Gross Domestic Product by State

Advance Statistics for 2012 and Revised Statistics for 2009–2011

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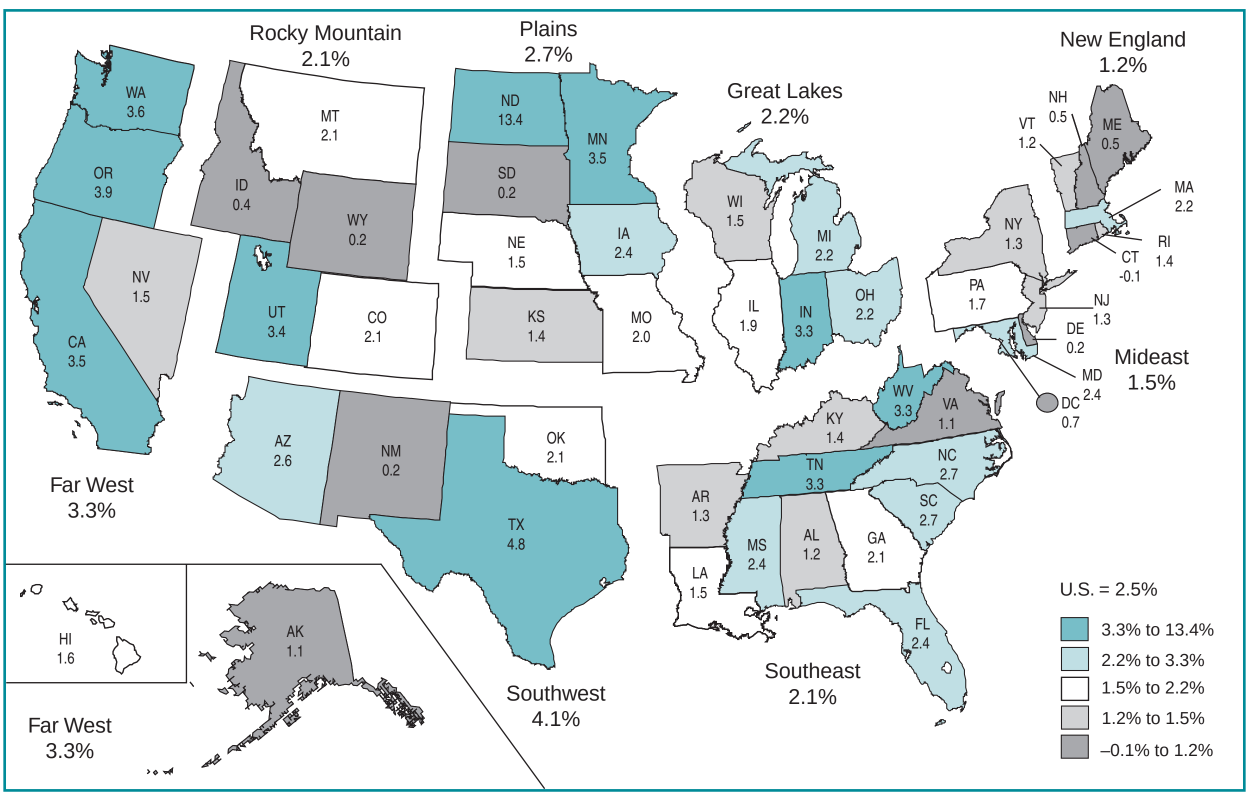
ECONOMIC growth was widespread across states in 2012. Real gross domestic product (GDP) grew in all eight BEA regions and in 49 states and the District of Columbia in 2012, according to statistics released by the Bureau of Economic Analysis (BEA). The Southwest was the fastest growing region, increasing 4.1 percent. North Dakota was the fastest growing state, increasing 13.4 percent (chart 1 and table 1).

U.S. real GDP by state—a measure of nationwide economic activity calculated as the sum of the GDP of all states deflated by a national price measure—increased 2.5 percent in 2012.

Other highlights include the following:

- Durable-goods manufacturing was the leading contributor to growth in U.S. real GDP by state in 2012. This industry grew 9.1 percent after growing 6.8

Chart 1. Percent Change in Real Gross Domestic Product by State, 2012



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percent in 2011. In 2012, growth in this industry accounted for nearly a quarter of U.S. growth and was the leading contributor to growth in seven of the eight BEA regions and in 22 states.

