

# *2018 State Business Tax Burden Rankings*

*9th Edition of the Annual Anderson Economic Group  
Comprehensive Report on State and Local Business Tax Burden  
Across the United States*

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## *I. Executive Summary*

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**PURPOSE OF REPORT** This report is the ninth edition of Anderson Economic Group’s annual business tax burden rankings for the 50 states and the District of Columbia. It presents the results of a comprehensive and consistent analysis that AEG has produced since 2006.

The purpose of this report is to:

- Identify the types of state and local taxes paid by businesses,
- Estimate the total amount of state and local taxes paid in 2016 by businesses in each state,
- Estimate each state’s business tax burden in 2016, and
- Rank all 50 states and the District of Columbia by their 2016 business tax burden.

We provide results for 2016 because that is the most recent year for which comprehensive data is available on state tax revenues.

### *More Than Ten Years of Consistent Analysis*

This report uses a consistent methodology, honed over more than a decade of research, to provide an objective analysis of state and local taxes paid by businesses as a share of business profits in each state. The rankings and other information in this report allow businesses, policy makers, and the public to compare the tax burdens imposed on employers in different states, and understand which taxes contribute to those burdens. For our complete business tax burden rankings, see Exhibit I on page 17.

### *Business Tax Reliance*

This is the fourth business tax burden report to include state business tax reliance, a measure of taxes collected from businesses as a share of total tax collections. This measure shows the extent to which state and local governments rely on business taxes to fund the public sector. See Exhibit IV on page 20 for our business tax reliance estimates.

### **OUR OBJECTIVE AND COMPREHENSIVE APPROACH**

We define state and local business tax burden as the amount of state and local taxes paid directly by businesses as a share of businesses’ pre-tax operating surplus (a measure of a business’s “ability to pay” these taxes).

We performed an exhaustive review to estimate *all taxes* directly paid by businesses to state and local governments. To make these estimates, we used dozens of state and national sources to collect information on 11 different categories of taxes, including property taxes, income taxes, sales taxes, excise taxes, severance taxes, and more.

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## Executive Summary

This approach provides a comprehensive, objective measure of the state and local tax burden. Contrary to other tax indices and rankings, we do not weight some taxes more than others, nor do we rely on any subjective assessments of which taxes or forms of taxation are better than others.

In our analysis, we are careful to include only taxes paid by businesses. For example, we include only sales taxes on goods and services purchased by businesses, not individual consumers. Similarly, we include only income taxes on individual business income, excluding income taxes on wages.

When we make comparisons to last year's estimates, we use updated estimates that take into account new data released since last year's report. We carefully document all of our data sources and assumptions in a fully disclosed methodology. See "Methodology" on page 11 for a detailed discussion of our methods.

## KEY FINDINGS

Our research and analysis led to the following major findings.

### *State and Local Taxes Paid by Businesses*

- U.S. businesses paid \$661.1 billion in state and local taxes in 2016.
- Nationally, property taxes and general sales taxes make up the largest share of state and local business tax burden, accounting for over 60% of total state and local taxes paid by businesses in 2016.

**TABLE 1. Total State and Local Taxes Paid by Businesses, 2016**

Type of Tax	Total Taxes Paid (billions of \$)	% of Total
Property tax	\$259.8	39.3%
General sales tax	\$152.7	23.1%
Corporate income tax	\$53.5	8.1%
Unemployment compensation tax	\$42.2	6.4%
Individual income tax on pass-thru business income	\$39.1	5.9%
License fees	\$34.5	5.2%
Public utilities sales tax	\$27.8	4.2%
Selective sales tax	\$27.1	4.1%
Motor fuel excise tax	\$9.6	1.5%
Severance tax	\$7.7	1.2%
Gross receipts tax	\$6.9	1.0%
<b>Total State and Local Taxes Paid by Businesses</b>	<b>\$661.3</b>	<b>100%</b>

*Note: May not sum due to rounding*

*Source: Anderson Economic Group analysis and estimates, using base data from U.S. Census of Governments State and Local Finance Survey and other federal and state sources. See Methodology Appendix for complete source list.*

*Business Tax Burdens by State*

- Business tax burdens vary widely among states. The five states with the lowest business tax burden all collected 7.0% or less of business operating margin, while the five states with the highest tax burden collected 12.3% or more of operating margin. For a list of the ten states with the lowest business tax burden, see Table 2 below. For a full ranking, see Exhibit I on page 17.

**TABLE 2. States with Lowest Business Tax Burdens, 2016**

Rank		Business Tax Burden
1	Oklahoma	6.6%
2	Oregon	6.8%
3	North Carolina	6.9%
4	Delaware	7.0%
5	Georgia	7.0%
6	Utah	7.0%
7	Indiana	7.0%
8	Missouri	7.0%
9	Michigan	7.5%
10	South Dakota	7.8%
	<i>U.S. State Average</i>	<i>9.4%</i>

*Note: Rankings include the District of Columbia. Business tax burden is defined as the share of pre-tax gross operating surplus in the state paid in state and local taxes.*

*Source: Anderson Economic Group analysis and estimates using base data from U.S. Census of Governments State and Local Finance Survey and other federal and state sources. See Methodology Appendix for complete source list.*

*Business Tax Reliance*

- Business tax reliance varies considerably among states, with business taxes accounting for less than 31% of all taxes collected in Maryland and over 71% in North Dakota.
- States with high severance taxes have a higher business tax burden. Outside of this relationship, there is no significant correlation between business tax burden and business tax reliance. States with a high business tax burden are not necessarily more likely to rely on business taxes as a revenue source.

