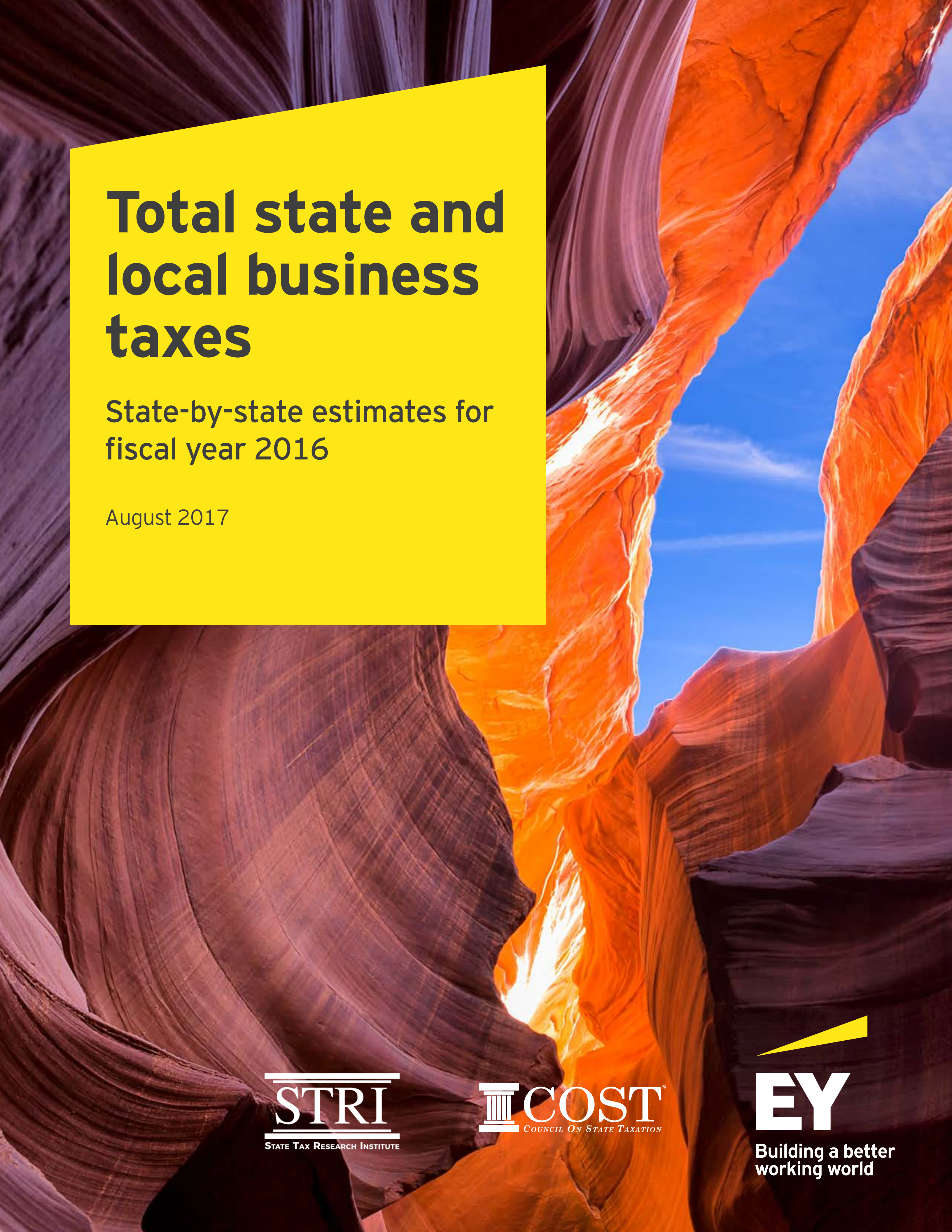


Total state and local business taxes

State-by-state estimates for fiscal year 2016

August 2017

STRI
State Tax Research Institute

COST
Council On State Taxation

EY
Building a better working world

Executive summary

This study presents detailed state-by-state estimates of the state and local taxes paid by businesses for FY2016. It is the 15th 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 more than $724.1 billion in state and local taxes in FY2016, an increase of 0.9% from FY2015. State business taxes fell by 1.4% compared to local business tax growth of 3.4%. In FY2016, business tax revenue accounted for approximately 44% of all state and local tax revenue. The business share has been within approximately 1% of 45% since FY2003.

The state and local business tax estimates presented in this study reflect tax collections from July 2015 through June 2016 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:

- Local business tax collections increased, while state business taxes fell from FY2015 to FY2016. Overall state and local business taxes increased 0.9%, with local business tax revenue growing by 3.4% and state business tax revenue falling by 1.4%. The state business tax decrease was driven by a variety of factors, as noted below and in Table 1.
- Business property tax revenue increased 4.5% in FY2016, a gain of $11.9 billion. Property taxes remain by far the largest state and local tax paid by businesses, accounting for 38.4% of the total. Property taxes are also by far the largest local tax paid by businesses (76.8% of all local taxes paid by businesses).
- General sales taxes on business inputs and capital investment totaled $153.9 billion, or 21.3% of state and local business taxes. Overall sales taxes paid by business increased 1.8%. Sales taxes on business inputs are the largest state tax paid by businesses (31.9% of all state taxes paid by businesses).
- Corporate income tax collections fell for the first time since FY2010. In FY2016, state and local corporate income taxes totaled $63.2 billion, or 8.7% of all state and local business taxes, down 5.6% from FY2015. Federal receipts from FY2016 also show a decrease in corporate income tax revenue. 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 5.6% of total state and local business taxes. State and local individual income taxes on business income increased by 3.3% from FY2015.
- Severance taxes decreased from $12.7 billion in FY2015 to $7.7 billion in FY2016, a decline of nearly 39%.
- 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 3.5% 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 $3.13 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 $1.11 for every dollar of government spending benefiting businesses.

Total state and local business taxes in FY2016

Businesses paid $724.1 billion in total state and local taxes in FY2016, as presented in Table 1.[2] This section describes the business taxes in more detail and highlights the key results.

- As shown in Table 1 and Figure 1, property tax revenue on real and personal property owned by businesses account for the largest share of total state and local business tax revenue, 38.4% or $278.1 billion in FY2016. Business property tax revenue increased 4.5% in FY2016. It is the fourth time since FY2009 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 2016. Of the $514.5 billion of total property tax revenue, 54% ($278.1 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 $153.9 billion, or 21.3% of all state and local business taxes. General sales and use tax revenue derived from business increased 1.8% 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.[3] Figure 2 displays general sales tax revenue on business inputs as a share of total state and local general sales tax revenue. In 2016, 42% of total sales tax revenue was from sales tax on business inputs.
- State and local corporate income tax revenue was $63.2 billion in FY2016, a decrease of 5.6% from FY2015. FY2016 was the first year corporate income taxes fell since FY2010. State and local corporate income tax revenue did not decline by as much as federal corporate income taxes during the same period. Federal corporate income tax receipts fell 14% between FY2015 and FY2016 following a downward trend in corporate profits in the third and fourth quarters of 2015.[4] Included in corporate income tax revenue are Ohio's Commercial Activity Tax, Texas' Margin Tax, New Hampshire's Business Enterprise Tax, and Washington's Business & Occupation Tax. These are based on gross receipts and constitute the primary business entity tax in each state, none of which imposes a traditional corporate income tax. 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 4).
- Employer contributions to unemployment insurance (unemployment taxes) were $43.1 billion in FY2016, a decrease of $2.8 billion or 6.1% from FY2015. This is the third year that unemployment tax collections have declined since FY2008, a result of most states having replenished their unemployment insurance funds and paid outstanding debts to the federal government. Declining unemployment tax revenues in Florida, Massachusetts and Illinois accounted for over $1 billion of the cumulative $2.8 billion decrease. Florida and Massachusetts saw changes in taxable earnings, while Illinois saw a change in the employer tax rates.

