



# Chronicling 100 Years of the U.S. Economy

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## Regional Quarterly Report

GDP, personal income, and more...

The statistics discussed in this *Regional Quarterly Report* include the following: (1) state gross domestic product (GDP) statistics for 2019, (2) state personal income statistics for 2019, and (3) personal consumption expenditures (PCE) by state statistics for 2019.

*David G. Lenze prepared the section on state GDP. David G. Lenze and Jeffrey L. Newman prepared the section on state personal income. Steven Zemanek and Christopher Lucas prepared the section on PCE by state.*

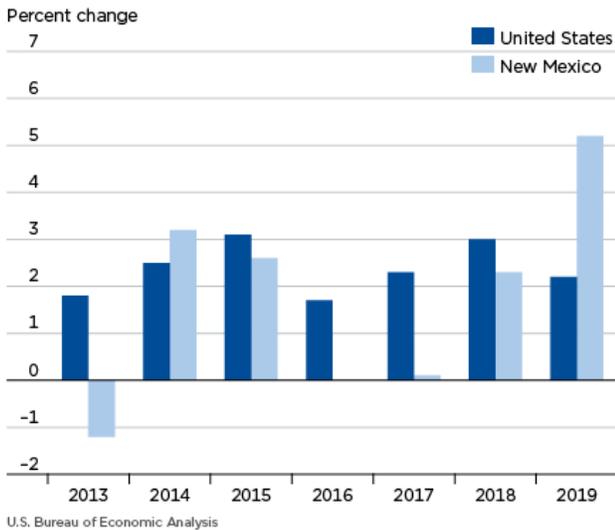
## State Gross Domestic Product for 2019

Real GDP growth slowed in Florida, New York, Texas, and 36 other states in 2019 and accelerated in 11 states (including California). U.S. real GDP, which includes the real GDP of the overseas activity of the federal government, grew 2.2 percent, down from 3.0 percent in 2018.<sup>1</sup> The real GDP growth of states in 2019 ranged from 5.2 percent in New Mexico to 0.3 percent in Hawaii (table A).

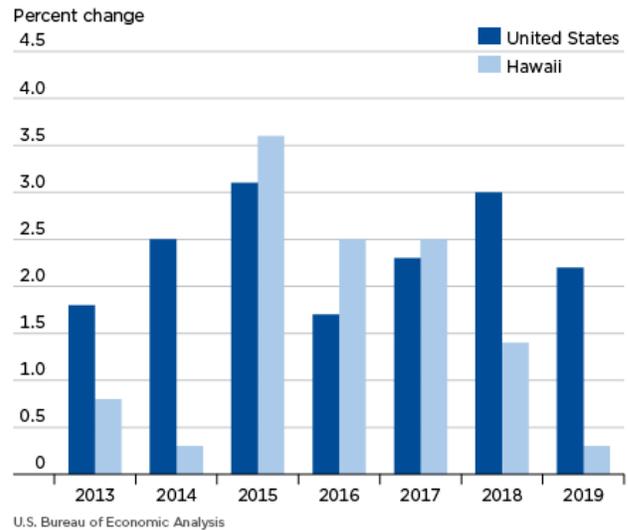
Oil and gas extraction was the main contributor to New Mexico's real GDP growth (2.7 percentage points); petroleum and coal products manufacturing was the next largest contributor (0.5 percentage point). Real GDP grew 44.9 percent in 2019 in New Mexico's oil and gas extraction industry and 48.8 percent in petroleum and coal products manufacturing. This was the first year since 2014 that New Mexico GDP grew faster than U.S. GDP (chart 1).

The slow growth in Hawaii in 2019 was mainly attributable to declines in the administrative and support services, real estate, and petroleum and coal products manufacturing industries. These industries subtracted 0.5, 0.3, and 0.2 percentage points, respectively, from real GDP growth. In contrast, air transportation was the major contributor to Hawaii's growth in 2019, contributing 0.3 percentage point. This was the second consecutive year that Hawaii GDP grew slower than U.S. GDP (chart 2).

**Chart 1. Real Gross Domestic Product Growth, United States and New Mexico**



**Chart 2. Real Gross Domestic Product Growth, United States and Hawaii**

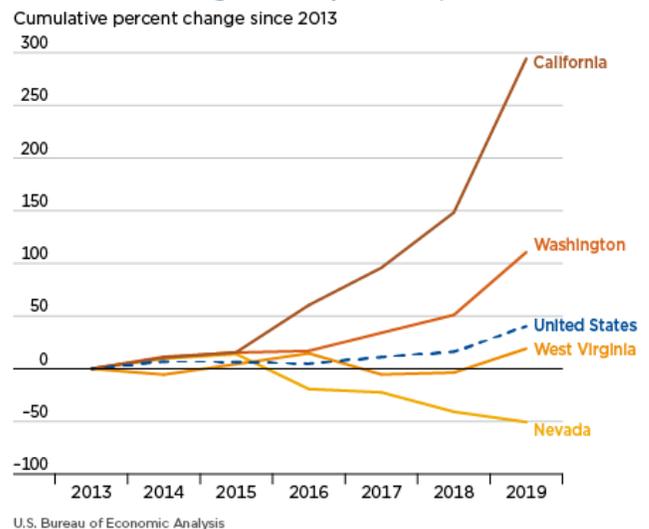


Of the 65 industries for which BEA publishes annual real GDP estimates by state, 46 grew in 2019, while 18 declined. (The percent change in the real GDP of construction in 2019 rounds to zero.) Real GDP growth rates in 2019 ranged from 20.7 percent for transit and ground passenger transportation to -6.1 percent for furniture and related product manufacturing (table B).

The growth of the transit industry was particularly strong in California, where it grew 58.9 percent in 2019, following a 26.8 percent increase in 2018. Growth was also strong in the state of Washington (39.5 percent) and West Virginia (23.6 percent). In contrast, the transit industry declined 16.5 percent in Nevada, its fourth consecutive year of decline (chart 3).

The percent decline of the furniture manufacturing industry was largest in Louisiana, which fell 13.6 percent in 2019, following a 1.3 percent decline in 2018. Other states with large percent declines were Indiana (12.2 percent), North Dakota (11.6 percent), Nebraska (11.1 percent), and Montana (10.6 percent). In contrast, furniture manufacturing rose 7.4 percent in New Mexico.

**Chart 3. Real Gross Domestic Product, Transit and Ground Passenger Transportation, Select States**



Contributions to U.S. real GDP growth in 2019 ranged from 0.23 percentage point for miscellaneous professional, scientific, and technical services industry to -0.13 percentage point for wholesale trade (table B). Among states, real GDP growth in the miscellaneous professional services industry (in chained 2012 dollars) was greatest in California (\$6.9 billion), Texas (\$4.5 billion), and Massachusetts (\$4.2 billion). The largest declines in wholesale trade real GDP were in Texas (\$3.2 billion), New York (\$2.4 billion), and Michigan (\$1.6 billion).

## Components of value added

The largest current-dollar declines in GDP were in petroleum and coal products manufacturing (\$23.9 billion) and oil and gas extraction (\$21.7 billion) (table C). The declines were due to falling prices (10.0 percent and 14.5 percent, respectively);<sup>2</sup> in contrast, real GDP increased \$19.0 billion and \$67.2 billion, respectively (table B). The decline in current-dollar GDP in these industries shows up in gross operating surplus, which fell \$25.4 billion and \$24.0 billion, respectively; compensation of employees and taxes on production and imports increased. By state, the largest declines in petroleum and coal products manufacturing current-dollar GDP were in Texas (\$5.9 billion), California (\$3.5 billion), and Louisiana (\$2.3 billion). By state, the largest declines in oil and gas extraction current-dollar GDP were in Texas (\$9.2 billion), Oklahoma (\$3.5 billion), and Colorado (\$1.8 billion).

The gross operating surplus of farms increased \$3.3 billion, despite a \$4.2 billion decline in current-dollar farm GDP, because of a \$10.0 billion increase in farm subsidies. The \$21.8 billion in farm subsidies in 2019 was the highest since the GDP by state statistics began in 1997. Farm subsidies for the Plains Region (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota) in 2019 were also a record high at \$8.8 billion.

Taxes on production and imports increased in most industries in 2019 but fell \$14.4 billion (30.0 percent) in the insurance carriers and related activities industry (table C). The decline resulted from a suspension of the federal health insurance providers fee imposed by the Affordable Care Act.

## 2019 annual update

Each fall, BEA typically revises the preliminary estimates of annual GDP by state released in the spring in order to incorporate the results of the annual updates of the National Income and Product Accounts (NIPAs), the GDP by industry statistics, and the state personal income statistics<sup>3</sup> and to incorporate state source data that are more complete and more detailed than those previously available. This year, the annual estimates for 1997 to 2019 were revised. The newly available and revised source data, which became available after last year's annual update in May 2019, include the following:

- U.S. Census Bureau, Economic Census for 2017 (retail, wholesale, and service industries only)
- U.S. Census Bureau, Annual Survey of State and Local Government Finances for fiscal years 2015–2017 (revised) and 2018 (new)
- Energy Information Administration, gas and electricity consumption for 2018 (revised) and 2019 (new)
- Energy Information Administration, oil, gas production and prices, and coal reports for 2018 (revised) and 2019 (new)

- Federal Deposit Insurance Corporation, branch office deposits for 2019 (new)
- Federal Home Loan Bank Board, income and expenses for 2019 (new)
- Federal Reserve Banks, income and expenses for 2019 (new) and data for foreign banking institutions for 1997–2019 (new data source)
- National Association of Insurance Commissioners, premiums and losses for 2019 (new)
- National Science Foundation, Business Research and Development Survey for 2018 (new)
- U.S. Department of Agriculture, Economic Research Service, farm income and expenses for 2015–2018 (revised) and 2019 (new)
- U.S. Department of Transportation, Bureau of Transportation Statistics, transportation finance, passengers, and freight for 2019 (new)
- U.S. Geological Survey, mineral resources for 2019 (new)
- BEA, compensation of employees and proprietors' income from state personal income for 2015–2018 (revised) and 2019 (new)

**Table A. Gross Domestic Product (GDP) by State**

[Percent change]

Region	Current dollars		Quantity index for real GDP	
	2018	2019	2018	2019
United States <sup>1</sup>	5.5	4.0	3.0	2.2
Alabama	4.8	3.2	2.3	1.4
Alaska	4.9	0.2	0.2	0.6
Arizona	6.2	5.5	3.9	3.1
Arkansas	3.9	2.5	1.5	0.6
California	5.1	5.3	3.1	3.4
Colorado	7.0	5.5	4.4	3.9
Connecticut	2.6	2.9	0.4	0.9
Delaware	6.1	3.9	2.1	1.8
District of Columbia	4.5	3.3	2.0	1.0
Florida	6.1	5.4	3.8	2.8
Georgia	5.9	3.9	3.7	1.6
Hawaii	3.9	2.8	1.4	0.3
Idaho	7.9	5.8	5.9	3.4
Illinois	4.8	2.6	2.3	0.5
Indiana	5.1	3.1	2.8	1.6
Iowa	4.4	2.4	2.3	0.4
Kansas	4.7	2.8	2.4	1.2
Kentucky	3.7	3.6	1.6	1.8
Louisiana	7.4	1.5	2.7	2.1
Maine	4.7	4.9	2.4	2.6
Maryland	3.0	3.7	0.8	1.4
Massachusetts	5.6	4.6	3.4	2.4
Michigan	4.0	2.9	2.3	0.8
Minnesota	5.2	3.2	2.9	1.1
Mississippi	3.8	2.1	1.0	0.6
Missouri	4.1	3.3	1.9	1.0
Montana	5.7	4.4	2.5	2.8
Nebraska	3.1	4.3	1.2	2.0
Nevada	6.7	5.3	4.2	2.7
New Hampshire	4.6	3.6	2.6	1.4
New Jersey	3.8	3.6	1.5	1.4
New Mexico	6.0	5.1	2.3	5.2
New York	6.0	3.9	3.0	1.6
North Carolina	4.9	4.3	2.6	1.9
North Dakota	7.0	1.6	4.3	0.9
Ohio	5.1	3.0	2.3	1.5
Oklahoma	7.1	1.7	2.7	2.4
Oregon	6.6	4.8	4.6	2.8
Pennsylvania	4.5	3.9	1.9	2.4
Rhode Island	3.1	3.3	0.8	1.0
South Carolina	5.3	5.2	3.1	2.8
South Dakota	5.8	3.2	2.7	0.6
Tennessee	4.8	3.8	2.7	1.6
Texas	7.8	2.7	3.9	2.9
Utah	8.4	6.0	5.6	3.8
Vermont	2.9	3.1	0.9	0.8
Virginia	4.2	4.4	2.3	2.2
Washington	9.0	6.5	7.2	4.6
West Virginia	6.6	1.6	3.0	0.7
Wisconsin	5.3	3.5	3.3	1.4
Wyoming	6.5	1.8	2.2	1.3

