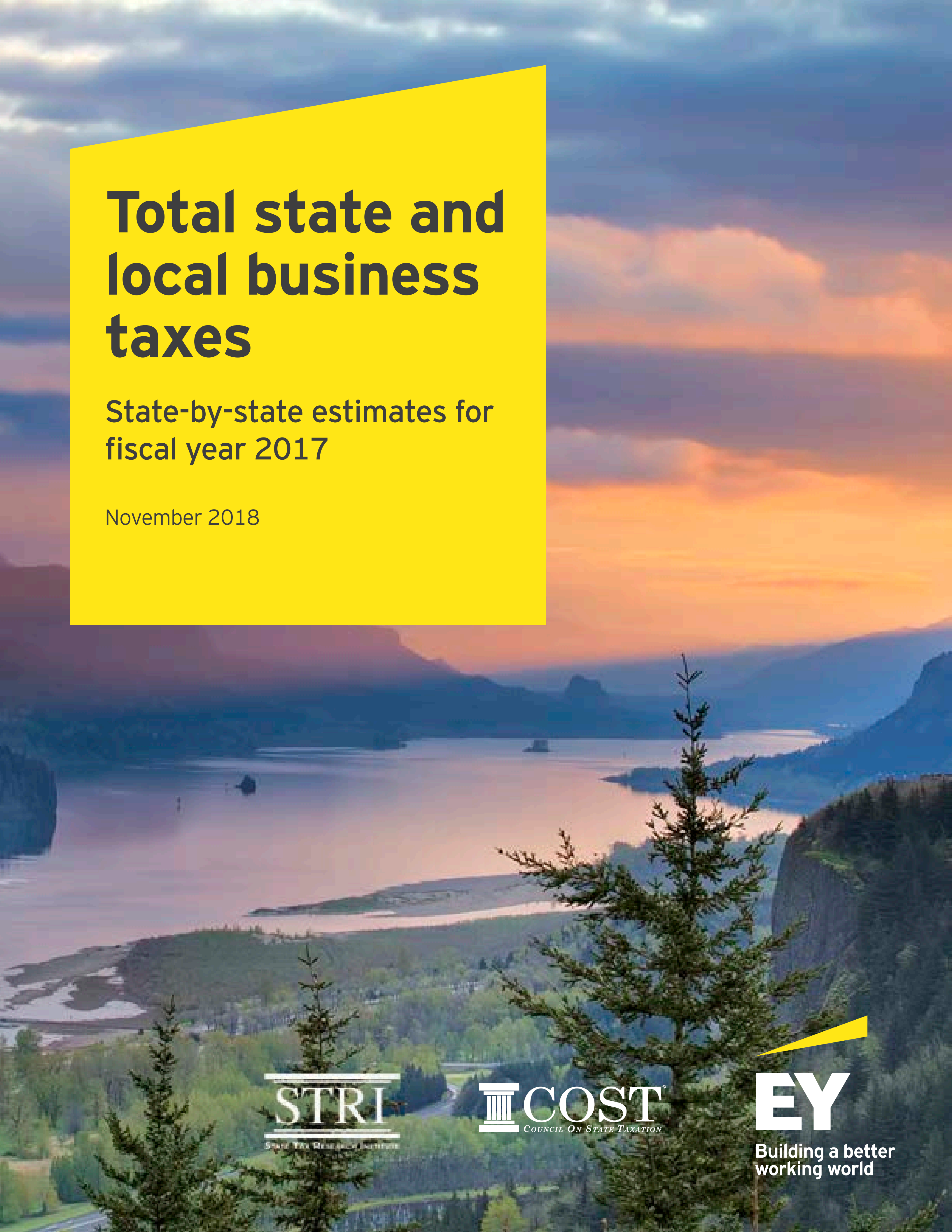
Total state and local business taxes

State-by-state estimates for fiscal year 2017

November 2018



STRI
State Tax Research Institute

COST
Council On State Taxation

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Executive summary

This study presents detailed state-by-state estimates of the state and local taxes paid by businesses for FY17. It is the 16th annual report prepared by Ernst & Young LLP in conjunction with the Council On State Taxation (COST) and the State Tax Research Institute (STRI).

Businesses paid $738.4 billion in state and local taxes in FY17, an increase of 2.0% from FY16. State business taxes increased by 0.4% and local business taxes grew by 3.7%. In FY17, business tax revenue accounted for approximately 44% of all state and local tax revenue. The business share has been within approximately 1 percentage point of 45% since FY03.

The state and local business tax estimates presented in this study reflect tax collections from July 2016 through June 2017 in most states.[1] These include business property taxes, sales and excise taxes paid by businesses on their input purchases and capital expenditures, gross receipts taxes, corporate income and franchise taxes, business and corporate license taxes, unemployment insurance taxes, individual income taxes paid by owners of noncorporate (pass-through) businesses, and other state and local taxes that are the statutory liability of business taxpayers.

Key findings of the study include:

- Both local and state business tax collections increased from FY16 to FY17. Overall state and local business taxes increased 2.0%, with local business tax revenue growing by 3.7% and state business tax revenue increasing by 0.4%.
- Business property tax revenue increased 3.9% in FY17, a gain of $10.9 billion. Property taxes remain by far the largest state and local tax paid by businesses, accounting for 38.9% of the total. Property taxes are also by far the largest local tax paid by businesses (76.4% of all local taxes paid by businesses).
- General sales taxes on business inputs and capital investment totaled $157.4 billion, or 21.3% of state and local business taxes. Overall sales taxes paid by business increased 2.7%.[2] Sales taxes on business inputs are the largest state tax paid by businesses (32.4% of all state taxes paid by businesses).
- Corporate income tax collections fell for the second year in a row. In FY17, state and local corporate income taxes totaled $62.7 billion, or 8.5% of all state and local business taxes, down 0.7% from FY16. Certain statewide gross receipts taxes levied in lieu of corporate income taxes are included in this measure.
- Individual income taxes on pass-through business income accounted for 5.3% of total state and local business taxes. State and local individual income taxes on business income fell by 2.9% from FY16.
- Severance taxes increased from $7.7 billion in FY16 to $8.9 billion in FY17, an increase of nearly 15.7%.
- State and local business taxes are equal to 4.5% of total US private-sector gross state product (GSP), which measures the total value of a state's annual private-sector production of goods and services. There is substantial variation across states, with taxes ranging from 3.4% to 7.5% of private-sector GSP.
- On average, businesses continue to pay more in state and local taxes than they receive in benefits. Businesses paid $3.30 of taxes for every dollar of government spending benefiting businesses, on average, assuming that in-state education spending does not benefit in-state businesses. Using an alternate assumption — that half of in-state education spending benefits in-state businesses — results in businesses paying $1.16 for every dollar of government spending benefiting businesses.

Total state and local business taxes in FY17

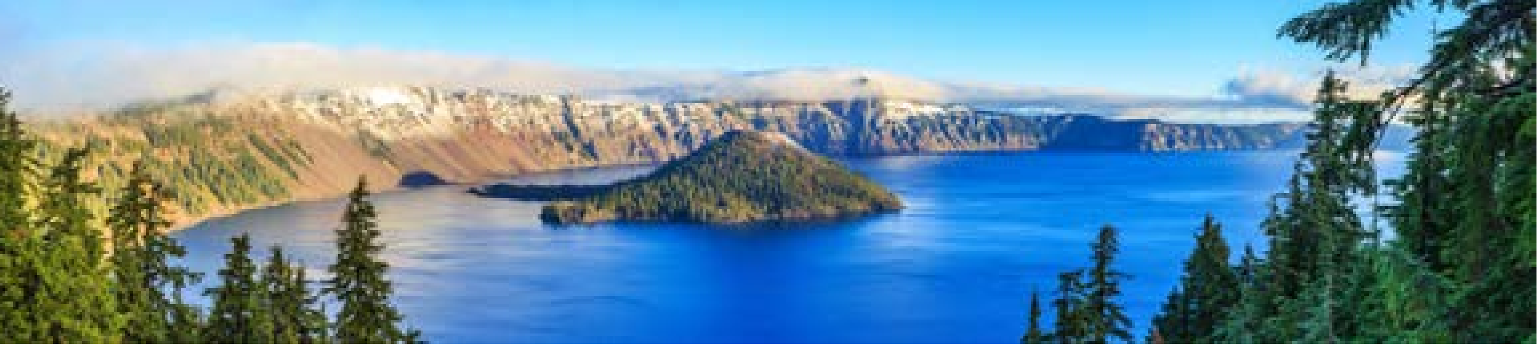
Businesses paid $738.4 billion in total state and local taxes in FY17, as presented in Table 1.[3] This section describes the business taxes in more detail and highlights the key results.

- As shown in Table 1 and Figure 1b, property tax revenue on real and personal property owned by businesses accounts for the largest share of total state and local business tax revenue, 38.9% or $287.4 billion in FY17. Business property tax revenue increased 3.9% in FY17. It is the fifth time since FY09 that the growth rate has been substantially higher than 1%. Figure 2 shows business property tax revenue as a share of total property tax revenue in 2017. Of the $530.8 billion of total property tax revenue, 54% ($287.4 billion) of the collections were taxes on business property.
- General sales and use tax revenue derived from businesses on purchases of inputs, including capital equipment, totaled $157.4 billion, or 21.3% of all state and local business taxes. General sales and use tax revenue derived from business increased 2.7% overall. Sales and use taxes collected on sales to final consumers are excluded; only the taxes paid on businesses' operating inputs and capital equipment purchases are included in the total business tax estimates.[4] Figure 2 displays general sales tax revenue on business inputs as a share of total state and local general sales tax revenue. In 2017, 42% of total sales tax revenue was from sales tax on business inputs.
- State and local corporate income tax revenue was $62.7 billion in FY17, a decrease of 0.7% from FY16. Federal tax reform, the Tax Cuts and Jobs Act (TCJA), was signed into law in December 2017 and significantly reduced federal corporate income taxes while expanding state income tax bases. While federal tax reform does not impact FY17 state tax collections, it is expected to significantly affect both business and individual taxes over the coming decade.
- Ohio's commercial activity tax, Texas' Margin Tax, New Hampshire's Business Enterprise Tax, Nevada's Commerce Tax, and Washington's Business and Occupation Tax are included in corporate income tax revenue. These taxes are based on gross receipts or modified gross receipts and constitute the primary business entity tax in each state. Corporate income taxes remain a relatively small percentage of total state and local tax collections, from both businesses and households. (See Figure 1a and Appendix Table A-4.)
- Employer contributions to unemployment insurance (unemployment taxes) were $40.1 billion in FY17, a decrease of $3.0 billion or 6.9% from FY16. This is the fourth year that unemployment tax collections have declined since FY08, a result of most states having replenished their unemployment insurance funds and paid outstanding debts to the federal government. Declining unemployment tax revenues in New York, Florida, Minnesota and Illinois accounted for over $1 billion of the cumulative $3.0 billion decrease.