- Finance and insurance was the second-largest contributor to growth in U.S. real GDP by state, accounting for 11.0 percent of U.S. growth in 2012. This industry grew 3.6 percent, rebounding from –0.6 percent in 2011. It was the leading contributor to growth in the Mideast region.
- Wholesale trade was the third-largest contributor to growth in U.S. real GDP by state. In 2012, this industry grew 4.8 percent after growing 3.0 percent in 2011.
- Construction turned up in 2012 after 8 consecutive years of contraction, increasing 3.2 percent nationally.
- Agriculture, forestry, fishing, and hunting continued to subtract from growth in real GDP by state, declining 3.7 percent in 2012 after declining 13.6 percent in 2011.

GDP by state is the most comprehensive measure of economic activity in states—the counterpart to GDP in the national income and product accounts (NIPAs).[1] On June 6, 2013, BEA released advance current-dollar and real (inflation-adjusted) statistics on GDP by state for 2012.[2] The release also provided revised statistics for 2009–2011.

This article focuses on the main industries that contributed to regional growth in 2012. It then discusses per capita real GDP by state and compares it with per capita personal income. It concludes by discussing the revisions to GDP by state for 2009–2011.

Industry contributions to regional and state growth in 2012

Durable-goods manufacturing was the leading contributor to U.S. real GDP by state growth in 2012. Growth in this industry contributed 0.55 percentage point, or approximately 22 percent, of the nation's real GDP growth of 2.5 percent (table 2). This industry contributed to real GDP growth in all states and regions except Hawaii and the District of Columbia. It was the leading contributor to growth in all states in the Great Lakes region, accounting for nearly 40 percent of the region's growth; this industry accounted for more than half of the growth rate in Indiana and Wisconsin and nearly half (45 percent) in Michigan. This industry contributed more than 1.0 percentage point to growth in five states—Oregon (2.87 percentage points), Indiana (1.70 percentage points), Kentucky (1.12 percentage points), Tennessee (1.08 percentage points) and Utah (1.03 percentage points).

Nationally, finance and insurance was the second-largest contributor to the growth in U.S. real GDP by state, contributing 0.28 percentage point. This industry contributed to growth in seven of the eight BEA regions and in 45 states and the District of Columbia. It was the leading contributor to growth in the Mideast region and in six states. This industry contributed 0.75 percentage point or more to the growth in real GDP in Delaware, South Dakota, and Utah.

Although finance and insurance was the second-largest contributor to national growth, it subtracted from growth in the New England region and in five states. It offset growth in Connecticut, the only state in which growth contracted (–0.1 percent) in 2012.

Wholesale trade was the third-largest contributor to growth (0.27 percentage point) for the nation. This industry contributed to real GDP growth in all eight BEA regions and in 48 states and the District of Columbia. It contributed 0.45 percentage point to growth in the Southwest region and 0.35 percentage point in the Plains region. Wholesale trade contributed more than 0.50 percentage point to growth in North Dakota (1.54 percentage points) and Texas (0.52 percentage point) and was the largest contributor to real GDP growth in New Jersey and Maine.

Construction, which had declined nationally for 8 years, rebounded in 2012, making a positive contribution to growth in U.S. real GDP by state. This industry contributed to growth in all eight BEA regions and in 43 states and the District of Columbia. Its largest contribution to growth was in North Dakota (1.32 percentage points), where the oil boom continued to create an increased demand for housing and infrastructure.

Mining was not a major contributor to real GDP growth for the nation, but it was the largest contributor to growth in North Dakota, West Virginia, and Texas. In North Dakota, the fastest growing state in 2012, mining contributed 3.26 percentage points to real GDP growth of 13.4 percent. Mining has increased in importance in North Dakota's economy as a result of the oil boom due to the recovery of oil from the Bakken region's shale formation; in 2009, mining accounted for 3.5 percent of North Dakota's current-dollar GDP, and in 2012, mining's share had nearly tripled, accounting for 9.6 percent of the state's current-dollar GDP. In West Virginia, mining contributed

1. This measure differs conceptually from GDP in the national income and product accounts, though the values are similar. For a description of the differences, see the box "Gross Domestic Product (GDP) by State."