1. Includes the real GDP of the overseas activity of the federal government.

**Table B. U.S. Real Gross Domestic Product (GDP) by Industry**

Industry	Percent change		Contribution to percent change		Change (millions of chained 2012 dollars) <sup>1</sup>	
	2018	2019	2018	2019	2018	2019
All industry total <sup>2</sup>	3.0	2.2	3.0	2.2	543,681	403,876
Farms	5.0	-1.4	0.03	-0.01	9,985	-2,945
Forestry, fishing, and related activities	1.2	5.5	0.00	0.01	405	1,822
Oil and gas extraction	-1.7	19.2	-0.02	0.17	-6,183	67,220
Mining (except oil and gas)	0.5	0.2	0.00	0.00	304	103
Support activities for mining	42.6	-1.5	0.09	0.00	18,196	-921
Utilities	0.5	1.3	0.01	0.02	1,480	3,590
Construction	2.8	0.0	0.11	0.00	18,008	-172
Wood product manufacturing	0.7	7.2	0.00	0.01	196	2,084
Nonmetallic mineral product manufacturing	0.7	1.4	0.00	0.00	339	701
Primary metal manufacturing	0.7	13.4	0.00	0.04	484	9,359
Fabricated metal product manufacturing	4.2	-2.1	0.03	-0.02	5,794	-3,022
Machinery manufacturing	6.5	-3.1	0.05	-0.02	8,538	-4,419
Computer and electronic product manufacturing	6.6	3.4	0.09	0.05	20,173	11,151
Electrical equipment, appliance, and component manufacturing	2.5	-0.2	0.01	0.00	1,492	-138
Motor vehicles, bodies and trailers, and parts manufacturing	5.2	4.5	0.04	0.03	6,876	6,297
Other transportation equipment manufacturing	5.1	2.2	0.04	0.02	7,159	3,184
Furniture and related product manufacturing	5.5	-6.1	0.01	-0.01	1,493	-1,758
Miscellaneous manufacturing	4.7	-1.7	0.02	-0.01	4,025	-1,500
Food and beverage and tobacco product manufacturing	2.2	0.2	0.03	0.00	5,289	410
Textile mills and textile product mills	-5.2	-2.9	0.00	0.00	-898	-476
Apparel, leather, and allied product manufacturing	-1.5	-4.3	0.00	0.00	-126	-359
Paper manufacturing	7.5	2.4	0.02	0.01	3,608	1,237
Printing and related support activities	-0.5	-1.1	0.00	0.00	-175	-417
Petroleum and coal products manufacturing	8.9	8.7	0.07	0.07	17,958	19,031
Chemical manufacturing	2.5	2.9	0.05	0.05	7,803	9,107
Plastics and rubber products manufacturing	4.1	-0.6	0.02	0.00	2,998	-465
Wholesale trade	0.6	-2.1	0.04	-0.13	6,633	-23,338
Retail trade	2.6	2.5	0.14	0.14	27,916	27,534
Air transportation	4.8	0.1	0.03	0.00	5,566	129
Rail transportation	5.3	-4.9	0.01	-0.01	2,033	-1,994
Water transportation	3.5	2.9	0.00	0.00	340	290
Truck transportation	-0.8	1.5	-0.01	0.01	-1,108	2,060
Transit and ground passenger transportation	4.7	20.7	0.01	0.05	1,892	8,754
Pipeline transportation	10.2	1.4	0.02	0.00	3,547	544
Other transportation and support activities	5.9	2.8	0.03	0.02	5,764	2,918
Warehousing and storage	8.4	9.0	0.03	0.03	5,367	6,200
Publishing industries (except internet)	13.1	9.5	0.16	0.13	33,900	27,662
Motion picture and sound recording industries	-11.0	7.3	-0.05	0.03	-10,395	6,142
Broadcasting (except internet) and telecommunications	4.0	3.6	0.09	0.08	19,845	18,711
Data processing, hosting, and other information services	14.1	10.9	0.15	0.13	32,597	28,833
Monetary authorities—central bank, credit intermediation, and related services	-1.8	-1.5	-0.06	-0.05	-7,609	-6,530
Securities, commodity contracts, and other financial investments and related activities	-3.0	-1.6	-0.05	-0.02	-6,933	-3,516
Insurance carriers and related activities	3.7	3.9	0.11	0.11	20,091	21,765
Funds, trusts, and other financial vehicles	15.0	-5.4	0.02	-0.01	2,991	-1,226
Real estate	2.5	1.8	0.30	0.22	51,890	38,547
Rental and leasing services and lessors of nonfinancial intangible assets	9.0	4.4	0.10	0.05	21,010	11,292
Legal services	2.2	-1.0	0.03	-0.01	4,683	-2,198
Computer systems design and related services	9.6	8.1	0.16	0.14	33,466	30,727
Miscellaneous professional, scientific, and technical services	4.5	5.1	0.20	0.23	37,381	43,649
Management of companies and enterprises	6.9	7.2	0.13	0.14	25,771	29,095
Administrative and support services	3.5	2.5	0.10	0.07	17,111	13,006
Waste management and remediation services	5.7	1.7	0.02	0.00	2,601	800
Educational services	1.6	2.1	0.02	0.03	3,387	4,721
Ambulatory health care services	4.0	4.2	0.14	0.15	27,788	30,346
Hospitals	1.9	1.5	0.05	0.04	8,240	6,452
Nursing and residential care facilities	0.9	-0.1	0.01	0.00	1,155	-121
Social assistance	3.5	4.5	0.02	0.03	3,758	4,970
Performing arts, spectator sports, museums, and related activities	4.6	2.9	0.03	0.02	5,168	3,417
Amusement, gambling, and recreation industries	2.1	0.8	0.01	0.00	1,685	627
Accommodation	2.3	2.0	0.02	0.02	3,278	2,958
Food services and drinking places	1.3	1.0	0.03	0.02	4,785	3,800
Other services (except government and government enterprises)	3.3	1.4	0.07	0.03	11,772	4,994
Federal civilian <sup>2</sup>	0.8	0.5	0.02	0.01	3,431	2,184
Military <sup>2</sup>	0.2	1.2	0.00	0.02	590	3,570
State and local	1.2	1.0	0.11	0.09	17,983	15,483

1. Chained-dollar values are not additive, because the relative weights for a given period differ from those of the reference year.

2. Includes the overseas activity of the federal government.

**Table C. Change in U.S. Gross Domestic Product and its Components for 2018 and 2019**

[Millions of chained (2012) dollars]<sup>1</sup>

Industry	Gross domestic product		Compensation of employees		Taxes on production and imports		Subsidies		Gross operating surplus	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
All industry total	1,068,881	821,365	527,473	483,928	80,815	46,647	3,442	10,571	464,035	301,360
Farms	218	-4,191	-2,434	1,598	-66	916	2,322	9,988	5,040	3,283
Forestry, fishing, and related activities	1,727	995	1,353	947	218	57	0	0	156	-9
Oil and gas extraction	40,149	-21,689	640	1,176	3,632	1,120	0	0	35,878	-23,987
Mining (except oil and gas)	3,109	1,388	1,344	276	772	188	0	0	993	924
Support activities for mining	13,526	-1,049	5,782	607	-34	32	0	0	7,779	-1,688
Utilities	11,737	13,435	2,611	3,913	1,717	980	0	0	7,409	8,542
Construction	50,322	44,514	37,511	34,866	451	374	0	0	12,360	9,274
Wood product manufacturing	2,851	888	1,264	1,115	29	21	0	0	1,558	-248
Nonmetallic mineral product manufacturing	1,719	2,229	1,246	913	42	38	0	0	432	1,277
Primary metal manufacturing	5,793	-481	2,064	546	19	69	0	0	3,712	-1,097
Fabricated metal product manufacturing	8,203	3,758	5,985	1,782	271	339	0	0	1,947	1,637
Machinery manufacturing	8,581	2,426	5,569	1,031	52	98	0	0	2,961	1,297
Computer and electronic product manufacturing	15,023	9,025	7,382	3,239	153	248	0	0	7,488	5,538
Electrical equipment, appliance, and component manufacturing	3,609	2,338	1,189	1,316	25	31	-4	44	2,390	1,035
Motor vehicles, bodies and trailers, and parts manufacturing	1,474	4,807	4,297	594	93	114	0	0	-2,916	4,100
Other transportation equipment manufacturing	7,969	5,474	4,896	5,152	94	84	0	0	2,979	238
Furniture and related product manufacturing	1,145	281	646	-130	9	13	0	0	489	398
Miscellaneous manufacturing	4,003	2,408	2,545	1,950	83	112	0	0	1,374	347
Food and beverage and tobacco product manufacturing	-5,182	4,466	4,110	2,881	-1,484	-1,142	0	0	-7,807	2,726
Textile mills and textile product mills	-688	-137	253	-139	-3	17	1	-1	-938	-16
Apparel, leather, and allied product manufacturing	-53	-58	-117	-89	-2	7	0	0	66	23
Paper manufacturing	4,729	1,283	423	788	20	52	0	0	4,285	443
Printing and related support activities	-621	639	320	61	2	22	0	0	-941	555
Petroleum and coal products manufacturing	51,432	-23,900	447	1,305	157	219	0	0	50,829	-25,423
Chemical manufacturing	18,500	13,935	2,476	6,360	684	-779	0	-4	15,340	8,350
Plastics and rubber products manufacturing	3,526	2,099	2,092	1,390	204	229	0	0	1,230	481
Wholesale trade	47,343	51,430	12,267	13,204	24,721	29,868	0	0	10,355	8,358
Retail trade	32,268	46,485	21,354	22,206	8,494	9,476	0	0	2,419	14,803
Air transportation	4,976	8,607	2,575	2,243	1,546	1,769	-12	61	844	4,656
Rail transportation	3,343	429	1,301	727	73	5	333	-34	2,302	-336
Water transportation	1,352	652	226	391	86	83	-24	6	1,016	184
Truck transportation	10,861	8,044	6,865	5,976	220	88	0	0	3,778	1,979
Transit and ground passenger transportation	863	9,168	1,724	6,443	97	57	0	0	-959	2,668
Pipeline transportation	5,246	4,457	128	752	260	80	0	0	4,859	3,624
Other transportation and support activities	8,910	10,039	6,897	8,993	59	73	0	0	1,953	973
Warehousing and storage	8,166	4,531	6,780	4,106	53	28	0	0	1,331	398
Publishing industries (except internet)	27,753	25,423	14,489	13,267	256	206	0	0	13,009	11,948
Motion picture and sound recording industries	-9,519	3,752	1,525	2,121	164	216	0	0	-11,208	1,415
Broadcasting (except internet) and telecommunications	10,911	12,134	853	1,101	1,988	-1,935	-6	1	8,063	12,970
Data processing, hosting, and other information services	25,237	26,421	10,927	6,973	763	128	0	0	13,546	19,321
Monetary authorities—central bank, credit intermediation, and related services	63,114	19,899	10,255	15,683	537	567	-69	-84	52,254	3,565
Securities, commodity contracts, and other financial investments and related activities	7,684	492	5,596	2,781	214	236	0	0	1,874	-2,525
Insurance carriers and related activities	42,425	11,971	14,570	13,274	14,877	-14,406	0	0	12,979	13,102
Funds, trusts, and other financial vehicles	7,132	-193	454	370	14	28	0	0	6,666	-592
Real estate	110,857	125,907	7,749	7,937	7,438	7,820	-348	148	95,322	110,299
Rental and leasing services and lessors of nonfinancial intangible assets	23,871	11,793	2,498	2,070	1,161	421	0	0	20,213	9,303
Legal services	13,187	8,273	5,938	5,615	678	556	0	0	6,571	2,102
Computer systems design and related services	26,069	25,944	21,114	22,628	449	114	0	0	4,505	3,203
Miscellaneous professional, scientific, and technical services	52,901	55,312	41,648	38,782	710	563	0	0	10,544	15,967
Management of companies and enterprises	19,737	19,065	18,081	17,264	214	298	0	0	1,443	1,502
Administrative and support services	23,939	26,295	22,142	17,762	399	305	0	0	1,397	8,229
Waste management and remediation services	5,901	3,064	2,342	1,419	163	63	0	0	3,397	1,582
Educational services	9,978	11,426	8,065	9,315	316	290	0	0	1,597	1,821
Ambulatory health care services	31,228	35,902	31,193	28,185	271	389	0	0	-237	7,329
Hospitals	19,123	20,021	15,679	14,741	487	428	-364	0	2,593	4,853
Nursing and residential care facilities	6,411	5,783	5,929	5,366	284	192	0	0	198	225
Social assistance	7,989	10,352	7,726	9,766	64	126	0	0	201	459
Performing arts, spectator sports, museums, and related activities	8,144	6,182	4,014	2,667	386	353	0	0	3,744	3,162
Amusement, gambling, and recreation industries	4,206	3,735	2,841	2,354	803	327	0	0	562	1,055
Accommodation	10,553	9,254	4,046	5,309	1,552	1,276	0	0	4,955	2,669
Food services and drinking places	19,364	21,289	16,452	14,686	3,050	2,404	0	0	-139	4,199
Other services (except government and government enterprises)	23,610	23,349	17,087	14,189	794	713	0	0	5,729	8,448
Federal civilian <sup>2</sup>	17,396	12,636	13,209	8,786	0	0	-18	118	4,169	3,968
Military <sup>2</sup>	10,005	11,017	6,993	7,194	0	0	0	0	3,013	3,822
State and local	73,543	66,144	60,052	53,831	34	-11	1,631	328	15,088	12,652
<b>Addenda:</b>										
Federal civilian, overseas activity	78	92	78	92	0	0	0	0	0	0
Military, overseas activity	2,919	2,854	1,097	550	0	0	0	0	1,822	2,304

