Gross Domestic Product by Metropolitan Area

Advance Statistics for 2012 and Revised Statistics for 2001–2011

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ECONOMIC GROWTH was widespread across metropolitan areas in 2012; real GDP increased in 305 of the nation's 381 metropolitan areas (chart 1), according to the advance statistics from the Bureau of Economic Analysis (BEA). In 2011, real GDP increased in 277 metropolitan areas (chart 2).[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 2.5 percent in 2012 after increasing 1.7 percent in 2011 (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 September, BEA released advance current-dollar and chained-dollar (real) statistics on GDP by metropolitan area for 2012.[2] Additional highlights for 2012 include the following:

- Durable-goods manufacturing led the economic growth in many metropolitan areas, especially in the Great Lakes region.
- Wholesale and retail trade growth was widespread, particularly in the Southwest region where it grew for the third consecutive year.
- Financial activities was a strong contributor to growth in many metropolitan areas.
- Construction contributed to growth in 2012 in many areas after 8 consecutive years of contraction, increasing 3.1 percent nationally.
- Agriculture, forestry, fishing, and hunting detracted from growth in many metropolitan areas.

After providing an overview of the industry composition of metropolitan areas by population size, this article will discuss the industries that drove national economic growth and the metropolitan areas where these industries were concentrated. It will then examine patterns in per capita real GDP by metropolitan area before concluding with a discussion of revisions to the statistics on GDP by metropolitan area.

Overview of Metropolitan Areas by Population

The new statistics reveal that metropolitan areas of different sizes differed also in terms of economic growth. Much of this can be explained by the industries that are typically concentrated in the areas. GDP for the group of large metropolitan areas, which includes areas with populations greater than 2 million, ranges from $1.4 trillion (New York-Newark-Jersey City, NY-NJ-PA) to $92.0 billion (San Antonio-New Braunfels, TX). The average wage per job for this group was $33,882 in 2011, which was notably higher than that of the U.S. metropolitan area total ($28,912).[3] The 31 metropolitan areas in this group have above average concentrations in arts, entertainment, and recreation; real estate, rental and leasing; and information. The strongest industry concentration among large metropolitan areas in 2011 was in Las Vegas-Henderson-Paradise, NV, where accommodation is 16.7 times more concentrated, relative to the nation.[4]

The medium-size group of metropolitan areas, which includes areas with populations between 500,000 and 2 million, comprises 73 metropolitan areas. GDP for this group ranges from $173.9 billion (San Jose-Sunnyvale-Santa Clara, CA) to $13.5 billion (Deltona-Daytona Beach-Ormond Beach, FL). This group's average wage per job was $27,811 in 2011, slightly lower than that of the U.S. metropolitan area total.

Metropolitan areas in this group have above average concentrations in health care and social assistance and both durable-goods and nondurable-goods manufacturing. The strongest industry concentration among