**ABOUT ANDERSON ECONOMIC GROUP**

Anderson Economic Group, LLC, is a boutique consulting firm, with offices in Chicago, Illinois; East Lansing, Michigan; New York, New York; and Istanbul, Turkey. The experts at AEG specialize in strategy, business valuation, public policy, and market analyses. We have conducted nationally-recognized studies on tax reform, business incentives, site selection and economic and fiscal impacts for private, public, and non-profit clients across the United States. For more information about AEG and the authors of this report, see “About Anderson Economic Group” on page 9.

## II. State and Local Business Taxes

Businesses pay many different taxes at the state and local level. We have identified 11 types of state and local taxes paid by businesses totaling \$661.1 billion for all state and local governments combined in 2016, as shown in Table 3 below.

**TABLE 3. Total State and Local Taxes Paid by Businesses, 2016**

Type of Tax	Total Taxes Paid (billions of \$)	% of Total
Property tax	\$259.8	39.3%
General sales tax	\$152.7	23.1%
Corporate income tax	\$53.5	8.1%
Unemployment compensation tax	\$42.2	6.4%
Individual income tax on pass-thru business income	\$39.1	5.9%
License fees	\$34.5	5.2%
Public utilities sales tax	\$27.8	4.2%
Selective sales tax	\$27.1	4.1%
Motor fuel excise tax	\$9.6	1.5%
Severance tax	\$7.7	1.2%
Gross receipts tax	\$6.9	1.0%
<b>Total State and Local Taxes Paid by Businesses</b>	<b>\$661.1</b>	<b>100%</b>

*Note: May not add to total due to rounding*

*Source: Anderson Economic Group analysis and estimates, using base data from U.S. Census of Governments State and Local Finance Survey and other federal and state sources. See Methodology Appendix for complete source list.*

Nationwide, over 60% of business taxes paid to state and local government come from just two taxes—property and general sales. Property and general sales taxes are the two largest taxes collected by value in 42 states and in the District of Columbia.

Corporate income tax is often seen as the most important state or local tax on businesses. However, corporate income tax accounts for only 8.1% of total business tax collections for all states combined. Corporate income taxes account for less than 10% of total business taxes paid in 38 states.

Note that we include only taxes paid by businesses directly. For example, we include only the amount of general sales tax paid on goods and services purchased *by businesses*, as opposed to sales tax paid on personal consumption by households. Similarly, we exclude any property taxes paid for owner-occupied and seasonal use homes.

For our complete business tax burden rankings, see Exhibit I on page 17.

**STATE BUSINESS TAX BURDEN RANKINGS**

We ranked all 50 states and the District of Columbia on their respective business tax burdens. A rank of “1” indicates the state with the lowest tax burden. We define business tax burden as the share of pre-tax gross operating surplus (a measure of profits) paid in state and local taxes. The ten states with the lowest business tax burden and the ten states with the highest business tax burden are shown in Table 4 below. Nationally, businesses saw an average state and local tax burden of 9.4% in 2016, a decrease from 9.7% in 2015.

**TABLE 4. States with Lowest and Highest Business Tax Burdens, 2016**

Ten States with Lowest Business Tax Burdens			Ten States with Highest Business Tax Burdens		
Rank		Business Tax Burden	Rank		Business Tax Burden
1	Oklahoma	6.6%	42	New York	11.3%
2	Oregon	6.8%	43	West Virginia	12.0%
3	North Carolina	6.9%	44	Wyoming	12.0%
4	Delaware	7.0%	45	Hawaii	12.0%
5	Georgia	7.0%	46	Mississippi	12.1%
6	Utah	7.0%	47	Rhode Island	12.3%
7	Indiana	7.0%	48	District of Columbia	12.5%
8	Missouri	7.0%	49	Vermont	12.9%
9	Michigan	7.5%	50	Maine	12.9%
10	South Dakota	7.8%	51	North Dakota	14.6%
U.S. State Average			9.4%		

*Note: Business tax burden is defined as the share of pre-tax gross operating surplus in the state paid in state and local taxes.*

*Source: Anderson Economic Group analysis and estimates using base data from U.S. Census of Governments State and Local Finance Survey and other federal and state sources. See Methodology Appendix for complete source list.*

**Ten States with Lowest Tax Burdens.** The ten states with the lowest tax burdens vary in their characteristics and taxing behavior. Oklahoma has the lowest tax burden with very low property and unemployment compensation taxes, and an above-average severance tax. In addition, its top individual income tax rate fell from 5.25% to 5% in 2016, leading to a 20% drop in individual income tax on pass-through business income from the previous year.

Oregon has had one of the lowest business tax burdens among all states for the past several years. Outside of having no general sales tax, Oregon does not rank among the ten lowest-burden states in any particular tax category, and has below-average business taxes across the board. North Carolina does not rank among the ten highest-burden states in any particular tax category, and has one of the lowest general sales tax burdens across the country.

**Ten States with Highest Tax Burdens.** The ten states with the highest tax burdens also vary in their taxing strategies. States with very high severance taxes—North Dakota, Wyoming, and West Virginia—appear on the list. High severance

taxes, however, do not always coincide with lower taxes in other categories. North Dakota, for example, has the highest severance tax burden in the country and also ranks in the ten highest-burden states for motor fuel and general sales taxes.

Six of the ten high tax burden states have no severance tax (Hawaii, Maine, New York, Rhode Island, Vermont, District of Columbia). Maine has the highest property tax burden in the country for businesses, closely followed by Rhode Island. Rhode Island also ranks the second highest for unemployment compensation taxes after Vermont. The District of Columbia has the fourth-highest burden due to relatively high and increasing property, public utilities, corporate income, and individual income taxes.