Table 1. Total state and local business taxes ($ billions)

Business tax	FY16	FY17	2017 % total taxes	One-year change
Property taxes on business property	$276.5	$287.4	38.9%	3.9%
General sales taxes on business inputs	153.3	157.4	21.3%	2.7%
Corporate income tax	63.2	62.7	8.5%	-0.7%
Excise taxes	42.6	43.1	5.8%	1.3%
Unemployment insurance	43.1	40.1	5.4%	-6.9%
Individual income tax on business income	40.5	39.4	5.3%	-2.9%
Business and corporate license	33.9	36.7	5.0%	8.5%
Public utility taxes	28.0	26.8	3.6%	-4.2%
Insurance premium taxes	21.3	21.8	3.0%	2.5%
Severance taxes	7.7	8.9	1.2%	15.7%
Other business taxes	13.7	13.9	1.9%	1.4%
Total state and local business taxes	**$723.7**	**$738.4**	**100.0%**	**2.0%**

Note: FY16 tax estimates are revised from the COST FY16 study due to newly released data from the U.S. Census Bureau. See Appendix for more information. Amounts may not sum due to rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.



- Excise taxes paid by business were an estimated $43.1 billion in FY17. Excise taxes attributed to business include a portion of motor fuel taxes and other excise taxes, such as taxes on hotel and rental car expenditures by business, as well as health care provider taxes on the revenue of hospitals and other providers of health services.
- Business and corporate license tax revenue totaled $36.7 billion, an increase of 8.5% from FY16. In FY17, business and corporate license tax revenue contributed to 5.0% of total state and local business tax collections.
- Individual income taxes paid by owners of pass-through entities (e.g., partnerships, sole proprietorships, limited liability companies and S-corporations) totaled an estimated $39.4 billion in FY17, a decrease of 2.9% from FY16. THE TCJA is expected to have significant impacts on individual income taxes related to pass-through income in FY18 and future years, although FY17 revenues are not impacted. Individual income taxes from pass-through business income represent 5.3% of total state and local business taxes.
- Public utility tax revenue decreased by 4.2% to $26.8 billion in FY17, the fifth consecutive year of decline. These taxes are generally based on business gross receipts, and because they are often levied in lieu of property or corporate income taxes, they are allocated solely to business.
- Taxes on insurance premiums totaled $21.8 billion in FY17, an increase of 2.5%.
- State and local severance taxes increased by $1.2 billion in FY17 for an increase of 15.7%. Alaska, New Mexico, Oklahoma and Texas account for the majority of increased taxes, while severance taxes declined in North Dakota and Wyoming.
- Other state and local business taxes, such as motor vehicle license tax and documentary and stock transfer tax, totaled $13.9 billion in FY17, a 1.4% increase from the previous year.

Figure 1a: Composition of total state and local taxes on businesses and households, FY17

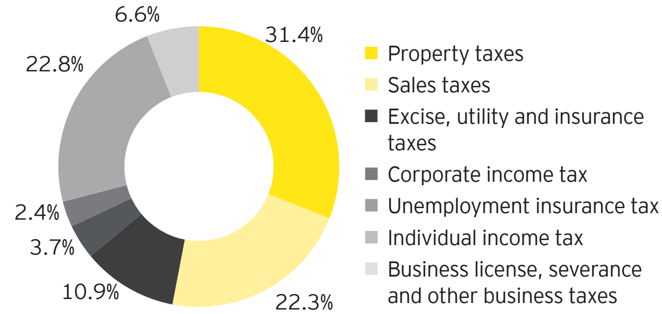
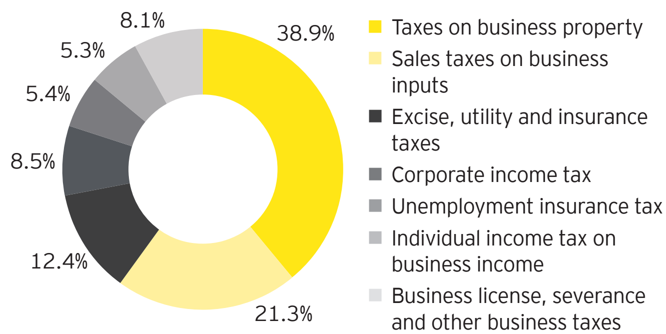
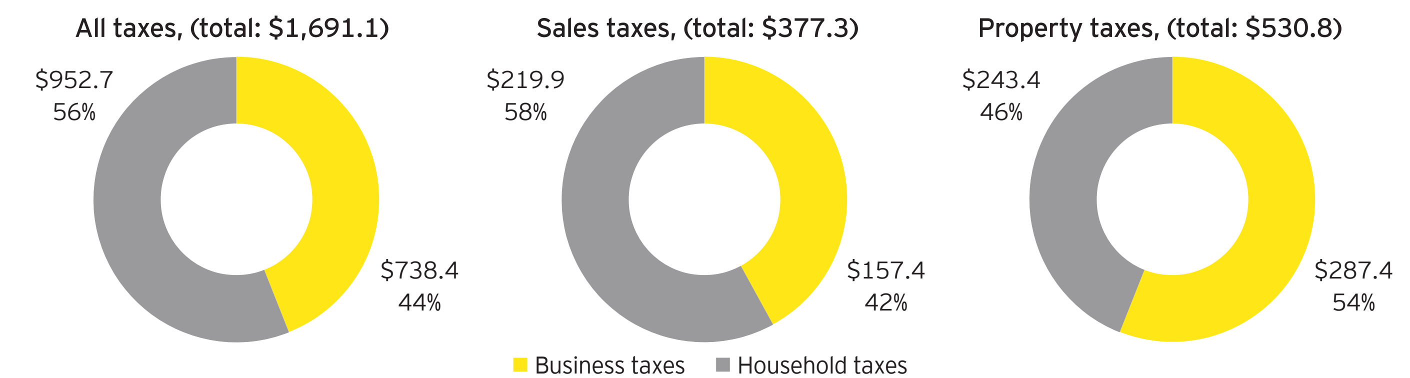


Figure 1b: Composition of total state and local business taxes, FY17



Note: Figures do not sum due to rounding.
Source: Ernst & Young LLP estimates based on from the U.S. Census Bureau, state and local government finances.

Figure 2: State and local business taxes as a share of total tax collections, FY17 ($ billions)



Classifying business taxes

This study generally defines business taxes as those that are the legal liability of businesses. Certain taxes collected by business, such as excise taxes on tobacco and alcohol and sales taxes on household purchases, are not included. In addition, individual income tax on pass-through business income is included as a legal tax liability of business owners. The business taxes included in this analysis are:

- Property taxes paid by business on real and personal property; taxes on income-generating, residential rental property are treated as business taxes
- General sales taxes paid by businesses on purchases of goods and services used in production; sales taxes on final goods paid by consumers are not included
- A portion of excise taxes, such as a business' share of motor fuel taxes, alcoholic beverage sales taxes, amusement taxes, insurance premiums taxes, pari-mutuels taxes, public utilities taxes, tobacco sales taxes and other selective sales taxes
- Corporate income taxes
- Taxes on insurance premiums and utility gross receipts, which are in some cases levied in lieu of other business entity taxes, are allocated entirely to business
- Individual income taxes on pass-through business income; taxes withheld on employee earnings are not considered business taxes
- Unemployment insurance (UI) tax paid by employers
- Business licenses, including general business licenses, specific industry and occupational licenses, and commercial motor vehicle licenses
- Severance taxes on mining, natural gas, oil and other natural resources

In most states, the corporate income tax is the primary tax levied specifically on business entities, but other types of taxes are used in several states. Ohio, Nevada and Washington levy a tax based on gross receipts in place of a traditional corporate income tax. New Hampshire's Business Enterprise Tax is levied on a value-added base rather than net income. This analysis considers these business entity taxes as corporate income tax revenue since the taxes act as an alternative to the corporate income tax in these states. Many states also levy franchise taxes based on the capital stock or net worth of a business. As shown in previous tables, businesses pay more in property and sales taxes than they do in specific corporate income, franchise or gross receipt taxes.

State versus local business taxes in FY17

Local business tax revenue grew by a higher percentage than the state business tax between FY16 and FY17. Tables 2a and 2b provide dollar amounts, percentage distributions and growth rates in FY17 for total business taxes at the state and local levels of government. Total state and local business tax revenues increased by $14.7 billion in FY17, after growing by $8.3 billion in FY16 from the prior fiscal year. State business tax revenue grew by 0.4% and local business tax revenues grew by 3.7%.

The largest local tax, business property taxes, increased by $10.5 billion in FY17. Local public utility tax revenue decreased by 3.4%, but increases in local sales and excise taxes on business inputs more than offset this decline, rising by 2.4% and 3.9% from FY16, respectively. Local business taxes grew by a total of $13.0 billion in FY17.

At the state level, business tax revenue increased by 0.4% or $1.7 billion from FY16 to FY17. Unemployment insurance tax revenue decreased by $3.0 billion, while general sales tax, which makes up 32.4% of state business tax revenue, increased by 2.8% or $3.3 billion from FY16. Severance taxes increased by $1.3 billion, an increase of 15.8% in FY17 after a dramatic decline in the prior fiscal year. Corporate income taxes and individual income taxes on pass-through business income both declined in FY17.

Tables 2a and 2b demonstrate that the composition of state business taxes differs significantly from business taxes at the local level. Table 2a shows the percentage distribution of state taxes by tax type; Table 2b shows the distribution of local business taxes. While state business tax revenues draw on a relatively broad set of sources, local governments rely heavily on property tax revenue, which made up 76.4% of local business taxes. The largest business tax at the state level, the sales and use tax, accounts for 32.4% of state business tax revenue.

Table 2a. State business taxes ($ billions)

Business tax	State business taxes FY16	State business taxes FY17	% total of state business taxes	One-year change
General sales and use tax on inputs	$118.7	$122.0	32.4%	2.8%
Corporate net income	$55.9	$54.1	14.4%	-3.3%
Unemployment insurance	$43.1	$40.1	10.7%	-6.9%
Individual income tax on business income	$37.2	$36.2	9.6%	-2.7%
Excise taxes on business inputs	$35.5	$35.7	9.5%	0.7%
Business license tax	$21.6	$24.0	6.4%	11.0%
Insurance premium tax	$20.4	$21.0	5.6%	2.5%
Public utility tax	$13.2	$12.6	3.3%	-5.2%
Property tax on business property	$10.6	$10.9	2.9%	3.6%
Severance taxes	$7.6	$8.9	2.4%	15.8%
Other business taxes	$11.0	$11.1	2.9%	0.8%
Total state business taxes	**$374.8**	**$376.5**	**100.0%**	**0.4%**

Note: Figures may not sum due to rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

Table 2b. Local business taxes ($ billions)

Business tax	Local business taxes FY16	Local business taxes FY17	% total of local business taxes	One-year change, local business taxes
Property taxes on business property	$265.9	$276.4	76.4%	3.9%
General sales tax on business inputs	$34.6	$35.4	9.8%	2.4%
Public utility taxes	$14.7	$14.2	3.9%	-3.4%
Excise taxes on business inputs	$7.1	$7.4	2.0%	3.9%
Other business taxes	$26.5	$28.4	7.9%	7.3%
Total local business taxes	**$348.9**	**$361.9**	**100.0%**	**3.7%**

Note: Includes local corporate income taxes. Figures may not sum due to rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