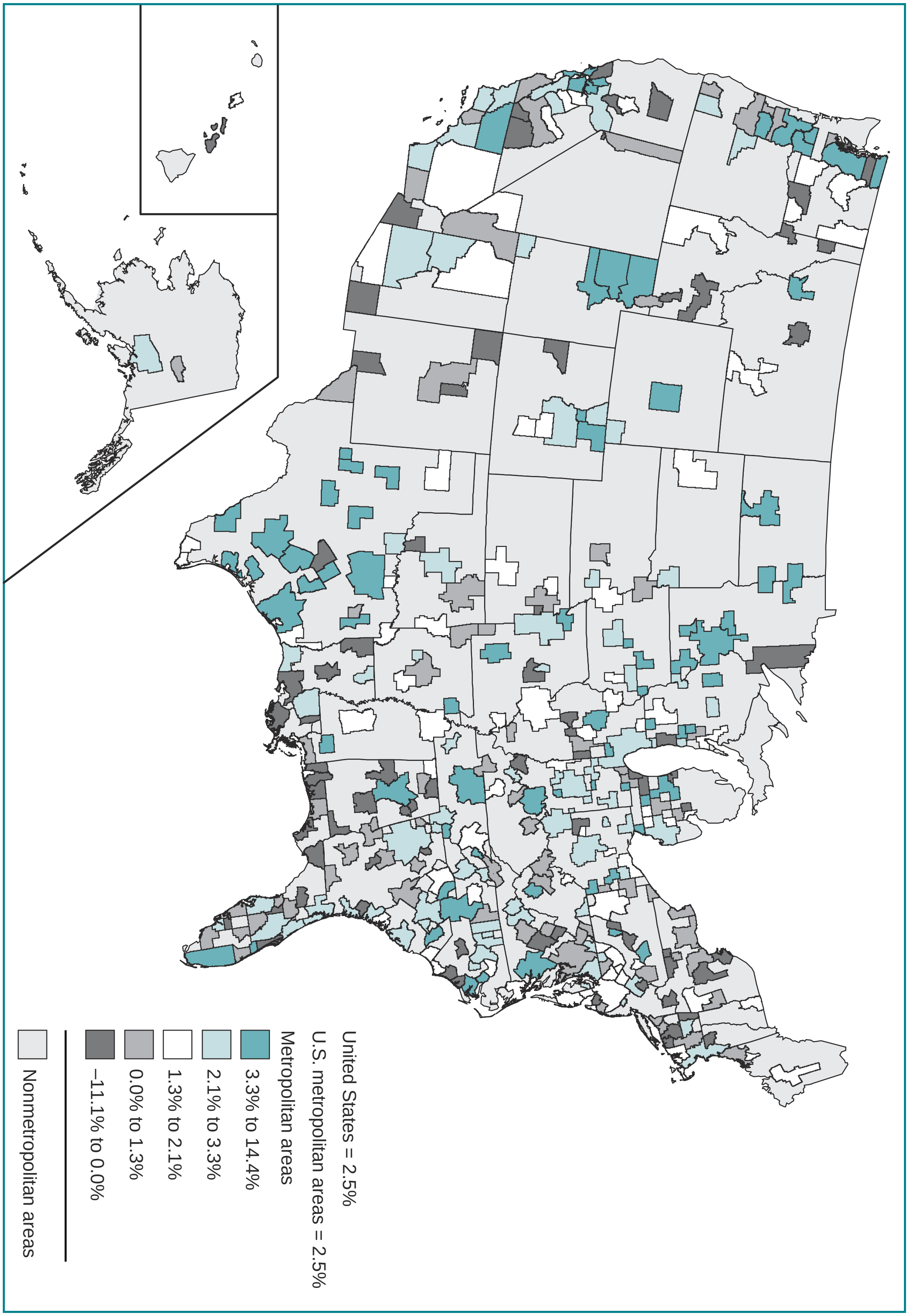
1. The Bureau of Economic Analysis (BEA) used the county-based definitions of metropolitan statistical areas developed by the Office of Management and Budget (OMB) for federal statistical purposes that was updated on February 28, 2013. As a result of these changes, the number of metropolitan areas increased from 363 to 381.

2. See the box "Advance Statistics on Gross Domestic Product (GDP) by Metropolitan Area for 2012."

3. The average wages are based on wage and salary disbursements from BEA's November 26, 2012, release of local area personal income.

