

Gross Domestic Product by State

New Statistics for the Fourth Quarter of 2016 and for 2016, Revised Quarterly Statistics for 2013 Through the Third Quarter of 2016, and Revised Annual Statistics for 2013–2015

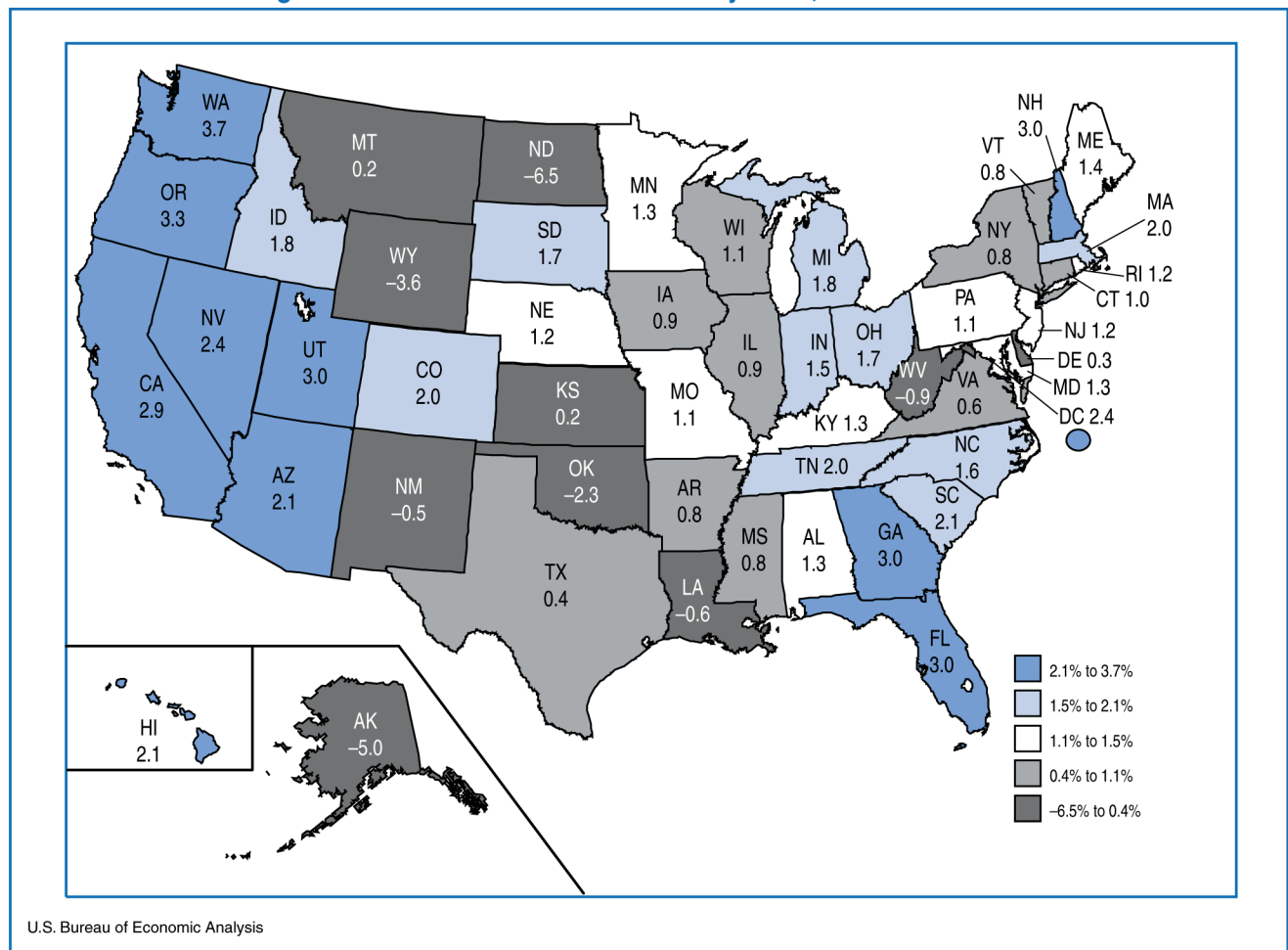
By Lam Cao and Albert Yoon

ECONOMIC GROWTH for the nation slowed in 2016. U.S. real gross domestic product (GDP) increased 1.5 percent in 2016, compared with 2.6 percent in 2015. Real GDP by state growth ranged from 3.7 percent in Washington to -6.5 percent in North Dakota (chart 1). GDP by state is the most comprehensive measure of economic activity in states—the counterpart to GDP in the national income and product accounts.