Table 1. Total state and local business taxes, FY2016 ($billions)

Business tax	FY2015	FY2016	2016 % total taxes	One-year change
Property taxes on business property	$266.2	$278.1	38.4%	4.5%
General sales taxes on business inputs	151.2	153.9	21.3%	1.8%
Corporate income tax	67.0	63.2	8.7%	-5.6%
Unemployment insurance	45.9	43.1	5.9%	-6.1%
Excise taxes on business inputs	41.0	42.5	5.9%	3.6%
Individual income tax on business income	39.0	40.3	5.6%	3.3%
Business and corporate license	34.9	33.8	4.7%	-3.4%
Public utility taxes	26.3	26.1	3.6%	-0.9%
Insurance premium taxes	20.0	21.3	2.9%	6.5%
Severance taxes	12.7	7.7	1.1%	-39.0%
Other business taxes	13.7	14.1	1.9%	3.0%
Total state and local business taxes	**$717.9**	**$724.1**	**100.0%**	**0.9%**

Note: Amounts may not sum due to rounding.
**FY2015 tax estimates are revised from the COST FY2015 study due to newly released data from the U.S. Census Bureau. See Appendix for more information.*
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 $42.5 billion in FY2016. 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 $33.8 billion, a decrease of 3.4% from FY2015. In FY2016, business and corporate license tax revenue contributed to 4.7% 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 $40.3 billion in FY2016, an increase of 3.3% from FY2015. Individual income taxes from pass-through business income represent 5.6% of total state and local business taxes.
- Public utility tax revenue decreased by 0.9% to $26.1 billion in FY2016, the fourth 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 $21.3 billion in FY2016, an increase of 6.5%.
- State and local severance taxes fell by 39.0% in FY2016, the largest decrease by far of all business taxes. The $5.0 billion decrease in severance taxes was driven largely by a cumulative $3.0 billion decrease in state severance tax collections in Texas and North Dakota.
- Other state and local business taxes, such as motor vehicle license tax and documentary and stock transfer tax, among others, totaled $14.1 billion in FY2016, a 3.0% increase from the previous year.

Figure 1a: Composition of total state and local taxes on businesses and households, FY2016

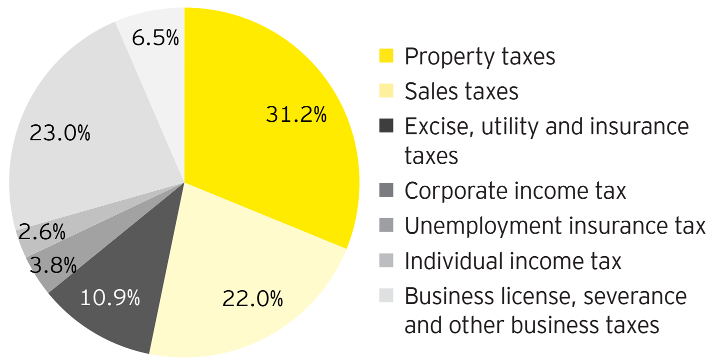
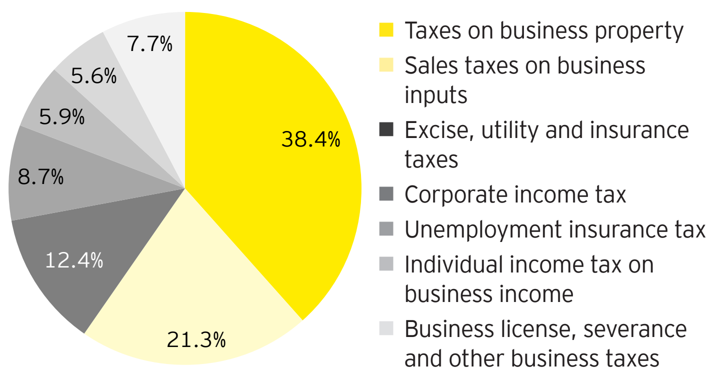
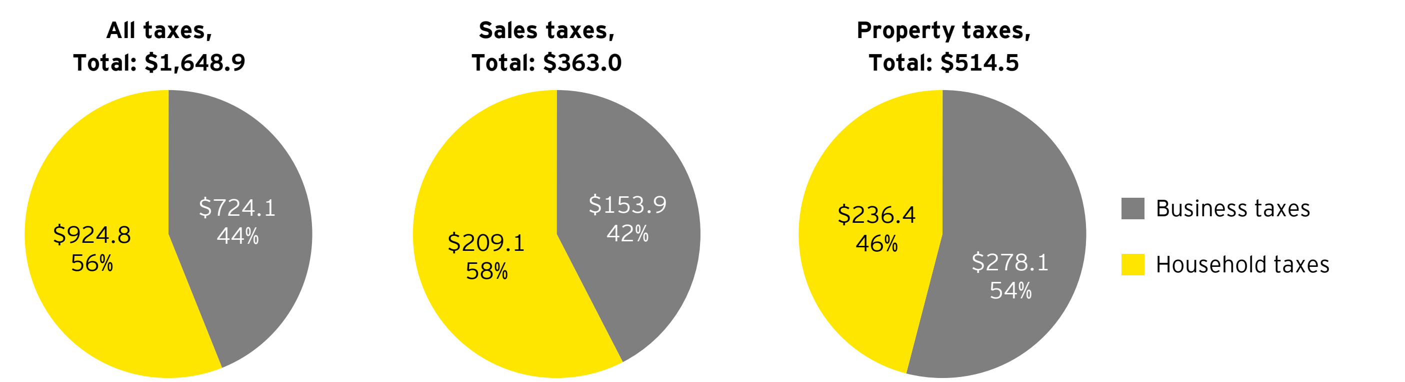


Figure 1b: Composition of total state and local business taxes, FY2016



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, FY2016 ($billions)

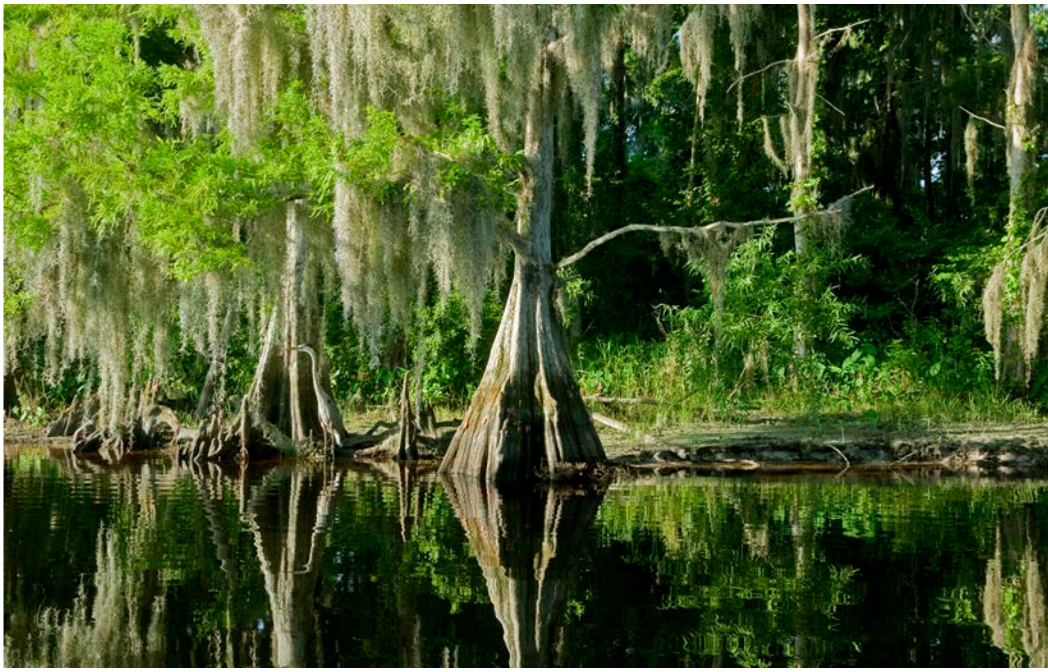


Classifying business taxes

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 business' share of motor fuel taxes, alcoholic beverage sales taxes, amusement taxes, insurance premiums taxes, pari-mutuel taxes, public utility 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
- 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, Texas and Washington levy a tax based on gross receipts in place of a traditional corporate income tax. In addition, New Hampshire's Business Enterprise Tax is levied on a value-added base rather than income. This analysis considers gross receipts and value-added 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 vs. local business taxes in FY2016