See Exhibit III on page 19 for a breakdown of tax burden by tax category in each state.

## **CHANGE IN BUSINESS TAX BURDEN FROM 2015 TO 2016**

State and local business tax revenue increased from \$657 billion to \$661 billion between 2015 and 2016. However, this tax revenue increase was outpaced by gross operating surplus growth nationwide, leading the national average business tax burden to decrease from 9.7% in 2015 to 9.4% in 2016.<sup>1</sup>

**Biggest Rise in Rankings.** We show the states whose ranking improved the most over the past year in our business tax burden rankings in Table 5 on page 7. Colorado saw the largest rise in our rankings, jumping 9 spots from number 25 to 16. This jump is due to large declines in the state's oil severance revenue and to modest declines in property taxes and sales tax collections from businesses.<sup>2</sup>

Montana collections from motor fuel, corporate income, severance, and unemployment compensation taxes all dropped by over 20% from 2015 to 2016, making it the second most improved state in our rankings. Alaska followed in third, rising seven spots from 37th to 30th as the state's severance tax collections continued to fall between 2015 and 2016.<sup>3</sup> Wyoming tax collections dropped due to drops in property, unemployment compensation, and general sales tax collections.

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1. Using more recent data on tax collections and state economies, we have updated our tax burden estimates from last year's report. The numbers presented for 2015 in this year's report represent updated estimates that do not match the preliminary estimates shown in last year's report.
  2. According to the U.S. Census Bureau, in FY 2015 the Colorado collected \$308 million in severance taxes. Severance tax collections were \$99 million in FY 2016.
  3. According to the U.S. Census Bureau, in FY 2015 the Alaska collected \$636 million in severance taxes. Severance tax collections were \$337 million in FY 2016.



**TABLE 5. Biggest Rise in Ranking from 2015 to 2016 (dollar amounts in millions)**

State	2 0 1 6			2 0 1 5		
	Rank	Tax Burden	Business Taxes	Rank	Tax Burden	Business Taxes
Colorado	16	8.2%	\$10,422	25	9.1%	\$11,343
Montana	28	9.5%	\$1,880	36	10.4%	\$2,053
Alaska	30	9.2%	\$1,779	37	10.6%	2,179
Wyoming	44	12.0%	\$2,154	50	14.1%	\$2,742

*Note: Some rankings in the 2018 study may not match rankings in the 2017 study due to updated tax data*

*Source: Anderson Economic Group analysis and estimates using base data from U.S. Census of Governments State and Local Finance Survey and other federal and state sources. See Methodology Appendix for complete source list.*

**Biggest Fall in Rankings.** As shown in Table 6 below, the two states whose ranking declined the most over the past year were the District of Columbia and Indiana. The District of Columbia fell 7 spots to 48th in our rankings after seeing over a 20% increase in property taxes, corporate income taxes, motor fuel taxes, and license fees paid by businesses in 2016. Indiana saw moderate increases in business property and general sales tax collections, dropping the state 6 spots from 1st to 7th.

Both Arkansas and Louisiana fell five spots in our rankings. Arkansas's fall in the rankings is primarily attributable to increases in property and general sales taxes. Louisiana's total business tax collections actually decreased, but the state's tax burden increased overall as the state's gross operating surplus declined faster than tax collections.

**TABLE 6. Biggest Drop in Ranking from 2015 to 2016 (dollar amounts in millions)**

State	2 0 1 6			2 0 1 5		
	Rank	Tax Burden	Business Taxes	Rank	Tax Burden	Business Taxes
District of Columbia	48	12.5%	\$3,955	41	11.2%	\$3,378
Indiana	7	7.0%	\$10,609	1	6.7%	\$9,999
Arkansas	34	9.7%	\$4,652	29	9.8%	\$4,600
Louisiana	19	8.3%	\$8,870	14	8.2%	\$8,877

*Source: Anderson Economic Group analysis and estimates using base data from U.S. Census of Governments State and Local Finance Survey and other federal and state sources. See Methodology Appendix for complete source list.*

**STATE BUSINESS TAX RELIANCE**

State business tax *reliance* is a separate measure from business tax burden. A state's business tax reliance is the share of all state and local tax revenue col-

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**State and Local Business Taxes**

lected from businesses. Importantly, *tax* revenues do not include other revenues such as federal grants, interest revenue, insurance premiums, pension contributions, fines, and charges for services.

Taxes paid by businesses accounted for 40.3% of total state and local tax collections nationwide in 2016. States vary significantly in their reliance on taxes paid by businesses, from 31.7% in Maryland to 71.6% in North Dakota.

States with high severance taxes often have high business tax reliance. In North Dakota and Wyoming, for example, severance taxes account for 31.5% and 19.4% of all state and local taxes collected (business and non-business), respectively. After excluding high-severance-tax states, there is virtually no correlation between a state's business tax reliance and its business tax burden.

See Exhibit IV on page 20 for our full business tax reliance rankings.

### *III. About Anderson Economic Group*

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Anderson Economic Group, LLC, is a boutique consulting firm, with offices in Chicago, Illinois; East Lansing, Michigan; New York, New York; and Istanbul, Turkey. The experts at AEG specialize in strategy, business valuation, public policy, and market analyses. We have conducted nationally-recognized studies on tax reform, business incentives, and economic and fiscal impacts for private, public, and non-profit clients across the United States.

We have analyzed all 50 states in past tax burden studies and market analyses, as well as our book *The State Economic Handbook* (Palgrave Macmillan).