2. For a description of the abbreviated methodology used to prepare the advance statistics, see the box "Advance Statistics on Gross Domestic Product (GDP) by State for 2012."

2.44 percentage points to real GDP growth of 3.3 percent. In Texas, the second-fastest growing state in 2012, mining contributed 0.92 percentage point to real GDP growth of 4.8 percent; mining in Texas, one of the largest states in the nation, accounted for 43 percent of the nation's mining in 2012.

In contrast, agriculture, forestry, fishing, and hunting subtracted from real GDP growth in 2012. This industry subtracted from growth in six of the eight BEA regions and in 35 states. In the Plains' states, this industry subtracted 0.28 percentage point from growth primarily because of the drought that affected the region in 2012. South Dakota was particularly hard hit: agriculture, forestry, fishing, and hunting subtracted 2.03 percentage points from real GDP growth. The drought also adversely effected this industry in several other states in the Plains region—Nebraska (–0.82 percentage point), Iowa (–0.49 percentage point), and Kansas (–0.41 percentage point).

Per capita real GDP by state

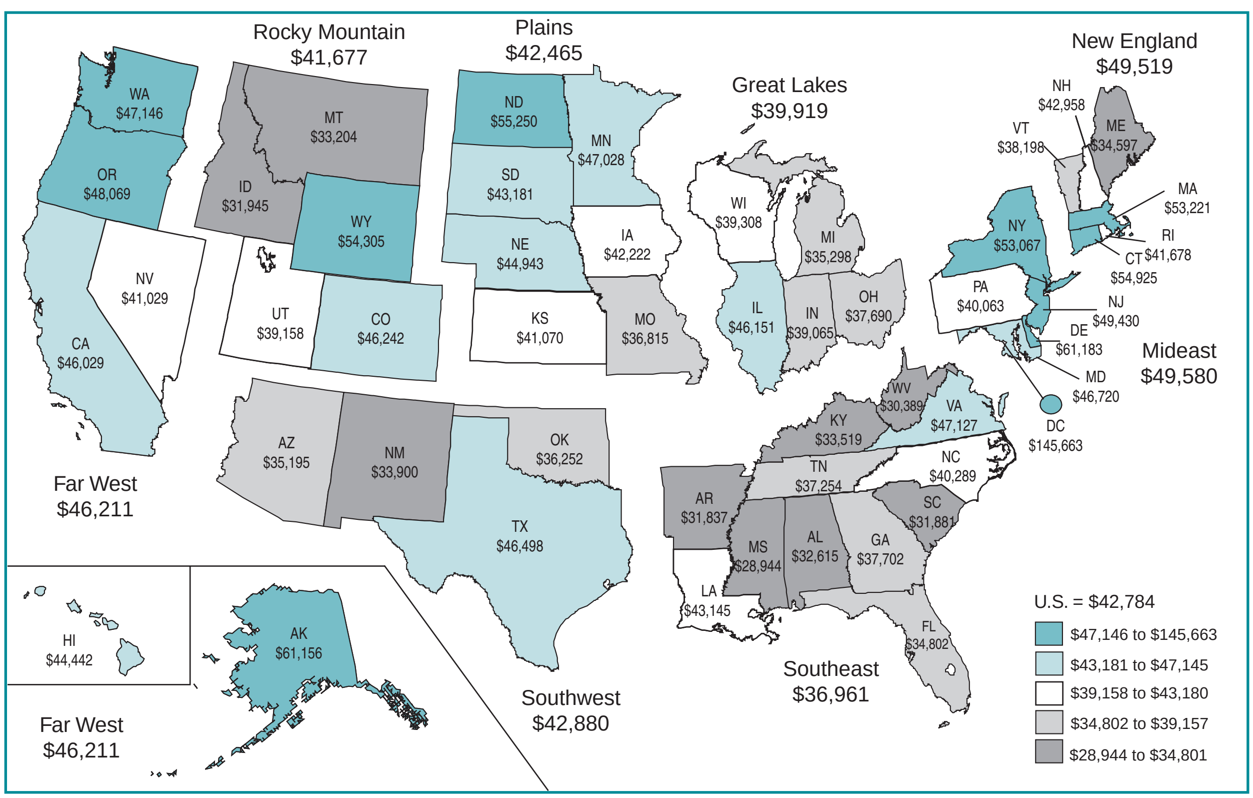
Per capita real GDP by state ranged from $61,183 in Delaware to $28,944 in Mississippi (chart 2 and table 3).

