

Regional Quarterly Report

GDP, personal income, and more...

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Advance real state GDP statistics for 2018

Real gross domestic product (GDP) for all states and the District of Columbia grew 2.9 percent in 2018. The percent change ranged from 5.7 percent in the state of Washington to -0.3 percent in Alaska, according to statistics released by the Bureau of Economic Analysis (BEA).

Washington, Utah, Idaho, Arizona, California, Colorado, Florida, Oregon, Texas, Nevada, and Tennessee led the nation in real GDP growth in 2018; each state grew faster than the 2.9 percent national growth rate. Except for Arizona, Nevada, and Tennessee, these states also led the nation in real GDP growth over the previous 5 years, growing faster than the 2.2 percent national compound annual growth rate from 2012 to 2017 (table 1).

Table 1. Real Gross Domestic Product by State
 [Percent change at annual rates]

States	2012-2017	2017-2018
States that grew faster than the U.S. in both 2017-2018 and in 2012-2017		
Washington	3.6	5.7
Utah	3.2	4.3
Idaho	3.1	4.1
California	3.8	3.5
Colorado	3.5	3.5
Florida	2.9	3.5
Oregon	3.4	3.4
Texas	2.9	3.2
States that grew slower than the U.S. in both 2017-2018 and in 2012-2017		
Virginia	0.8	2.8
Massachusetts	1.9	2.7
Michigan	1.7	2.7
Wisconsin	1.3	2.5
North Dakota	-0.6	2.5
West Virginia	0.1	2.4
Missouri	0.5	2.3
Minnesota	2.0	2.2
New Hampshire	1.8	2.2
Pennsylvania	1.7	2.1
District of Columbia	1.5	2.1
New York	1.3	2.1
Illinois	0.8	2.1
New Jersey	0.9	2.0
Alabama	0.7	2.0
Indiana	1.5	1.9
Kansas	1.2	1.9
Maine	1.0	1.9
Ohio	1.8	1.8
Oklahoma	1.8	1.8
New Mexico	0.8	1.8
Maryland	1.6	1.6
Nebraska	1.6	1.5
Iowa	1.4	1.4
Kentucky	0.8	1.4
South Dakota	0.8	1.3
Vermont	0.5	1.2
Louisiana	-0.4	1.1
Hawaii	1.7	1.0
Mississippi	0.2	1.0
Connecticut	-0.3	1.0
Arkansas	1.1	0.9
Montana	1.1	0.9
Rhode Island	0.7	0.6
Delaware	0.5	0.3
Wyoming	-0.1	0.3
Alaska	-1.9	-0.3
Other states		
Arizona	2.1	4.0
Nevada	2.0	3.2
Tennessee	2.0	3.0
North Carolina	1.9	2.9
Georgia	2.8	2.6
South Carolina	2.6	1.6

Note. The United States grew 2.2 percent (2012-2017) and 2.9 percent (2017-2018).

Information and retail trade contributed the most to Washington's 5.7 percent real GDP growth in 2018. Information contributed 1.8 percentage points, and retail trade contributed 1.1 percentage points. This contrasts with the much smaller contributions information and retail trade made to national real GDP growth (0.5 and 0.2 percentage point, respectively).

The large contributions from information and retail trade to Washington's growth in 2018 are a continuation of the large contributions the industries made in 2017 and 2016, when their combined contributions were 2.6 and 2.9 percentage points, respectively.

Thirty-six states and the District of Columbia grew more slowly than the United States in 2018 as well as more slowly than the United States over the previous 5 years. Alaska's real GDP fell 0.3 percent in 2018 after falling at a 1.9 percent compound annual rate from 2012 to 2017. Alaska was the only state with a decline in 2018 and was the state with the largest decline over the previous 5 years. Its 2018 real GDP was 9.3 percent below its 2012 peak.

Real GDP for mining fell 7.6 percent in Alaska in 2018 and accounts for much of the decline in Alaska's real GDP over the previous 5 years.

Revised GDP statistics for 2015–2017

The advance state GDP statistics for 2018 are based primarily on the national GDP by industry statistics and BEA estimates of earnings by state and industry.¹ Substantially richer state source data are now available for earlier years and have been incorporated in revised GDP statistics for 2015–2017. In addition to a disaggregation into 65 three-digit industries (compared to 21 two-digit industries for the 2018 advance statistics), the state GDP statistics for 2015–2017 show the distribution of income from production to labor (compensation), capital (gross operating surplus), and government (taxes on production and imports less subsidies).

Current-dollar GDP for 2017 increased in every state after falling in nine states the previous year (table 2). Growth in 2017 was fastest in the state of Washington (6.0 percent) and slowest in Connecticut (1.0 percent).