AEG's past clients include:

- Governments, such as the states of Kentucky, Tennessee, Michigan, North Carolina, and Wisconsin; the cities of Detroit, MI, Cincinnati, OH, Norfolk, VA, and Fort Wayne, IN; counties such as Oakland County, Michigan, and Collier County, Florida; and authorities such as the Detroit-Wayne County Port Authority.
- Corporations such as CVS Caremark, GM, Ford, Delphi, Honda, Metaldyne, Taubman Centers, The Detroit Lions, PG&E Generating, SBC, Gambrinus, Labatt USA, and InBev USA.
- Nonprofit organizations, such as the University of Chicago, University of Michigan, National Association of Realtors, Hall Foundation, Van Andel Institute, International Mass Retailers Association, American Automobile Manufacturers Association, Service Employee International Union, and the Michigan Chamber of Commerce.

Visit AEG's website at: [www.AndersonEconomicGroup.com](http://www.AndersonEconomicGroup.com).

#### **ABOUT THE AUTHORS**

**Jason Horwitz.** Mr. Horwitz is a Senior Consultant at Anderson Economic Group and Director of the Public Policy and Economic Analysis practice area. He has performed and overseen the analysis and production of the annual business tax burden rankings report since 2013. Mr. Horwitz has advised governments, trade organizations, and corporations across the country on economic issues and the impacts of policy. His work has been featured in Bloomberg Businessweek, NPR Marketplace, Chicago Sun-Times, Detroit News, Crain's Chicago Business, and on WBEZ Radio. Mr. Horwitz holds a Master of Public Policy from the Harris School of Public Policy at the University of Chicago and a Bachelor of Arts in Physics and Philosophy from Swarthmore College.

**Judy Zhang.** Judy Zhang is a Senior Analyst with Anderson Economic Group, working in the Public Policy and Economic Analysis Practice Area. Her work focuses on research and analysis for various economic and fiscal impact projects. Some of her recent works include an impact study of state business tax incentives, a survey analysis related to real estate closing costs, and an assessment of pension reform and alternative investment. Ms. Zhang holds a Master of Public Policy from the Harris School of Public Policy at the University of

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**About Anderson Economic Group**

Chicago and a Bachelor of Arts in Business Economics and Accounting from the University of California Los Angeles.

**Patrick L. Anderson.** Mr. Anderson founded Anderson Economic Group in 1996, and serves as a Principal and Chief Executive Officer in the company. He pioneered the development of the original methodology for this report and co-authored the initial business tax burden reports. Mr. Anderson has written over 100 published works, including *Economics of Business Valuation* from Stanford University Press. Three of his journal articles, “Pocketbook Issues and the Presidency,” “The Value of Private Businesses in the United States,” and “Policy Uncertainty and Persistent Unemployment,” have each been awarded for outstanding writing from the National Association of Business Economics. Mr. Anderson is a graduate of the University of Michigan, where he earned a Master of Public Policy degree and a Bachelor of Arts degree in political science. He is a member of the National Association for Business Economics and the National Association of Forensic Economists.

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## *IV. Methodology*

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Our approach to measuring the state and local tax burden is to estimate the total amount of state and local taxes paid by businesses in each state and the District of Columbia, and divide it by a measure of business operating margin. This approach has the advantage of providing an objective measure which does not impose any external set of tax policy preferences. Our tax burden measure does not attempt to consider “fairness,” business decisions at the margin, the effects of different taxes on different types of business operations, or the incidence of any individual tax.

Our approach is laid out in more detail in the remainder of this section.

### **MEASURE OF GROSS OPERATING SURPLUS**

To compare the tax burdens across different states, we divide the total state and local taxes paid in each state by pre-tax gross operating surplus for businesses within that state. We use the Bureau of Economic Analysis’ measure of gross operating surplus. This measure is very similar to net profits, including all business receipts minus the cost of inputs, compensation of employees, and taxes. What remains are corporate profits, proprietors’ income, and consumption of fixed capital (depreciation).

Thus, the only difference between gross operating surplus and a comprehensive measure of after-tax profits is that gross operating surplus does not exclude depreciation of fixed assets. We add back in state and local taxes in order to measure the tax impact as a share of *pre-tax* gross operating surplus. Note that our measure does not attempt to add back *federal* taxes, which are difficult to apportion to businesses on a state-by-state basis.

### **TAXES PAID BY BUSINESSES**

Unless otherwise specified, all state tax collections data is from the U.S. Census of Governments 2016 Annual Survey of State Tax Collections. This source gives comparable tax and revenue data for all 50 states and the District of Columbia. We estimated tax collections for local governments based on 2015 figures reported in the Census of Governments State and Local Government Finances Survey, which we scaled based on 2015-16 growth in state collections.<sup>4</sup>

In order to estimate the total taxes paid by businesses, we used tax data from eight tax categories:

1. Property
2. License
3. Individual Income
4. Corporate Income

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4. Detailed local tax collections data is released later than state data. In order to produce more timely rankings, we estimated local tax collections. One exception to the method described here for estimating local tax collections is for property tax, where we used growth in the 2015-16 statewide property tax levy.

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## Methodology

5. Unemployment Compensation
6. Severance
7. General Sales and Gross Receipts
8. Selective Sales (motor fuels, public utilities, and other)

For each of the above categories, we allocated some portion of tax collections to businesses (as opposed to households) using the following methodology.

**Property taxes.** We estimated 2016 local property tax collections based on 2015-16 growth in the statewide property tax levy, which we obtained from property tax report in each state. When state-level data was not available, we applied a national levy growth rate. We allocated the total estimated 2016 state and local property tax collections to businesses based on figures from the 2016 one-year American Community Survey. We calculated business share of property taxes paid as the residual of total property taxes collected in 2016 less property taxes paid on owner-occupied and seasonal units (a proximate measure for vacation homes). Our exclusion of seasonal units is a change from reports prior to 2017, which classified all non owner-occupied property taxes as business tax. We treat rental housing as business property and include property taxes paid on rental housing in our estimates.