Local business tax revenue grew between FY2015 and FY2016, while state business tax revenue fell. Tables 2-A and 2-B provide dollar amounts, percentage distributions and growth rates in FY2016 for total business taxes at the state and local levels of government.

Total state and local business tax revenues increased by $6.2 billion in FY2016, after growing by $22.6 billion in FY2015 from the prior fiscal year. State business tax revenue fell by 1.4% and local business tax revenues grew by 3.4%. The largest local tax, business property taxes, which remained relatively flat between FY2009 and FY2012, increased by $15.4 billion in FY2015 and $11.4 billion in FY2016. While local excise and other business tax revenue fell, the increase in property tax revenue alone more than offset that decline in revenue.

At the state level, business tax revenue fell by 1.4% or $5.3 billion from FY2015 to FY2016. This is largely due to a decrease in severance tax revenue of $5.0 billion or 39.3%. Corporate income and unemployment insurance tax revenue each decreased by over $2.0 billion. General sales tax, which makes up 31.9% of state business tax revenue, increased by 1.7% from FY2015.

Tables 2-A and 2-B demonstrate that the composition of state business taxes differs significantly from business taxes at the local level. Table 2-A shows the percentage distribution of state taxes by tax type; Table 2-B 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 76.8% of local business taxes. The largest business tax at the state level, the sales and use tax, accounts for 31.9% of state business tax revenue. The degree to which states impose sales and use taxes on business purchases, and the implications of proposals to increase this leading component of state business taxes, are detailed in the 2013 Ernst & Young LLP/COST study, "What's Wrong with Taxing Business Services? Adverse Effects from Existing and Proposed Sales Taxation of Business Investment and Services." (Available at www.cost.org.)

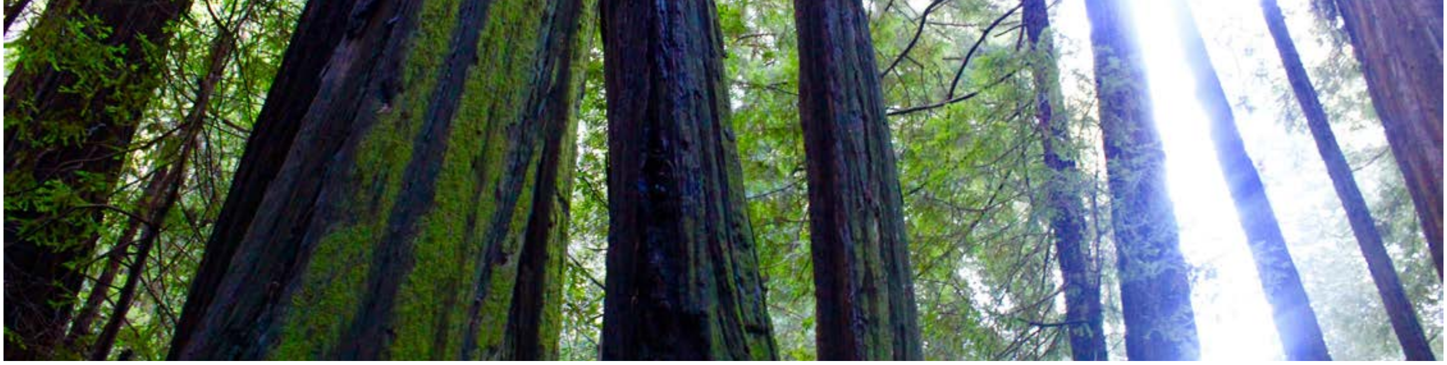


Table 2a. State business taxes, FY2016 ($billions)

Business tax	State business taxes FY2015	State business taxes FY2016	% total state business taxes	One-year growth, state business taxes
General sales and use tax on inputs	$118.0	$120.0	31.9%	1.7%
Corporate net income	$58.9	$55.9	14.9%	-5.0%
Unemployment insurance	$45.9	$43.1	11.5%	-6.1%
Individual income tax	$35.7	$36.9	9.8%	3.3%
Excise taxes on business inputs	$34.0	$35.5	9.4%	4.3%
Business license tax	$22.8	$21.6	5.8%	-5.2%
Insurance premium tax	$19.1	$20.4	5.4%	6.8%
Public utility tax	$13.6	$13.2	3.5%	-2.7%
Property tax on business property	$10.1	$10.6	2.8%	4.9%
Severance taxes	$12.6	$7.6	2.0%	-39.3%
Other business taxes	$10.6	$11.0	2.9%	3.9%
Total state business taxes	**$381.2**	**$375.9**	**100.0%**	**-1.4%**

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, FY2016 ($billions)

Business tax	Local business taxes FY2015	Local business taxes FY2016	% total local business taxes	One-year growth, local business taxes
Property taxes on business property	$256.2	$267.6	76.8%	4.5%
General sales taxes on business inputs	$33.2	$33.9	9.7%	2.1%
Public utility taxes	$12.7	$12.8	3.7%	1.1%
Excise taxes on business inputs	$7.0	$7.0	2.0%	0.0%
Other business taxes	$27.7	$26.9	7.7%	-2.7%
Total local business taxes	**$336.7**	**$348.3**	**100.0%**	**3.4%**

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.
**Includes local corporate income taxes.*

State-by-state business tax collections

Figure 3 shows the state-by-state change in total state and local business taxes between FY2015 and FY2016. States with significant tax changes in FY2016 and trends in business tax collections are described below.

- In 2016, business property taxes increased substantially for the fourth year in a row since 2009. The $11.9 billion in increased property tax revenue was largely driven by gains in four large states: California, Florida, New York and Texas. Nationally, property tax revenue increased by 4.5%, but 30 states grew at a slower rate than the national average. California had the largest dollar increase in business property tax revenue, collecting $1.8 billion more than in 2015. Connecticut had the highest growth rate for business property tax revenue, increasing 12.6%.
- Texas saw the single largest decline in business tax revenue, largely driven by a 41% drop in severance tax revenue in FY2016. Other states, including North Dakota, also saw a significant drop in severance tax revenue. Due to the base of the tax (e.g., gross value), lower prices and production led to lower severance tax receipts.
- On the other end of the spectrum, California had the largest increase in state and local business tax revenue due to an increase in its property tax revenue.
- Business tax revenue derived from individual income increased for the second year in a row. Individual income increased by 3.3% in 2016. New York was responsible for over 40% of the growth in tax revenue in this category.
- Gains in state sales tax collections were concentrated in Washington, New York and California, which each experienced sales tax increases over $350 million. Of the 45 states with a state sales tax, 34 experienced sales tax collections increase.

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.