1. Chained-dollar values are not additive, because the relative weights for a given period differ from those of the reference year.

2. Includes the overseas activity of the federal government.

## State Personal Income for 2019

Personal income growth slowed in every state in 2019 except New York and Rhode Island, where growth in 2019 maintained the same pace as in 2018 (table D).<sup>4</sup> State personal income for the United States, which excludes the personal income of federal civilian and military personnel stationed abroad, grew 3.9 percent in 2019, down from 5.3 percent in 2018. Inflation, as measured by the national price index for personal consumption expenditures, slowed to 1.5 percent in 2019 from 2.1 percent in 2018. Personal income growth rates in 2019 ranged from 5.8 percent in Utah to 2.0 percent in West Virginia. Growth rates of per capita personal income, which adjusts for differential state population growth, ranged from 4.5 percent in California to 2.3 percent in Nevada.

**Table D. Percent Change in Personal Income and Select Components by State**

Region	2018						2019					
	Personal income	Compensation of employees <sup>1</sup>	Proprietors' income with IVA and CCAdj	Dividends, interest, and rent	Personal current transfer receipts	Contributions for government social insurance <sup>1</sup>	Personal income	Compensation of employees <sup>1</sup>	Proprietors' income with IVA and CCAdj	Dividends, interest, and rent	Personal current transfer receipts	Contributions for government social insurance <sup>1</sup>
United States	5.3	5.1	5.0	7.1	4.0	4.8	3.9	4.4	4.7	1.3	5.2	4.3
Alabama	4.4	4.2	6.3	5.8	3.4	5.6	3.7	4.4	0.5	1.2	4.9	3.6
Alaska	4.5	4.2	-5.8	6.4	7.5	2.0	3.6	3.4	4.4	1.9	5.3	2.9
Arizona	6.4	6.6	7.2	8.0	4.4	7.2	5.0	5.6	5.2	2.0	6.6	6.0
Arkansas	4.3	3.5	-4.0	9.2	3.1	2.8	3.3	3.5	-0.5	1.9	5.5	4.4
California	5.5	5.5	3.0	7.4	4.8	6.1	4.7	5.5	5.5	1.5	6.3	5.5
Colorado	7.4	6.2	11.3	8.5	8.2	6.4	5.1	6.5	4.8	1.6	4.9	5.7
Connecticut	4.3	2.2	2.5	6.8	6.7	3.0	3.1	2.4	3.7	1.8	2.2	2.4
Delaware	5.1	4.0	19.9	3.0	4.7	5.5	3.8	4.0	2.1	0.4	5.6	3.5
District of Columbia	3.5	5.3	-11.8	3.6	1.8	4.3	3.3	2.8	4.9	-0.3	4.0	2.5
Florida	6.5	6.2	6.3	8.1	4.9	6.6	4.0	5.1	5.1	1.1	5.6	6.4
Georgia	5.6	4.6	10.0	7.3	5.0	5.2	3.8	4.6	2.3	0.7	5.0	4.6
Hawaii	3.1	3.8	4.9	1.9	1.8	4.6	2.9	2.9	4.8	1.5	4.3	3.8
Idaho	7.4	7.0	8.7	8.6	6.2	6.0	5.3	5.5	10.9	1.0	7.1	5.6
Illinois	4.9	4.4	9.5	6.2	2.9	4.9	2.4	2.7	2.6	0.8	3.8	2.8
Indiana	5.2	4.6	7.5	7.0	4.0	4.8	3.4	3.1	3.7	1.2	5.7	4.0
Iowa	5.5	3.9	11.4	5.2	8.3	4.1	3.6	2.4	14.3	0.2	5.8	3.1
Kansas	5.0	4.2	5.9	7.0	4.5	4.2	4.3	3.5	12.8	0.7	5.5	4.1
Kentucky	3.7	3.6	1.6	6.6	2.9	3.7	3.5	3.8	5.6	1.2	4.0	2.9
Louisiana	4.9	4.3	7.4	6.7	4.0	5.1	2.5	1.8	3.1	0.6	4.7	1.4
Maine	5.1	4.8	3.2	6.7	5.6	5.2	4.2	4.9	5.5	0.7	4.9	4.3
Maryland	3.4	3.7	-7.2	5.9	4.9	4.2	3.3	3.3	4.3	1.1	4.5	3.4
Massachusetts	5.3	5.3	3.9	6.5	4.5	5.3	3.5	4.8	4.8	0.9	2.3	4.4
Michigan	4.1	4.0	0.7	5.6	4.6	5.0	3.1	2.5	5.5	0.8	5.7	2.0
Minnesota	5.1	4.4	5.6	6.8	6.0	5.1	3.2	3.3	8.1	0.0	4.4	3.3
Mississippi	3.3	3.1	1.0	4.6	3.4	2.5	2.6	2.7	0.0	1.1	4.5	3.4
Missouri	4.2	4.7	-6.2	7.1	3.7	3.9	3.5	3.7	7.3	1.1	4.1	4.1
Montana	5.1	4.2	6.7	7.4	3.5	5.4	4.0	4.1	6.6	1.3	5.9	4.0
Nebraska	5.0	4.5	1.6	6.6	5.3	3.0	3.5	3.6	6.2	0.8	5.4	4.0
Nevada	7.0	5.9	14.1	8.3	5.9	7.1	4.1	5.4	5.2	0.9	6.4	9.6
New Hampshire	5.0	4.1	8.9	4.5	5.8	4.2	3.8	4.0	4.2	1.1	3.4	3.7
New Jersey	4.4	4.0	4.9	3.5	3.4	3.0	3.8	3.7	5.4	0.8	4.3	3.3
New Mexico	4.9	4.8	4.2	4.4	5.7	4.3	4.2	4.6	9.6	0.9	4.3	4.6
New York	4.0	5.0	4.6	8.1	-3.3	3.8	4.0	4.3	4.7	1.8	7.2	3.7
North Carolina	5.2	5.4	0.2	6.5	4.6	3.7	4.4	5.0	4.5	1.7	5.3	5.0
North Dakota	6.2	4.5	12.5	6.9	6.8	0.6	3.1	4.0	-1.7	1.4	5.0	2.0
Ohio	4.2	3.7	3.2	7.1	2.4	2.0	3.1	3.5	2.6	1.1	4.3	3.5
Oklahoma	4.9	5.0	5.3	6.7	3.1	5.8	3.7	3.7	3.5	1.6	6.1	3.3
Oregon	6.6	6.0	9.2	7.2	5.8	4.4	4.2	4.7	5.1	1.4	5.6	5.3
Pennsylvania	5.2	4.1	2.6	7.5	6.9	3.4	3.6	4.0	4.0	2.1	3.7	3.5
Rhode Island	3.7	2.9	7.8	2.8	2.6	3.6	3.7	2.8	4.6	0.0	4.5	3.0
South Carolina	5.3	5.1	0.9	7.7	5.3	5.0	4.8	5.0	4.1	3.0	5.9	5.0
South Dakota	6.4	4.3	15.5	6.7	4.7	3.9	3.2	4.6	0.0	1.3	5.6	5.9
Tennessee	5.3	5.2	4.7	7.0	4.9	4.5	4.0	4.1	4.6	1.2	5.7	4.8
Texas	6.9	6.1	10.8	8.2	4.6	5.2	4.6	5.6	3.4	1.8	4.9	4.3
Utah	8.2	7.6	9.1	9.7	6.1	5.5	5.8	6.5	5.5	3.3	7.5	5.9
Vermont	3.5	3.2	3.7	3.3	4.2	2.5	3.2	2.9	7.5	0.4	4.4	1.0
Virginia	4.7	4.4	1.0	6.2	5.0	3.7	3.3	4.1	6.1	0.5	5.6	4.0
Washington	7.9	8.7	5.0	7.9	4.9	6.2	5.4	6.8	5.2	1.7	5.5	5.4
West Virginia	5.1	7.4	8.5	5.8	2.2	6.0	2.0	0.5	4.5	1.0	2.9	0.4
Wisconsin	5.1	4.8	1.7	6.5	5.3	3.2	3.4	3.4	8.4	0.8	4.6	4.0
Wyoming	7.1	4.9	19.5	6.6	5.1	4.0	2.7	4.2	1.3	-0.1	4.7	3.5

**CCAdj** Capital consumption adjustment

**IVA** Inventory valuation adjustment

1. Compensation and contributions for government social insurance are by place of work.

Compensation of employees, the largest component of personal income,<sup>5</sup> grew 4.4 percent in the United States in 2019, down from 5.1 percent in 2018, reflecting a deceleration in wage and salary employment growth to 1.3 percent from 1.6 percent. Compensation growth was fastest in the state of Washington (6.8 percent) and slowest in West Virginia (0.5 percent), where employment grew 2.0 percent and fell 0.7 percent, respectively.

The information industry was the primary contributor to Washington’s compensation growth (among two-digit North American Industry Classification System (NAICS) industries), accounting for \$4.4 billion of the \$19.8 billion increase. Within the information industry, employee compensation increased 39.8 percent for data processing, hosting, and related services, 11.4 percent for publishing industries (except internet publishing), and 27.6 percent for other information services.

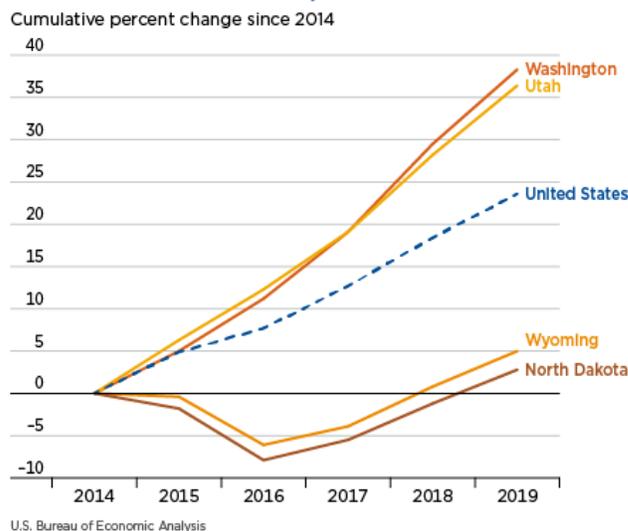
In West Virginia, the compensation of construction employees fell 20.5 percent (\$723 million) in 2019. Compensation also fell in farming (14.7 percent), mining (1.8 percent), information (0.4 percent), and professional services (2.1 percent) among two-digit NAICS industries. The two largest contributors to compensation growth were health care, which grew 3.9 percent (\$265 million), and state and local government, which grew 4.0 percent (\$257 million).