**License taxes and fees.** We allocated 100% of amusement, corporation, public utility, occupation and business, and alcoholic beverages license taxes and fees to businesses. We allocated motor vehicle and motor vehicle operator license taxes using the ratio of diesel fuel taxes to total fuel taxes (as described in “Motor fuel excise taxes” on page 14).

**Individual income tax on pass-through business income.** Using data from the IRS Statistics on Income (SOI), we estimated the total adjusted gross income (AGI), total adjusted gross income over \$100,000, and the number of filers who have over \$100,000 in income for each state. We also found these values for filers who receive personal income directly from businesses (S corporations, partnerships, and sole proprietorships). Business owners pay taxes on this income through their individual income tax returns.

We applied state individual income tax rates in order to estimate the total income tax collected on business income. For the seven states that have a flat tax rate across all income brackets, we applied this flat rate to all business income for individuals (income from S corporations, proprietorships, and partnerships). For states that have a graduated income tax, we calculated an average effective rate on all income below \$100,000, using Census estimates for total income tax collected. We then applied this rate to all business income up to \$100,000, and applied the average marginal rate for incomes at or above \$100,000 in each state to all business income above \$100,000. We calculated the average marginal rate for incomes above \$100,000 by taking a weighted average of rates for income over \$100,000 in each state, weighted by the amount of estimated income at those levels according to IRS SOI.

For this calculation, we assumed that owners’ business income was evenly distributed among all their income. That is, if someone had \$200,000 in total income, our

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## Methodology

model assumes that half of their business income was taxed at the average effective rate on income below \$100,000 and half of it was taxed at the average marginal rate for income above \$100,000.

**Corporate income tax.** We allocated 100% of corporate income tax collections to businesses.

**Unemployment compensation.** We allocated 100% of state unemployment compensation tax collections to businesses.

**Severance taxes.** We allocate 100% of severance tax collections to businesses.

**General sales taxes.** We allocate general sales taxes to businesses based on the estimated share of taxable consumption attributable to businesses in each state.

We estimated business consumption of several hundred commodities by state using Bureau of Economic Analysis (BEA) data on KLEMS Intermediate Use and state gross domestic product by industry. Business consumption of each commodity was estimated by assuming that the share of consumption by each industry that occurred in a given state was equivalent to the share of that industry's national GDP produced in that state. KLEMS Intermediate Use data is no longer available by commodity for 2012 or later. We estimated 2016 numbers by multiplying 2011 data by the change in the larger KLEMS categories—energy, manufactured goods, and services—from 2011 to 2016.

We estimated household consumption of thousands of commodities by state using the Bureau of Labor Statistics (BLS) Consumer Expenditure Survey (CES) public use microdata and summary results. We used the 2018 CCH State Tax Handbook, data from the National Conference of State Legislators, and the websites of tax and Treasury departments for various states to track which commodities were exempt or subject to special rates in each state.

Once we estimated the amount of taxable household consumption and business consumption, we could derive the share of total statewide taxable consumption that was attributable to businesses. We multiplied this share for each state by the total state and local general sales tax collections in 2016, estimated using Census Bureau data.

**Gross receipts taxes.** We used state government revenue data to isolate gross receipts tax collections in states that levy significant gross receipts taxes as part of their main business tax: Ohio, Pennsylvania, and Washington.<sup>5</sup> We allocated 100% of these gross receipts taxes to businesses. We allocated Hawaii's and New Mexico's gross receipt taxes to businesses based on the methodology for general sales tax since Hawaii and New Mexico explicitly allow businesses to recoup the gross receipts tax by applying a pseudo-sales tax to the final sale price of goods and services.

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5. District of Columbia and Delaware also have a gross receipts tax, but this revenue is included in other tax categories that are partly or wholly allocated to businesses.

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## Methodology

**Motor fuel excise taxes.** We estimated the amount of state gasoline and diesel fuel tax collected for each state in 2016 using data from the U.S. Department of Transportation, Federal Highway Administration (motor fuel usage and fuel tax rates). We allocated a portion of 2016 state and local collections to businesses based on the share of each state's total fuel tax collections attributable to diesel. We assumed that businesses, as opposed to households, generally purchase diesel and pay taxes on those purchases.

**Public utilities tax.** We allocated 100% of this category to businesses.

**Other selective sales tax.** This category captures state-specific sales taxes on items other than alcoholic beverages, tobacco, amusement, insurance, motor fuels, lottery, and public utilities. We divided this category evenly between households and businesses.

## PREVIOUS YEAR'S RANKINGS AND DETAILED METHODOLOGY

The complete outline of AEG's 2006-08 methodology for apportioning taxes to businesses can be found in Patrick L. Anderson and Caroline M. Sallee, *Benchmarking for Success: A Comparison of State Business Taxes*, Anderson Economic Group (2006). Our method was updated in 2014, as described in the preceding methodology, and has been only marginally adjusted since then. Prior installments of this study are available on AEG's website.

Our 2017 State Business Tax Burden Rankings analysis has been updated to account for newly available data that was estimated at the time of the report's initial release. All comparisons made to 2015 tax figures and rankings are in reference to this updated analysis.

## DATA SOURCES

The complete list of data sources used in this report are as follows:

U.S. Census Bureau. 2015 State and Local Government Finances. *State & Local Summary Tables by Level of Government*. <http://www.census.gov/govs/local/>.