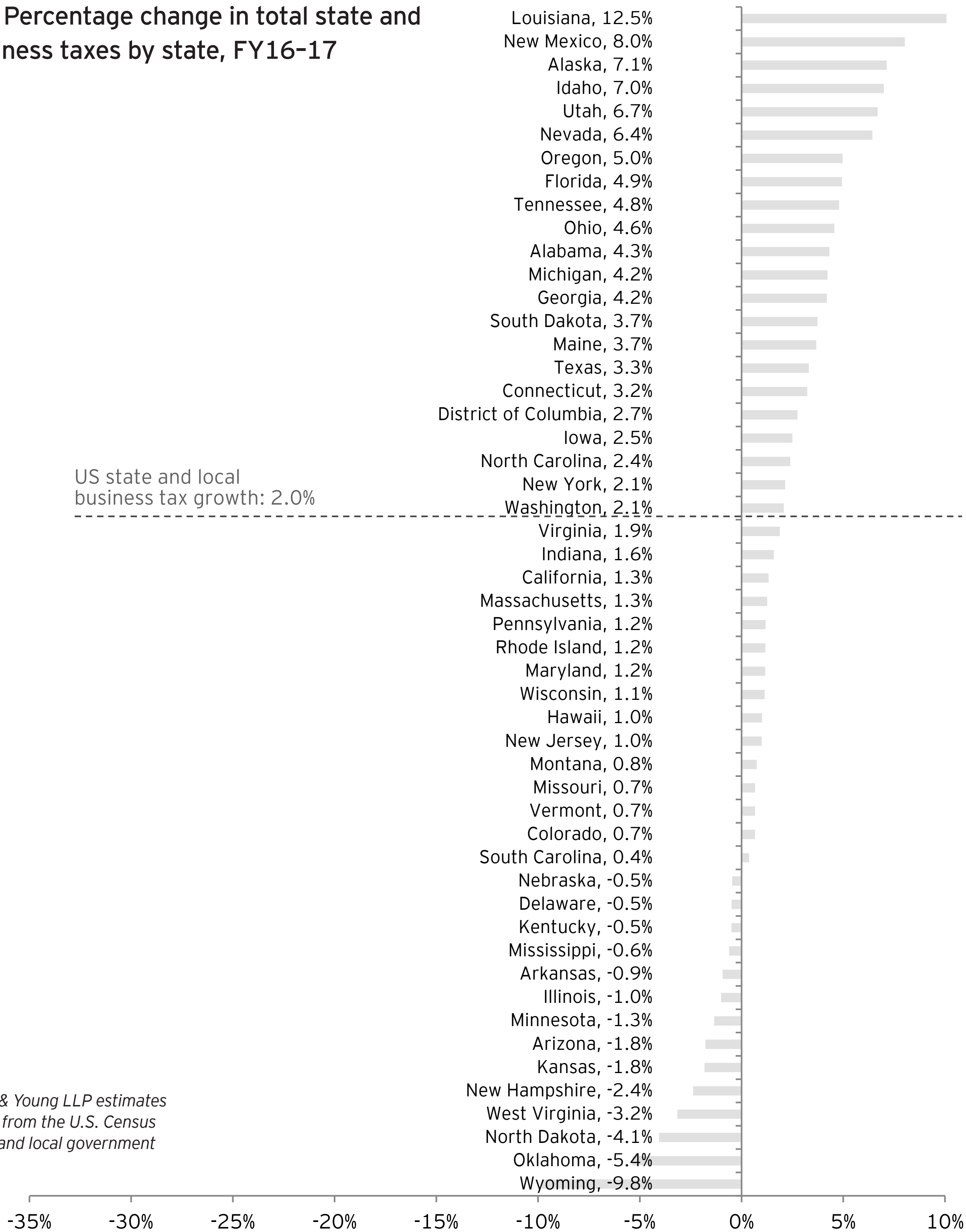
State-by-state business tax collections

Figure 3 shows the state-by-state change in total state and local business taxes between FY16 and FY17. States with significant tax changes in FY17 and trends in business tax collections are described below.

- In 2017, business property taxes increased substantially for the seventh year in a row since 2010. The $10.9 billion in increased property tax revenue was largely driven by gains in four large states: New York, Texas, California and Florida. Nationally, property tax revenue increased by 3.9%, but 28 states grew at a slower rate than the national average. California had the largest dollar increase in business property tax revenue, collecting $1.5 billion more than in 2016. Kentucky had the highest growth rate for business property tax revenue, increasing by 7.0%.
- Wyoming saw the largest decline in business taxes: 9.8% in FY17. This decline was concentrated in severance and sales taxes after lower production in extraction industries.
- On the other end of the spectrum, Louisiana had the largest increase in state and local business tax collections: 12.5%. Louisiana's sales tax rate increased from 4% to 5% in FY17, and corporate income tax collections increased 70% from FY16 due in part to an expansion of companies subject to the tax.
- New Mexico experienced 8% growth in business taxes in FY17. New Mexico cut its corporate income tax rate from 6.6% to 6.2%, but increases in severance taxes more than made up for the decline.
- Business tax revenue derived from individual income decreased by 2.0% in 2017 after two years of consecutive growth.
- Gains in sales tax collections on business were concentrated in Florida and Louisiana, where each experienced increases of over $700 million. Of the 45 states with a state sales tax, 34 collected more money in FY17.

Table 3 presents business tax collections by tax type and state. The results show that states vary widely in the composition of their business tax structures, producing implications for revenue growth and stability in each state. Appendix Table A-3 presents the percentage composition by tax type for each of the 50 states and the District of Columbia.

Figure 3. Percentage change in total state and local business taxes by state, FY16–17



Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

Table 3. State and local business taxes, by type, FY17 ($ billions)

	Property tax	Sales tax	Excise tax including public utilities and insurance	Corporate income	Unemployment insurance tax	Individual income tax on business income	License and other taxes*	Total business taxes
Alabama	$2.1	$1.7	$1.7	$0.5	$0.2	$0.4	$0.9	$7.5
Alaska	0.8	–	0.1	0.1	0.1	–	0.7	1.9
Arizona	5.5	3.1	1.2	0.4	0.5	0.3	0.6	11.6
Arkansas	1.3	1.7	0.5	0.4	0.3	0.3	0.3	4.8
California	30.5	18.2	11.5	10.1	6.1	9.6	10.4	96.5
Colorado	5.4	2.8	1.0	0.5	0.7	0.8	0.5	11.9
Connecticut	2.8	1.6	1.0	0.9	0.8	1.0	0.3	8.4
Delaware	0.5	–	0.3	0.3	0.1	0.1	1.5	2.7
Florida	16.9	11.7	6.5	2.4	0.9	–	2.7	41.1
Georgia	7.5	4.4	2.0	1.0	0.7	1.1	0.7	17.4
Hawaii	0.9	1.3	0.8	0.2	0.2	0.2	0.2	3.7
Idaho	1.0	0.5	0.3	0.2	0.1	0.3	0.2	2.6
Illinois	15.3	5.2	5.1	2.9	2.2	1.1	1.8	33.6
Indiana	4.8	2.4	1.4	1.0	0.6	0.8	0.3	11.2
Iowa	3.1	1.7	1.5	0.4	0.5	0.4	0.5	8.0
Kansas	2.7	1.7	0.7	0.4	0.3	–	0.3	6.1
Kentucky	2.5	1.5	1.5	0.6	0.6	0.5	0.5	7.7
Louisiana	3.2	3.7	1.5	0.3	0.2	0.4	0.8	10.1
Maine	2.1	0.5	0.3	0.2	0.1	0.1	0.2	3.5
Maryland	3.6	1.9	2.5	1.0	0.6	1.5	1.0	12.1
Massachusetts	8.3	3.0	1.2	2.2	1.4	1.3	0.8	18.2
Michigan	6.2	3.4	1.7	1.2	1.3	0.8	1.0	15.5
Minnesota	4.4	2.8	2.6	1.2	0.6	0.9	1.1	13.7
Mississippi	2.4	1.3	0.7	0.4	0.1	0.2	0.4	5.6
Missouri	3.4	2.4	0.8	0.4	0.6	0.6	0.8	9.0
Montana	1.0	–	0.3	0.1	0.1	0.1	0.4	2.0
Nebraska	2.5	1.0	0.3	0.3	0.1	0.4	0.3	4.8
Nevada	1.5	2.5	1.2	–	0.6	–	1.4	7.3
New Hampshire	1.7	–	0.4	0.6	0.1	0.0	0.3	3.1
New Jersey	12.9	4.2	2.2	2.1	2.6	1.6	1.3	26.7
New Mexico	0.9	2.0	0.4	0.1	0.3	0.1	1.0	4.9
New York	33.3	13.1	7.3	11.6	3.1	5.6	3.0	77.0
North Carolina	5.1	4.3	1.8	0.8	1.2	1.2	1.7	16.2
North Dakota	0.6	0.5	0.3	0.1	0.1	0.0	1.6	3.3
Ohio	7.3	5.7	3.1	2.0	1.1	1.3	1.9	22.5
Oklahoma	1.6	2.1	0.7	0.2	0.2	0.6	1.0	6.3
Oregon	2.9	–	1.2	0.7	1.0	0.7	1.1	7.6
Pennsylvania	10.4	4.8	3.8	2.8	3.1	2.1	2.4	29.4
Rhode Island	1.2	0.4	0.4	0.1	0.3	0.1	0.1	2.6
South Carolina	4.1	1.4	0.8	0.4	0.3	0.4	0.9	8.2
South Dakota	0.8	0.8	0.2	0.0	0.0	–	0.2	2.1
Tennessee	3.8	3.9	1.7	1.7	0.3	0.0	1.6	13.1
Texas	32.9	19.3	8.4	3.2	2.4	–	5.3	71.5
Utah	2.1	1.3	0.7	0.3	0.2	0.4	0.2	5.2
Vermont	1.1	0.2	0.3	0.1	0.1	0.1	0.1	2.0
Virginia	7.8	2.2	2.4	0.8	0.6	0.9	1.7	16.3
Washington	5.3	5.3	3.4	3.9	1.2	–	1.4	20.4
West Virginia	1.3	0.6	0.6	0.1	0.2	0.1	0.6	3.6
Wisconsin	4.9	2.3	1.2	1.0	0.8	0.7	0.9	11.8
Wyoming	1.0	0.4	0.1	–	0.1	–	0.5	2.2
District of Columbia	2.1	0.6	0.3	0.6	0.2	0.3	0.1	4.2
United States	**$287.4**	**$157.4**	**$91.7**	**$62.7**	**$40.1**	**$39.4**	**$59.5**	**$738.4**

Note: "–" indicates zero collections; "0.0" indicates collections of less than $50 million.
**Corporate income and individual income tax on business income include gross receipts taxes levied in Ohio, Texas, Washington and the BET in New Hampshire. "Other taxes" include documentary and stock transfer taxes, severance taxes, and local gross receipts taxes. Certain Ohio localities impose a net profits tax, which is included in the "Corporate income" column. The small amount of corporate profits taxes at the local level in Michigan is included in "other taxes."*
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

Comparing state business tax levels

A state's business tax burden can be measured in many ways, including the level of business taxes compared to the level of economic activity that is subject to taxation and the final incidence of business taxes, after they have been shifted to consumers or owners of factors of production, including workers. State and local business taxes are imposed on a variety of tax bases, including net income, input purchases, payroll, property and other tax bases. Therefore, a broad measure of a state's overall economic activity should be used to determine the measure of aggregate business tax burden that can be compared across states.