Table 2. Gross Domestic Product (GDP) by State

[Percent change]

	Current dollars		Quantity index for real GDP	
	2016	2017	2016	2017
United States	2.7	4.2	1.6	2.2
Alabama	1.5	4.1	0.5	1.8
Alaska	-2.3	4.6	-1.8	-0.2
Arizona	4.8	4.9	3.3	3.0
Arkansas	1.3	3.0	0.5	0.9
California	4.1	5.5	3.0	3.6
Colorado	3.4	5.5	2.4	3.1
Connecticut	1.3	1.0	-0.2	-0.6
Delaware	-0.7	2.5	-2.9	-0.1
District of Columbia	3.7	3.9	2.0	1.7
Florida	5.0	4.4	3.4	2.5
Georgia	5.0	4.4	3.3	2.9
Hawaii	3.8	3.7	2.3	1.6
Idaho	4.5	4.5	3.7	2.4
Illinois	1.6	2.5	0.3	0.6
Indiana	2.6	3.8	1.7	1.6
Iowa	1.3	1.5	0.4	-0.3
Kansas	2.7	2.8	2.3	0.8
Kentucky	1.6	3.0	0.5	1.1
Louisiana	-2.7	4.4	-1.2	0.1
Maine	3.7	3.6	2.1	1.7
Maryland	4.6	3.7	3.1	2.0
Massachusetts	3.4	4.1	1.7	2.2
Michigan	3.4	3.2	1.9	1.6
Minnesota	3.0	4.0	2.0	2.1
Mississippi	1.0	2.8	0.3	0.5
Missouri	0.4	2.7	-0.9	0.9
Montana	-1.4	3.3	-1.1	0.4
Nebraska	0.9	2.1	0.5	0.3
Nevada	4.3	4.4	2.4	2.5
New Hampshire	3.3	3.5	1.9	2.0
New Jersey	2.1	3.1	0.7	1.3
New Mexico	0.1	3.6	0.1	0.0
New York	3.6	3.7	1.4	1.4
North Carolina	3.0	3.8	1.1	1.9
North Dakota	-7.6	1.7	-7.1	-1.6
Ohio	1.9	3.9	0.7	1.6
Oklahoma	-3.6	5.0	-2.8	0.2
Oregon	5.8	5.1	4.6	3.2
Pennsylvania	2.0	3.9	1.1	1.7
Rhode Island	1.6	2.6	0.0	0.8
South Carolina	4.3	4.3	2.8	2.6
South Dakota	1.6	2.4	0.3	-0.4
Tennessee	3.6	4.0	1.9	2.4
Texas	-0.2	5.8	0.2	2.0
Utah	5.6	4.9	3.9	2.7
Vermont	3.0	3.1	1.6	1.3
Virginia	1.9	3.4	0.3	1.8
Washington	4.8	6.0	3.8	4.1
West Virginia	-0.7	4.7	-1.2	1.4
Wisconsin	2.4	3.0	1.1	1.4
Wyoming	-4.9	4.8	-3.8	0.5

The distribution of income from production varied substantially across industries:

- For the nation in 2017, compensation ranged from 90 percent of GDP for nursing and residential care facilities to 5 percent for real estate.
- Across private industries, taxes on production and imports ranged from 22 percent for retail trade to 1 percent for construction.
- Subsidies were essentially zero for most industries, but were as high as 7 percent for farms.
- Gross operating surplus ranged from 84 percent for real estate to 5 percent for nursing and residential care facilities.

The distribution of income from production varied markedly across states as well:

- Almost all the growth in current-dollar GDP for 2017 in Connecticut was in compensation, which grew \$2.2 billion (table 3). About \$0.3 billion was in taxes on production and imports less subsidies and only \$20 million was in gross operating surplus.
- In Alaska, almost all the growth in current-dollar GDP for 2017 was in gross operating surplus (\$2.1 billion) and in taxes on production and imports less subsidies (\$0.2 billion). Compensation of employees fell slightly.²
- Compensation growth for 2017 in New York (\$39.8 billion) was greater than in Texas (\$36.7 billion), even though Texas is the larger state as measured by GDP. Compensation growth for 2016 in New York was also larger than in Texas.
- Gross operating surplus grew in 2017 in every state except Iowa and North Dakota. The 2017 decline in Iowa, \$0.3 billion, was smaller than the \$1.3 billion decline in the previous year and was primarily in insurance carriers (down \$1.7 billion) and in farms (down \$0.4 billion).³
- Similarly, the 2017 decline in North Dakota, \$0.1 billion, was smaller than the \$2.2 billion decline in the previous year and was primarily in farms (down \$0.5 billion) and in construction (down \$0.2 billion).⁴