Growth in real GDP was spread across industries in 2016, with the majority of industry groups contributing to growth. Information services was the leading contributor to real GDP growth nationally followed by professional, scientific, and technical services, and health care and social assistance. In contrast, a decline in mining subtracted from real GDP growth (chart 2).

Information services grew 6.4 percent nationally

Chart 1. Percent Change in Real Gross Domestic Product by State, 2015–2016



and led real GDP growth in Washington and California—two of the fastest growing states in 2016. Information services is one of the largest industries in both states (table 1). It accounts for 10 percent of GDP in Washington and 8 percent of GDP in California, compared with 5 percent of GDP in the nation. In 2016, 6,000 new jobs were added to information services in Washington, and 19,000 new jobs were added in California.¹

1. These statistics are from the Bureau of Labor Statistics.

Chart 2. U.S. Real Gross Domestic Product Growth in Select Industries

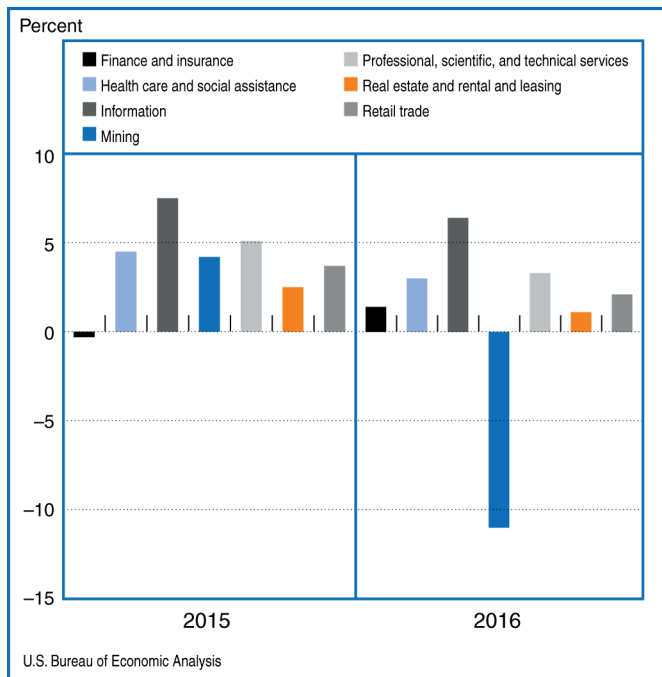


Table 1. Top Five Industries by Current-Dollar GDP for the United States, California, and Washington in 2016

	Industry	Percent of total GDP
United States	Real estate and rental and leasing	13.3
	Government	12.3
	Health care and social assistance	7.4
	Finance and insurance	7.3
	Professional, scientific, and technical services	7.3
California	Real estate and rental and leasing	16.8
	Government	12.2
	Professional, scientific, and technical services	8.6
	Information	8.4
	Durable-goods manufacturing	6.4
Washington	Real estate and rental and leasing	14.1
	Government	13.6
	Information	10.0
	Durable-goods manufacturing	10.0
	Retail trade	7.9

GDP Gross domestic product

Mining was the biggest drag on the U.S. economy, declining 11 percent in 2016. This industry was the largest detractor from growth in every state that declined in 2016—North Dakota, Alaska, Wyoming, Oklahoma, West Virginia, Louisiana, and New Mexico. Mining accounts for a large share of the economic activity in these states (table 2). The decline in mining largely reflects the suppression of oil prices since late 2014 and the boom in the production of natural gas, a substitute for coal.

Table 2. Mining Industry Gross Domestic Product (GDP) for the United States and Select States in 2016

	Current-dollar GDP (millions of dollars)	Mining's share of state total GDP (percent)	State's share of U.S. mining GDP (percent)
United States	264,580	1.4	100.0
Alaska	7,514	14.8	2.8
Louisiana	9,576	4.1	3.6
New Mexico	7,569	8.1	2.9
North Dakota	5,023	9.6	1.9
Oklahoma	18,490	10.1	7.0
West Virginia	8,400	11.4	3.2
Wyoming	7,584	20.0	2.9

Growth in the fourth quarter of 2016

Real GDP growth remained positive throughout 2016 but slowed in the fourth quarter to 1.9 percent from 3.5 percent in the third quarter (at an annualized rate). Real GDP growth in the fourth quarter ranged from 3.4 percent in Texas to 0.1 percent in Kansas and Mississippi (chart 3).