Delaware's per capita real GDP was 43 percent above the national average. The finance and insurance sector was the leading contributor to the state's high per capita real GDP; finance and insurance accounted for 37 percent of Delaware's economy in 2012. Alaska had the second-highest per capita real GDP at $61,156, which was also 43 percent above the national average. North Dakota, Connecticut, and Wyoming had the next highest per capita real GDP. States with highest per capita real GDP are widespread with these five states representing five of the eight BEA regions.

West Virginia, Arkansas, South Carolina, and Idaho joined Mississippi as the states with the lowest per capita real GDP in 2012. Mississippi's per capita real GDP was 32 percent below the national average. States with the lowest per capita real GDP are more concentrated in an area of the United States: these five states represent two of the eight BEA regions, and four of these states represent the Southeast region.

Per capita real GDP by state and per capita personal income. Per capita real GDP by state and per capita personal income both measure the economic well-being of a state. Per capita real GDP includes corporate income, but per capita personal income does

Chart 2. Per Capita Real Gross Domestic Product by State, 2012



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not. Per capita personal income also includes entitlements, such as social security and Medicare payments, but per capita real GDP by state does not. In 2012, the rankings for per capita real GDP by state and per capita personal income showed many similarities.

The District of Columbia had the highest per capita real GDP and the highest per capita personal income. The District of Columbia's per capita real GDP was more than three times the national average and reflects that many people commute into the District of Columbia for work.[3]

Seven of the states that ranked in the top 10 in per capita real GDP also ranked in the top 10 for per capita personal income.

Eight of the states that ranked in the bottom 10 in per capita real GDP also ranked in the bottom in per capita personal income. Mississippi ranked last in both per capita real GDP and per capita personal income.

Several states ranked in the highest or lowest category in one measure but not in the other. Alaska ranked second in per capita real GDP, reflecting the large concentration of the mining industry, but it ranked tenth in per capita personal income. Oregon ranked ninth in per capita real GDP, but it ranked 33rd in per capita personal income. Maryland ranked thirteenth in per capita real GDP, but it ranked fifth in per capita personal income.

3. GDP by state is measured by place of work; personal income is measured by place of residence.

Revisions

BEA's June release of GDP by state included revised statistics for 2011 at a more detailed industry level and revised statistics for 2009–2010.[4] The revised statistics incorporate new and revised state source data, most notably the annual revision of state personal income; the Annual Survey of Manufactures (ASM) data, revised for 2010 and new for 2011; data from the National Association of Insurance Commissioners for 2011; new *State and Local Government Finances* data for 2010; and new *State Government Finances* for 2011. In addition, revisions to GDP by state incorporated newly available and revised source data from BEA's national accounts.[5]

Revised advance statistics for 2011. Revisions to the advance statistics of GDP by state for 2011, which were released in June 2012, were generally larger than the revisions for 2009–2010. The advance statistics for

4. The advance statistics for 2011 that were released in June 2012 have been revised.

5. This revision to GDP by state incorporated the July 2012 annual revision of the national income and product accounts and the November 2012 annual revision of the annual industry accounts.

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

The advance statistics on GDP by state are based on source data that are incomplete or subject to further revision by the source agency. Revised statistics that are based on more complete data, will be released in the summer of 2014. The advance statistics are prepared at the sector level of the 2002 North American Industry Classification System. The advance 2012 statistics draw heavily on preliminary 2012 state earnings by industry released on March 27, 2013, and on advance 2012 statistics on GDP by industry released on April 25, 2013. As a result, the advance 2012 statistics on GDP by state are consistent with the national annual industry accounts and the state personal income accounts.

The 2012 advance statistics on current-dollar GDP by state were extrapolated from industry value added (GDP) for 2011, using the change in state earnings by industry from state personal income statistics. For two industries, preliminary source data were incorporated: the advance statistics for the agriculture, forestry, fishing, and hunting sector incorporated preliminary data on farm sector cash receipts from the U.S. Department of Agriculture, and the advance statistics for the mining sector incorporated preliminary data on value of production and prices from the U.S. Department of the Interior and the U.S. Department of Energy.