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## Methodology

Bureau of Economic Analysis. U.S. Dept. of Commerce. *1998-2011 KLEMS Intermediate Use Estimates*.

Bureau of Labor Statistics. U.S. Dept. of Labor. *Consumer Expenditure Survey, Public Use Microdata, 2016*.

U.S. Dept. of Transportation, Federal Highway Administration, “Motor Fuel & Highway Trust Fund Statistics 2016.” [https://www.fhwa.dot.gov/policyinformation/motorfuelhwy\\_trustfund.cfm](https://www.fhwa.dot.gov/policyinformation/motorfuelhwy_trustfund.cfm).

Official reports on the taxable value of property and on commodity-specific general sales tax exemptions from all fifty states and the District of Columbia, where available.

## *V. Detailed Tables*

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Section Contents:

- Exhibit I, “AEG State Business Tax Burden Rankings, 2016”
- Exhibit II, “Total State and Local Taxes Paid by Business, 2016”
- Exhibit III, “State and Local Taxes Paid by Business, Share of Pre-Tax Gross Operating Surplus, 2016”
- Exhibit IV, “State and Local Business Tax Reliance, 2016”

Exhibit I. AEG State Business Tax Burden Rankings, 2016

Rank	State	Tax Collected from Business	2016 Business Tax	2015 Business Tax	
		(millions)	Burden	Burden	
1	Oklahoma	\$5,179	6.6%	4	7.0%
2	Oregon	\$6,843	6.8%	2	6.9%
3	North Carolina	\$14,862	6.9%	3	7.0%
4	Delaware	\$2,501	7.0%	5	7.1%
5	Georgia	\$14,966	7.0%	6	7.2%
6	Utah	\$4,474	7.0%	7	7.4%
7	Indiana	\$10,609	7.0%	1	6.7%
8	Missouri	\$7,956	7.0%	8	7.4%
9	Michigan	\$13,972	7.5%	11	8.1%
10	South Dakota	\$1,802	7.8%	9	7.6%
11	Ohio	\$19,640	7.8%	10	7.7%
12	Tennessee	\$10,497	7.9%	12	8.1%
13	Wisconsin	\$9,483	8.0%	17	8.4%
14	Iowa	\$6,973	8.0%	13	8.1%
15	Nebraska	\$4,351	8.1%	15	8.2%
16	Colorado	\$10,422	8.2%	25	9.1%
17	California	\$90,908	8.2%	18	8.4%
18	Texas	\$59,017	8.3%	16	8.2%
19	Louisiana	\$8,870	8.3%	14	8.2%
20	Idaho	\$2,346	8.4%	19	8.6%
21	Alabama	\$6,508	8.4%	21	8.6%
22	Virginia	\$14,618	8.5%	20	8.6%
23	Maryland	\$11,613	8.6%	22	8.7%
24	Arizona	\$9,809	8.6%	23	8.8%
25	Massachusetts	\$16,518	8.9%	26	9.2%
26	Pennsylvania	\$26,392	9.1%	24	9.1%
27	Washington	\$17,937	9.2%	27	9.6%
28	Montana	\$1,880	9.5%	36	10.4%
29	Connecticut	\$10,073	9.5%	30	9.9%
30	Alaska	\$1,836	9.5%	37	10.6%
31	Kentucky	\$7,025	9.5%	28	9.6%
32	Florida	\$32,994	9.6%	31	9.9%
33	Kansas	\$5,901	9.7%	33	10.0%
34	Arkansas	\$4,652	9.7%	29	9.8%
35	Illinois	\$30,789	9.7%	32	9.9%
36	South Carolina	\$7,919	10.1%	38	10.7%
37	Nevada	\$6,019	10.1%	34	10.0%
38	Minnesota	\$13,118	10.3%	35	10.3%
39	New Jersey	\$23,361	10.6%	39	10.7%
40	New Mexico	\$3,778	10.8%	43	12.3%
41	New Hampshire	\$3,096	10.9%	40	10.9%
42	New York	\$70,976	11.3%	42	11.6%
43	West Virginia	\$3,498	12.0%	47	12.6%
44	Wyoming	\$2,154	12.0%	50	14.1%
45	Hawaii	\$3,937	12.0%	44	12.3%
46	Mississippi	\$5,023	12.1%	45	12.3%
47	Rhode Island	\$2,565	12.3%	46	12.6%
48	District of Columbia	\$3,955	12.5%	41	11.2%
49	Vermont	\$1,335	12.9%	48	13.2%
50	Maine	\$2,594	12.9%	49	13.3%
51	North Dakota	\$3,523	14.6%	51	18.9%

Source: Anderson Economic Group estimates and analysis of base data from U.S. Census of Governments State and Local Finance Survey and other federal and state sources. See Methodology Appendix for complete source list.