Table 4 presents state-by-state estimates of state and local business and total taxes, as well as the total effective business tax rate (TEBTR) imposed on business activity by state and local governments. The TEBTR is measured as the ratio of state and local business taxes to private-sector gross state product (GSP), the total value of a state's annual production of goods and services by the private sector. The average TEBTR across all states is 4.5%.

Missouri had the lowest TEBTR at 3.4%. Missouri has low corporate income, excise, and license taxes compared to economic activity. Missouri is also less reliant on business taxes, instead generating a greater share of tax revenue from households rather than businesses. Michigan has the second lowest TEBTR at 3.5%. Property taxes paid by businesses have declined in Michigan the past few years due to elimination of industrial personal property taxes and exemptions for some commercial personal property. Indiana's TEBTR of 3.5% is explained in part by low property and sales taxes paid by businesses. Both Michigan and Indiana have strong manufacturing sectors and provide sales tax exemptions for input purchases that are used in the production of final goods. Businesses in these states pay a lower share of sales taxes than the national average.

Connecticut also has a low TEBTR, explained in part by the several high-output industries, such as insurance, financial services and aerospace, which generate a large amount of GSP for the state. Business taxes per dollar of GSP are significantly below the national average for this reason. Additionally, Connecticut relies on individual income taxes for a significant share of its total state and local taxes, which are mostly paid by households.

Another state with a low TEBTR is Oregon (3.7%), which ranks low due to its lack of a sales tax and its lower-than-average business share of property taxes at 45%, compared with 54% nationally. Vermont had the highest TEBTR at 7.5%. Vermont relies heavily on property taxes, of which 68% are estimated to have been paid by business. Vermont also has lower-than-average GSP per capita, ranking in the bottom 15 states.

TEBTRs provide a starting point for comparing burdens across states, but they do not provide sufficient information to evaluate a state's competitiveness. States with relatively low TEBTRs that derive most of their business taxes from origin-based taxes such as property taxes and sales taxes are not as competitive as states with higher TEBTRs that rely on taxes that have a larger impact on out-of-state businesses.

TEBTRs also do not indicate the economic incidence of a tax. When a tax can be passed on to consumers, the tax is not a burden in the same way as taxes where the economic incidence, not just the legal liability, falls on the owners of a business. This is particularly likely in some of the states with the highest TEBTRs, such as Vermont, North Dakota, Maine and New Mexico. Some of these states (specifically North Dakota and New Mexico) rely on severance taxes, which are imposed on businesses but are likely shifted to investors and owners of mineral assets, many of whom are located outside the state.[5]

Furthermore, two states with similar TEBTRs may vary in the manner in which they tax certain industries. For example, some states may levy relatively high taxes on capital-intensive manufacturers and relatively low taxes on labor-intensive service industries. When the state and local tax structure imposes disparate burdens by industry, economic decisions may be distorted due to disincentives facing highly taxed industries. It is also important to note that the TEBTR is a measure of the average tax burden on existing businesses in a state rather than a measure of the marginal tax that would be borne by a company investing in a new facility. For this reason, the TEBTR provides one metric that can be used to evaluate a state's business tax structure, but it is not a clear indicator of the competitiveness of a state's business tax system in terms of attracting new investment.

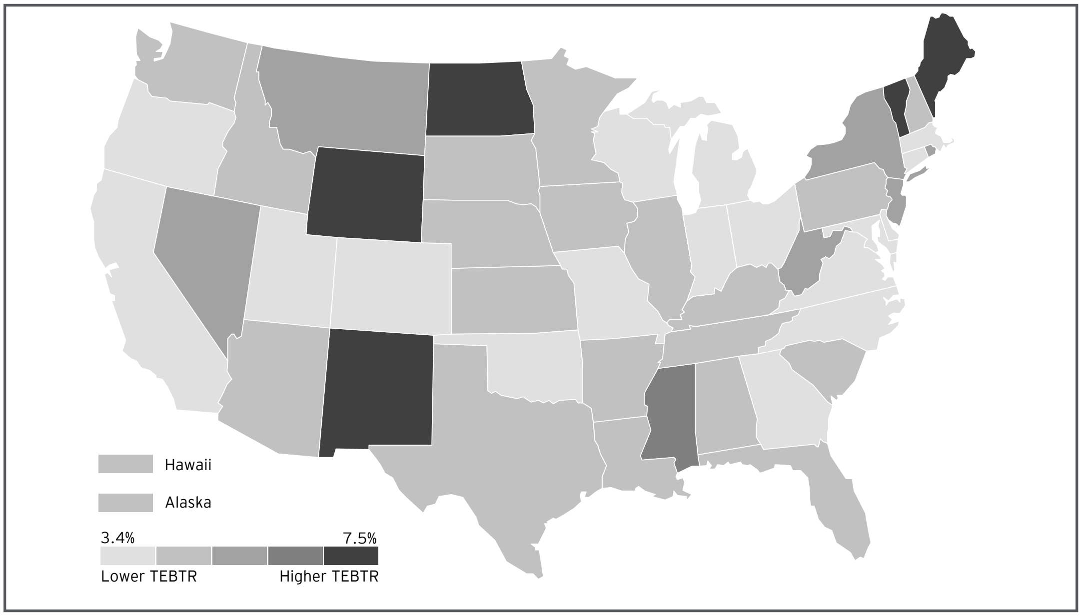
Table 4. Business taxes as a share of state, local and total taxes and private-sector GSP, FY17 ($ billions)

State	State taxes		Local taxes		State and local taxes		TEBTR*	Business taxes per employee ($ thousands)**
	Business	Total	Business	Total	Business	Total		
Alabama	$4.2	$10.7	$3.3	$5.8	$7.5	$16.5	4.3%	$3.6
Alaska	1.1	1.3	0.8	1.6	1.9	2.9	4.5%	$5.2
Arizona	5.3	14.4	6.3	10.4	11.6	24.8	4.3%	$4.0
Arkansas	3.7	9.8	1.1	2.3	4.8	12.1	4.5%	$3.7
California	54.8	161.8	41.7	85.8	96.5	247.5	4.1%	$5.3
Colorado	4.4	13.9	7.4	12.7	11.9	26.5	4.1%	$4.3
Connecticut	5.5	17.2	2.8	11.1	8.4	28.2	3.6%	$4.8
Delaware	2.2	3.7	0.5	1.1	2.7	4.8	4.2%	$5.8
Florida	19.3	41.1	21.8	35.6	41.1	76.7	4.9%	$4.6
Georgia	7.5	23.2	9.9	17.7	17.4	40.9	3.6%	$3.7
Hawaii	2.5	7.2	1.3	2.4	3.7	9.6	5.4%	$5.1
Idaho	1.6	4.7	1.0	1.9	2.6	6.5	4.4%	$3.5
Illinois	15.3	40.2	18.3	35.0	33.6	75.2	4.6%	$5.4
Indiana	6.1	18.6	5.1	8.8	11.2	27.4	3.5%	$3.5
Iowa	3.7	10.2	4.4	7.0	8.0	17.2	4.8%	$4.9
Kansas	3.1	8.4	3.0	5.1	6.1	13.6	4.5%	$4.1
Kentucky	4.7	12.5	3.0	5.4	7.7	17.8	4.5%	$3.8
Louisiana	4.6	11.3	5.5	9.4	10.1	20.7	4.7%	$5.0
Maine	1.4	4.4	2.1	2.9	3.5	7.3	6.7%	$5.5
Maryland	7.3	22.2	4.8	16.6	12.1	38.8	3.9%	$4.3
Massachusetts	9.5	29.0	8.7	17.9	18.2	46.9	3.9%	$4.9
Michigan	9.8	29.9	5.7	14.1	15.5	44.0	3.5%	$3.5
Minnesota	8.9	26.2	4.8	9.3	13.7	35.6	4.4%	$4.6
Mississippi	3.1	7.9	2.5	3.2	5.6	11.2	6.1%	$4.6
Missouri	3.9	13.0	5.1	10.3	9.0	23.3	3.4%	$3.0
Montana	1.1	2.8	0.9	1.4	2.0	4.2	5.0%	$4.1
Nebraska	1.9	5.2	2.9	4.7	4.8	9.9	4.6%	$4.6
Nevada	4.7	9.2	2.6	4.9	7.3	14.1	5.4%	$5.3
New Hampshire	1.5	2.6	1.6	4.1	3.1	6.7	4.4%	$4.5
New Jersey	13.5	34.9	13.2	30.5	26.7	65.4	5.1%	$6.4
New Mexico	3.3	6.1	1.6	2.7	4.9	8.8	6.7%	$5.7
New York	25.3	82.8	51.7	102.2	77.0	185.0	5.7%	$8.0
North Carolina	9.5	28.1	6.7	14.4	16.2	42.5	3.5%	$3.4
North Dakota	2.5	3.6	0.7	1.1	3.3	4.7	6.7%	$7.5
Ohio	13.0	31.4	9.5	24.3	22.5	55.7	4.0%	$4.0
Oklahoma	3.6	8.8	2.7	4.7	6.3	13.5	4.1%	$3.8
Oregon	3.6	12.9	4.0	7.9	7.6	20.8	3.7%	$3.9
Pennsylvania	16.4	41.0	13.0	28.6	29.4	69.6	4.4%	$4.8
Rhode Island	1.3	3.5	1.2	2.8	2.6	6.3	5.0%	$5.0
South Carolina	3.2	10.1	5.0	7.8	8.2	17.9	4.5%	$3.8
South Dakota	1.1	1.9	1.0	1.7	2.1	3.6	4.8%	$4.6
Tennessee	7.8	14.2	5.2	9.9	13.1	24.1	4.4%	$4.2
Texas	32.6	56.0	39.0	60.0	71.5	116.0	4.9%	$5.7
Utah	2.4	8.0	2.8	4.8	5.2	12.8	3.7%	$3.4
Vermont	1.6	3.3	0.4	0.6	2.0	3.9	7.5%	$6.2
Virginia	5.9	22.8	10.4	18.2	16.3	40.9	4.0%	$3.9
Washington	13.1	25.2	7.3	15.4	20.4	40.6	4.8%	$5.7
West Virginia	2.0	5.3	1.6	2.0	3.6	7.3	5.7%	$5.0
Wisconsin	6.6	19.0	5.2	10.9	11.8	29.9	4.2%	$3.9
Wyoming	1.2	1.7	1.0	1.3	2.2	3.0	6.7%	$7.8
District of Columbia	4.2	7.7	0.0	0.0	4.2	7.7	5.0%	$5.3
United States	**$376.5**	**$990.6**	**$361.9**	**$700.6**	**$738.4**	**$1,691.1**	**4.5%**	**$4.9**

Note: TEBTR equals taxes as a percent of gross state product. Amounts may not sum due to rounding.
**Average of calendar year 2016 and calendar year 2017 private-industry GSP. This is the TEBTR on economic activity occurring within the state.*
***Business taxes per employee calculated using 2017 private-sector employment from Bureau of Labor Statistics Quarterly Census of Employment and Wages and FY17 total state and local business tax collections.*
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances

Figure 4. TEBTR by state, FY17

(state and local business taxes divided by private-sector GSP in each state)



Source: Ernst & Young LLP estimates based on data from the Bureau of Economic Analysis and the U.S. Census Bureau, state and local government finances.