Cumulative compensation growth over the last 5 years (2014–2019) was fastest in the states of Washington (38.3 percent) and Utah (36.4 percent) and slowest in North Dakota (2.8 percent) and Wyoming (5.0 percent). Over the same period, compensation grew 23.6 percent for the United States (chart 4).

Proprietors’ income, which represents the income earned from current production by unincorporated businesses that is received by persons, grew 4.7 percent for the United States in 2019, down from 5.0 percent growth in 2018. U.S. farm proprietors’ income rose 20.4 percent (\$9.6 billion) in 2019 after increasing 1.9 percent (\$0.9 billion) in 2018. In the farm belt, farm proprietors’ income growth was above average in Iowa (39.5 percent), Kansas (125.1 percent), Minnesota (61.2 percent), and Nebraska (32.8 percent) but fell in North Dakota (20.8 percent) and South Dakota (16.6 percent). U.S. nonfarm proprietors’ income grew 4.2 percent in 2019, down from 5.1 percent growth in 2018. Among states, nonfarm proprietors’ income growth was fastest in Virginia (5.7 percent) and slowest in Wyoming (0.3 percent).

Property income (dividends, interest, and rent) increased 1.3 percent in 2019, down from 7.1 percent in 2018. Personal dividend income fell 1.1 percent, personal interest income rose 2.2 percent, and the rental income of persons increased 3.7 percent.

**Chart 4. Compensation of Employees, All Industries, Select States**



Personal current transfer receipts, which consist primarily of Social Security, Medicare, and Medicaid benefits, grew 5.2 percent on average in 2019, up from 4.0 percent in 2018. Transfer receipts increased in all states. Growth was fastest in Utah (7.5 percent), where Medicaid benefits increased 14.6 percent, and slowest in Connecticut (2.2 percent), where Medicaid benefits fell 5.0 percent. In West Virginia, personal current transfer receipts contributed more to personal income growth in 2019 than any other component (table E). In all other states, the compensation of employees was the leading contributor to personal income growth.

Social security benefits grew 7.9 percent in Idaho in 2019 and 6.8 percent in 2018, faster than every other state in both years. In contrast, social security benefits grew 4.4 percent in West Virginia in 2019 and 3.7 percent in 2018, the slowest of all states in both years.

Contributions for government social insurance, a subtraction in the derivation of personal income, grew 4.3 percent in 2019, down from 4.8 percent growth in 2018. The largest increase in contributions for government social insurance in 2019 was 9.6 percent in Nevada. The smallest increase was 0.4 percent in West Virginia.

Because state personal income is a place-of-residence concept, the compensation of employees and certain employee contributions for government social insurance, which are measured by place of work, must be adjusted to place of residence. The residence adjustment reduced personal income growth in New York \$6.4 billion in 2019 (table E). At the same time, the residence adjustment contributed \$4.1 billion to New Jersey's personal income growth and \$2.2 billion to Connecticut's growth.

Table E. Change in State Personal Income by Component and by State, 2018–2019

Region	Change from previous year (millions of dollars)															
	2018								2019							
	Personal income	Compensation of employees <sup>1</sup>	Proprietors' income with IVA and CCAdj		Dividends, interest, and rent	Personal current transfer receipts	Contributions for government social insurance <sup>1</sup>	Adjustment for residence	Personal income	Compensation of employees <sup>1</sup>	Proprietors' income with IVA and CCAdj		Dividends, interest, and rent	Personal current transfer receipts	Contributions for government social insurance <sup>1</sup>	Adjustment for residence
Farm			Nonfarm	Farm							Nonfarm					
United States	901,673	526,430	895	75,498	245,403	115,205	61,939	181	703,007	482,757	9,622	65,084	48,961	154,920	58,289	-48
Alabama	8,753	4,892	-143	987	2,132	1,581	868	173	7,696	5,369	-470	535	476	2,344	585	26
Alaska	1,915	1,149	4	-208	515	526	62	-10	1,576	973	5	141	159	398	91	-8
Arizona	19,219	11,913	69	1,413	4,830	2,609	1,666	50	16,017	10,839	170	987	1,275	4,114	1,482	114
Arkansas	5,372	2,381	-129	-183	2,703	903	257	-46	4,285	2,462	-372	337	620	1,658	416	-3
California	131,373	79,667	-110	7,200	39,182	15,942	10,458	-50	117,776	83,974	2,445	10,675	8,603	22,233	9,966	-187
Colorado	23,150	11,894	103	3,369	6,006	3,284	1,533	26	16,989	13,399	453	1,187	1,221	2,131	1,440	38
Connecticut	10,997	3,062	2	721	3,799	2,218	510	1,706	8,211	3,494	56	1,020	1,071	779	430	2,221
Delaware	2,499	1,271	-6	744	286	473	222	-47	1,952	1,341	-53	146	36	585	147	45
District of Columbia	1,945	4,874	0	-890	373	121	445	-2,089	1,868	2,652	0	323	-34	271	266	-1,079
Florida	65,883	33,591	-220	4,129	23,173	9,650	4,574	134	43,282	29,376	445	2,923	3,538	11,583	4,712	128
Georgia	26,217	13,991	-396	4,254	6,343	3,939	1,891	-23	18,562	14,409	-25	1,017	672	4,127	1,761	124
Hawaii	2,326	1,785	-40	337	310	210	276	0	2,290	1,453	15	290	251	521	240	0
Idaho	5,388	2,764	294	372	1,441	818	343	42	4,156	2,303	580	326	174	987	339	125
Illinois	33,790	19,764	1,079	3,708	8,681	3,045	2,591	104	17,577	12,849	-1,148	2,589	1,222	4,097	1,526	-506
Indiana	15,598	8,563	268	1,814	3,439	2,319	1,145	340	10,876	5,942	-324	1,428	636	3,432	984	747
Iowa	8,249	3,645	1,414	31	1,559	2,108	502	-6	5,658	2,326	1,509	509	60	1,583	391	62
Kansas	7,053	3,549	615	342	1,974	1,013	469	29	6,409	3,110	1,800	388	196	1,297	473	91
Kentucky	6,761	4,083	-297	489	2,010	1,272	543	-254	6,672	4,373	105	578	383	1,795	439	-123
Louisiana	10,121	5,217	-30	1,355	2,446	1,787	717	63	5,321	2,332	-64	651	244	2,156	202	203
Maine	3,189	1,708	-6	157	790	759	252	33	2,727	1,829	43	227	94	707	219	47
Maryland	12,494	7,876	-178	-2,194	4,224	2,464	1,122	1,424	12,301	7,427	165	1,164	842	2,367	947	1,283
Massachusetts	24,677	16,385	-2	1,595	6,357	2,988	1,867	-779	17,156	15,493	16	1,997	935	1,603	1,644	-1,244
Michigan	18,763	11,333	1	200	4,602	4,311	1,858	175	14,622	7,445	106	1,583	737	5,612	782	-79
Minnesota	15,717	8,788	4	1,237	4,127	2,869	1,315	7	10,163	6,944	761	1,143	21	2,221	877	-49
Mississippi	3,648	1,840	-130	208	801	958	213	184	2,977	1,654	-338	336	195	1,312	294	112
Missouri	11,497	8,292	-301	-975	3,728	2,006	872	-380	10,235	6,886	572	839	618	2,339	939	-79
Montana	2,494	1,099	364	-69	906	334	208	68	2,051	1,121	130	176	169	579	160	34
Nebraska	4,813	2,738	226	-48	1,302	788	237	45	3,609	2,251	535	161	169	834	327	-15
Nevada	9,852	5,015	-1	1,274	2,914	1,383	722	-12	6,216	4,794	86	446	333	1,582	1,045	20
New Hampshire	3,946	1,838	-7	693	636	683	245	346	3,146	1,891	8	346	157	424	222	542
New Jersey	25,462	12,933	-52	2,842	3,808	2,717	1,268	4,482	23,068	12,581	161	3,077	946	3,611	1,415	4,107
New Mexico	4,063	2,348	-72	284	724	1,116	283	-55	3,642	2,325	283	223	161	893	313	69
New York	51,640	41,435	-369	6,272	22,205	-7,387	3,753	-6,763	54,244	37,527	596	5,794	5,199	15,392	3,848	-6,415
North Carolina	23,795	15,409	-1,294	1,376	5,634	4,101	1,369	-62	21,182	15,101	90	1,467	1,596	4,925	1,929	-69
North Dakota	2,479	1,230	405	81	599	384	24	-195	1,322	1,165	-213	140	126	302	78	-120
Ohio	23,178	12,960	637	694	6,733	2,597	862	418	17,600	12,577	-680	1,809	1,128	4,693	1,538	-389
Oklahoma	8,464	4,824	52	1,096	2,146	1,039	732	39	6,694	3,735	177	627	542	2,079	432	-34
Oregon	13,314	7,572	146	1,450	3,119	2,192	787	-378	8,981	6,302	128	845	650	2,234	990	-187
Pennsylvania	35,597	16,844	-545	2,331	9,017	8,903	1,814	860	25,669	16,957	560	2,277	2,705	5,093	1,925	2
Rhode Island	2,029	981	-1	285	287	289	173	362	2,103	978	0	181	0	502	148	589
South Carolina	11,223	6,250	-117	248	3,088	2,415	830	169	10,691	6,545	-30	653	1,312	2,860	867	218
South Dakota	2,792	1,017	760	126	710	317	124	-14	1,489	1,134	-244	244	147	395	194	8
Tennessee	16,229	9,453	-263	2,231	3,172	2,921	1,067	-219	12,783	7,931	184	1,830	601	3,553	1,185	-131
Texas	94,633	51,849	-169	18,998	20,080	9,363	5,371	-116	67,384	50,677	84	6,466	4,725	10,499	4,665	-400
Utah	11,244	6,841	26	949	2,997	1,071	642	2	8,656	6,232	156	492	1,129	1,387	725	-14
Vermont	1,146	607	-44	144	223	273	67	10	1,080	553	87	121	26	294	29	26
Virginia	21,929	13,076	-218	500	6,286	3,229	1,372	428	16,437	12,552	111	1,549	484	3,794	1,522	-531
Washington	34,259	23,357	-386	2,130	8,075	3,040	2,248	292	25,073	19,799	208	1,685	1,823	3,541	2,072	89
West Virginia	3,592	2,880	-46	405	623	447	330	-388	1,513	208	19	187	116	603	23	402
Wisconsin	14,577	8,740	-49	371	3,634	2,581	740	40	10,082	6,387	691	942	481	2,373	953	162
Wyoming	2,331	857	47	625	654	235	101	15	938	780	44	10	-9	229	92	-22

CCAdj Capital consumption adjustment

IVA Inventory valuation adjustment

1. Compensation and contributions for government social insurance are by place of work.

## Updates to previously released estimates

Each September, BEA typically revises the preliminary estimates of annual state personal income released in March in order to incorporate the results of the annual update of the NIPAs,<sup>6</sup> to incorporate state source data that are more complete and more detailed than those previously available (table H), and to update the seasonal factors used for the quarterly estimates. In general, the components of personal income were revised from the first quarter of 2015 to the first quarter of 2020. In addition, the residence adjustment was revised from the first quarter of 2013 to the fourth quarter of 2014 to incorporate revised source data.

The NIPA estimate of U.S. personal income for 2019, after adjustment for differences in geographic coverage and the timing of the availability of source data, was revised down 0.3 percent (\$56.8 billion).<sup>7</sup> This national estimate controls the state estimates.<sup>8</sup> U.S. personal current transfer receipts were revised down 1.5 percent (\$46.5 billion), nonfarm proprietors' income was revised down 1.1 percent (\$18.1 billion), and dividends, interest, and rent were revised down 0.4 percent (\$16.1 billion). These downward revisions were offset somewhat by a 0.1 percent (\$13.3 billion) upward revision to wages and salaries and a 21.8 percent (\$10.1 billion) upward revision to farm proprietors' income.