Finance and insurance and retail trade were the leading contributors to real GDP growth for the nation in the fourth quarter, growing 6.3 percent and 5.7 percent, respectively (chart 4). Professional, scientific, and technical services was the third-largest contributor, increasing 3.6 percent. Manufacturing, specifically non-durable-goods manufacturing, was the leading contributor to the deceleration in real GDP in the fourth quarter; manufacturing declined 2.9 percent.

Although the annual GDP by state statistics show a decline in mining in 2016, the industry began to recover in the fourth quarter of 2016. Mining grew 5.2 percent nationally in the fourth quarter, rebounding after six consecutive quarters of decline. Although mining's contribution to national real GDP growth was marginal, this industry did have a major impact on growth in North Dakota, West Virginia, Oklahoma, and Texas in the fourth quarter. In fact, it was the leading contributor to growth in North Dakota and West Virginia.

In North Dakota, mining grew by 14.5 percent in the fourth quarter (chart 5). Mining is one of North Dakota's most important industries, accounting for 10

Chart 3. Percent Change in Real Gross Domestic Product by State, 2016:III–2016:IV

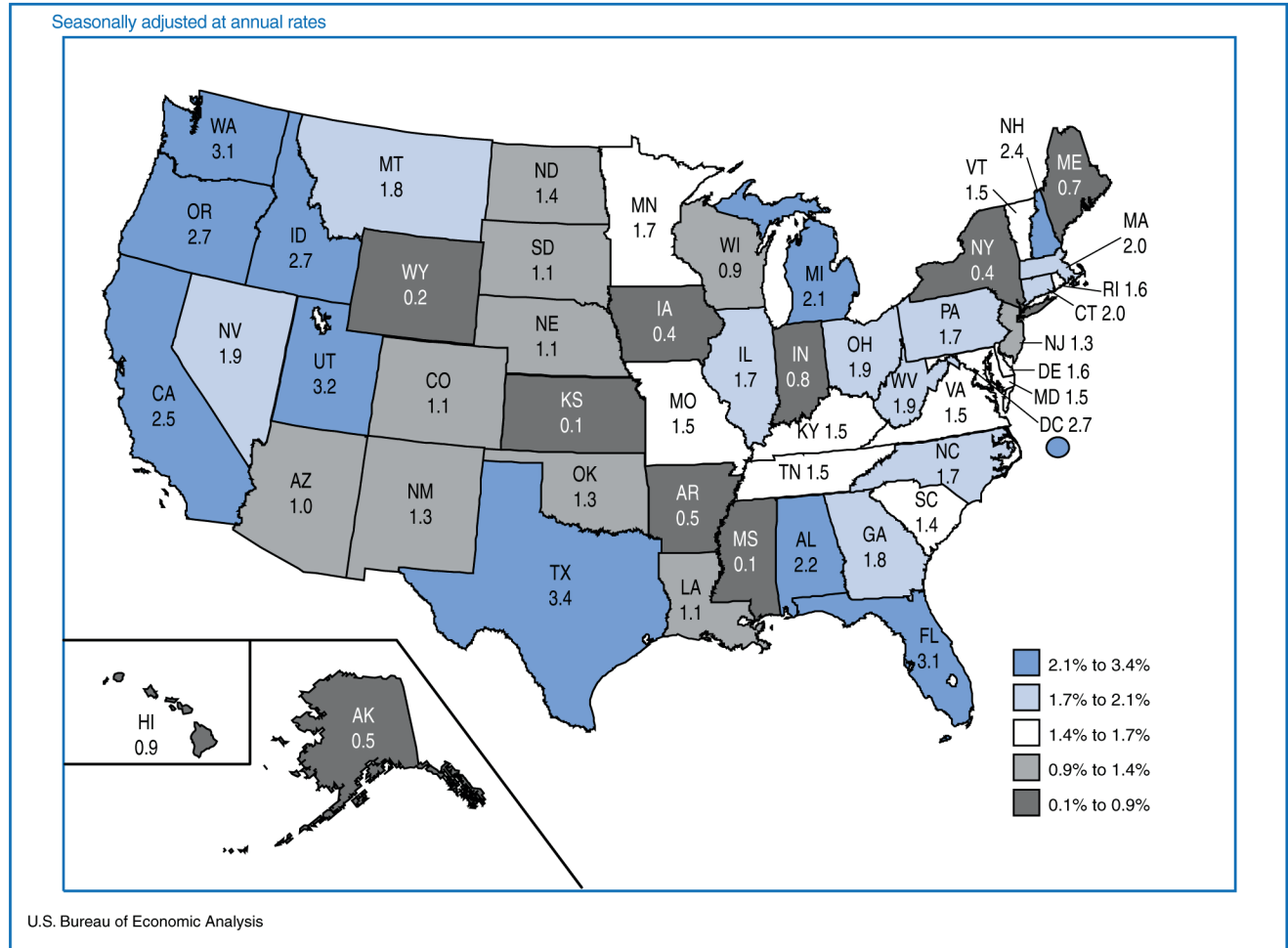


Chart 4. U.S. Real Gross Domestic Product Growth in Select Industries

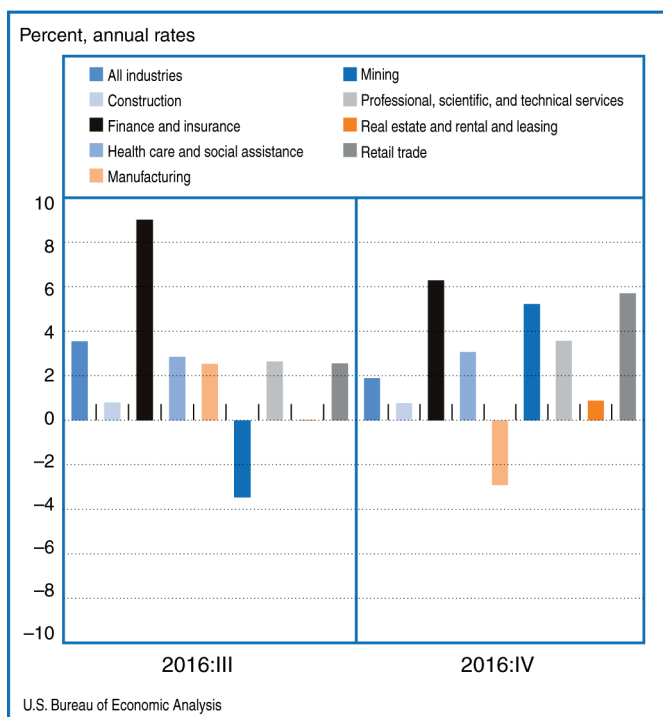
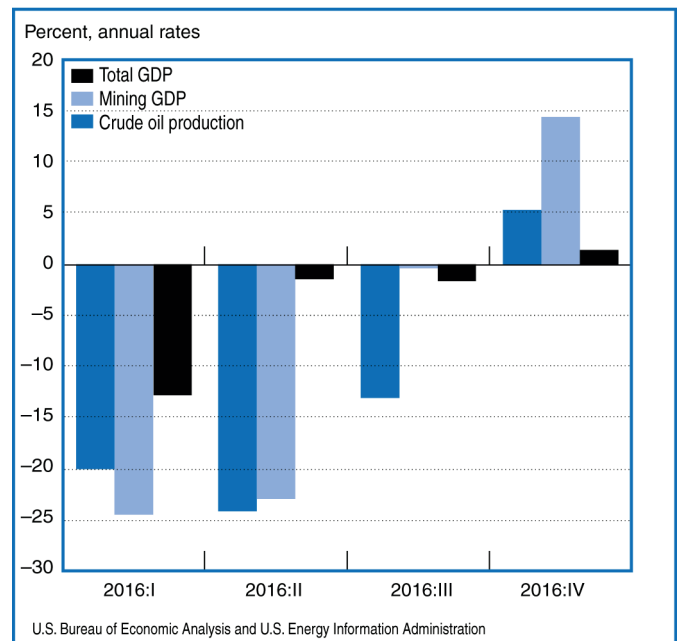


Chart 5. North Dakota Growth in Production of Crude Oil and Real Gross Domestic Product (GDP)



percent of the state’s economy. Further evidence of the importance of mining to the state can be seen by looking at the industry’s and state’s growth. The fourth

quarter of 2016 was the first time the industry’s and state’s economy grew since they both peaked in the fourth quarter of 2014. Crude oil production largely explains the decline and the rebound in mining in the state (chart 6).