Table 5 summarizes the share of taxes paid by business in each state. Business taxes accounted for 43.7% of total state and local taxes in FY17. Business taxes accounted for a smaller share of state taxes (38.0%) than local taxes (51.7%). The share of local taxes paid by business is higher than the state share because businesses pay 54% of local property taxes, which account for 76.4% of total (business and household) local tax collections, while state governments rely most heavily on sales taxes, of which the majority are paid by households.

The business share of total state and local taxes has remained relatively stable over the past five years, as shown in Appendix Table A-1. Additionally, the business share has been within approximately 1 percentage point of 45% every year since 2003. Although some individual income taxes are imposed on business income, the vast majority falls on households. Individual income taxes on non-business income (i.e., households) accounted for 20.9% of total state and local tax revenue in FY17.

The share of total state and local taxes paid by businesses varies significantly by state for a number of reasons. States with the highest business share in FY17 include Wyoming (72.8%), North Dakota (69.6%), Alaska (63.4%), Texas (61.7%) and South Dakota (58.4%). All of these states have significant severance taxes paid by business. Additionally, South Dakota, Texas and Wyoming do not have an individual income tax, which is predominantly paid by households, creating a greater reliance on business taxes in these states.

States with the lowest business tax share include Connecticut (29.7%), Maryland (31.2%), Michigan (35.2%), Missouri (38.4%), Oregon (36.3%) and North Carolina (38.1%). Connecticut and Maryland generate the smallest share of their overall tax receipts from business taxes. In both states, the structure of the states' economies play a significant role in generating this result. In Connecticut, significant income earned by high-income taxpayers contributes to individual income tax receipts that exceed business collections. In Maryland, the state receives a low share of its total tax revenue from business taxes because the state relies heavily on the individual income tax to generate tax revenue from employment related to the significant nontaxable federal government and nonprofit activity in the state. In FY17, 37.6% of total state and local taxes came from the individual income tax in Maryland compared with 23.3% nationally. This increased reliance on the individual income tax increases business income taxes on pass-through income but reduces the overall business share and TEBTR. Oregon's low business share is explained by its lack of a sales tax, of which businesses paid 41.7% nationally, and a lower property tax share paid by business (45.3% in Oregon compared with 54.1% nationally).

A high share of total state and local taxes paid by business does not necessarily translate into a high effective business tax rate on economic activity. States without individual income taxes generally derive a larger share of their total tax revenue from business taxes, even though business taxes in these states may not be significantly higher than average. The business tax burden would not increase if household taxes were cut and no new taxes were imposed on businesses, but the business share of total taxes would increase. For instance, 57.3% of taxes in Delaware are paid by business (13.6 percentage points above average), but the TEBTR is 4.2% (0.3 percentage point below average). In the case of Delaware, the high business share is largely attributable to the corporation license tax, which generates substantial revenue due to the significant number of businesses incorporated in Delaware.

Table 5. Business share of total state and local taxes, FY17

State	Business share of state taxes	Business share of local taxes	Business share of total state and local taxes
Alabama	39.8%	55.8%	45.4%
Alaska	79.5%	50.0%	63.4%
Arizona	36.8%	60.2%	46.6%
Arkansas	38.0%	48.1%	39.9%
California	33.9%	48.6%	39.0%
Colorado	31.9%	58.7%	44.7%
Connecticut	32.4%	25.7%	29.7%
Delaware	59.6%	49.3%	57.3%
Florida	46.9%	61.3%	53.6%
Georgia	32.4%	55.8%	42.5%
Hawaii	34.4%	51.8%	38.8%
Idaho	34.8%	55.4%	40.7%
Illinois	38.1%	52.1%	44.6%
Indiana	32.9%	58.3%	41.0%
Iowa	35.9%	62.6%	46.7%
Kansas	37.1%	57.7%	44.9%
Kentucky	37.6%	55.8%	43.1%
Louisiana	40.4%	58.3%	48.5%
Maine	32.6%	70.6%	47.9%
Maryland	32.7%	29.1%	31.2%
Massachusetts	33.0%	48.4%	38.9%
Michigan	32.8%	40.3%	35.2%
Minnesota	34.0%	51.7%	38.6%
Mississippi	38.9%	76.8%	49.9%
Missouri	29.9%	49.3%	38.4%
Montana	41.4%	62.7%	48.6%
Nebraska	36.7%	62.1%	48.8%
Nevada	50.9%	53.0%	51.6%
New Hampshire	57.6%	38.8%	46.0%
New Jersey	38.8%	43.3%	40.9%
New Mexico	54.4%	58.9%	55.8%
New York	30.5%	50.6%	41.6%
North Carolina	33.7%	46.5%	38.1%
North Dakota	70.4%	66.7%	69.6%
Ohio	41.3%	39.1%	40.4%
Oklahoma	40.7%	57.6%	46.6%
Oregon	28.0%	49.8%	36.3%
Pennsylvania	39.9%	45.4%	42.2%
Rhode Island	37.3%	44.4%	40.4%
South Carolina	31.3%	64.3%	45.7%
South Dakota	56.6%	60.3%	58.4%
Tennessee	55.2%	52.8%	54.2%
Texas	58.2%	64.9%	61.7%
Utah	30.1%	57.5%	40.3%
Vermont	48.4%	68.0%	51.6%
Virginia	26.0%	57.0%	39.8%
Washington	51.9%	47.2%	50.1%
West Virginia	37.7%	77.5%	48.7%
Wisconsin	34.9%	47.7%	39.5%
Wyoming	71.2%	74.9%	72.8%
District of Columbia	54.7%	n/a	54.7%
United States	**38.0%**	**51.7%**	**43.7%**

Note: District of Columbia taxes are treated as state taxes in this analysis.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

Governmental benefits received by businesses versus taxes paid

In addition to the TEBTR, the business tax burden can be evaluated by comparing business taxes paid to benefits received by businesses due to government spending. Because government spending can reduce businesses' nontax costs, if two businesses pay the same amount of taxes, but one receives larger benefits from government spending, the true burden of taxes is not the same for both businesses. Calculating the business tax-benefit ratio estimates the extent to which businesses are "getting what they paid for" from their tax dollars.

Figure 5 shows FY17 total estimated state and local government spending by category (net of user charges and other nontax revenue) for both households and businesses. Using a methodology developed by economists at the Federal Reserve Bank of Chicago, we allocated expenditures in the major categories shown in Figure 5 between households and businesses to reflect the extent to which each group benefits from each type of expenditure.[6] Certain expenditures, such as health and human services, were assigned entirely to households, while other categories, such as public safety and highway infrastructure costs (transportation category), were split evenly between businesses and households. The tax-benefit ratio was calculated by dividing business taxes in each state by estimated government expenditures benefiting business.

Since education spending is by far the largest category of net state and local expenditures, estimates of the tax-benefit ratio for businesses are sensitive to the allocation of education expenditures between businesses and households. While economic theory suggests that individuals are the primary beneficiaries of education due to higher wages, business owners can benefit if an educated workforce generates higher returns to capital. Returns to capital would increase if workers do not completely capture productivity gains through higher wages or an educated workforce improves the productivity of capital (e.g., an educated or trained worker may know how to use machines in production more efficiently, resulting in fewer breakdowns or work stoppages). A review of the literature finds that a 1% increase in the share of workers with a college education in a city increases output by 0.5 to 0.6 percentage point.[7] If businesses are able to capture some or all of the additional productivity from increased education, they are deriving benefits from this type of government spending.

Education can increase profits through indirect channels as well. For example, increasing education may reduce property crime, lowering business costs and increasing the return to capital. One estimate of the social returns of an educated workforce is that social benefits, in the form of lower government spending for police services and incarceration costs, are equal to 14% to 26% of the private return of education (higher wages) that accrues to individuals.[8]

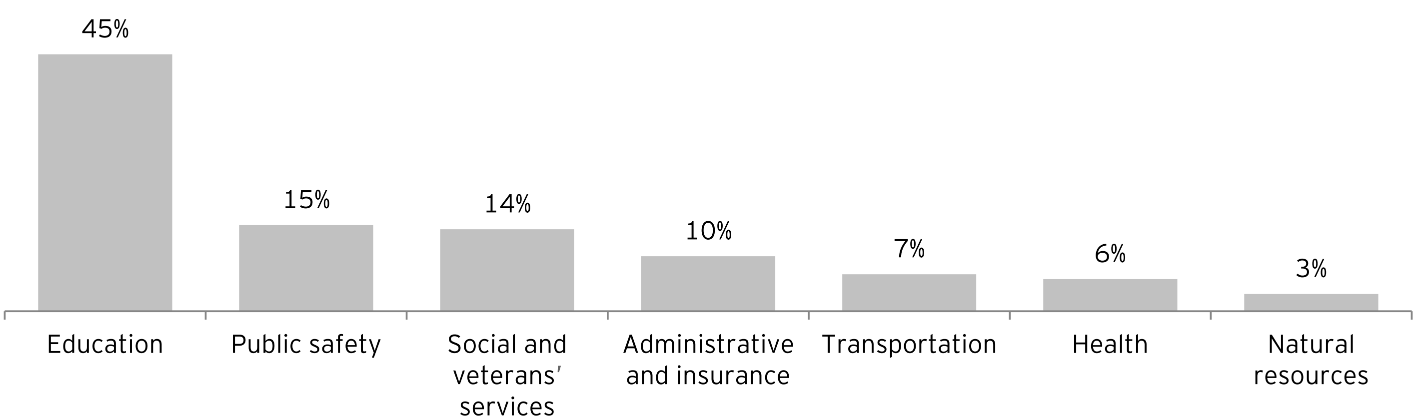
Since the benefit of education to households and businesses is unknown, and the tax-benefit ratio is sensitive to this assumption, this analysis presents a range of estimates for the share of educational expenditures that benefit local business. The ratio is estimated assuming 0%, 25% and 50% of in-state education spending benefits in-state businesses.[9]

Figure 6 and Table 6 summarize the results using the three educational share assumptions for FY17. Assuming that education spending does not directly benefit local business, the ratio of business taxes paid to government services received by business is 3.3, indicating that businesses are taxed at $3.30 per dollar of government services they receive (i.e., a ratio of 3.3 to 1). The ratio drops to 1.7 when one-quarter of education spending is assumed to benefit business and 1.2 for half of education spending.

Calculating tax-benefit ratios using net government spending yields different results than using gross spending. Net government spending subtracts nontax revenue and estimates tax-funded state and local government spending. While tax revenue is the largest individual source of state and local government revenue, nearly 55% of total revenue was derived from other sources in 2016, the last year for which complete state and local government finances data from the U.S. Census Bureau is available. A state could maintain the same level of business taxation and gross spending from one year to the next, but its tax-benefit ratio would still differ if its level of nontax revenue changed.