Table 3. Change in Gross Domestic Product by State and its Components for 2016 and 2017

[Millions of dollars]

	Gross domestic product		Compensation of employees		Taxes on production and imports		Subsidies		Gross operating surplus	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
United States	487,892	778,205	261,011	451,663	33,817	43,461	4,556	-517	197,621	282,563
Alabama	2,938	8,268	2,603	4,185	793	258	7	30	-451	3,855
Alaska	-1,186	2,257	-829	-2	349	178	-1	0	-706	2,081
Arizona	14,301	15,143	6,666	9,598	773	684	92	29	6,953	4,890
Arkansas	1,564	3,624	1,711	2,498	301	295	28	6	-419	836
California	105,224	146,527	54,027	81,033	-655	5,787	1,237	-85	53,089	59,622
Colorado	10,867	18,098	5,353	10,951	990	777	120	-33	4,643	6,337
Connecticut	3,281	2,557	882	2,228	44	300	1	-9	2,355	20
Delaware	-516	1,787	87	1,358	288	59	5	20	-888	390
District of Columbia	4,640	5,085	3,073	3,561	164	226	41	9	1,444	1,306
Florida	44,326	41,094	20,644	25,563	4,014	2,842	178	-79	19,847	12,610
Georgia	25,544	23,883	12,643	13,751	1,810	793	53	10	11,144	9,348
Hawaii	3,116	3,177	1,391	1,587	210	375	20	-4	1,535	1,210
Idaho	2,974	3,130	2,054	2,449	309	132	78	-57	689	492
Illinois	12,820	20,376	7,451	14,862	1,505	2,409	216	5	4,080	3,109
Indiana	8,502	12,845	6,657	8,234	237	526	93	-3	1,701	4,081
Iowa	2,386	2,628	2,941	2,691	731	163	32	-25	-1,254	-252
Kansas	4,030	4,401	435	1,940	505	370	135	-83	3,224	2,009
Kentucky	3,061	5,911	2,455	3,247	214	301	46	2	438	2,365
Louisiana	-6,257	10,052	-1,709	2,400	804	767	25	136	-5,328	7,021
Maine	2,119	2,116	1,035	1,362	150	172	9	-7	943	576
Maryland	16,930	14,260	5,869	7,360	562	881	48	5	10,547	6,024
Massachusetts	17,063	21,208	7,742	14,899	1,119	979	99	-16	8,301	5,313
Michigan	16,196	15,661	10,130	11,374	1,222	846	52	-41	4,896	3,400
Minnesota	9,906	13,629	6,617	9,130	1,077	730	43	-6	2,254	3,762
Mississippi	1,105	3,011	1,358	1,365	325	234	32	23	-547	1,434
Missouri	1,313	7,980	2,025	5,976	551	384	60	-12	-1,204	1,608
Montana	-625	1,523	462	1,024	40	108	30	-49	-1,097	342
Nebraska	1,000	2,490	1,597	2,068	142	255	87	-151	-652	15
Nevada	6,137	6,585	3,066	4,011	1,516	31	30	-47	1,584	2,495
New Hampshire	2,525	2,777	1,078	1,744	247	219	7	-3	1,207	811
New Jersey	11,789	18,044	5,398	10,571	405	1,778	140	-10	6,125	5,685
New Mexico	98	3,234	542	1,107	-141	322	44	-3	-259	1,802
New York	53,735	56,933	13,045	39,787	2,622	3,590	455	-167	38,524	13,389
North Carolina	14,953	19,641	8,529	12,497	1,278	562	89	-9	5,235	6,573
North Dakota	-4,166	840	-1,671	729	-234	179	110	-23	-2,150	-90
Ohio	11,614	24,457	6,737	13,640	1,128	2,200	43	-19	3,792	8,596
Oklahoma	-6,740	8,838	-1,831	3,071	-350	162	6	-1	-4,553	5,603
Oregon	11,830	10,904	5,877	6,670	649	365	108	-52	5,413	3,817
Pennsylvania	14,240	28,074	3,516	15,765	721	1,531	77	81	10,080	10,859
Rhode Island	922	1,527	607	1,214	104	178	16	1	226	136
South Carolina	8,858	9,222	3,892	5,607	413	211	44	3	4,597	3,407
South Dakota	762	1,148	678	835	74	165	68	-77	78	71
Tennessee	11,697	13,450	7,327	7,740	553	676	8	-1	3,826	5,033
Texas	-3,751	90,099	9,759	36,687	1,507	5,424	47	281	-14,969	48,269
Utah	8,378	7,801	5,039	5,017	781	428	35	-10	2,593	2,346
Vermont	926	989	522	559	71	131	10	-5	343	293
Virginia	9,237	16,559	4,521	11,479	1,027	947	66	3	3,755	4,137
Washington	22,361	29,483	14,434	17,775	2,248	1,443	225	-24	5,903	10,240
West Virginia	-527	3,285	-724	1,543	37	253	8	-2	168	1,487
Wisconsin	7,288	9,444	4,880	6,127	688	687	44	-37	1,764	2,594
Wyoming	-1,835	1,720	-923	398	-98	144	12	-8	-802	1,170
Overseas activity ¹	945	438	1,334	404	0	0	0	0	-388	33