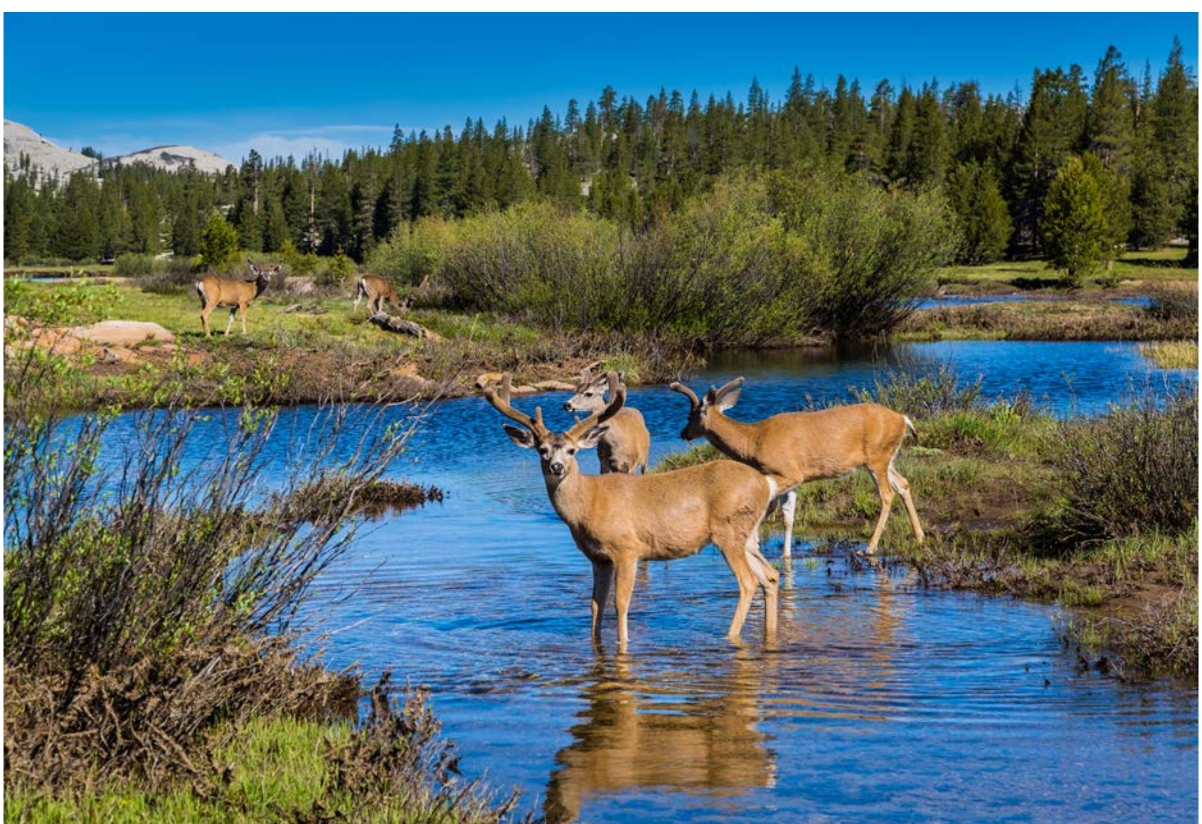
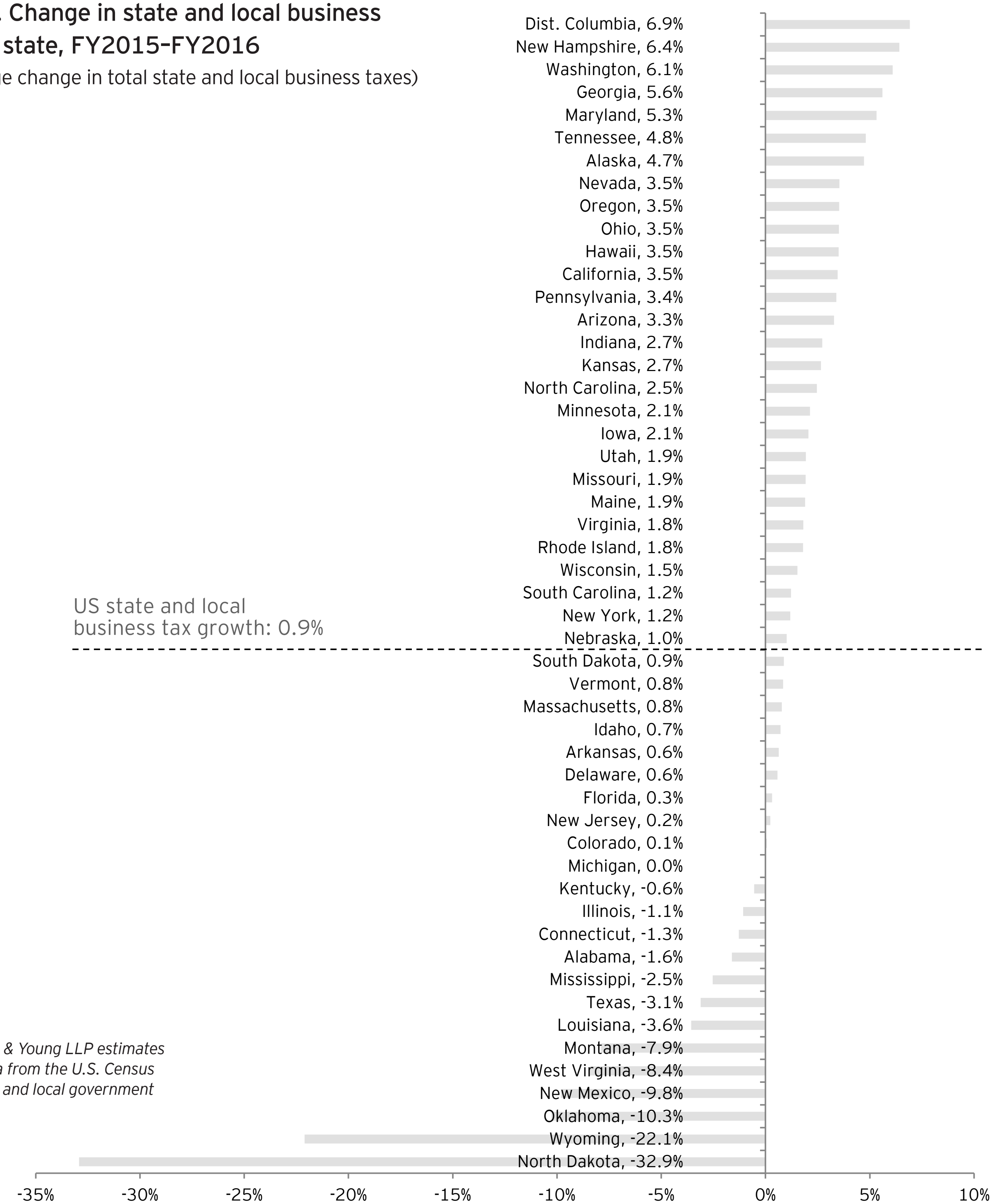


Figure 3. Change in state and local business taxes by state, FY2015–FY2016

(Percentage change in total state and local business taxes)