The 2012 advance statistics on GDP by state for all sectors were scaled to the advance 2012 statistics on GDP by industry by allocating the difference between the two measures to the states. The sector statistics were then summed to total GDP for the states.

The advance statistics on real GDP by state for detailed industries are derived by applying national chain-type price indexes for value added to the industry values of current-dollar GDP by state. The chain-type index formula that is used in the national accounts is then used to calculate the real values for sectors and total real GDP for the states.

The advance U.S. real GDP by state differs from the corresponding GDP values in the national income and product accounts (NIPAs) because of differences in source data and vintages of data used to estimate GDP by state and NIPA GDP.

2011 correctly indicated the direction of change in 42 states and the District of Columbia, and they correctly identified whether a state grew at a faster or a slower pace than U.S. real GDP growth in 33 states and the District of Columbia. Additionally, the advance statistics correctly identified 8 of the 17 states with the fastest growth, 7 of the 16 states with moderate growth, and 11 of the 17 states with the slowest growth.

Current-dollar GDP by state. For 2011, revisions to current-dollar GDP by state were less than 3.5 percent in absolute terms for all states except three—Hawaii, Louisiana, and South Dakota (table 4).

For Hawaii, current-dollar GDP by state was revised up 4.5 percent. The upward revision was primarily due to an upward revision in real estate that was due to an upward revision in the state's imputed rent for owner-occupied housing and an upward revision to real estate for the nation.

For Louisiana, current-dollar GDP by state was revised down 4.2 percent. The downward revision was mainly due to a downward revision in petroleum and coal products manufacturing. In addition to the national downward revision for this industry, the ASM data for the revised estimate indicated less activity than

Gross Domestic Product (GDP) by State

Gross domestic product (GDP) by state is calculated as the sum of incomes earned by labor and capital and the costs incurred in the production of goods and services. It includes the wages and salaries that workers earn, the income earned by sole proprietorships and partnerships and corporations, and taxes on production and imports—such as sales, property, and federal excise taxes.

In contrast, GDP in the national income and product accounts (NIPAs) is calculated as the sum of spending by consumers, businesses, and government on final goods and services plus investment and net foreign trade. In theory, income earned should equal spending, but because of different data sources, income earned, usually referred to as "gross domestic income (GDI)," does not always equal what is spent (GDP). The difference is referred to as the "statistical discrepancy."

U.S. GDP by state differs from the GDP in the NIPAs and thus from GDP by industry in the annual industry accounts, because the U.S. GDP by state excludes federal military and civilian activity located overseas, which cannot be attributed to a particular state. The 2012 statistics on GDP by industry are identical to those from the 2012 annual revision of the NIPAs released in July 2012. However, because of revisions since July 2012, NIPA GDP may differ from U.S. GDP by state.

The statistics on GDP by state for industries for 1997 forward are based on the North American Industry Classification System (NAICS), and the statistics for industries for 1963–97 are based on the Standard Industrial Classification (SIC). For each industry, the three components of GDP by state are presented: compensation of employees, taxes on production and imports less subsidies, and gross operating surplus. Compensation of employees is the sum of wage and salary accruals, employer contributions for employee pension and insurance funds, and employer contributions for government social insurance. Taxes on production and imports is the sum of federal excise taxes and customs duties, state and local government sales taxes, property taxes (including residential real estate taxes), motor vehicle licenses, severance taxes, other taxes, and special assessments. Gross operating surplus is the sum of corporate profits, proprietors' income, rental income of persons, net interest, capital consumption allowances, business transfer payments, nontax payments, and the current surplus of government enterprises.

Current-dollar statistics on GDP by state and its components are scaled to equal national totals of current-dollar GDP by industry and its components for all industries except federal military and civilian government. If the national total for an industry differs from the initial sum-of-states total for an industry, the difference between the national total and the sum-of-states total is allocated to the states according to the state distribution of the initial estimates.

The statistics on real GDP by state are prepared in chained (2005) dollars. Real GDP by state is an inflation-adjusted measure of each state's GDP that is based on national prices of the goods and services produced in that state. The statistics on real GDP by state and on quantity indexes with a base year of 2005 were derived by applying national chain-type price indexes for value added to current-dollar GDP by state for the 64 detailed NAICS-based industries for 1997 forward and for the 63 detailed SIC-based industries for 1977–97.