In West Virginia, mining grew 15.3 percent in the fourth quarter (chart 7). Mining accounted for 11 percent of the West Virginia economy. Unlike the oil-driven recovery in North Dakota, the growth in West Virginia was mainly due to an increase in coal production (chart 8).

Chart 6. North Dakota Crude Oil Production and Real Gross Domestic Product (GDP) in Mining

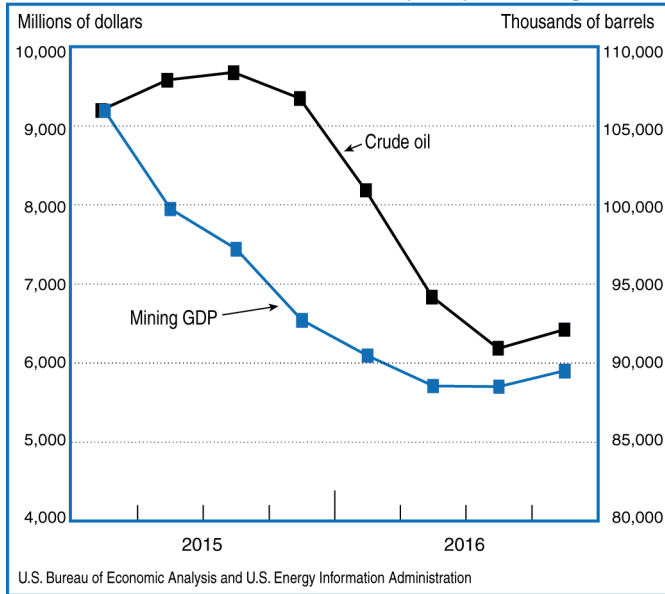


Chart 7. West Virginia Growth in Production of Coal and Real Gross Domestic Product (GDP)

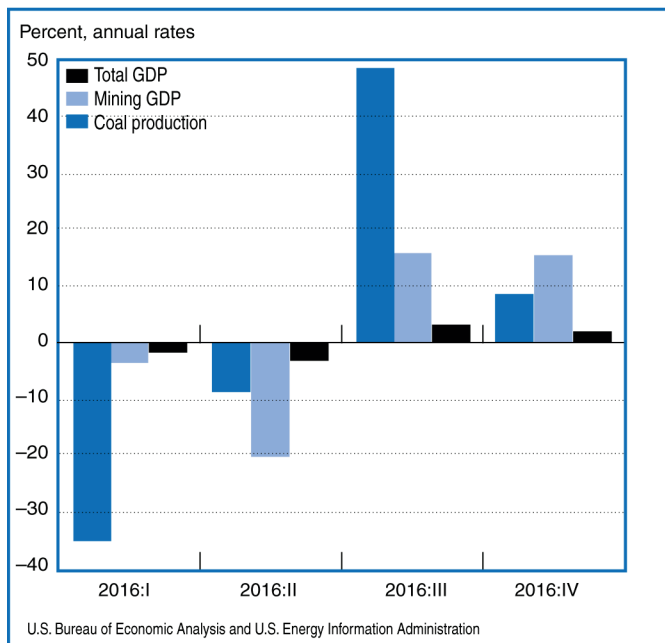
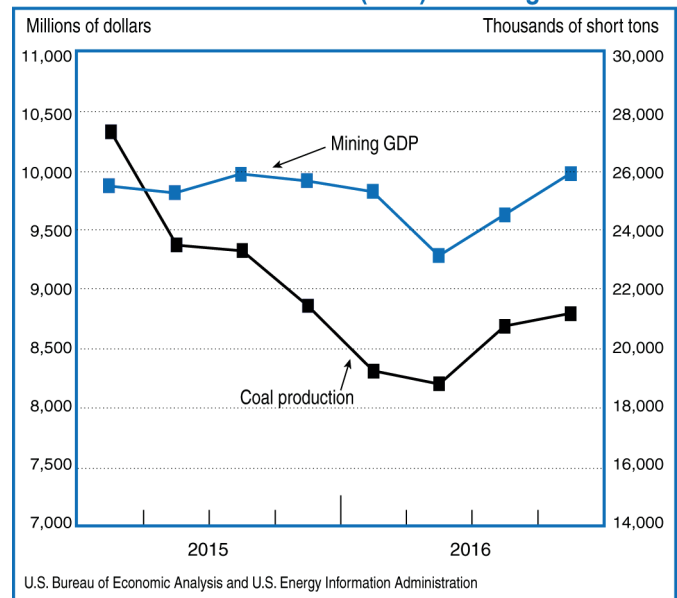