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, FY2016 ($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	$2.0	$1.7	$1.6	$0.4	$0.3	$0.3	$0.8	$7.1
Alaska	1.0	–	0.1	0.2	0.2	--	0.4	1.9
Arizona	5.2	4.1	1.2	0.6	0.5	0.3	0.5	12.4
Arkansas	1.2	1.7	0.5	0.5	0.3	0.3	0.3	4.8
California	29.2	19.7	11.9	9.9	6.2	9.6	8.4	94.9
Colorado	5.4	2.7	1.2	0.6	0.7	0.8	0.6	12.1
Connecticut	2.7	1.5	1.0	0.7	0.8	1.0	0.3	8.1
Delaware	0.5	–	0.3	0.3	0.1	0.1	1.4	2.8
Florida	16.3	8.4	6.8	2.3	1.2	–	2.8	37.8
Georgia	7.3	4.4	1.9	1.0	0.8	1.0	0.6	17.0
Hawaii	0.8	1.4	0.8	0.1	0.2	0.2	0.2	3.7
Idaho	0.9	0.5	0.3	0.2	0.1	0.2	0.2	2.5
Illinois	15.1	5.0[5]	5.1	3.4	2.4	1.3	1.7	33.9
Indiana	4.7	2.4	1.3	1.0	0.7	0.8	0.3	11.3
Iowa	3.0	1.8	0.4	0.4	0.4	0.5	0.5	7.0
Kansas	3.1	1.7	0.8	0.4	0.4	–	0.3	6.6
Kentucky	2.3	1.7	1.5	0.7	0.5	0.5	0.5	7.8
Louisiana	3.1	2.9	1.0	0.2	0.2	0.4	0.9	8.7
Maine	2.0	0.5	0.3	0.1	0.2	0.1	0.2	3.4
Maryland	3.4	1.9	2.5	1.1	0.7	1.3	1.0	12.0
Massachusetts	8.1	2.9	1.2	2.3	1.4	1.3	0.8	18.1
Michigan	6.1	3.3	1.5	0.9	1.4	0.8	0.9	14.9
Minnesota	4.0	2.7	2.1	1.5	0.9	1.0	1.1	13.3
Mississippi	2.2	1.3	0.7	0.5	0.2	0.2	0.5	5.6
Missouri	3.4	2.4	0.8	0.4	0.6	0.7	0.8	9.1
Montana	1.0	–	0.2	0.1	0.1	0.1	0.4	2.0
Nebraska	2.3	1.0	0.4	0.3	0.1	0.4	0.3	4.8
Nevada	1.5	2.2	1.1	–	0.5	–	1.4	6.7
New Hampshire	1.6	–	0.4	0.7	0.1	0.0	0.3	3.1
New Jersey	12.8	4.1	2.3	2.2	2.7	1.5	1.2	26.8
New Mexico	0.9	1.9	0.5	0.1	0.3	0.1	0.7	4.6
New York	32.3	12.2	7.4	10.5	3.5	6.1	3.0	75.0
North Carolina	5.1	4.1	1.8	1.1	1.5	1.1	1.4	16.0
North Dakota	0.6	0.6	0.3	0.1	0.1	0.0	1.7	3.4
Ohio	7.3	5.3	3.0	1.9	1.1	1.3	2.0	22.0
Oklahoma	1.6	2.1	0.7	0.3	0.2	0.8	0.9	6.6
Oregon	2.7	–	1.0	0.7	1.0	0.8	1.1	7.2
Pennsylvania	10.5	4.4	4.1	2.9	3.1	2.2	2.5	29.6
Rhode Island	1.2	0.4	0.4	0.1	0.3	0.1	0.1	2.5
South Carolina	3.9	1.4	0.8	0.4	0.4	0.3	0.9	8.2
South Dakota	0.7	0.8	0.2	0.0	0.0	–	0.2	2.0
Tennessee	3.6	3.8	1.7	1.5	0.3	0.1	1.5	12.5
Texas	31.4	18.6	8.2	3.9	2.2	–	4.3	68.5
Utah	2.0	1.1	0.6	0.3	0.3	0.3	0.3	4.9
Vermont	1.1	0.2	0.3	0.1	0.1	0.1	0.1	2.0
Virginia	7.4	2.1	2.4	0.8	0.7	0.9	1.7	15.9
Washington	5.0	7.5	3.0	3.6	1.3	–	1.3	21.9
West Virginia	1.2	0.5	0.7	0.1	0.2	0.2	0.6	3.6
Wisconsin	5.0	2.2	1.1	1.0	1.0	0.7	0.9	11.9
Wyoming	0.3	0.4	0.1	–	0.1	–	0.7	1.5
District of Columbia	2.1	0.6	0.3	0.6	0.2	0.3	0.1	4.1
United States	**$278.1**	**$153.9**	**$89.8**	**$63.2**	**$43.1**	**$40.3**	**$55.6**	**$724.1**

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 death and gift taxes, 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 workers and capital owners.[6] 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%. Connecticut had the lowest TEBTR at 3.47%. Connecticut is home to several high-output industries, such as insurance, financial services and aerospace, which generate a large amount of GSP for the state. Businesses 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 to 54% nationally. Vermont had the highest TEBTR at 7.5%. Vermont relies heavily on property taxes, of which 69% 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 passed on to consumers, many of whom are located outside the state.[7]

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 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, FY2016 ($billions)

State	State taxes		Local taxes		State and local taxes		TEBTR*	Business taxes per employee ($thousands)**
	Business	Total	Business	Total	Business	Total		
Alabama	$4.0	$10.2	$3.1	$5.6	$7.1	$15.8	4.2%	$4.3
Alaska	0.9	1.2	1.0	1.9	1.9	3.1	4.7%	7.3
Arizona	6.2	15.1	6.2	9.9	12.4	25.0	4.8%	5.3
Arkansas	3.8	9.8	1.0	2.1	4.8	11.9	4.6%	4.6
California	54.9	161.5	39.9	82.7	94.9	244.2	4.2%	6.4
Colorado	4.5	13.5	7.6	12.7	12.1	26.2	4.3%	5.4
Connecticut	5.3	16.1	2.8	10.9	8.1	26.9	3.5%	5.4
Delaware	2.2	3.7	0.5	1.1	2.8	4.7	4.4%	7.0
Florida	16.8	38.9	21.0	34.2	37.8	73.1	4.7%	5.0
Georgia	7.3	22.3	9.6	17.0	17.0	39.3	3.8%	4.5
Hawaii	2.5	7.1	1.2	2.3	3.7	9.4	5.8%	7.0
Idaho	1.5	4.3	1.0	1.8	2.5	6.1	4.3%	4.3
Illinois	16.2	41.3	17.8	33.8	33.9	75.1	4.8%	6.4
Indiana	6.2	18.3	5.1	8.6	11.3	26.9	3.7%	4.2
Iowa	3.7	9.9	3.2	5.8	7.0	15.7	4.4%	5.1
Kansas	3.3	8.5	3.4	5.8	6.6	14.3	5.0%	5.6
Kentucky	4.9	12.3	2.9	5.2	7.8	17.5	4.7%	4.8
Louisiana	3.7	9.5	5.0	8.5	8.7	18.1	4.1%	5.1
Maine	1.4	4.3	2.0	2.8	3.4	7.1	6.7%	6.4
Maryland	7.4	21.6	4.6	16.4	12.0	37.9	4.1%	5.4
Massachusetts	9.6	28.7	8.5	17.5	18.1	46.2	4.1%	5.6
Michigan	9.3	28.8	5.6	13.8	14.9	42.7	3.5%	4.0
Minnesota	9.3	26.1	4.0	8.1	13.3	34.2	4.5%	5.3
Mississippi	3.3	7.8	2.3	3.0	5.6	10.8	6.3%	6.0
Missouri	4.0	12.8	5.1	10.2	9.1	23.0	3.5%	3.7
Montana	1.1	2.8	0.9	1.4	2.0	4.1	5.1%	5.2
Nebraska	2.0	5.2	2.8	4.5	4.8	9.8	4.8%	5.7
Nevada	4.4	8.6	2.3	4.3	6.7	12.9	5.3%	5.8
New Hampshire	1.6	2.7	1.5	3.9	3.1	6.6	4.6%	5.4
New Jersey	13.7	34.3	13.1	30.3	26.8	64.5	5.3%	7.7
New Mexico	3.0	5.8	1.5	2.6	4.6	8.4	6.4%	7.0
New York	26.1	84.9	49.0	97.5	75.0	182.4	5.8%	9.3
North Carolina	9.4	27.7	6.6	14.3	16.0	41.9	3.6%	4.3
North Dakota	2.7	3.8	0.7	1.1	3.4	4.9	7.0%	9.2
Ohio	12.4	29.8	9.6	24.7	22.0	54.5	4.0%	4.6
Oklahoma	3.8	8.7	2.7	4.7	6.6	13.5	4.2%	4.9
Oregon	3.6	12.0	3.6	7.4	7.2	19.4	3.7%	4.5
Pennsylvania	16.4	40.5	13.2	29.4	29.6	69.9	4.6%	5.6
Rhode Island	1.4	3.5	1.2	2.7	2.5	6.2	5.2%	5.9
South Carolina	3.4	10.0	4.8	7.5	8.2	17.4	4.7%	4.8
South Dakota	1.0	1.8	1.0	1.6	2.0	3.4	4.7%	5.5
Tennessee	7.4	13.7	5.0	9.5	12.5	23.2	4.4%	4.8
Texas	31.4	54.3	37.1	57.1	68.5	111.5	4.7%	6.5
Utah	2.3	7.3	2.6	4.5	4.9	11.8	3.7%	4.0
Vermont	1.6	3.2	0.4	0.5	2.0	3.8	7.5%	7.3
Virginia	5.9	21.9	10.0	17.5	16.0	39.3	4.0%	4.9
Washington	14.4	23.6	7.5	14.4	21.9	38.0	5.5%	8.0
West Virginia	2.1	5.3	1.5	2.0	3.6	7.3	5.9%	6.3
Wisconsin	6.6	18.7	5.2	10.9	11.9	29.6	4.4%	4.7
Wyoming	1.5	2.0	0.0	0.0	1.5	2.0	4.5%	6.6
District of Columbia	4.1	7.5	0.0	0.0	4.1	7.5	5.0%	7.7
United States	**$375.9**	**$973.3**	**$348.3**	**$675.6**	**$724.1**	**$1,648.9**	**4.5%**	**$5.8**