Wyoming has the highest tax-benefit ratio due to lower levels of government spending compared to severance tax revenue. In Wyoming, the ratio of business taxes to expenditures benefiting local businesses is 6.2, assuming education benefits households only. Twelve additional states have tax-benefit ratios at or above 4.0, assuming educational expenditures do not benefit business. If educational expenditures are split between households and businesses, the tax-benefit ratios are fairly similar across states, with all states having tax-benefit ratios between 0.8 and 1.7.

Figure 5. Net state and local government expenditures by category, FY17
(for both households and businesses)[10]



Source: Ernst & Young LLP estimates of tax-funded revenue based on data from the U.S. Census Bureau, state and local government finances, and the National Association of State Budget Officers.

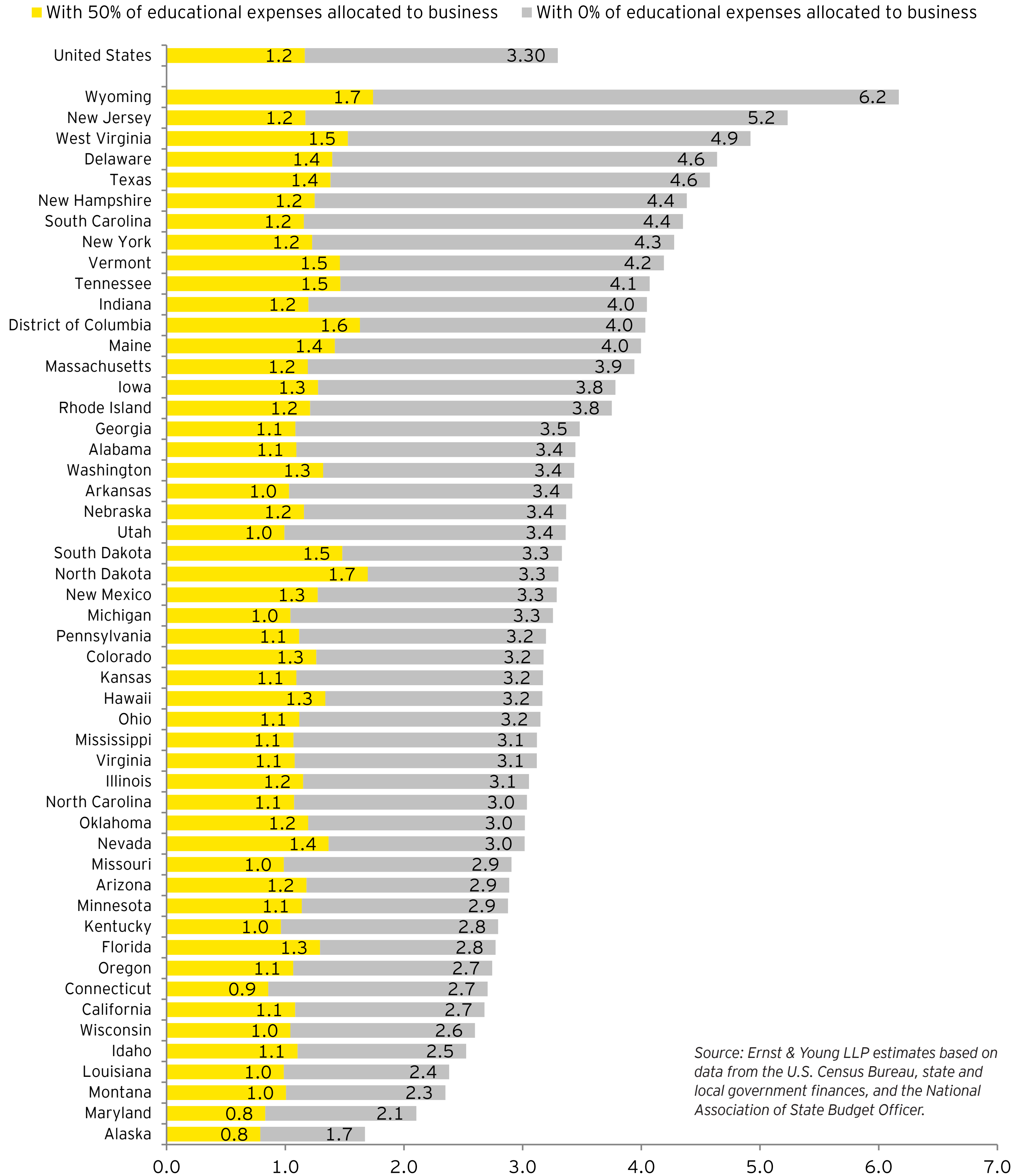
Table 6. Ratio of business taxes to government expenditures benefiting businesses, FY17 ($ billions)

State	State and local business taxes	0% of education spending benefiting business: Total state and local spending benefiting business	0%: Tax-benefit ratio	25% of education spending benefiting business: Total state and local spending benefiting business	25%: Tax-benefit ratio	50% of education spending benefiting business: Total state and local spending benefiting business	50%: Tax-benefit ratio
Alabama	$7.5	$2.2	3.4	$4.5	1.7	$6.9	1.1
Alaska	1.9	1.1	1.7	1.7	1.1	2.4	0.8
Arizona	11.6	4.0	2.9	6.9	1.7	9.8	1.2
Arkansas	4.8	1.4	3.4	3.0	1.6	4.7	1.0
California	96.5	36.0	2.7	62.5	1.5	89.1	1.1
Colorado	11.9	3.7	3.2	6.6	1.8	9.4	1.3
Connecticut	8.4	3.1	2.7	6.4	1.3	9.8	0.9
Delaware	2.7	0.6	4.6	1.3	2.1	2.0	1.4
Florida	41.1	14.8	2.8	23.3	1.8	31.8	1.3
Georgia	17.4	5.0	3.5	10.5	1.7	16.0	1.1
Hawaii	3.7	1.2	3.2	2.0	1.9	2.8	1.3
Idaho	2.6	1.0	2.5	1.7	1.5	2.4	1.1
Illinois	33.6	11.0	3.1	20.1	1.7	29.2	1.2
Indiana	11.2	2.8	4.0	6.1	1.8	9.4	1.2
Iowa	8.0	2.1	3.8	4.2	1.9	6.3	1.3
Kansas	6.1	1.9	3.2	3.7	1.6	5.6	1.1
Kentucky	7.7	2.7	2.8	5.4	1.4	8.0	1.0
Louisiana	10.1	4.2	2.4	7.2	1.4	10.2	1.0
Maine	3.5	0.9	4.0	1.7	2.1	2.5	1.4
Maryland	12.1	5.7	2.1	10.1	1.2	14.5	0.8
Massachusetts	18.2	4.6	3.9	10.0	1.8	15.3	1.2
Michigan	15.5	4.8	3.3	9.8	1.6	14.8	1.0
Minnesota	13.7	4.8	2.9	8.4	1.6	12.1	1.1
Mississippi	5.6	1.8	3.1	3.5	1.6	5.2	1.1
Missouri	9.0	3.1	2.9	6.1	1.5	9.1	1.0
Montana	2.0	0.9	2.3	1.4	1.4	2.0	1.0
Nebraska	4.8	1.4	3.4	2.8	1.7	4.2	1.2
Nevada	7.3	2.4	3.0	3.9	1.9	5.3	1.4
New Hampshire	3.1	0.7	4.4	1.6	1.9	2.5	1.2
New Jersey	26.7	5.1	5.2	14.0	1.9	22.9	1.2
New Mexico	4.9	1.5	3.3	2.7	1.8	3.8	1.3
New York	77.0	18.0	4.3	40.4	1.9	62.8	1.2
North Carolina	16.2	5.3	3.0	10.2	1.6	15.1	1.1
North Dakota	3.3	1.0	3.3	1.5	2.2	1.9	1.7
Ohio	22.5	7.1	3.2	13.6	1.6	20.1	1.1
Oklahoma	6.3	2.1	3.0	3.7	1.7	5.3	1.2
Oregon	7.6	2.8	2.7	4.9	1.5	7.1	1.1
Pennsylvania	29.4	9.2	3.2	17.7	1.7	26.3	1.1
Rhode Island	2.6	0.7	3.8	1.4	1.8	2.1	1.2
South Carolina	8.2	1.9	4.4	4.5	1.8	7.1	1.2
South Dakota	2.1	0.6	3.3	1.0	2.1	1.4	1.5
Tennessee	13.1	3.2	4.1	6.1	2.2	8.9	1.5
Texas	71.5	15.6	4.6	33.7	2.1	51.8	1.4
Utah	5.2	1.5	3.4	3.4	1.5	5.2	1.0
Vermont	2.0	0.5	4.2	0.9	2.2	1.4	1.5
Virginia	16.3	5.2	3.1	10.2	1.6	15.1	1.1
Washington	20.4	5.9	3.4	10.7	1.9	15.4	1.3
West Virginia	3.6	0.7	4.9	1.5	2.3	2.3	1.5
Wisconsin	11.8	4.6	2.6	7.9	1.5	11.3	1.0
Wyoming	2.2	0.4	6.2	0.8	2.7	1.3	1.7
District of Columbia	4.2	1.0	4.0	1.8	2.3	2.6	1.6
United States	**$738.4**	**$224.0**	**3.30**	**$429.2**	**1.72**	**$634.3**	**1.16**

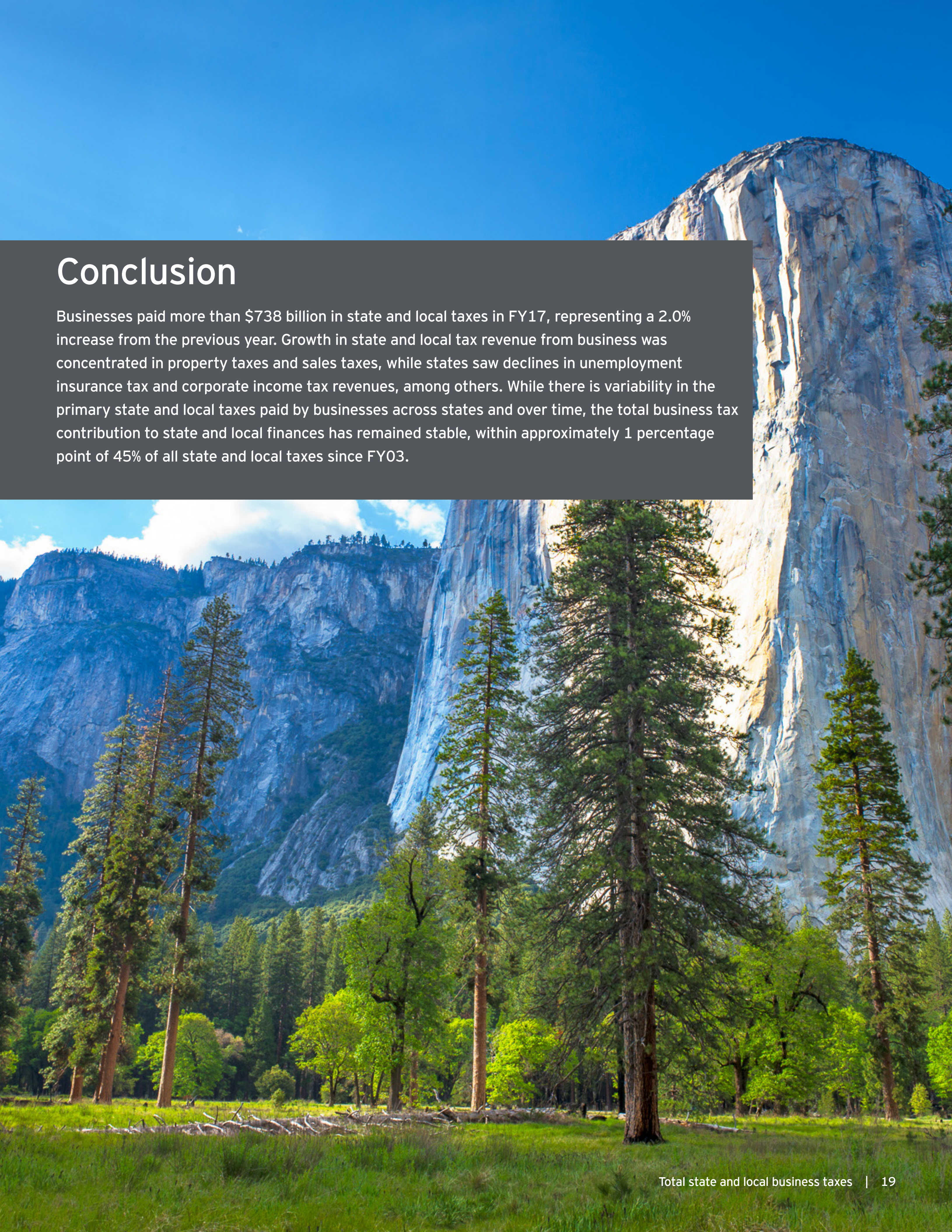
Note: Figures may not sum due to rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances, and the National Association of State Budget Officers.