The unweighted average revision to 2019 personal income in the 50 states and the District of Columbia was 1.4 percent (table F). The average absolute revision was 1.5 percent.

The largest downward revisions for 2019 were for Vermont (2.5 percent), Connecticut (2.3 percent), and Michigan (2.2 percent); the largest upward revision was for Montana (1.4 percent). Property income (dividends, interest, and rent) contributed the most to the revision of personal income in Vermont and Michigan (table G). Nonfarm proprietors' income contributed the most in Connecticut. In Montana, property income and farm proprietors' income each contributed 0.7 percentage point to the revision of personal income, and nonfarm proprietors' income subtracted 0.7 percentage point. These revisions are mostly due to the incorporation of new source data from the Internal Revenue Service for dividends, interest, and rent and the income of nonfarm sole proprietorships and partnerships reported on 2018 income tax returns. The revisions to farm proprietors' income were primarily due to the incorporation of 2019 state-level crop production data from the U.S. Department of Agriculture.

**Table F. Revisions to Personal Income, by State and the District of Columbia, 2015–2019**

Region	2015	2016	2017	2018	2019
United States	0.1	0.2	0.4	0.1	-0.3
Alabama	0.6	0.8	1.4	1.1	0.6
Alaska	0.1	0.5	1.0	1.3	1.1
Arizona	0.0	0.3	0.1	0.4	-0.4
Arkansas	0.4	0.6	0.3	0.1	-0.5
California	0.0	0.4	0.5	0.0	-0.1
Colorado	0.2	0.4	0.4	0.7	-0.3
Connecticut	0.1	0.2	-0.7	-2.1	-2.3
Delaware	0.1	0.7	0.9	0.6	0.4
District of Columbia	0.0	0.3	0.2	-1.1	-1.3
Florida	-0.1	0.8	1.3	1.5	0.8
Georgia	0.3	0.4	0.8	0.9	0.1
Hawaii	0.0	0.2	0.6	-0.4	-0.8
Idaho	-0.2	-0.3	0.3	1.3	0.7
Illinois	0.4	0.2	0.5	0.4	-0.3
Indiana	0.1	-0.1	0.0	0.4	0.0
Iowa	0.1	0.2	0.4	-0.1	-1.5
Kansas	-0.1	-0.3	0.0	-0.4	0.0
Kentucky	0.3	0.3	-0.3	-0.4	-0.6
Louisiana	-0.3	-0.5	0.0	-0.1	-1.1
Maine	0.0	0.0	0.0	-0.2	-0.6
Maryland	-0.2	-0.1	0.4	-1.1	-1.6
Massachusetts	0.0	0.3	0.3	-0.1	-1.0
Michigan	-0.1	-0.5	-0.7	-1.5	-2.2
Minnesota	0.1	-0.2	0.0	-0.3	-1.4
Mississippi	0.5	0.2	0.4	-0.1	-1.2
Missouri	0.1	0.0	-0.9	-1.4	-1.9
Montana	0.3	0.7	1.9	1.2	1.4
Nebraska	0.3	-0.2	-0.1	-0.9	-0.6
Nevada	0.5	0.8	1.5	1.4	0.5
New Hampshire	-0.5	0.1	0.5	0.1	-0.6
New Jersey	0.0	0.2	0.1	-0.8	-0.7
New Mexico	0.1	0.5	0.5	0.0	-1.5
New York	0.1	0.2	0.3	-0.1	0.4
North Carolina	0.0	0.4	0.5	0.2	-0.1
North Dakota	-0.1	-1.3	0.1	0.3	-0.5
Ohio	0.1	0.4	0.3	-0.1	-0.7
Oklahoma	-0.1	0.0	0.3	-0.9	-1.3
Oregon	-0.1	0.2	0.7	1.1	0.5
Pennsylvania	0.1	0.4	0.3	-0.4	-1.3
Rhode Island	-0.2	0.2	0.4	-0.7	-0.3
South Carolina	-0.1	0.4	0.3	0.5	0.3
South Dakota	0.1	0.2	0.4	0.4	0.1
Tennessee	0.1	-0.2	0.6	0.7	-0.2
Texas	-0.1	0.3	0.9	1.3	0.6
Utah	0.1	0.0	0.3	1.2	1.1
Vermont	-0.4	-0.7	-0.6	-1.5	-2.5
Virginia	-0.3	0.3	0.6	0.1	-0.8
Washington	0.1	-0.1	-0.2	0.1	-0.2
West Virginia	0.4	0.5	0.7	0.7	-0.1
Wisconsin	0.4	0.1	-0.1	0.0	-0.7
Wyoming	-0.5	-0.8	0.3	0.5	-1.8
Average revision	0.1	0.1	0.1	0.2	1.4
Average absolute revision	0.3	0.3	0.4	0.8	1.5
Standard deviation of revision	0.3	0.3	0.6	0.9	1.0

Note. The annual revisions are calculated from the March 2020 release.

**Table G. Contributions to the Revision to Personal Income by Component by State for 2019<sup>1</sup>**

Region	Percent revision	Contributions to the revision (percentage points)							
	Personal income	Wages and salaries	Supplements to wages and salaries	Nonfarm proprietors' income	Farm proprietors' income	Dividends, interest, and rent	Personal current transfer receipts	Contributions for government social insurance	Adjustment for residence
United States	-0.3	0.1	0.0	-0.1	0.1	-0.1	-0.3	0.0	0.0
Alabama	0.6	0.1	0.1	0.1	0.0	0.2	0.2	0.0	0.0
Alaska	1.1	0.3	0.7	-1.2	0.0	0.1	1.1	-0.1	0.0
Arizona	-0.4	0.1	-0.2	0.1	0.0	0.1	-0.6	0.0	0.0
Arkansas	-0.5	0.0	-0.1	-0.4	0.2	0.1	-0.2	0.1	0.0
California	-0.1	0.2	-0.3	0.0	0.0	0.0	0.0	0.0	0.0
Colorado	-0.3	-0.1	0.1	-0.2	0.1	0.0	-0.4	-0.1	0.0
Connecticut	-2.3	0.1	-0.3	-1.0	0.0	-0.8	-0.5	0.0	0.2
Delaware	0.4	-0.1	0.7	0.9	0.0	-0.4	-0.2	0.0	-0.5
District of Columbia	-1.3	-0.9	-0.7	-2.1	0.0	-0.8	-0.3	-0.2	3.3
Florida	0.8	0.2	0.2	0.1	0.1	0.6	-0.2	0.1	0.0
Georgia	0.1	-0.1	-0.3	0.3	0.0	0.4	-0.3	0.0	0.1
Hawaii	-0.8	0.1	0.0	0.2	-0.1	-0.9	-0.1	0.0	0.0
Idaho	0.7	-0.1	0.2	0.2	0.8	-0.1	-0.2	0.0	0.0
Illinois	-0.3	-0.1	-0.2	0.3	0.0	-0.5	0.2	0.0	0.0
Indiana	0.0	0.1	0.2	0.3	0.0	-0.2	-0.3	0.1	0.1
Iowa	-1.5	-0.1	0.2	-0.4	0.3	-0.8	-0.6	0.0	0.0
Kansas	0.0	0.1	-0.3	-0.8	1.5	-0.4	-0.3	0.0	0.0
Kentucky	-0.6	0.0	-0.1	0.0	0.0	-0.4	-0.2	0.0	0.1
Louisiana	-1.1	-0.1	-0.4	0.1	0.0	-0.5	-0.3	-0.1	0.1
Maine	-0.6	0.2	-0.2	-0.1	0.1	-0.3	-0.3	-0.1	0.0
Maryland	-1.6	0.0	0.1	-1.0	0.1	-0.1	-0.4	0.0	-0.3
Massachusetts	-1.0	0.0	-0.1	-0.1	0.0	-0.5	-0.4	0.0	0.1
Michigan	-2.2	0.0	-0.3	-0.3	0.0	-1.3	-0.3	-0.1	0.0
Minnesota	-1.4	0.1	0.1	0.1	-0.2	-1.0	-0.5	0.0	0.0
Mississippi	-1.2	0.0	-0.1	-0.1	-0.4	-0.3	-0.2	0.1	0.0
Missouri	-1.9	0.2	0.2	-0.8	0.1	-1.3	-0.3	0.1	0.0
Montana	1.4	0.0	0.3	-0.7	0.7	0.7	0.3	-0.1	0.0
Nebraska	-0.6	0.2	-0.2	-1.3	1.0	-0.3	-0.1	0.0	0.1
Nevada	0.5	0.3	0.0	0.5	0.0	0.3	-0.2	0.3	0.0
New Hampshire	-0.6	0.0	0.0	0.3	0.0	-0.5	-0.3	0.0	-0.1
New Jersey	-0.7	0.1	0.4	0.0	0.0	-1.1	-0.3	0.0	0.3
New Mexico	-1.5	-0.2	0.1	0.1	0.2	-1.1	-0.7	-0.1	0.0
New York	0.4	0.0	0.4	-0.1	0.0	0.1	0.0	-0.1	-0.2
North Carolina	-0.1	0.0	0.5	0.0	-0.1	-0.2	-0.2	0.0	0.0
North Dakota	-0.5	0.2	-0.3	-0.3	0.5	-0.1	-0.7	-0.2	0.0
Ohio	-0.7	0.2	-0.2	-0.3	0.0	0.0	-0.3	-0.1	-0.1
Oklahoma	-1.3	0.1	-0.1	-1.4	0.2	-0.1	-0.1	-0.2	0.0
Oregon	0.5	0.2	0.2	0.3	0.2	0.1	-0.4	0.1	-0.1
Pennsylvania	-1.3	0.0	0.0	-0.4	0.1	-0.2	-0.8	0.0	0.0
Rhode Island	-0.3	0.3	0.3	0.2	0.0	-0.7	-0.2	0.0	-0.2
South Carolina	0.3	0.1	0.2	-0.2	0.0	0.6	-0.4	0.0	0.0
South Dakota	0.1	0.2	0.1	-0.1	0.2	-0.2	0.0	0.2	0.0
Tennessee	-0.2	-0.3	0.2	0.1	0.0	0.1	-0.3	0.0	0.0
Texas	0.6	0.0	0.0	-0.1	0.0	0.8	-0.3	-0.1	0.0
Utah	1.1	0.3	-0.6	0.2	0.1	1.2	-0.1	0.0	0.0
Vermont	-2.5	0.0	-0.4	0.1	0.1	-1.7	-0.7	-0.2	0.0
Virginia	-0.8	0.2	-0.2	-0.2	0.1	0.1	-0.4	0.0	-0.2
Washington	-0.2	0.1	0.2	0.2	-0.1	-0.2	-0.5	0.0	0.0
West Virginia	-0.1	-0.4	0.2	0.4	0.1	-0.2	-0.5	0.0	0.3
Wisconsin	-0.7	0.3	-0.2	0.0	0.1	-0.5	-0.4	0.1	0.0
Wyoming	-1.8	-0.2	-0.2	-0.1	-0.1	-1.1	-0.2	-0.2	0.0

1. Personal income is the sum of wages and salaries, supplements to wages and salaries, nonfarm proprietors' income, farm proprietors' income, dividends, interest, and rent, and personal current transfer receipts less contributions for government social insurance plus the adjustment for residence.