Note: TEBTR equals taxes as a percent of gross state product.
**Average of calendar year 2015 and calendar year 2016 private industry GSP. This is the TEBTR on economic activity occurring within the state.*
***Business taxes per employee calculated using 2016 private-sector employment from Bureau of Labor Statistics Quarterly Census of Employment and Wages and FY2016 total state and local business tax collections.*
Note: 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

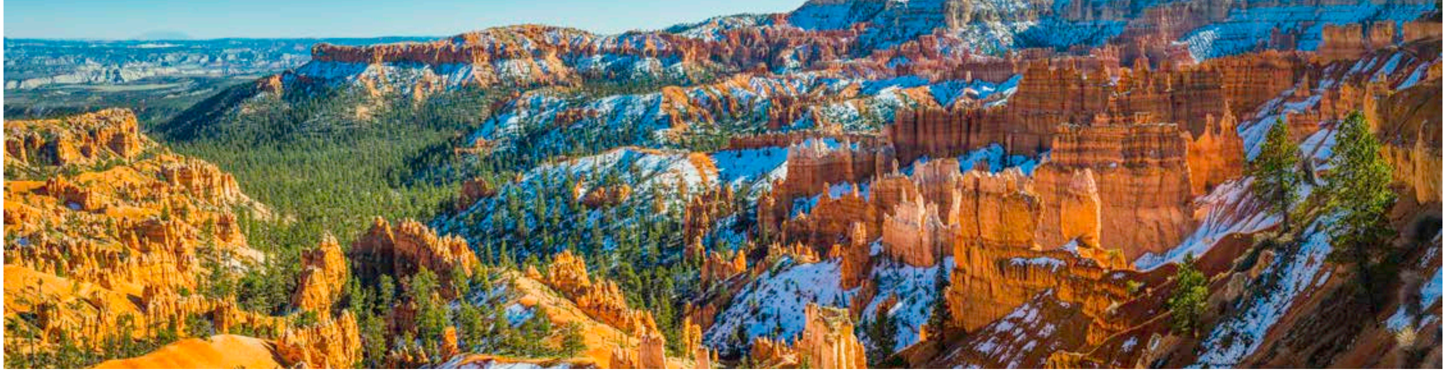
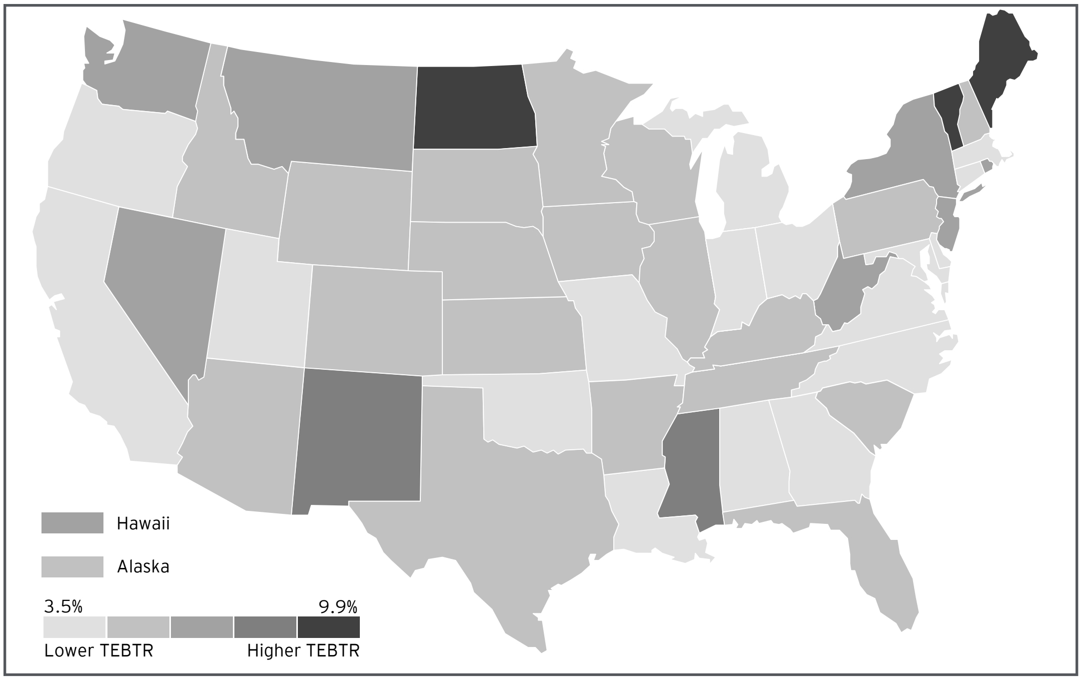


Figure 4. Total effective business tax rate (TEBTR) by state, FY2016

(state and local business taxes divided by private sector gross state product 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 43.9% of total state and local taxes in FY2016. Business taxes accounted for a smaller share of state taxes (38.6%) than local taxes (51.5%). 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 73.4% 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% 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 nonbusiness income (i.e., households) accounted for 20.5% of total state and local tax revenue in FY2016.

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 FY2016 include Wyoming (73.3%), North Dakota (69.3%), Alaska (62.6%), Texas (61.5%), and South Dakota (59.2%). 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 California (38.9%), North Carolina (38.2%), Oregon (37.3%), Michigan (35.0%), Maryland (31.7%), and Connecticut (30.0%). Connecticut and Maryland generate the smallest share of their overall tax receipts from business taxes. In both states, the structure of the states' economies plays a significant role in generating this result. In Connecticut, significant income earned by high-income taxpayers contributes to individual income tax receipts that outweigh 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 FY2016, 37.2% of total state and local taxes came from the individual income tax in Maryland compared to 23.0% 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 42% nationally, and a lower property tax share paid by business (45% in Oregon compared to 54% nationally).