Figure 6. Business taxes per dollar of net government spending that benefits businesses, FY17

(values shown are equal to business taxes divided by government spending that benefits businesses)



Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances, and the National Association of State Budget Officer.



Conclusion

Businesses paid more than $738 billion in state and local taxes in FY17, representing a 2.0% increase from the previous year. Growth in state and local tax revenue from business was concentrated in property taxes and sales taxes, while states saw declines in unemployment insurance tax and corporate income tax revenues, among others. While there is variability in the primary state and local taxes paid by businesses across states and over time, the total business tax contribution to state and local finances has remained stable, within approximately 1 percentage point of 45% of all state and local taxes since FY03.

Appendix

Table A-1. Total state and local business taxes, 2013–17 ($ billions)

State and local taxes	2013	2014	2015	2016	2017
Total business taxes	$683.0	$694.4	$715.4	$723.7	$738.4
Individual income taxes on non-business income	302.9	304.6	328.7	336.9	345.4
Other taxes	530.4	542.9	565.6	588.6	607.3
Total state and local taxes	**$1,516.3**	**$1,541.9**	**$1,609.7**	**$1,649.1**	**$1,691.1**

Composition of state and local taxes	2013	2014	2015	2016	2017
Total business taxes	45.0%	45.0%	44.4%	43.9%	43.7%
Individual income taxes on non-business income	20.0%	19.8%	20.4%	20.4%	20.4%
Other taxes	35.0%	35.2%	35.1%	35.7%	35.9%
Total state and local taxes	**100%**	**100%**	**100%**	**100%**	**100%**

Note: Figures may not sum due to rounding. FY14, FY15 and FY16 reflect updated business share estimates of sales taxes.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

Table A-2. Composition of state and local business taxes, 2013–17 ($ billions)

Business tax	2013	2014	2015	2016	2017
Property tax on business property	$244.6	$250.1	$262.8	$276.5	$287.4
General sales and use tax on inputs	139.1	143.7	151.3	153.3	157.4
Corporate net income	63.0	64.3	67.0	63.2	62.7
Unemployment comp.	50.8	48.7	45.9	43.1	40.1
Business license tax	32.5	33.9	34.5	33.9	36.7
Excise taxes	38.6	39.0	40.8	42.6	43.1
Public utility tax	29.0	28.3	28.0	28.0	26.8
Individual income tax	37.5	36.6	39.3	40.5	39.4
Severance taxes	16.9	17.9	12.7	7.7	8.9
Insurance premium tax	18.2	18.9	20.0	21.3	21.8
Other business taxes	12.8	13.2	13.2	13.7	13.9
Total business taxes	**$683.0**	**$694.4**	**$715.4**	**$723.7**	**$738.4**

Note: Figures may not sum due to rounding.
Source: Ernst & Young LLP estimates based on the most recent data from the U.S. Census Bureau, state and local government finances.

Table A-3. Composition of state and local business taxes, by type, FY17

State	Property tax	Sales tax	Excise tax	Corporate income tax	Unemployment insurance tax	Individual income tax on business income	License and other taxes*	Total business taxes
Alabama	28.0%	22.9%	22.4%	6.9%	3.3%	4.8%	11.7%	100.0%
Alaska	44.8%	–	6.8%	4.7%	7.6%	–	36.2%	100.0%
Arizona	47.8%	27.0%	10.2%	3.2%	4.2%	2.6%	5.0%	100.0%
Arkansas	26.9%	35.2%	11.3%	8.2%	5.7%	5.8%	6.9%	100.0%
California	31.6%	18.9%	11.9%	10.5%	6.4%	10.0%	10.8%	100.0%
Colorado	45.9%	24.0%	8.8%	4.5%	5.6%	6.7%	4.6%	100.0%
Connecticut	33.0%	19.6%	11.9%	10.7%	9.6%	11.5%	3.7%	100.0%
Delaware	17.5%	–	10.2%	9.2%	4.3%	4.6%	54.2%	100.0%
Florida	41.1%	28.5%	15.7%	5.8%	2.2%	–	6.7%	100.0%
Georgia	43.3%	25.3%	11.3%	5.6%	4.3%	6.4%	3.8%	100.0%
Hawaii	24.9%	33.8%	20.2%	4.9%	4.5%	5.4%	6.2%	100.0%
Idaho	35.9%	20.2%	11.8%	8.2%	5.6%	9.5%	8.9%	100.0%
Illinois	45.6%	15.5%	15.3%	8.6%	6.5%	3.4%	5.3%	100.0%
Indiana	42.5%	21.4%	12.4%	9.1%	5.3%	7.1%	2.3%	100.0%
Iowa	38.2%	20.7%	18.5%	5.4%	5.9%	5.1%	6.3%	100.0%
Kansas	44.2%	28.1%	12.2%	6.3%	4.4%	–	4.8%	100.0%
Kentucky	32.4%	19.8%	19.8%	8.2%	7.2%	6.0%	6.7%	100.0%
Louisiana	31.6%	36.7%	14.5%	2.9%	2.2%	3.7%	8.4%	100.0%
Maine	59.5%	14.4%	7.9%	5.0%	3.6%	4.3%	5.2%	100.0%
Maryland	29.6%	15.8%	20.9%	8.3%	4.9%	12.4%	8.0%	100.0%
Massachusetts	45.5%	16.4%	6.6%	12.0%	7.9%	7.1%	4.4%	100.0%
Michigan	40.2%	21.7%	10.8%	7.7%	8.2%	5.1%	6.3%	100.0%
Minnesota	32.3%	20.5%	19.0%	8.9%	4.6%	6.9%	7.7%	100.0%
Mississippi	43.0%	22.7%	13.3%	7.3%	2.4%	3.9%	7.3%	100.0%
Missouri	37.7%	27.3%	9.4%	4.3%	6.1%	6.6%	8.5%	100.0%
Montana	51.1%	–	12.4%	6.2%	4.9%	7.3%	18.1%	100.0%
Nebraska	51.4%	20.1%	6.2%	5.5%	2.0%	8.8%	6.1%	100.0%
Nevada	21.2%	34.9%	16.2%	–	7.9%	–	19.8%	100.0%
New Hampshire	56.6%	–	14.0%	18.6%	1.9%	0.2%	8.7%	100.0%
New Jersey	48.2%	15.6%	8.2%	7.9%	9.6%	5.8%	4.7%	100.0%
New Mexico	19.0%	40.0%	9.0%	1.9%	6.4%	2.3%	21.4%	100.0%
New York	43.3%	17.0%	9.4%	15.1%	4.1%	7.3%	3.9%	100.0%
North Carolina	31.4%	26.8%	11.3%	4.7%	7.6%	7.4%	10.8%	100.0%
North Dakota	18.6%	15.2%	8.0%	1.9%	4.5%	1.3%	50.5%	100.0%
Ohio	32.4%	25.5%	13.6%	9.1%	5.0%	5.9%	8.5%	100.0%
Oklahoma	25.4%	33.0%	10.7%	2.5%	3.5%	9.2%	15.7%	100.0%
Oregon	38.3%	–	15.3%	9.5%	12.6%	9.6%	14.7%	100.0%
Pennsylvania	35.3%	16.2%	12.8%	9.7%	10.7%	7.0%	8.3%	100.0%
Rhode Island	46.9%	14.2%	14.8%	5.1%	10.7%	4.3%	4.1%	100.0%
South Carolina	49.7%	16.8%	9.7%	4.6%	3.3%	4.3%	11.6%	100.0%
South Dakota	37.2%	40.0%	10.1%	1.5%	1.9%	–	9.3%	100.0%
Tennessee	28.9%	30.1%	13.1%	13.2%	2.3%	0.3%	12.0%	100.0%
Texas	46.0%	26.9%	11.8%	4.5%	3.3%	–	7.4%	100.0%
Utah	39.6%	25.5%	12.8%	6.4%	4.1%	6.9%	4.7%	100.0%
Vermont	56.5%	9.7%	15.7%	4.0%	7.1%	3.5%	3.4%	100.0%
Virginia	47.9%	13.3%	14.5%	5.1%	3.4%	5.5%	10.3%	100.0%
Washington	26.2%	25.8%	16.5%	19.0%	5.8%	–	6.7%	100.0%
West Virginia	36.5%	16.8%	18.0%	3.3%	5.4%	4.1%	15.9%	100.0%
Wisconsin	41.4%	19.8%	10.2%	8.1%	7.2%	5.7%	7.6%	100.0%
Wyoming	47.2%	20.3%	4.8%	–	2.8%	–	24.9%	100.0%
District of Columbia	50.9%	14.0%	7.4%	13.1%	3.9%	7.5%	3.2%	100.0%
United States	**38.9%**	**21.3%**	**12.4%**	**8.5%**	**5.4%**	**5.3%**	**8.1%**	**100.0%**

Note: Figures may not sum due to rounding. "–" indicates 0.0%.
**Taxes categorized under "other" include documentary and stock transfer taxes, severance taxes, and local gross receipts taxes.*
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