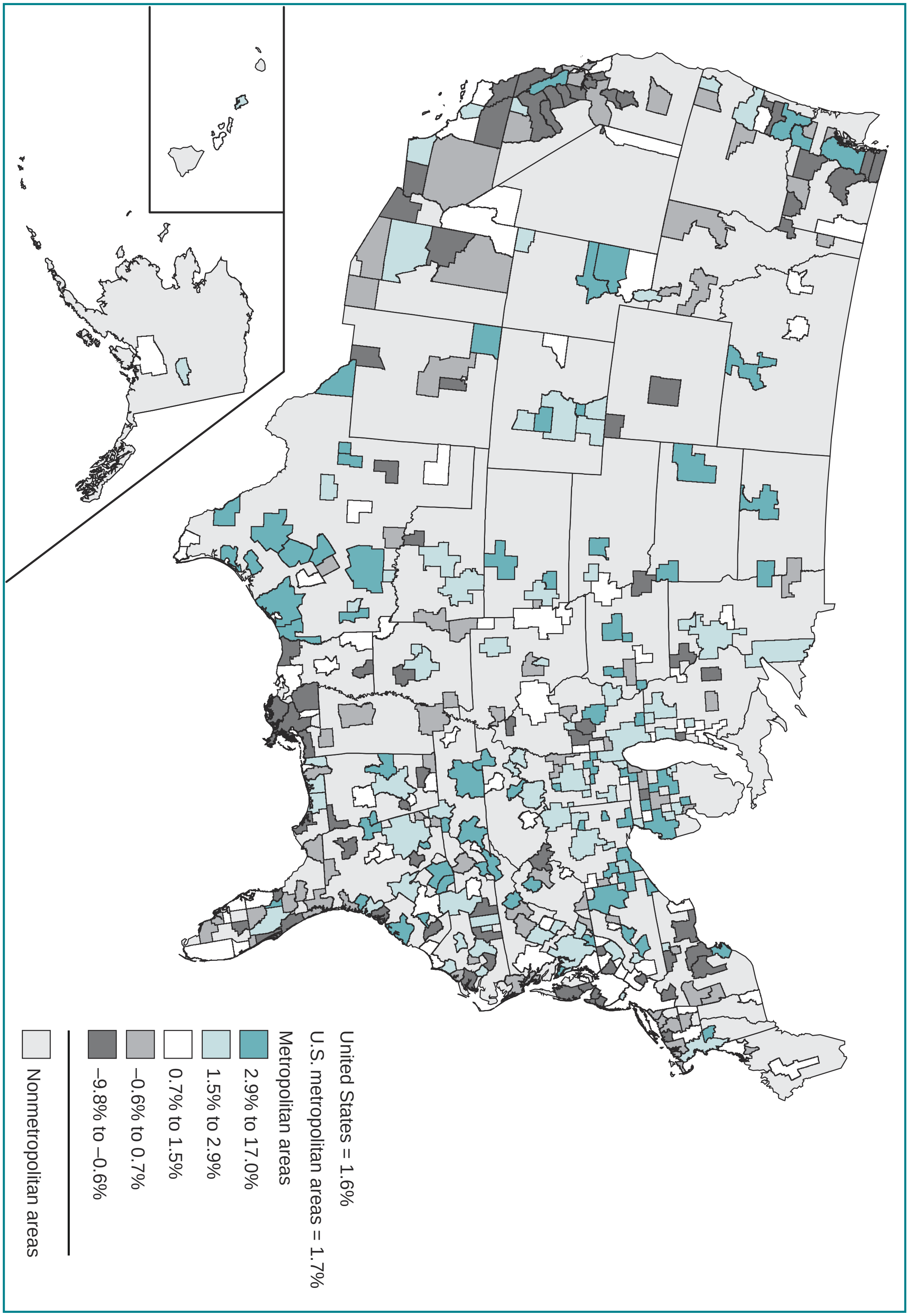
4. Subsector industry detail is not available for advance statistics.

Chart 1. Percent Change in Real Gross Domestic Product (GDP) by Metropolitan Area, 2012



U.S. Bureau of Economic Analysis

Chart 2. Percent Change in Real Gross Domestic Product (GDP) by Metropolitan Area, 2011



U.S. Bureau of Economic Analysis

medium-size metropolitan areas was in Grand Rapids-Wyoming, MI, where furniture and related product manufacturing is heavily concentrated.

Most metropolitan areas (277) fall within the small-size group, which includes areas with populations of less than 500,000. GDP for small metropolitan areas ranges from $28.6 billion (Anchorage, AK) to $1.8 billion (Grants Pass, OR). The average wage per job for this group was $22,584 in 2011, which was notably lower than that of the U.S. metropolitan area total. Metropolitan areas in this group have above average concentrations in health care and social assistance; government; and agriculture, forestry, fishing, and hunting. The strongest industry concentration among small metropolitan areas in 2011 was in Dalton, GA where textile and textile product mills is 264.5 times more concentrated, relative to the nation.