The chain-type index formula that is used in the national accounts is then used to calculate the values of total real GDP by state and of real GDP by state at more aggregated industry levels. Real GDP by state may reflect a substantial volume of output that is sold to other states and countries. To the extent that a state's output is produced and sold in national markets at relatively uniform prices (or sold locally at national prices), real GDP by state captures the differences across states that reflect the relative differences in the mix of goods and services that the states produce. However, real GDP by state does not capture geographic differences in the prices of goods and services that are produced and sold locally.

the earnings extrapolation did for the advanced estimates.

For South Dakota, current-dollar GDP by state was revised up 3.9 percent. The upward revision was primarily due to crop and animal production ("Farms") that was due to an upward revision to farm cash receipts.

For 2010, the revisions to current-dollar GDP were small. Most were less than 2.0 percent in absolute terms. The largest revisions were for Hawaii (2.6 percent), Louisiana (–2.2 percent), and Vermont (2.2 percent). The upward revisions for Hawaii and Vermont were primarily due to real estate, reflecting the trend of the national revision. The downward revision for Louisiana was driven by petroleum and coal products manufacturing, also reflecting the trend of the national revision.

For 2009, the revisions to current-dollar GDP were no more than 1.0 percent in absolute terms for all states except Connecticut (1.7 percent), Iowa (1.1 percent), Nevada (–1.1 percent), and Idaho (1.1 percent). The upward revisions for Connecticut and Iowa were primarily due to upward revisions to insurance carriers and related activities. The revisions for Nevada and Idaho were caused by revisions to real estate.

Real (chained-dollar) GDP by state. Revisions to the real GDP growth rates for 2009–2010 primarily reflect revisions to the current-dollar statistics, many of which are mentioned above. The revisions to the growth rates of real GDP were measured as a percentage point difference from the previously published growth rates.

For 2010, only two states had revisions of more than 3.0 percentage points to real GDP (in absolute terms); the mean absolute revision was 0.4 percentage point (table 5). The states with the largest absolute revisions were Louisiana (–3.6 percentage points) and Iowa (–3.2 percentage points). For Louisiana, the revision to the growth rate was caused by a downward revision to petroleum and coal products manufacturing, which also caused the current-dollar revision. For Iowa, the revision was caused primarily by a downward revision to machinery manufacturing.

For 2009, most percentage point revisions were small. The growth rate for Connecticut was revised up 1.7 percentage points, and the growth rate for Louisiana was revised up 1.4 percentage points. For Connecticut, the upward revision was caused by an upward revision to insurance carriers and related activities, which also caused the current-dollar revision. For Louisiana, the upward revision was caused primarily by an upward revision to oil and gas extraction.

Data Availability

Summary statistics on gross domestic product (GDP) by state in current dollars and in real chained (2005) dollars for 2009–2012 are presented in this article. More detailed statistics for states, BEA regions, and the United States can be accessed interactively on BEA's Web site.

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

- Advance statistics on current-dollar GDP by state, real GDP by state in chained (2005) dollars, and quantity indexes for 2012 for 24 NAICS-based sectors.
- Current-dollar and real GDP by state and quantity indexes for 1997–2011 for 81 NAICS-based subsectors.
- Current-dollar statistics of compensation of employees, taxes on production and imports less subsidies, taxes on production and imports, subsidies, and gross operating surplus for 1997–2011 for 81 NAICS-based subsectors.
- Per capita real GDP by state for 1997–2012.

E-mail gdpbystate@bea.gov or call 202–606–5340 for further information.

Acknowledgments

The statistics of gross domestic product (GDP) by state were prepared by the staff of the Regional Product Division under the direction of Charles Ian Mead, Chief, and Clifford H. Woodruff III, Chief of the Regional Product Branch. Joel D. Platt, Associate Director for Regional Economics, provided general guidance. Contributing staff members were Sharon D. Panek, Chief of the GDP by State Services Section, Zheng (Catherine) Wang, Chief of the GDP by State Goods Section, Frank T. Baumgardner, John E. Broda, LeRoynda Brooks, Lam X. Cao, Jacob R. Hinson, Yolanda B. Langford, Ralph M. Rodriguez, Todd P. Siebeneck, Robert P. Tate, and Shane T. Taylor.

Appendix A and tables 1 through 8 follow.