEA will return to the regular September release schedule for GDP by metropolitan area in 2013.

The statistics on GDP by metropolitan area are consistent with the statistics on GDP by state that were released in June 2012; however, these statistics do not incorporate the revisions to U.S. GDP by industry released in November 2012. The overall picture of the economy shown by GDP by industry for 2009–2011 did not change and the industry trends in the GDP by metropolitan area statistics are similar to the national trends, though there are some differences in magnitude. The November 2012 revisions to U.S. GDP by industry will be included in the September 2013 release of GDP by metropolitan area.

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of growth rates was less than 10 percentage points for all areas except Mount Vernon-Anacortes, WA (10.7 percent), Lake Charles, LA (10.9 percent), Midland, TX (12.4 percent), and Kokomo, IN (13.6 percent).

Revisions to nondurable-goods manufacturing led to revisions to real GDP growth rates for Mount Ver-

non-Anacortes, WA, and Lake Charles, LA. Revisions to mining led to revisions to the real GDP growth rates for Midland, TX. Revisions to durable-goods manufacturing led to revisions to the real GDP growth rates for Kokomo, IN.

Tables 1–6 follow.