**Table H. Regional Source Data Used to Estimate State Personal Income and Personal Current Taxes**

Annual estimates	
<b>Wages and salaries by industry</b>	
In general	QCEW wage data.
Farm	USDA farm labor expense data.
Agriculture and forestry support activities	USDA farm labor expense data.
Rail transportation	RRB state payroll and employment data; Census Bureau ACS Journey to work data.
Educational services	CBP payroll data; Official Catholic Directory data.
Membership associations and organizations	CBP payroll data; RRB payroll data.
Private households	Census Bureau ACS data; Census Bureau population data.
Military	DOD personnel data; Coast Guard personnel and payroll data.
State and local government	Census Bureau Annual Survey of Public Employment and Payroll data; CES employment data.
<b>Employer contributions for employee pension and insurance funds by industry</b>	
Rail transportation	FRA casualties data.
State and local government	Census Bureau Annual Survey of Public Pensions contributions, pension service charges, and membership data; actuarial data from the CAFRs for a sample of state and local government retirement systems; MEPS employer contributions for health insurance data (certain states only).
All other industries	NAIC earned premium data and NASI employers cost of self insurance data; MEPS employer contributions for health insurance data (certain states only).
<b>Employer contributions for government social insurance by industry</b>	
All industries	Census Bureau State Government Finances data; QCEW data on contributions to unemployment insurance funds; OES data on employee wage distributions; CPS industry data on hours worked.
<b>Proprietors' income</b>	
Farm	USDA gross income and expense data; USDA ARMS corporate farm income data; Census of Agriculture livestock purchased and corporate farm income data.
Nonfarm industries	IRS data on net profits of proprietorships and partnerships; USDA Rural Development net income of agricultural cooperatives; USDA RUS net margin, or profit, of cooperatives that have outstanding loans.
<b>Residence adjustment</b>	Census Bureau ACS Journey to work data; IRS wage data.
<b>Dividends, interest, and rent</b>	USDA gross rental value of farm dwellings; IRS income tax data on dividends, taxable interest, S Corporation distributions, gross rents and royalties, and net royalty income; ACS data on the aggregate value of dwellings and mobile homes; OPM federal civilian retirement payments data and DOD military retirement payments data; SSA Social Security benefits data; FDIC deposits data; NCUA deposits data.
<b>Personal current transfer receipts</b>	SSA data on Social Security benefits and Supplemental Security Income benefits; Census Bureau state and local government finance data on disability benefits, income maintenance benefits, state workers' compensation, and education benefits; CMS medical benefits data; DOD medical benefits data; DVA veterans benefits data; USDA data on SNAP and WIC; IRS SOI tax credit data; PBGC benefits data; DOL data on unemployment benefits, black lung disability benefits, and trade adjustment; DOE Pell Grants and enrollment data; HHS data on TANF, foster care and adoption assistance, and energy assistance; Census Bureau population data; Railroad Retirement Board data on retirement and disability benefits and unemployment compensation.
<b>Employee and self-employed contributions for government social insurance</b>	SSA Earnings and Employment Data for Workers Covered under Social Security and Medicare and other unpublished SSA data; California state temporary disability insurance data; Census Bureau state temporary disability insurance data; CMS supplemental medical insurance enrollment data; personal contributions for state unemployment insurance data from the states; DVA veterans' insurance premiums data.
<b>Personal current taxes</b>	IRS income tax data; Census Bureau quarterly tax collections and state tax collections data; Census Bureau state and local government finance data.
Quarterly estimates	
<b>Wages and salaries by industry</b>	
In general	QCEW wage data; CES employment data.
Transportation and warehousing	DOT payroll data.
Military	DOD personnel data; Coast Gurard payroll data.
<b>Personal current transfer receipts</b>	DOL unemployment rate data; CMS medical benefits data.

<b>ACF TANF</b>	Administration for Children and Families, Temporary Assistance to Needy Families
<b>ACS</b>	American Community Survey, Census Bureau
<b>ARMS</b>	Agricultural Resource Management Survey
<b>CAFR</b>	Comprehensive Annual Financial Report
<b>CBP</b>	County Business Patterns, Census Bureau
<b>CES</b>	Current Employment Statistics survey, Bureau of Labor Statistics
<b>CMS</b>	Centers for Medicare and Medicaid Services
<b>CPS</b>	Current Population Survey, Census Bureau
<b>DOD</b>	Department of Defense
<b>DOE</b>	Department of Education
<b>DOL</b>	Department of Labor
<b>DOT</b>	Department of Transportation
<b>DVA</b>	Department of Veterans Affairs
<b>FDIC</b>	Federal Deposit Insurance Corporation
<b>FRA</b>	Federal Railroad Administration
<b>IRS</b>	Internal Revenue Service
<b>MEPS</b>	Medical Expenditure Panel Survey, Agency for Healthcare Research and Quality
<b>NAIC</b>	National Association of Insurance Commissioners
<b>NASI</b>	National Academy of Social Insurance
<b>NCUA</b>	National Credit Union Administration
<b>OASDHI</b>	Old-Age, Survivors, Disability, and Hospital Insurance, Social Security Administration
<b>OES</b>	Occupational Employment Statistics, Bureau of Labor Statistics
<b>OPM</b>	Office of Personnel Management
<b>PBGC</b>	Pension Benefit Guaranty Corporation
<b>QCEW</b>	Quarterly Census of Employment and Wages, Bureau of Labor Statistics
<b>RRB</b>	Railroad Retirement Board
<b>RUS</b>	Rural Utilities Service
<b>SNAP</b>	Supplemental Nutritional Assistance Program
<b>SSA</b>	Social Security Administration
<b>USDA</b>	U.S. Department of Agriculture
<b>WIC</b>	Special Supplemental Nutrition for Women, Infants, and Children

## Personal Income in the NIPAs and State Personal Income

The level of personal income in the National Income and Product Accounts differs from the national total in the state personal income statistics because of differences in coverage and timing of the availability of source data.

The differences in coverage stem from different concepts of residence. For NIPA personal income, a U.S. resident has a center of economic interest in the country and resides, or expects to reside, in the country for a year or more. For state personal income, a resident is a participant in a U.S. regional economy, regardless of the individual's national citizenship or duration of residence.<sup>1</sup>

In general, the NIPA measure of personal income is broader than state personal income:

- NIPA personal income includes the earnings of federal civilian and military personnel stationed abroad and the property income received by the federal retirement plans of these workers. The regional measure of personal income does not include this income.<sup>2</sup>
- NIPA personal income includes all income earned by U.S. citizens living abroad for less than a year. State personal income excludes the portion earned while an individual lives abroad.
- NIPA personal income includes the income of foreign nationals only if they live and work in the United States for a year or more. State personal income includes the income of resident foreign nationals working in the United States—including migrant workers—regardless of length of stay or residency.

The annual estimates of personal income in the NIPAs also diverge from the national totals of state personal income because of differences in the timing of the availability of source data. For example, farm proprietors' income in the NIPAs differs from farm proprietors' income in state personal income because the latter incorporates revised U.S. Department of Agriculture data that were not available until after the national estimate was released.

Both NIPA and state personal income include the income of U.S. residents employed by international organizations or by other countries while living in the United States, and both exclude the income of foreign nationals employed by their home governments. NIPA personal income also includes the income of foreign nationals working at international organizations in the United States.<sup>3</sup> In addition, both measures exclude the income of private U.S. citizens living outside the country for a year or more.

### Relation of Personal Income in the NIPAs and the State Personal Income Accounts

[Billions of dollars]

Component	2017	2018	2019
<b>Personal income, NIPAs</b>	<b>16,948.6</b>	<b>17,851.8</b>	<b>18,551.5</b>
<b>Plus adjustments for:</b>			
<b>Coverage differences</b>	<b>-14.4</b>	<b>-15.6</b>	<b>-15.2</b>
Federal workers abroad	-28.0	-29.2	-30.4
Wage and salary disbursements	-19.3	-20.0	-20.6
Supplements to wages and salaries <sup>1</sup>	-6.0	-6.5	-7.0
Dividends, interest, and rent <sup>2</sup>	-4.7	-4.8	-4.9
Less: Personal contributions for social insurance	-2.0	-2.1	-2.1
Rest-of-the-world difference	13.6	13.6	15.2
Wages of private foreign nationals in United States	14.9	15.0	16.6
Wages of private U.S. residents abroad	-1.3	-1.4	-1.4
<b>Use of more current source data</b>	<b>4.7</b>	<b>4.1</b>	<b>7.1</b>
Wage and salary disbursements	0.0	0.0	0.0
Farm proprietors' income	4.7	4.1	7.1
Personal current transfer receipts	<0.1	<0.1	<0.1
Statistical discrepancy <sup>3</sup>	-1.3	-1.0	-1.1
<b>Equals: State personal income</b>	<b>16,937.6</b>	<b>17,839.3</b>	<b>18,542.3</b>

1. Employer contributions for government social insurance and for employee pension and insurance funds for federal workers stationed abroad.
2. Investment income received by federal retirement plans that is attributed to federal workers stationed abroad.
3. Includes revisions made in the NIPAs that are not yet reflected in state personal income concerning wages of border workers and foreign nationals working for international organizations.

1. See *State Personal Income and Employment: Concepts, Data Sources, and Statistical Methods* on BEA's website.

2. For a description of military coverage in state personal income, see "New Treatment of State Estimates of Military Compensation," *Survey* 85 (October 2005): 116.

3. For more information on the treatment of border workers in the residence adjustment, see *State Personal Income and Employment: Concepts, Data Sources, and Statistical Methods*.

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The annual revision of state personal income was prepared by the Regional Income Division under the direction of Mauricio Ortiz, Chief. Joel Platt, Associate Director for Regional Economics, provided general guidance. The preparation of the revised estimates was a division-wide effort.

The annual estimates of wages and salaries, supplements to wages and salaries, and farm proprietors' income were prepared by the Compensation Branch under the supervision of Marcelo F. Yoon, Chief. Major responsibilities were assigned to Peter Battikha, Michael Berry, John Laffman, and David Lenze. Contributing staff members were Terence Fallon, David Guo, Hong Han, Michelle Harder, Nayana Kollanthara, Paul Medzerian, Elizabeth McCormack, Russell Moncrief, Ross Stepp, and Troy Watson.

The quarterly estimates of state personal income and the annual estimates of nonfarm proprietors' income, property income (personal dividends, interest, and rents and royalties), personal current transfer receipts, employee contributions for government social insurance, and the adjustment for residence were prepared by the Regional Income Branch under the supervision of Lisa Ninomiya, Chief. Major responsibilities were assigned to Brian Maisano, Alexander Adams, and Matthew von Kerczek. Contributing staff members were Michael Bentley, Suet Boudhraa, Ernie Enriquez, Solomon Kublashvili, Toan Ly, W. Timothy McKeel, and Jesse Park.

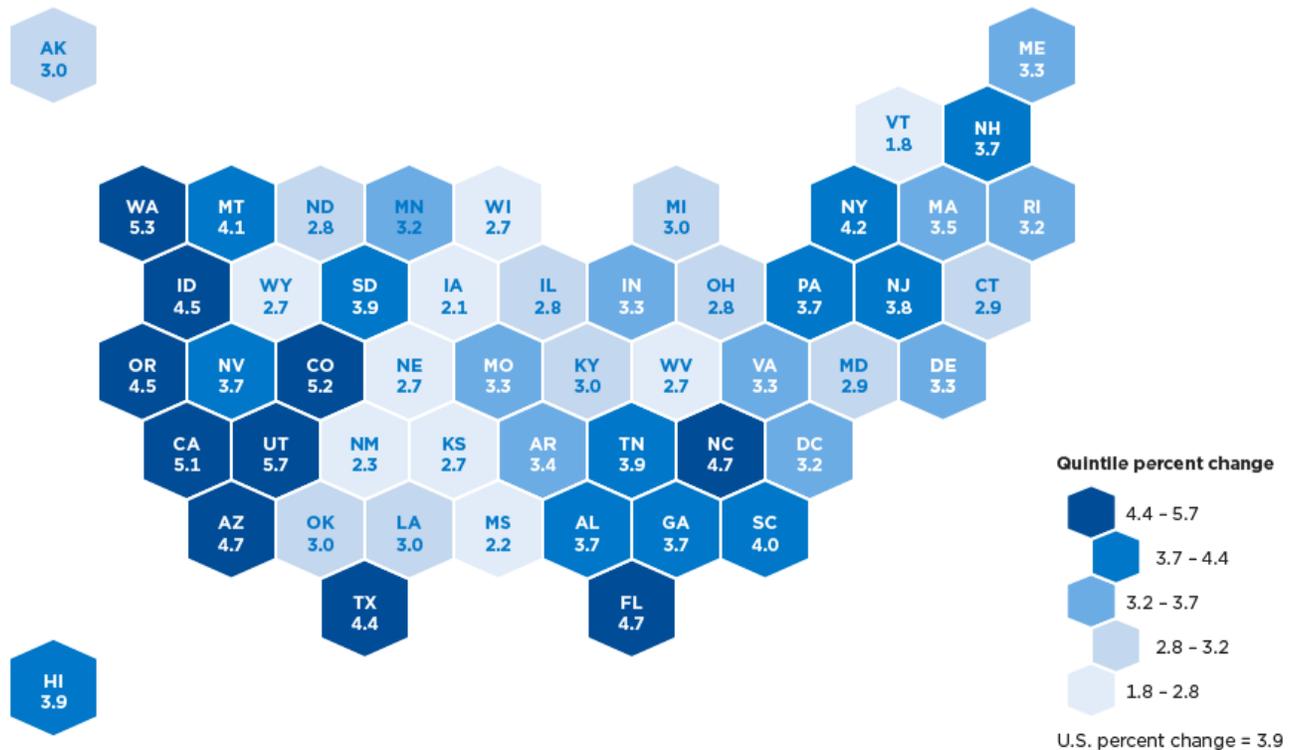
The annual estimates of personal current tax receipts were prepared by John Broda under the supervision of Zheng Wang.