Table 5. Business share of total state and local taxes, FY2016

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, 58.4% of taxes in Delaware are paid by business (33.1% above average) but the TEBTR is 4.4% (2.9% 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.

State	Business share of state taxes	Business share of local taxes	Business share of total state and local taxes
Alabama	39.4%	55.4%	45.0%
Alaska	78.0%	52.9%	62.6%
Arizona	40.9%	62.9%	49.6%
Arkansas	38.6%	47.7%	40.3%
California	34.0%	48.3%	38.9%
Colorado	33.4%	59.4%	46.0%
Connecticut	33.0%	25.7%	30.0%
Delaware	61.2%	49.1%	58.4%
Florida	43.2%	61.4%	51.7%
Georgia	33.0%	56.4%	43.1%
Hawaii	35.5%	52.6%	39.6%
Idaho	35.0%	54.9%	40.7%
Illinois	39.2%	52.6%	45.2%
Indiana	33.7%	59.0%	41.8%
Iowa	37.5%	56.0%	44.3%
Kansas	38.6%	58.2%	46.6%
Kentucky	40.1%	55.2%	44.6%
Louisiana	38.3%	58.8%	48.0%
Maine	32.5%	70.5%	47.5%
Maryland	34.3%	28.3%	31.7%
Massachusetts	33.5%	48.4%	39.1%
Michigan	32.4%	40.2%	35.0%
Minnesota	35.7%	49.5%	38.9%
Mississippi	41.9%	76.5%	51.5%
Missouri	31.1%	50.1%	39.5%
Montana	41.3%	62.7%	48.4%
Nebraska	38.2%	62.7%	49.6%
Nevada	51.6%	53.6%	52.3%
New Hampshire	59.4%	38.8%	47.3%
New Jersey	40.0%	43.2%	41.5%
New Mexico	52.6%	59.8%	54.8%
New York	30.7%	50.2%	41.1%
North Carolina	33.9%	46.5%	38.2%
North Dakota	70.0%	66.9%	69.3%
Ohio	41.6%	38.9%	40.4%
Oklahoma	44.1%	57.7%	48.9%
Oregon	29.9%	49.3%	37.3%
Pennsylvania	40.4%	45.0%	42.4%
Rhode Island	38.4%	44.4%	41.0%
South Carolina	34.0%	64.6%	47.1%
South Dakota	57.7%	60.8%	59.2%
Tennessee	54.2%	53.2%	53.8%
Texas	57.9%	64.9%	61.5%
Utah	31.4%	57.9%	41.5%
Vermont	49.1%	68.0%	51.8%
Virginia	27.0%	57.5%	40.6%
Washington	61.0%	51.9%	57.6%
West Virginia	39.8%	76.1%	49.6%
Wisconsin	35.6%	47.7%	40.1%
Wyoming	73.3%	n/a	73.3%
District of Columbia	55.2%	n/a	55.2%
United States	**38.6%**	**51.5%**	**43.9%**

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 vs. 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-to-benefit ratio estimates the extent to which businesses are "getting what they paid for" from their tax dollars.

Figure 5 shows FY2016 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, expenditures in the major categories shown in Figure 5 were allocated between households and businesses to reflect the extent to which each group benefits from each type of expenditure.[8] 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 points.[9] 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.[10]

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.[11]

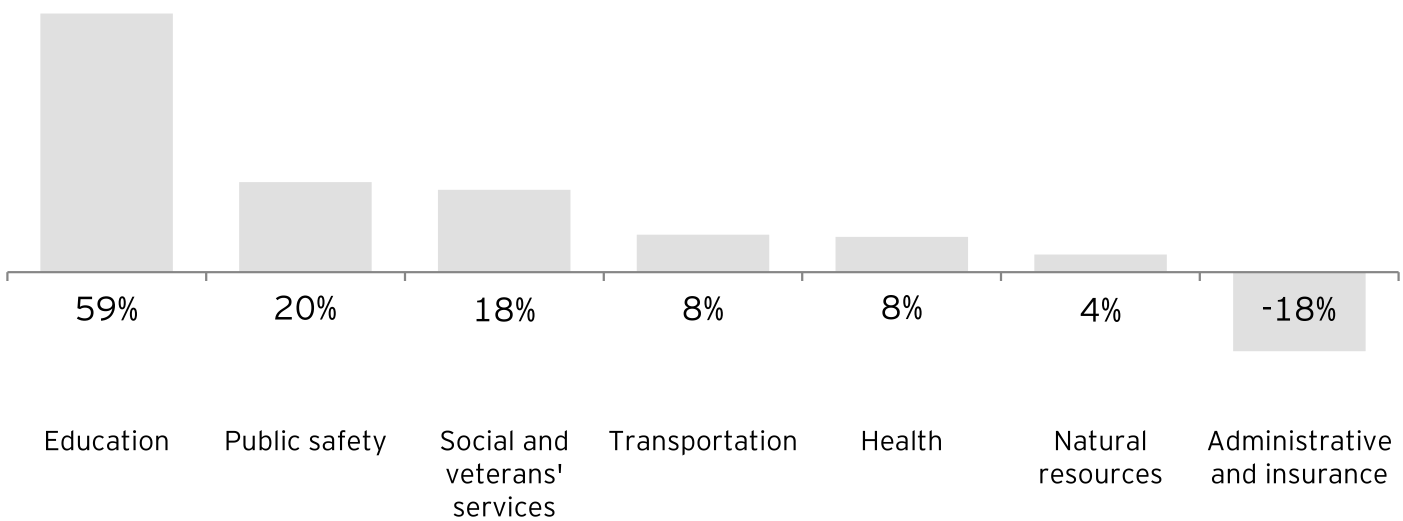
Figure 6 and Table 6 summarize the results using the three educational share assumptions for FY2016. Assuming that education spending does not directly benefit local business, the ratio of business taxes paid to government services received by business is 3.1, indicating that businesses are taxed $3.13 per dollar of government services they receive (i.e., a ratio of 3.1 to 1). The ratio drops to 1.6 when one-quarter of education spending is assumed to benefit business and 1.1 when half of education spending is assumed to benefit local business.

Calculating tax-to-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 60% of total revenue was derived from other sources in 2014, 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-to-benefit ratio would still differ if its level of nontax revenue changed.

While net government expenditures have decreased in FY2016 for the first time in three years, the level of expenditures benefiting business has remained stable. This resulted in a higher business share of total net state and local government expenditures in FY2016. Under the three educational assumptions, the business share of total net state and local government expenditures of $1.3 trillion was 18% with zero educational benefit, 34% with one-quarter of educational spending benefiting businesses and 50% if half of educational expenditures are assumed to benefit business.

Delaware has the highest tax-benefit ratios due in large part to the corporation license tax, which generates substantial revenue due to the significant number of businesses incorporated in the state. In Delaware, the ratio of business taxes to expenditures benefiting local businesses is 5.0, assuming education benefits households only. Nine additional states have tax-benefit ratios 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, FY2016
(for both households and businesses)[12]



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.