Industry Contributions to Regions and Metropolitan Areas

Growth in real GDP across U.S. metropolitan areas in 2012 was primarily attributable to growth in durable-goods manufacturing, wholesale and retail trade, and financial activities. For the nation, durable-goods manufacturing grew 9.1 percent in 2012 after growing 6.8 percent in 2011; trade grew 4.3 percent in 2012 after growing 1.5 percent in 2011; and financial activities grew 2.1 percent in 2012 after growing 0.3 percent in 2011. The growth in these industries was similar for total real GDP for U.S. metropolitan areas.[5]

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 averaged growth of 3.1 percent in 2012 after growing 1.9 percent in 2011.

Table A. Ten Largest Metropolitan Areas Ranked by Real Gross Domestic Product (GDP), 2012

Rank		Real GDP [millions of chained (2005) dollars]
1	New York-Newark-Jersey City, NY-NJ-PA	1,173,487
2	Los Angeles-Long Beach-Anaheim, CA	670,974
3	Chicago-Naperville-Elgin, IL-IN-WI	488,974
4	Washington-Arlington-Alexandria, DC-VA-MD-WV	389,320
5	Houston-The Woodlands-Sugar Land, TX	385,683
6	Dallas-Fort Worth-Arlington, TX	372,652
7	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	311,787
8	San Francisco-Oakland-Hayward, CA	309,847
9	Boston-Cambridge-Newton, MA-NH	295,829
10	Atlanta-Sandy Springs-Roswell, GA	256,357

The three areas with the fastest real GDP growth in 2012 were New Orleans-Metairie, LA (7.6 percent), San Francisco-Oakland-Hayward, CA (7.4 percent), and Austin-Round Rock, TX (6.5 percent) (table B).

The fastest growing regions in 2012 were the Southwest region (4.1 percent) and the Far West region (3.3 percent); trade was the largest contributor to growth in both regions.

Table B. Ten Fastest Growing Large Metropolitan Areas, 2012

Rank		Percent change
1	San Francisco-Oakland-Hayward, CA	7.4
2	Houston-The Woodlands-Sugar Land, TX	5.3
3	Dallas-Fort Worth-Arlington, TX	4.3
4	Los Angeles-Long Beach-Anaheim, CA	3.1
5	Atlanta-Sandy Springs-Roswell, GA	2.6
6	Chicago-Naperville-Elgin, IL-IN-WI	2.4
7	Boston-Cambridge-Newton, MA-NH	2.3
8	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	1.5
9	New York-Newark-Jersey City, NY-NJ-PA	1.4
10	Washington-Arlington-Alexandria, DC-VA-MD-WV	0.7

Advance Statistics on Gross Domestic Product (GDP) by Metropolitan Area for 2012

As part of the 5-month acceleration in the release of the Bureau of Economic Analysis' 2012 local area personal income statistics, the August release of advance metropolitan area personal income was discontinued. The loss of this data source necessitated a delay in the release of 2011 advance GDP by metropolitan-area statistics until February 2013. To improve the timeliness of the release of these advance statistics and to return to the previous release date (September), a new data source was identified and the advance GDP methodology was modified.

As with the previous releases of advance statistics, the 2012 advance statistics 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 2014.

The advance statistics are prepared at the sector level of the North American Industry Classification System. The advance 2012 statistics use subsector-level industry detail for unpublished county wages for metropolitan areas from the Bureau of Labor Statistics' Quarterly Census of Employment and Wages, and the advance 2012 current-dollar statistics on GDP by state, which were released on June 6, 2013. The annual percent change in county wages from 2011 to 2012 was calculated and then applied to the county GDP statistics underlying the statistics on GDP by metropolitan area for 2011. These extrapolated statistics for all sectors were scaled to the advance statistics on GDP by state for 2012 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.