The public use tabulations and data files were assembled and the tables were prepared by the Data and Administrative Systems Group under the direction of Elizabeth Cologer and Nicholas Empey. Major responsibilities were assigned to Jeffrey Newman, Michael Paris, and Callan Swenson. Contributing staff members were Melanie Carrales, Jake Dillion, Abbas Mousa, and Jonas Wilson.

## Personal Consumption Expenditures by State, 2019

On October 8, 2020, BEA released current-dollar statistics on PCE by state for 2019. PCE grew 3.9 percent nationwide in 2019, increasing in all states and the District of Columbia. The percent change for the states ranged from a low of 1.8 percent in Vermont to a high of 5.7 percent in Utah (chart 5).

Chart 5. Personal Consumption Expenditures by State: Percent Change, 2018–2019



PCE by state is a household consumption measure that reflects the value of the goods and services purchased by, or on behalf of, households by state of residence. These statistics on households provide an indication of economic well-being as well as information on consumption patterns across states and over time. For example, the statistics show how households allocate their spending between goods and services or between necessities and discretionary items or how consumers adjust their spending to changes in the economy.

The states with the largest PCE growth rates in 2019 were in the western half of the United States. After Utah, the largest growth rates were in Washington (5.3 percent), Colorado (5.2 percent), and California (5.1 percent). On the opposite end of the spectrum, the state with the smallest growth rate—Vermont—was followed by Iowa (2.1 percent), Mississippi (2.2 percent), and New Mexico (2.3 percent).

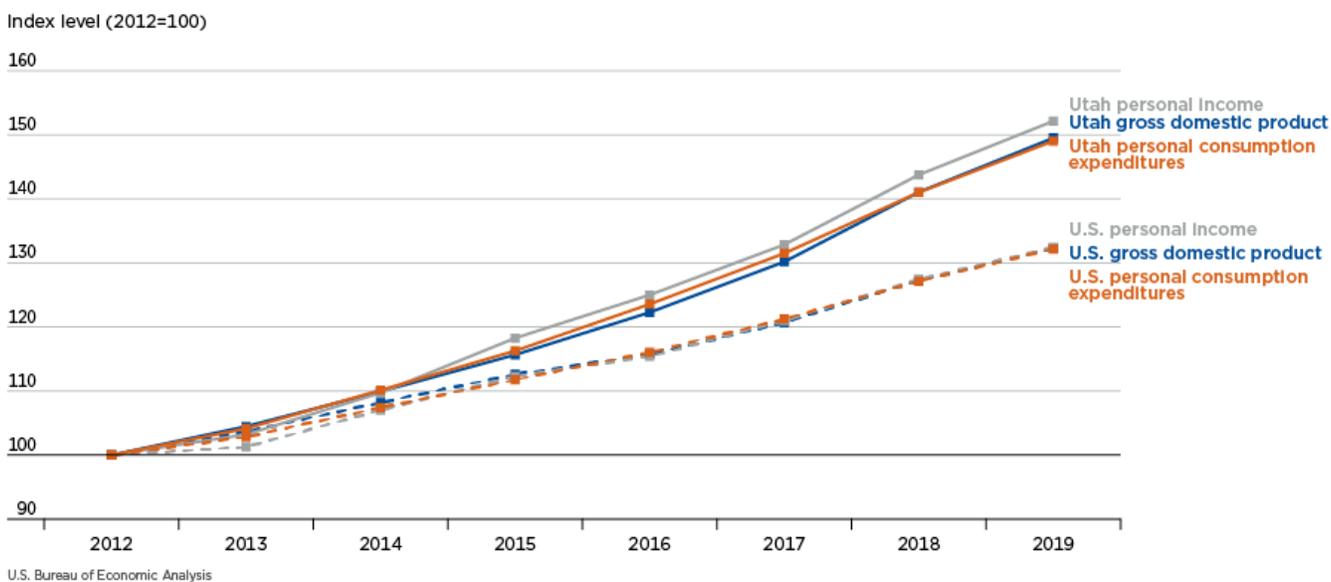
## Utah

Utah experienced the largest growth in 2019, increasing 5.7 percent; it was also the fastest growing state the previous year, increasing 7.2 percent in 2018 (table I);. The fastest growing states had strong growth in categories with large budget shares of total state PCE, such as housing and utilities, health care services, and financial services and insurance. A good example is Utah, which had large growth in both the financial services and insurance category and the housing and utilities category.

The primary contributors to Utah's growth were financial services and insurance and housing and utilities. While financial services and insurance and housing and utilities were the state's primary contributors, all categories contributed positively to the overall growth, except for gasoline and other energy goods. Utah has enjoyed a vibrant and robust economy, and that trend continued in 2019. In addition to a strong economy, Utah is the national leader in industrial banking.<sup>9</sup>

The strong growth in Utah is also evident in BEA's personal income and GDP regional data (chart 6). Growth in Utah's GDP and personal income outpaced the growth rate for the nation. Additionally, Utah's population grew more than the national average. Both components of population, natural increase (births less deaths) and net migration (inflows less outflows), increased from the previous year (table J).

**Chart 6. Indexed Regional Statistics for the United States and Utah, 2012-2019**



**Table I. Percent Change in Total Personal Consumption Expenditures by State, 2018-2019**

Region	Percent change	
	2018	2019
<b>United States<sup>1</sup></b>	<b>4.9</b>	<b>3.9</b>
Alabama	4.1	3.7
Alaska	3.3	3.0
Arizona	5.5	4.7
Arkansas	4.2	3.4
California	5.3	5.1
Colorado	5.5	5.2
Connecticut	4.0	2.9
Delaware	4.9	3.3
District of Columbia	5.6	3.2
Florida	5.6	4.7
Georgia	4.9	3.7
Hawaii	5.2	3.9
Idaho	6.1	4.5
Illinois	4.0	2.8
Indiana	4.3	3.3
Iowa	3.3	2.1
Kansas	3.4	2.7
Kentucky	3.7	3.0
Louisiana	3.7	3.0
Maine	4.7	3.3
Maryland	3.4	2.9
Massachusetts	4.1	3.5
Michigan	3.8	3.0
Minnesota	5.1	3.2
Mississippi	3.8	2.2
Missouri	3.8	3.3
Montana	5.0	4.1
Nebraska	3.7	2.7
Nevada	5.3	3.7
New Hampshire	4.5	3.7
New Jersey	4.3	3.8
New Mexico	4.5	2.3
New York	5.4	4.2
North Carolina	5.7	4.7
North Dakota	4.6	2.8
Ohio	3.9	2.8
Oklahoma	4.7	3.0
Oregon	5.5	4.5
Pennsylvania	4.8	3.7
Rhode Island	4.2	3.2
South Carolina	5.0	4.0
South Dakota	5.5	3.9
Tennessee	5.3	3.9
Texas	5.7	4.4
Utah	7.2	5.7
Vermont	3.8	1.8
Virginia	4.3	3.3
Washington	6.2	5.3
West Virginia	3.7	2.7
Wisconsin	4.5	2.7
Wyoming	4.0	2.7

1. The U.S. values reported differ from the personal consumption expenditures (PCE) values in the national accounts because PCE by state excludes net expenditures abroad by U.S. residents, which consist of government and private employees' expenditures abroad less personal remittances in kind to nonresidents.

Note. Percent change from preceding period was calculated from unrounded data. Expenditures may not sum to higher-level aggregates because of rounding.

**Table J. Net Change in Population, United States and Select States, 2018-2019**

Region	2018	2019	Net change	Natural increase	Net migration
United States	326,687,501	328,239,523	1,552,022	956,674	595,348
Utah	3,153,550	3,205,958	52,408	31,199	21,167
Vermont	624,358	623,989	-369	-53	-299

Source. U.S. Census Bureau

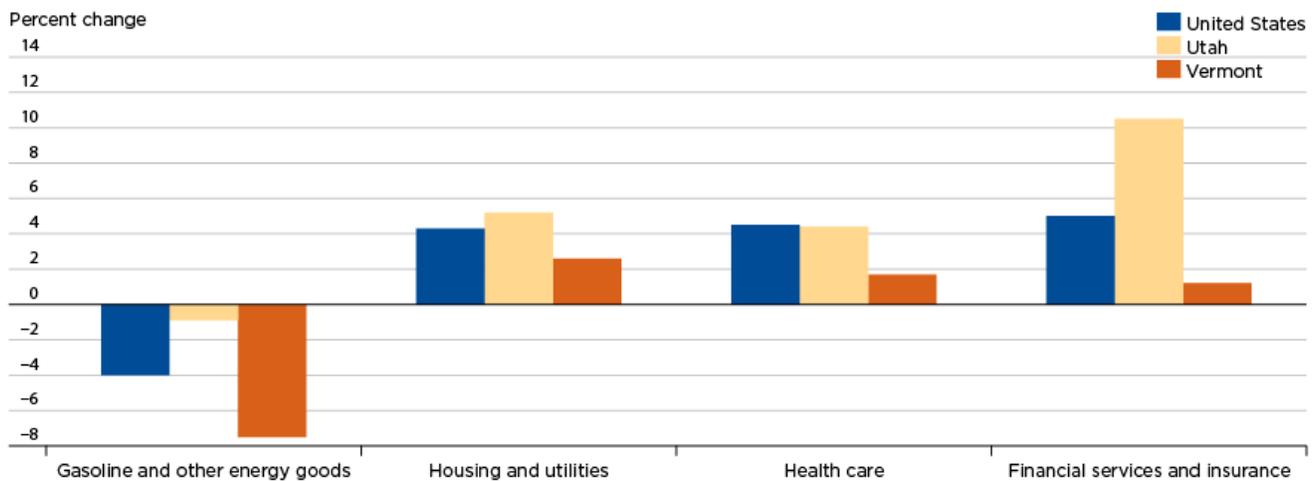
## Vermont

Vermont had the smallest growth in 2019, increasing 1.8 percent; it was also among the slowest growing states the previous year, increasing 3.8 percent in 2018. Like the fastest growing states, a common characteristic for the slow growing states was an underperforming category with a large budget share of total state PCE. Two of Vermont's largest contributors to growth, housing and utilities and health care services, are good examples of this.

Expenditures on housing and utilities in Vermont had the second slowest growth rate of all the states, at 2.6 percent. In contrast, the national growth rate for housing and utilities expenditures was 4.3 percent, and Utah, the fastest growing state, boasted a growth rate of 5.1 percent. Similarly, the growth rate for expenditures on health care services in Vermont was 1.7 percent, while U.S. expenditures on health care services had a growth rate of 4.5 percent (chart 7).