Note. Gross domestic product equals compensation plus taxes on production and imports less subsidies plus gross operating surplus.

1. Economic activity taking place outside the borders of the United States by the military and associated federal civilian support staff.

New source data

The updated state GDP estimates reflect the incorporation of newly available and revised state source data. The major source data incorporated as part of the update are summarized in table 4; additional information is provided in the state GDP methodology on the BEA website.

Table 4. Major New or Revised State Source Data Incorporated in Gross Domestic Product by State

Component	Goods-producing industries Source data
Gross domestic product	Farm income and expenses from USDA; oil, gas production and prices, coal reports from EIA; mineral data from USGS; research and development expenditures from NSF
Taxes on production and imports	Government finance data, tax revenue data, building permits from Census Bureau; state departments of revenue and/or finance; coal mine price and production, refinery capacity from EIA; federal land usage from DOI
Component	Services-producing industries Source data
Taxes on production and imports	Government finance, tax revenue from Census Bureau; state departments of revenue and/or finance; nuclear power generation, aviation data from EIA; air freight data, highway usage data from DOT; assessment data from FRB; mineral leases, revenues, rents, and royalties data from DOI
Gross operating surplus	Electricity revenue, natural gas delivery data from EIA; receipts, revenue, and payroll data from Census Bureau; transportation finance, passengers, and freight data from DOT; rail profits, interest, depreciation data from Amtrak; rail passenger data from NARP; income and expenses from FDIC, FRB, OTS, and FHLBB; premiums and losses from NAIC; Indian gaming revenue data from Casino City Press; mortgage activity data from Inside Mortgage Finance Publications; research and development expenditures from NSF; government finance data from Census Bureau to estimate surplus/deficit of government enterprises

DOD	U.S. Department of Defense
DOI	U.S. Department of Interior
DOT	U.S. Department of Transportation
EIA	Energy Information Administration, U.S. Department of Energy
FDIC	Federal Deposit Insurance Corporation
FHLBB	Federal Home Loan Bank Board
FRB	Federal Reserve Bank
NAIC	National Association of Insurance Commissioners
NARP	National Association of Railroad Passengers
NSF	National Science Foundation
OTS	Office of Thrift Supervision
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

The estimates of taxes on production and imports now incorporate state government finance data (including general sales and gross receipts taxes) for fiscal year 2017 from the Census Bureau.

Other estimates incorporate new oil, gas, and coal production and price data for 2017 from the U.S. Energy Information Administration; air transportation finance data and railroad freight ton-miles data for 2017 from the U.S. Department of Transportation; income and expense data for 2017 from the Federal Deposit Insurance Corporation; and premium and loss data for 2017 from the National Association of Insurance Commissioners.⁵

In general, for the goods-producing industries, GDP, compensation, taxes on production and imports, and subsidies are estimated, whereas gross operating surplus is derived as a residual. For the services-producing industries, however, gross operating surplus is estimated, and GDP is derived as the sum of the four components.

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1. BEA estimates of compensation of employees and rental income of persons by state, rather than earnings, were used to estimate real estate GDP. U.S. Department of Agriculture estimates of farm cash receipts by state were used to estimate agriculture GDP. U.S. Department of Energy estimates of oil and gas production and prices by state were used to estimate mining GDP.
 2. Compensation in Alaska for 2017 fell \$0.2 billion in mining, \$0.2 billion in construction, and smaller amounts in several other industries. These losses were almost offset by increases in health care, government, and several other industries.
 3. The declines were partially offset by increases in other industries, including manufacturing and real estate.
 4. The declines were partially offset by increases in other industries, including oil and gas extraction.
 5. Value added by state data for 2017 from the Census Bureau's Census of Manufactures have not yet been released and there is no Annual Survey of Manufactures in census years.



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