5. See the box "Relation of Gross Domestic Product (GDP) by Metropolitan Area to National GDP".

Durable-goods manufacturing

In 2012, durable-goods manufacturing contributed to real GDP growth in 356 of the nation's 381 metropolitan areas and in all BEA regions. This industry accounted for 6.2 percent of total GDP in 2012 and contributed more than any other industry to growth in real GDP (0.52 percentage point) (table 2).

Growth in durable-goods manufacturing was most prominent in the Great Lakes region, where 7 of the industry's 10 largest contributions to growth occurs and where the industry contributed to growth in 52 of the region's 55 metropolitan areas. The industry's largest contributions to growth occurred in Elkhart-Goshen, IN, and Columbus, IN, where the industry added more than 8 percentage points to real GDP growth in 2012. These two areas were among the fastest growing small metropolitan areas in 2012 (table C).

Table C. Ten Fastest Growing Small Metropolitan Areas, 2012

Rank		Percent change
1	Odessa, TX	14.1
2	Elkhart-Goshen, IN	11.4
3	St. Joseph, MO-KS	9.8
4	Columbus, IN	9.6
5	Victoria, TX	8.7
6	Bismarck, ND	8.5
7	Kokomo, IN	8.4
8	Greenville, NC	5.6
9	Beckley, WV	5.6
10	Longview, WA	5.6

Durable-goods manufacturing also drove growth in other regions. Of the 8 metropolitan areas across the nation in which growth in this industry was more than $2 billion, 4 were in the Far West region. That region included the 3 metropolitan areas with the largest growth in durable-goods manufacturing. Durable-goods manufacturing contributed more than 2 percentage points to growth in real GDP in the Far West metropolitan areas of Portland-Vancouver-Hillsboro, OR-WA (3.51 percentage points), Grants Pass, OR (2.64 percentage points), and Albany, OR (2.49 percentage points).

Wholesale and retail trade

In 2012, wholesale and retail trade contributed to real GDP growth in 363 of the nation's 381 metropolitan areas and in all BEA regions. Trade industries accounted for 11.9 percent of total GDP and contributed 0.51 percentage point to growth in real GDP. Trade industries were the largest contributor to growth in 39 metropolitan areas in 2012. The effect of growth in trade industries was strongest in the Southwest and Plains regions. These industries contributed 3 percentage points or more to GDP growth in Victoria, TX (3.26 percentage points) and Odessa, TX (3.10 percentage points).

Financial activities

In 2012, financial activities contributed to real GDP growth in 231 of the nation's 381 metropolitan areas and in 7 of the 8 BEA regions. The industry accounted for 21.4 percent of total GDP in 2012 and contributed 0.45 percentage point to growth in real GDP. It was the largest contributor to growth in 17 metropolitan areas nationwide, including 5 metropolitan areas in the Mideast, most notably in Ocean City, NJ, where financial activities contributed 2.03 percentage points to growth. The industry contributed 2 percentage points or more to growth in several other areas: Missoula, MT (3.36 percentage points); Eau Claire, WI (2.35 percentage points); Bloomington, IL (2.32 percentage points); and Minneapolis-St. Paul-Bloomington, MN-WI (2.04 percentage points).

Although financial activities was the third largest contributor to growth to the nation's metropolitan areas, it subtracted from growth in 150 metropolitan areas. The industry's decline was most pronounced in the Southeast, where the industry subtracted from growth in 47 metropolitan areas, most notably Hammond, LA (6.69 percentage points); Punta Gorda, FL (4.90 percentage points); and Gainesville, GA (3.18 percentage points).