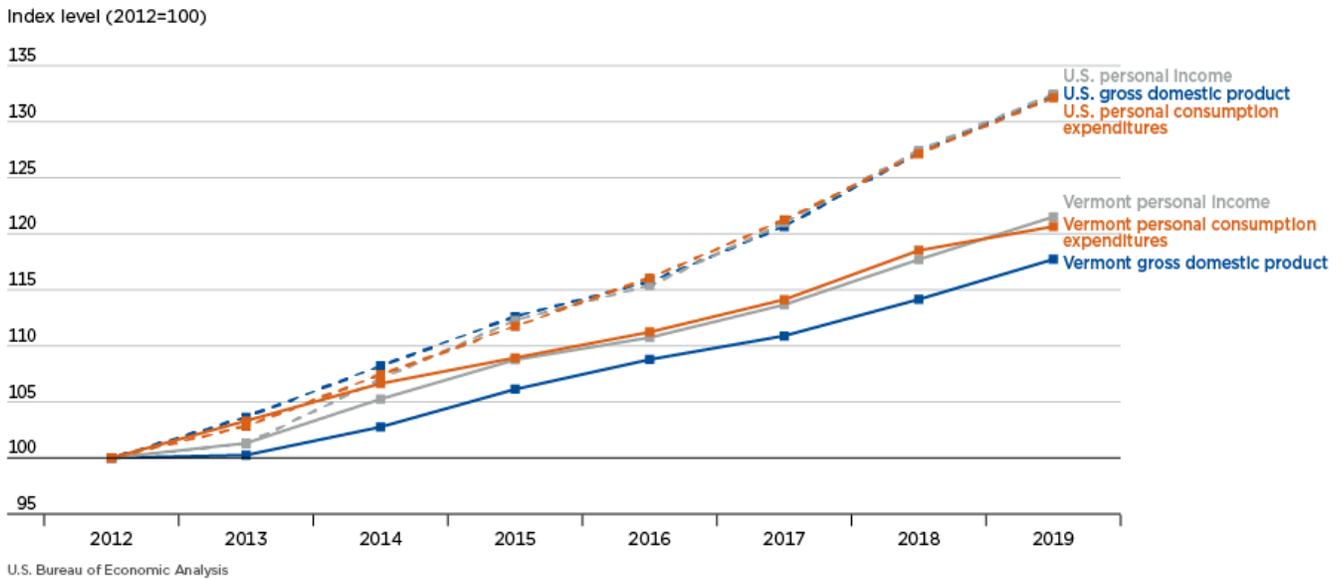
Additionally, the slow growth in Vermont was evident in BEA's personal income and GDP regional data (chart 8). Growth in Vermont's GDP and personal income lagged the respective growth rates for the nation. However, the most important indicator was the population statistic, which decreased in 2019. Unlike Utah, both components of Vermont's population decreased from the previous year.

**Chart 7. Percent Change for Select Personal Consumption Expenditures  
Categories for the United States, Utah, and Vermont, 2018-2019**



U.S. Bureau of Economic Analysis

Chart 8. Indexed Regional Statistics for the United States and Vermont, 2012–2019



## Revisions

The October release of PCE by state included updated statistics for 2013–2018. The updated statistics incorporated the results of the 2020 annual update of the NIPAs and newly available and revised regional source data. Source data that were either revised or newly released include total receipts data from the 2017 Economic Census, new and revised data from the Bureau of Labor Statistics Quarterly Census of Employment and Wages for 2015–2019, and new 2018 data from the Census Bureau American Community Survey.

Several methodology improvements were incorporated into the PCE by state statistics for the October release. The health care category introduced the use of product service code data, which allows for the inclusion of expenditures through additional retail outlets and improved identification of consumer-specific spending. The financial services and insurance category incorporated the improvements implemented in the NIPAs for services furnished without payment by financial intermediaries.<sup>10</sup> Lastly, the food services and accommodations category incorporated data from the Annual Survey of State and Local Government Finances for school lunches.

Current-dollar national PCE was unrevised in 2018 (table K). At the state level, the revisions ranged from a downward 4.0 percent in Montana to an upward 2.7 percent in Arizona. Current-dollar PCE was revised downward in 24 states and was unrevised or revised upward in 26 states and the District of Columbia. The revisions were caused by the new and revised source data, primarily due to the 2017 Economic Census. Additionally, the methodology improvements introduced revisions to select categories.

**Table K. Percent Revisions to Total Personal Consumption Expenditures by State, 2015–2018**

Region	Percent revision			
	2015	2016	2017	2018
<b>United States<sup>1</sup></b>	<b>0.1</b>	<b>0.2</b>	<b>0.2</b>	<b>0.0</b>
Alabama	0.7	1.4	1.6	1.3
Alaska	-1.3	-1.7	-1.9	-2.8
Arizona	1.9	2.7	3.2	2.7
Arkansas	-0.5	-0.5	-0.7	-0.5
California	0.2	0.0	0.3	-0.3
Colorado	0.8	1.4	1.4	0.8
Connecticut	-0.1	0.4	0.4	0.4
Delaware	0.7	0.8	1.1	1.3
District of Columbia	0.2	0.8	0.6	0.7
Florida	0.6	0.7	0.7	0.6
Georgia	1.2	1.5	2.1	1.6
Hawaii	-1.4	-2.2	-2.8	-2.7
Idaho	-0.8	-1.3	-1.3	-1.4
Illinois	-0.2	-0.2	-0.4	-0.9
Indiana	0.3	0.7	1.0	1.2
Iowa	-0.7	-0.5	-0.7	-1.1
Kansas	0.1	0.6	0.5	0.0
Kentucky	0.3	0.9	0.8	0.3
Louisiana	-0.3	-0.2	0.0	-0.1
Maine	0.5	1.1	1.5	1.1
Maryland	-0.5	-0.6	-0.8	-1.3
Massachusetts	-0.7	-1.1	-1.7	-1.6
Michigan	0.4	0.3	0.1	-0.5
Minnesota	-1.6	-2.4	-3.1	-3.2
Mississippi	0.6	1.1	1.3	1.4
Missouri	-0.3	0.0	0.2	-0.1
Montana	-1.9	-2.7	-3.8	-4.0
Nebraska	-1.1	-1.3	-1.5	-2.1
Nevada	1.2	1.7	2.4	2.0
New Hampshire	0.7	1.5	1.5	1.3
New Jersey	-0.6	-0.7	-0.9	-1.2
New Mexico	0.2	0.3	0.4	0.2
New York	-0.3	-0.4	-0.4	-0.5
North Carolina	0.1	0.4	0.2	0.2
North Dakota	-3.1	-3.6	-4.1	-3.7
Ohio	0.9	1.4	1.9	1.7
Oklahoma	0.5	0.6	0.9	0.6
Oregon	-1.0	-1.3	-1.3	-1.4
Pennsylvania	-0.1	0.1	0.1	0.0
Rhode Island	0.9	1.0	1.4	1.2
South Carolina	0.3	0.6	0.7	1.3
South Dakota	0.2	0.1	0.4	0.9
Tennessee	0.0	0.4	0.3	0.4
Texas	0.7	0.6	0.6	0.5
Utah	0.4	0.1	0.6	0.5
Vermont	-1.8	-1.9	-2.5	-3.3
Virginia	0.1	0.3	0.3	0.0
Washington	-0.1	0.1	0.1	-0.6
West Virginia	-0.8	-0.5	-0.2	-0.1
Wisconsin	-0.1	-0.2	-0.4	-0.9
Wyoming	-0.3	-0.2	0.0	-0.3

1. The U.S. values reported differ from the personal consumption expenditures (PCE) values in the national accounts because PCE by state excludes net expenditures abroad by U.S. residents, which consist of government and private employees' expenditures abroad less personal remittances in kind to nonresidents.

Note. Percent change from preceding period was calculated from unrounded data. Expenditures may not sum to higher-level aggregates because of rounding.

## Personal Consumption Expenditures by State

### Concepts and definitions

PCE by state is the regional counterpart of national PCE, which measures the value of the goods and services purchased by, and on behalf of, households. PCE by state measures household consumption based on households' state of residence in the 50 states and the District of Columbia. Examples of purchases made on behalf of households include health care services paid for by Medicare and Medicaid and education services provided by nonprofit institutions or the government.

In addition to out-of-pocket household purchases and purchases made by third parties on behalf of households, PCE by state also includes imputations for the consumption of goods and services without market transactions. The two main imputations in PCE by state are owner-occupied housing and financial services with no explicit charge.

The housing imputation approximates the value of housing services provided by owner-occupied housing. This imputation ensures that the treatment of owner-occupied housing is comparable with that of tenant-occupied housing, which is valued by rent paid. Because homeowners consume the service of shelter, regardless of having a mortgage, this imputation represents the rent homeowners would pay if they rented the home they own.

The financial services imputation approximates the value of financial services that households receive either without payment or for a small fee, which does not reflect the full value of the service. Examples of these services include no-additional-fee checking accounts, recordkeeping, and safekeeping of deposits.

Finally, PCE by state includes the net expenditures of nonprofit institutions serving households (NPISHs). Since the services by NPISHs are typically provided to households for less than the cost of the service, these net expenditures represent the value of the services that is unaccounted for by households' out-of-pocket purchases.<sup>1</sup>

PCE by state statistics are consistent with BEA national PCE statistics, with respect to concepts and definitions, and with BEA regional income statistics, with respect to residency. The latter allows for meaningful comparisons of household income and consumption within a given geography.

There are minor differences in coverage between the regional and national PCE statistics, which stem from differences in residency definitions across these statistics.<sup>2</sup> PCE by state excludes the net expenditures abroad by U.S. residents, which consist of government and private employees' expenditures abroad less personal remittances in kind to nonresidents.<sup>3</sup> These expenditures are included in national PCE, but they cannot be attributed to a particular state. However, PCE by state does include the travel expenditures abroad by U.S. residents.

### Residency adjustments

Residency definitions are important to the regional economic accounts to align measures of income and consumption within a given geography. PCE by state statistics use the residency concept of regional income statistics so state expenditures correspond to the same population used to measure state personal income.

For regional income statistics, a resident is considered a participant in a regional economy regardless of national allegiance or duration of residence. Regional income statistics exclude the income earned by U.S. residents living abroad but include the income earned by foreign nationals working in the United States. PCE by state also excludes net expenditures of U.S. residents abroad; however, PCE by state includes the travel expenditures abroad by U.S. residents.

Residency adjustments are made to both regional income and PCE statistics; however, these adjustments serve different purposes. For regional income statistics, a residence adjustment is made to reallocate income earned in places of work other than the recipients' place of residence. For the PCE by state statistics, a residency adjustment is made to reallocate expenditures made in states other than the households' state of residence.

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1. For more information, see "[Chapter 5. Personal Consumption Expenditures](#)" in *Concepts and Methods of the U.S. National Income and Product Accounts* on the BEA website.

2. For a more detailed discussion on residency in the national and regional economic accounts, see Christian Awuku-Budu, Ledia Guci, Christopher A. Lucas, and Charles Ian Mead, "[Prototype Personal Consumption Expenditures by State](#)," *Survey* 94 (September 2014).

3. In 2019, the net expenditures abroad by U.S. residents were 0.08 percent of national total PCE.

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1. The current-dollar GDP of the overseas activity of the federal government exceeded the GDP of 15 states in 2019.
2. See the table “[Percent Changes in Chain-Type Price Indexes for Gross Output by Industry](#)” in the Industry Economic Accounts.
3. See “[The 2020 Annual Update of the National Income and Product Accounts](#),” *Survey of Current Business* 100 (August 2020).
4. State personal income, which is measured in current dollars, is the sum of compensation of employees; proprietors’ income with inventory valuation and capital consumption adjustments; dividends, interest, and rent; and personal current transfer receipts less contributions for government social insurance plus the adjustment for residence.
5. In 2019, compensation accounted for 69 percent of state personal income in North Dakota and 53 percent in Connecticut and Montana, the states with the largest and smallest shares. Compensation is measured by place of work.
6. See “[The 2020 Annual Update of the National Income and Product Accounts](#),” *Survey* 100 (August 2020).
7. For more information about the adjustments, see the box “Personal Income in the NIPAs and State Personal Income.”
8. The components of NIPA personal income are estimated independently of the components of state personal income, oftentimes using data sources that are not available for states. To reconcile the sum of state estimates with the adjusted NIPA estimates, the state estimates are adjusted proportionately. In other words, the adjusted NIPA estimates control the sum of the state estimates.
9. See the press release “[Utah anchors and dominates industrial banking in the United States](#)” from the *Utah Business* website.
10. For more detailed information, see “[The 2020 Annual Update of the National Income and Product Accounts](#),” *Survey* 100 (August 2020).