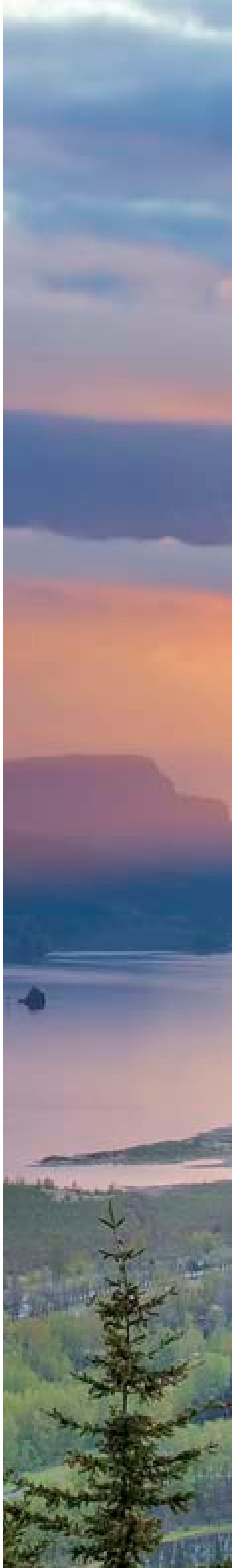
Table A-4. Composition of total state and local taxes, by type, FY17

State	Property tax	Sales tax	Excise tax	Corporate income tax	Unemployment insurance tax	Individual income tax	License and other taxes*	Total taxes
Alabama	17.1%	29.5%	17.8%	3.2%	1.5%	22.7%	8.2%	100.0%
Alaska	47.1%	7.3%	12.0%	3.0%	4.8%	–	25.8%	100.0%
Arizona	31.6%	38.0%	9.1%	1.5%	2.0%	13.9%	3.9%	100.0%
Arkansas	18.1%	37.5%	11.4%	3.3%	2.3%	22.9%	4.5%	100.0%
California	26.0%	18.9%	7.6%	4.1%	2.5%	34.0%	6.9%	100.0%
Colorado	30.3%	25.6%	9.0%	2.0%	2.5%	25.6%	4.9%	100.0%
Connecticut	38.6%	15.0%	8.6%	3.2%	2.9%	28.2%	3.6%	100.0%
Delaware	18.4%	–	12.0%	5.3%	2.5%	26.0%	35.8%	100.0%
Florida	36.2%	36.2%	14.7%	3.1%	1.2%	–	8.7%	100.0%
Georgia	31.8%	24.5%	9.8%	2.4%	1.8%	26.8%	2.8%	100.0%
Hawaii	18.0%	36.1%	13.8%	1.9%	1.7%	21.8%	6.7%	100.0%
Idaho	26.7%	25.4%	9.9%	3.3%	2.3%	25.5%	7.0%	100.0%
Illinois	38.2%	18.6%	13.4%	3.8%	2.9%	17.6%	5.4%	100.0%
Indiana	25.6%	27.6%	12.9%	3.7%	2.2%	25.0%	3.1%	100.0%
Iowa	30.9%	20.6%	14.6%	2.5%	2.7%	21.9%	6.7%	100.0%
Kansas	32.8%	30.8%	10.0%	2.8%	2.0%	17.2%	4.4%	100.0%
Kentucky	21.0%	19.6%	15.9%	3.5%	3.1%	32.4%	4.5%	100.0%
Louisiana	19.9%	43.6%	15.2%	1.4%	1.0%	14.2%	4.7%	100.0%
Maine	40.3%	19.8%	10.0%	2.4%	1.7%	21.1%	4.6%	100.0%
Maryland	26.7%	11.9%	14.2%	2.6%	1.5%	37.0%	6.0%	100.0%
Massachusetts	36.6%	13.3%	6.4%	4.7%	3.1%	31.4%	4.6%	100.0%
Michigan	34.3%	21.0%	10.8%	2.7%	2.9%	22.7%	5.6%	100.0%
Minnesota	25.6%	17.0%	15.0%	3.4%	1.8%	30.8%	6.3%	100.0%
Mississippi	27.5%	31.6%	14.1%	3.7%	1.2%	16.5%	5.5%	100.0%
Missouri	27.0%	26.8%	8.8%	1.7%	2.4%	28.1%	5.3%	100.0%
Montana	39.3%	–	14.1%	3.0%	2.4%	28.3%	12.9%	100.0%
Nebraska	38.2%	22.4%	6.5%	2.7%	1.0%	22.5%	6.8%	100.0%
Nevada	22.5%	39.0%	21.4%	–	4.1%	–	13.0%	100.0%
New Hampshire	67.4%	–	14.4%	8.6%	0.9%	1.0%	7.9%	100.0%
New Jersey	45.7%	14.7%	6.1%	3.2%	3.9%	21.3%	5.0%	100.0%
New Mexico	18.6%	36.9%	10.4%	1.0%	3.6%	15.2%	14.2%	100.0%
New York	31.4%	16.8%	7.4%	6.3%	1.7%	30.8%	5.6%	100.0%
North Carolina	24.9%	24.8%	10.5%	1.8%	2.9%	28.4%	6.6%	100.0%
North Dakota	18.4%	21.9%	10.7%	1.3%	3.1%	6.8%	37.7%	100.0%
Ohio	27.7%	25.4%	11.6%	3.7%	2.0%	24.3%	5.3%	100.0%
Oklahoma	18.7%	32.5%	11.0%	1.2%	1.6%	23.1%	12.0%	100.0%
Oregon	30.7%	–	10.6%	3.4%	4.6%	40.3%	10.4%	100.0%
Pennsylvania	28.7%	16.3%	14.0%	4.1%	4.5%	24.7%	7.7%	100.0%
Rhode Island	42.9%	15.8%	11.5%	2.1%	4.3%	19.6%	3.8%	100.0%
South Carolina	34.3%	20.8%	9.5%	2.1%	1.5%	23.1%	8.7%	100.0%
South Dakota	35.5%	39.9%	13.6%	0.9%	1.1%	–	9.0%	100.0%
Tennessee	26.7%	40.4%	13.9%	7.2%	1.2%	1.0%	9.6%	100.0%
Texas	42.6%	31.6%	14.2%	2.8%	2.0%	–	6.7%	100.0%
Utah	25.8%	27.6%	10.2%	2.6%	1.6%	28.2%	4.0%	100.0%
Vermont	42.5%	9.9%	17.7%	2.1%	3.6%	19.0%	5.1%	100.0%
Virginia	33.9%	13.1%	10.8%	2.0%	1.4%	31.9%	6.9%	100.0%
Washington	27.9%	35.3%	15.2%	9.5%	2.9%	–	9.1%	100.0%
West Virginia	23.0%	18.5%	19.3%	1.6%	2.6%	24.8%	10.1%	100.0%
Wisconsin	34.4%	18.9%	9.6%	3.2%	2.8%	26.1%	5.1%	100.0%
Wyoming	43.5%	25.3%	7.1%	–	2.0%	–	22.1%	100.0%
District of Columbia	32.7%	18.4%	5.6%	7.2%	2.1%	25.4%	8.6%	100.0%
United States	**31.4%**	**22.3%**	**10.9%**	**3.7%**	**2.4%**	**22.8%**	**6.6%**	**100.0%**

Note: Figures may not sum due to rounding. "–" indicates 0.
**Taxes categorized under "other" include documentary and stock transfer taxes, severance taxes, and local gross receipts taxes.*
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances.

Endnotes

1. States that follow a different fiscal year are Alabama (ends September 30), Michigan (ends September 30), New York (ends March 31) and Texas (ends August 31). Data presented in this study are for each state's fiscal year.
2. EY's sales tax model used to estimate business share was updated for all 50 states in FY17. Certain prior-year estimates from FY14, FY15 and FY16 were restated to reflect updated business sales tax estimates. Prior-year estimates for sales taxes paid by business were updated and are shown in the historical appendix tables.
3. The general methodology used to estimate state and local business taxes is described in detail in the Appendix to the *Ernst & Young/COST FY2005 50-State Business Tax study* published in March 2006 (available at www.cost.org). Note that business tax estimates for prior years have been revised from those published in earlier editions of this study due to the use of newly released U.S. Census Bureau data and refinements to the estimation of individual income taxes. All references to business taxes in prior fiscal years refer to the updated estimates included in this study, rather than the previously published estimates.
4. Robert Cline, Andrew Phillips, and Tom Neubig, "What's Wrong with Taxing Business Services? Adverse Effects from Existing and Proposed Sales Taxation of Business Investment and Services," prepared for the Council On State Taxation, April 4, 2013.
5. Robert Cline, Andrew Phillips, Joo Mi Kim and Tom Neubig, "The Economic Incidence of Additional State Business Taxes," *State Tax Notes*, January 11, 2010.
6. Richard H. Mattoon and William A. Testa, "How Closely Do Business Taxes Conform to the Benefits Principle?" presentation at the Future State Business Tax Reforms: Perspectives from the Business, Government and Academic Communities conference, Federal Reserve Bank of Chicago, September 17, 2007. The authors distributed state and local government expenditures between businesses and households. Services benefiting business include shares of expenditures for transportation, water and sewer infrastructure, police and fire protection, general government "overhead" (e.g., legislative, administrative and judicial services), interest, and regulatory activities. The methodology used is described in detail in William H. Oakland and William A. Testa, "State-Local Business Taxation and the Benefits Principle," Economic Perspectives (January/February 1996). The authors also note that selective excise taxes, such as the severance tax, impact a small portion of businesses and could be removed from the business tax numerator to provide a measure of the tax-benefit ratio generally applicable to most firms. EY professionals added in expenditure categories to the analysis not included in the 2007 data.
7. Evidence is reviewed in Enrico Moretti, "Workers' Education, Spillovers, and Productivity: Evidence from Plant-Level Production Functions," *The American Economic Review*, June 2004.
8. An example of work related to the social benefits of education is Lance Lochner and Enrico Moretti, "The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports," NBER Working Paper 8605, November 2001.
9. The tax-benefit ratios shown in this study were constructed following the general methodology used by Mattoon and Testa that allocates expenditures net of user charges and federal transfers to businesses and households. Like Mattoon and Testa, EY professionals identified major categories of state and local spending. Using data from the U.S. Census Bureau's 2010 State and Local Government Finances, expenditures, charges, federal transfers and other category-specific nontax revenue were assigned to each category. These items were used to calculate the net expenditures for each category. The net expenditures were then allocated to businesses and households in an identical manner to the Mattoon and Testa allocation for all categories included in their analysis. For new categories, EY professionals followed Mattoon and Testa's general principles in allocating net expenditures.
10. Administrative and insurance share is negative because nontax revenue from investments, interest and other sources exceeds total outlays.



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This study was prepared by the QUEST practice of Ernst & Young LLP in conjunction with the Council On State Taxation (COST) and the State Tax Research Institute (STRI).

QUEST is a group of economists, statisticians, survey professionals and tax policy researchers within Ernst & Young LLP's National Tax practice, located in Washington, DC. QUEST provides quantitative advisory services and products to private and public sector clients that enhance business processes, support regulatory compliance, analyze proposed policy issues and provide litigation support.

COST is a nonprofit trade association based in Washington, DC. COST was formed in 1969 as an advisory committee to the Council of State Chambers of Commerce and today has an independent membership of nearly 600 major corporations engaged in interstate and international business. COST's objective is to preserve and promote the equitable and nondiscriminatory state and local taxation of multijurisdictional business entities.

STRI is a nonprofit organization established in 2014 to provide educational programs and conduct research designed to enhance public dialogue relating to state and local tax policy. STRI is affiliated with COST.