**Exhibit III. State and Local Taxes Paid by Business, Share of Pre-Tax Gross Operating Surplus, 2016**

*(Taxes Paid by Business as a Share of Pre-Tax Gross Operating Surplus)*

State	Property Tax	Motor Fuel Excise Tax	Public Utilities Sales Tax	Other Selective Sales Tax	Corporate Income Tax	License Fees	Unemployment compensation	Individual income tax on pass-thru business income	Severance	Gross Receipts Taxes	General Sales Taxes	Total
<i>United States</i>	3.5%	0.1%	0.4%	0.4%	0.7%	0.5%	0.6%	0.5%	0.1%	0.1%	2.0%	8.9%
Alabama	2.4%	0.2%	1.0%	0.5%	0.5%	0.8%	0.4%	0.4%	0.1%	0.0%	2.2%	8.4%
Alaska	5.1%	0.1%	0.0%	0.2%	1.1%	0.4%	0.9%	0.0%	1.7%	0.0%	0.0%	9.5%
Arizona	3.9%	0.2%	0.2%	0.1%	0.5%	0.3%	0.4%	0.4%	0.0%	0.0%	2.5%	8.6%
Arkansas	2.9%	0.3%	0.3%	0.3%	0.9%	0.5%	0.7%	0.5%	0.1%	0.0%	3.1%	9.7%
California	2.5%	0.0%	0.4%	0.3%	0.9%	0.6%	0.6%	0.9%	0.0%	0.0%	2.1%	8.2%
Colorado	3.7%	0.1%	0.1%	0.4%	0.5%	0.2%	0.5%	0.5%	0.1%	0.0%	2.1%	8.2%
Connecticut	4.7%	0.1%	0.3%	0.3%	0.7%	0.2%	0.8%	0.8%	0.0%	0.0%	1.5%	9.5%
Delaware	1.1%	0.0%	0.2%	0.2%	0.9%	3.9%	0.4%	0.3%	0.0%	0.0%	0.0%	7.0%
District of Columbia	6.2%	0.0%	0.6%	0.1%	1.8%	0.3%	0.5%	0.9%	0.0%	0.0%	2.2%	12.5%
Florida	3.7%	0.2%	1.2%	0.2%	0.7%	0.5%	0.3%	0.0%	0.0%	0.0%	2.9%	9.6%
Georgia	3.5%	0.2%	0.2%	0.1%	0.5%	0.2%	0.4%	0.5%	0.0%	0.0%	1.4%	7.0%
Hawaii	3.1%	0.0%	0.9%	0.8%	0.3%	0.3%	0.6%	0.6%	0.0%	0.0%	5.3%	12.0%
Idaho	3.2%	0.3%	0.1%	0.1%	0.7%	0.7%	0.5%	0.7%	0.0%	0.0%	2.0%	8.4%
Illinois	3.9%	0.1%	0.8%	0.5%	1.1%	0.4%	0.7%	0.4%	0.0%	0.0%	1.8%	9.7%
Indiana	2.7%	0.1%	0.2%	0.3%	0.7%	0.2%	0.6%	0.4%	0.0%	0.0%	1.8%	7.0%
Iowa	3.3%	0.2%	0.3%	0.1%	0.4%	0.5%	0.5%	0.4%	0.0%	0.0%	2.4%	8.0%
Kansas	4.3%	0.2%	0.4%	0.1%	0.6%	0.3%	0.6%	0.4%	0.1%	0.0%	2.7%	9.7%
Kentucky	2.7%	0.2%	0.6%	0.6%	1.0%	0.5%	0.7%	0.6%	0.2%	0.0%	2.4%	9.5%
Louisiana	2.9%	0.1%	0.2%	0.1%	0.2%	0.4%	0.2%	0.3%	0.4%	0.0%	3.5%	8.3%
Maine	7.2%	0.2%	0.1%	0.3%	0.7%	0.8%	0.7%	0.8%	0.0%	0.0%	2.1%	12.9%
Maryland	3.1%	0.1%	0.5%	0.7%	0.8%	0.4%	0.5%	1.0%	0.0%	0.0%	1.5%	8.6%
Massachusetts	4.0%	0.1%	0.0%	0.3%	1.3%	0.2%	0.8%	0.8%	0.0%	0.0%	1.4%	8.9%
Michigan	3.4%	0.1%	0.1%	0.4%	0.5%	0.3%	0.7%	0.5%	0.0%	0.0%	1.6%	7.5%
Minnesota	3.4%	0.2%	0.1%	1.0%	1.2%	0.6%	0.7%	0.9%	0.0%	0.0%	2.3%	10.3%
Mississippi	5.6%	0.3%	0.1%	0.5%	1.1%	0.9%	0.4%	0.4%	0.1%	0.0%	2.7%	12.1%
Missouri	2.9%	0.2%	0.3%	0.1%	0.3%	0.3%	0.5%	0.6%	0.0%	0.0%	1.7%	7.0%
Montana	5.1%	0.3%	0.2%	0.2%	0.6%	0.9%	0.6%	0.8%	0.8%	0.0%	0.0%	9.5%
Nebraska	4.2%	0.2%	0.2%	0.0%	0.6%	0.4%	0.2%	0.4%	0.0%	0.0%	1.8%	8.1%
Nevada	3.0%	0.2%	0.5%	0.6%	0.0%	1.1%	0.9%	0.0%	0.2%	0.0%	3.6%	10.1%
New Hampshire	6.4%	0.1%	0.2%	0.7%	2.5%	0.8%	0.3%	0.0%	0.0%	0.0%	0.0%	10.9%
New Jersey	4.9%	0.0%	0.5%	0.2%	1.0%	0.4%	1.2%	0.6%	0.0%	0.0%	1.7%	10.6%
New Mexico	2.2%	0.3%	0.2%	0.3%	0.3%	0.5%	1.0%	0.3%	1.6%	0.0%	4.0%	10.8%
New York	5.0%	0.0%	0.3%	0.6%	1.6%	0.1%	0.5%	1.0%	0.0%	0.0%	2.1%	11.3%
North Carolina	2.4%	0.2%	0.0%	0.3%	0.5%	0.6%	0.7%	0.5%	0.0%	0.0%	1.7%	6.9%
North Dakota	2.4%	0.3%	0.2%	0.3%	0.4%	0.5%	0.5%	0.2%	6.4%	0.0%	3.2%	14.6%
Ohio	2.7%	0.2%	0.5%	0.2%	0.1%	0.6%	0.4%	0.5%	0.0%	0.7%	1.9%	7.8%
Oklahoma	1.7%	0.2%	0.2%	0.0%	0.4%	0.7%	0.3%	0.3%	0.4%	0.0%	2.3%	6.6%
Oregon	2.7%	0.1%	0.4%	0.4%	0.7%	0.7%	1.0%	0.8%	0.0%	0.0%	0.0%	6.8%
Pennsylvania	2.9%	0.3%	0.5%	0.3%	1.0%	0.7%	1.1%	0.5%	0.0%	0.6%	1.3%	9.1%
Rhode Island	6.7%	0.1%	0.5%	0.6%	0.7%	0.4%	1.3%	0.6%	0.0%	0.0%	1.6%	12.3%
South Carolina	5.3%	0.2%	0.1%	0.3%	0.6%	0.8%	0.5%	0.5%	0.0%	0.0%	1.7%	10.1%
South Dakota	3.0%	0.3%	0.1%	0.3%	0.1%	0.7%	0.2%	0.0%	0.0%	0.0%	3.2%	7.8%
Tennessee	2.6%	0.1%	0.1%	0.3%	1.2%	1.0%	0.2%	0.0%	0.0%	0.0%	2.4%	7.9%
Texas	4.2%	0.1%	0.3%	0.4%	0.0%	0.2%	0.3%	0.0%	0.3%	0.0%	2.5%	8.3%
Utah	2.8%	0.2%	0.3%	0.3%	0.5%	0.2%	0.4%	0.6%	0.1%	0.0%	1.7%	7.0%
Vermont	5.9%	0.1%	0.1%	2.0%	0.9%	0.4%	1.4%	0.7%	0.0%	0.0%	1.3%	12.9%
Virginia	4.3%	0.1%	0.4%	0.5%	0.4%	0.6%	0.4%	0.6%	0.0%	0.0%	1.2%	8.5%
Washington	2.3%	0.1%	0.6%	0.4%	0.0%	0.5%	0.7%	0.0%	1.9%	0.0%	2.7%	9.2%
West Virginia	4.3%	0.5%	0.5%	0.9%	0.5%	0.7%	0.7%	0.4%	1.5%	0.0%	2.0%	12.0%
Wisconsin	2.7%	0.2%	0.3%	0.2%	0.8%	0.6%	0.8%	0.6%	0.0%	0.0%	1.7%	8.0%
Wyoming	5.3%	0.3%	0.2%	0.0%	0.0%	0.6%	0.4%	0.0%	3.3%	0.0%	1.9%	12.0%