Chart 8. West Virginia Coal Production and Real Gross Domestic Product (GDP) in Mining



Revisions

BEA’s May release of GDP by state included revised quarterly statistics for the first quarter of 2013 to the third quarter of 2016, which primarily reflect the results of revisions to the annual statistics for 2013–2015 and the new annual statistics for 2016.

The revised statistics incorporate new and revised state source data, in particular, revised Annual Survey of Manufactures data for 2014 and new data for 2015, new *State and Local Government Finance* statistics for 2014, new Federal Deposit Insurance Corporation bank deposit data for 2015, and new insurance revenue and loss data for 2015. In addition, the revisions incorporated revised state intellectual property estimates

produced by the Bureau of Economic Analysis. The annual update of the annual industry accounts was incorporated in December 2016 and did not change for this revision.

All revisions to GDP by state were relatively small. The mean absolute revisions (MARs) for 2013–2015

ranged from 0.1 percent to 0.9 percent. Revisions to the advance statistics of GDP by state for 2015, which were released in December 2016, were generally small, but as expected, they were larger than revisions to the statistics for 2013–2014 (table 3).

Table 3. Revisions to the 2015 Growth Rates of Real Gross Domestic Product (GDP) by State

	Previously published	Revised		Previously published	Revised
United States ¹	2.5	2.6	Southeast	2.4	2.4
New England	2.4	2.8	Alabama	0.9	1.1
Connecticut	0.7	2.2	Arkansas	0.5	0.2
Maine	1.1	1.1	Florida	4.0	3.6
Massachusetts	3.8	3.7	Georgia	2.6	2.5
New Hampshire	1.4	2.1	Kentucky	1.4	1.1
Rhode Island	1.4	1.1	Louisiana	1.0	0.5
Vermont	0.4	0.9	Mississippi	0.5	0.3
Mideast	1.7	1.7	North Carolina	2.0	2.7
Delaware	2.7	2.2	South Carolina	2.5	2.8
District of Columbia	2.2	1.6	Tennessee	2.7	3.1
Maryland	2.0	2.1	Virginia	2.0	2.4
New Jersey	2.0	1.6	West Virginia	1.4	0.4
New York	0.9	1.2	Southwest	4.0	3.8
Pennsylvania	2.8	2.6	Arizona	1.4	1.4
Great Lakes	1.6	1.3	New Mexico	1.7	1.7
Illinois	1.8	1.0	Oklahoma	2.2	2.7
Indiana	1.4	0.8	Texas	4.8	4.5
Michigan	1.6	2.7	Rocky Mountain	2.9	3.0
Ohio	1.8	1.0	Colorado	3.2	3.0
Wisconsin	1.1	1.3	Idaho	2.7	2.2
Plains	1.3	1.3	Montana	2.0	2.1
Iowa	1.3	2.2	Utah	3.4	4.3
Kansas	0.8	2.2	Wyoming	-0.1	-0.3
Minnesota	1.9	1.3	Far West	3.6	4.0
Missouri	1.7	1.4	Alaska	-0.6	0.6
Nebraska	0.9	0.3	California	3.8	4.4
North Dakota	-2.6	-3.1	Hawaii	2.3	2.3
South Dakota	2.6	2.6	Nevada	1.6	3.5
			Oregon	4.9	4.5
			Washington	3.0	2.9

1. The U.S. values may differ from the values in the national income and product accounts (NIPAs) because of revisions to the NIPA values and because the GDP by state accounts exclude federal military and civilian activity located overseas (because these activities cannot be attributed to a particular

state). In addition, the advance statistics for 2016 may differ from the NIPA values because of different sources and vintages of data used to estimate GDP by state.