Construction

After 8 consecutive years of decline, construction rebounded in 2012, making a positive contribution to

Relation of Gross Domestic Product (GDP) by Metropolitan Area to National GDP

The statistics of GDP by metropolitan area that were released on September 17, 2013, are consistent with the GDP by state statistics released in June 2013 and incorporate revisions to national GDP by industry released by the Bureau of Economic Analysis (BEA) in December 2012. However, these statistics do not incorporate the 2013 comprehensive revision to the national income and product accounts, which was released in July. The comprehensive revision included the capitalization of research and development expenditures and artistic originals and improved measures of transactions for defined benefit pensions; these improvements will be included in the September 2014 release of GDP by metropolitan area statistics. Changes in GDP will likely be concentrated in metropolitan areas where industries affected by these revisions account for a notable portion of total GDP. For more information, see "Preview of the 2013 Comprehensive Revision of the Industry Economic Accounts" in the June 2013 issue of the SURVEY OF CURRENT BUSINESS.

growth in real U.S. GDP by metropolitan area. This industry contributed to growth in all 8 BEA regions and in 248 metropolitan areas. Its largest contributions to growth occurred in Odessa, TX (2.62 percentage points) and Brunswick, GA (2.05 percentage points).

Agriculture, forestry, fishing, and hunting

In contrast to construction, agriculture, forestry, fishing, and hunting subtracted from real GDP growth in 2012. This industry subtracted from real GDP growth in 6 of the 8 BEA regions and in 269 metropolitan areas. It offset real GDP growth in several metropolitan areas in California, which was affected by drought conditions in 2012.

Per Capita Real GDP by Metropolitan Area

Per capita real GDP for metropolitan areas was $45,604 in 2012, 6.6 percent higher than the national average.[6] The five metropolitan areas with the highest per capita real GDP in 2012 were Midland, TX; San Jose-Sunnyvale-Santa Clara, CA; Bridgeport-Stamford-Norwalk, CT; Casper, WY; and San Francisco-Oakland-Hayward, CA (table 3). Midland, TX, had the highest per capita real GDP in the nation at $100,178, which was 134 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 2012 were The Villages, FL; Lake Havasu City-Kingman, AZ; Sebring, FL; McAllen-Edinburg-Mission, TX; and Punta Gorda, FL. The Villages, FL, had the lowest per capita real GDP in the nation, at $15,198, which was 64 percent lower than the national average.

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

Revisions

The statistics on GDP by metropolitan area for 2001–2011 that were released in February have been revised. The revisions are consistent with the annual revision of GDP by state for 2009–2011 released on June 6, 2013.[7] In addition, the revisions for 2009–2011 reflect revisions to underlying source data.

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 metropolitan areas (in which the composition of metropolitan areas did not change) was 1.1 percent for 2009–2011. The mean absolute revision was less than 5.0 percent for all areas except Mount Vernon-Anacortes, WA (8.9 percent); Lake Charles, LA (8.3 percent); Bellingham, WA (6.4 percent); and Waterloo-Cedar Falls, IA (5.9 percent).

7. See "Gross Domestic Product by State: Advance Statistics for 2012 and Revised Statistics for 2009–2011," Survey of Current Business 93 (July 2013): 115–120.

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 6, 2013, which are based on the annual revision of the national income and product accounts (NIPAs) released in July 2012 and the national GDP by industry statistics released on April 25, 2013. 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 nonmetropolitan 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.

Revisions in nondurable-goods manufacturing led to revisions in current-dollar GDP for Mount Vernon-Anacortes, WA; Lake Charles, LA; and Bellingham, WA. Revisions in durable-goods manufacturing led to revisions in current-dollar GDP for Waterloo-Cedar Falls, IA.

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 metropolitan areas (in which the composition of metropolitan areas did not change) was 1.0 percentage point for 2009–2011. The mean absolute revision of growth rates was less than 5 percentage points for all areas except Mount Vernon-Anacortes, WA (7.7 percent); Lake Charles, LA (7.5 percent); and Bellingham, WA (5.4 percent). Revisions to nondurable-goods manufacturing led to revisions to real GDP growth rates for all three metropolitan areas.

Data Availability

Summary statistics on gross domestic product (GDP) by metropolitan area in current dollars and in real chained (2005) dollars for 2001–2012 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 2012 for 24 sectors based on the North American Industry Classification System.
- Current-dollar and real GDP by metropolitan area and quantity indexes for 2001–2011 for 24 NAICS-based sectors and for 61 NAICS-based subsectors.
- Per capita real GDP by metropolitan area for 2001–2012.

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

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Tables 1–6 follow.