Legend: 10 Lowest Tax States  
10 Highest Tax States

Source: AEG Estimates, using base data from U.S. Census of Governments State and Local Finance Survey and other federal and state sources. See Methodology Appendix for complete source list.

Analysis: Anderson Economic Group, LLC

Note: Due to the nature of New Mexico's gross receipts tax, we show it here as a general sales tax and determine the amount paid by business using the same method as for general sales taxes in other states.

Exhibit IV. State and Local Business Tax Reliance, 2016

Rank	State	Tax Collected from Business (millions)	Share of Total State and Local Tax Revenue
1	Maryland	\$11,613	31.7%
2	Wisconsin	\$9,483	34.3%
3	Michigan	\$13,972	34.5%
4	Missouri	\$7,956	34.8%
5	Vermont	\$1,335	36.1%
6	Oregon	\$6,843	37.2%
7	Maine	\$2,594	37.2%
8	North Carolina	\$14,862	37.5%
9	Massachusetts	\$16,518	37.5%
10	Virginia	\$14,618	37.9%
11	Ohio	\$19,640	38.1%
12	New Jersey	\$23,361	38.4%
13	Oklahoma	\$5,179	38.4%
14	California	\$90,908	38.6%
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16	Minnesota	\$13,118	38.8%
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18	Georgia	\$14,966	39.1%
19	Arkansas	\$4,652	39.2%
20	Idaho	\$2,346	39.2%
21	Arizona	\$9,809	39.4%
22	New York	\$70,976	39.7%
23	Pennsylvania	\$26,392	40.1%
24	Kentucky	\$7,025	41.1%
25	Indiana	\$10,609	41.3%
26	Colorado	\$10,422	41.4%
27	Alabama	\$6,508	41.7%
28	Illinois	\$30,789	42.2%
29	Hawaii	\$3,937	42.7%
30	Rhode Island	\$2,565	43.9%
31	Nebraska	\$4,351	44.8%
32	Kansas	\$5,901	44.9%
33	Iowa	\$6,973	45.1%
34	Mississippi	\$5,023	46.2%
35	Tennessee	\$10,497	46.3%
36	Florida	\$32,994	46.4%
37	Montana	\$1,880	46.7%
38	New Mexico	\$3,778	47.0%
39	South Carolina	\$7,919	47.1%
40	Louisiana	\$8,870	47.7%
41	Nevada	\$6,019	47.9%
42	New Hampshire	\$3,096	48.1%
43	West Virginia	\$3,498	48.7%
44	Washington	\$17,937	48.7%
45	Texas	\$59,017	52.1%
46	South Dakota	\$1,802	52.7%
47	Delaware	\$2,501	54.9%
48	District of Columbia	\$3,955	54.9%
49	Alaska	\$1,836	65.2%
50	Wyoming	\$2,154	70.4%
51	North Dakota	\$3,523	71.6%

Source: Anderson Economic Group estimates and analysis of base data from U.S. Census of Governments State and Local Finance Survey and other federal and state sources. See Methodology Appendix for complete source list.