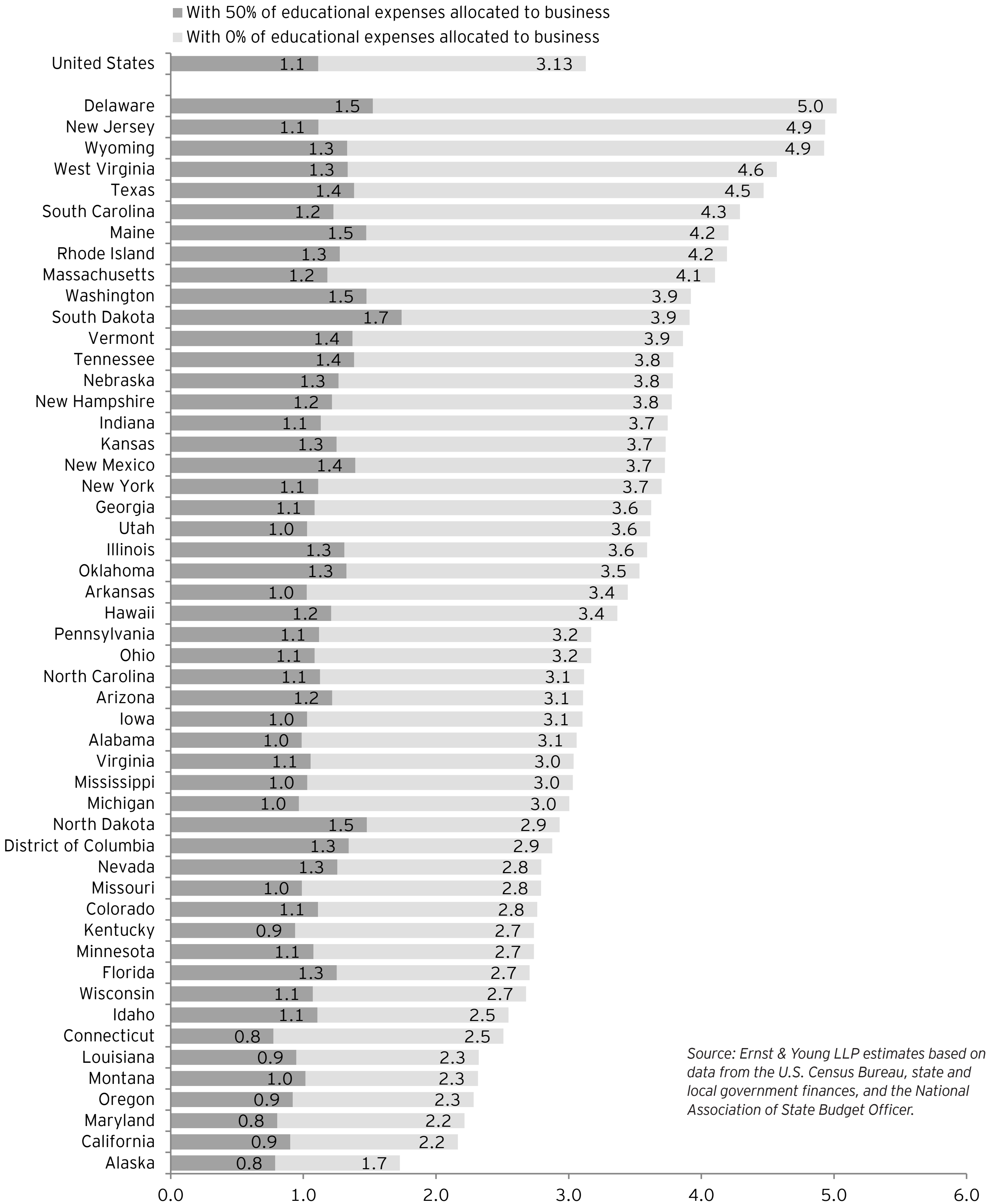
Table 6. Ratio of business taxes to net government expenditures benefiting businesses, FY2016 ($billions)

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	$7.1	$2.3	3.1	$4.8	1.5	$7.2	1.0
Alaska	1.9	1.1	1.7	1.8	1.1	2.5	0.8
Arizona	12.4	4.0	3.1	7.1	1.7	10.2	1.2
Arkansas	4.8	1.4	3.4	3.0	1.6	4.7	1.0
California	94.9	43.8	2.2	74.6	1.3	105.3	0.9
Colorado	12.1	4.4	2.8	7.6	1.6	10.9	1.1
Connecticut	8.1	3.2	2.5	6.8	1.2	10.4	0.8
Delaware	2.8	0.6	5.0	1.2	2.3	1.8	1.5
Florida	37.8	14.0	2.7	22.1	1.7	30.2	1.3
Georgia	17.0	4.7	3.6	10.2	1.7	15.6	1.1
Hawaii	3.7	1.1	3.4	2.1	1.8	3.1	1.2
Idaho	2.5	1.0	2.5	1.6	1.5	2.2	1.1
Illinois	33.9	9.5	3.6	17.7	1.9	25.9	1.3
Indiana	11.3	3.0	3.7	6.5	1.7	9.9	1.1
Iowa	7.0	2.2	3.1	4.5	1.5	6.8	1.0
Kansas	6.6	1.8	3.7	3.5	1.9	5.3	1.3
Kentucky	7.8	2.9	2.7	5.6	1.4	8.3	0.9
Louisiana	8.7	3.7	2.3	6.4	1.3	9.1	0.9
Maine	3.4	0.8	4.2	1.5	2.2	2.3	1.5
Maryland	12.0	5.4	2.2	10.2	1.2	15.0	0.8
Massachusetts	18.1	4.4	4.1	9.9	1.8	15.3	1.2
Michigan	14.9	5.0	3.0	10.2	1.5	15.4	1.0
Minnesota	13.3	4.9	2.7	8.6	1.5	12.4	1.1
Mississippi	5.6	1.8	3.0	3.6	1.5	5.4	1.0
Missouri	9.1	3.3	2.8	6.2	1.5	9.2	1.0
Montana	2.0	0.9	2.3	1.4	1.4	2.0	1.0
Nebraska	4.8	1.3	3.8	2.6	1.9	3.8	1.3
Nevada	6.7	2.4	2.8	3.9	1.7	5.4	1.3
New Hampshire	3.1	0.8	3.8	1.7	1.8	2.6	1.2
New Jersey	26.8	5.4	4.9	14.7	1.8	24.1	1.1
New Mexico	4.6	1.2	3.7	2.3	2.0	3.3	1.4
New York	75.0	20.3	3.7	43.8	1.7	67.4	1.1
North Carolina	16.0	5.1	3.1	9.7	1.7	14.2	1.1
North Dakota	3.4	1.2	2.9	1.7	2.0	2.3	1.5
Ohio	22.0	6.9	3.2	13.6	1.6	20.3	1.1
Oklahoma	6.6	1.9	3.5	3.4	1.9	5.0	1.3
Oregon	7.2	3.2	2.3	5.5	1.3	7.9	0.9
Pennsylvania	29.6	9.3	3.2	17.9	1.7	26.5	1.1
Rhode Island	2.5	0.6	4.2	1.3	2.0	2.0	1.3
South Carolina	8.2	1.9	4.3	4.3	1.9	6.7	1.2
South Dakota	2.0	0.5	3.9	0.8	2.4	1.1	1.7
Tennessee	12.5	3.3	3.8	6.2	2.0	9.0	1.4
Texas	68.5	15.3	4.5	32.4	2.1	49.5	1.4
Utah	4.9	1.4	3.6	3.1	1.6	4.8	1.0
Vermont	2.0	0.5	3.9	1.0	2.0	1.4	1.4
Virginia	16.0	5.3	3.0	10.2	1.6	15.1	1.1
Washington	21.9	5.6	3.9	10.2	2.1	14.8	1.5
West Virginia	3.6	0.8	4.6	1.8	2.1	2.7	1.3
Wisconsin	11.9	4.4	2.7	7.7	1.5	11.1	1.1
Wyoming	1.5	0.3	4.9	0.7	2.1	1.1	1.3
District of Columbia	4.1	1.4	2.9	2.3	1.8	3.1	1.3
United States	**$724.1**	**$231.4**	**3.13**	**$441.4**	**1.64**	**$651.5**	**1.11**

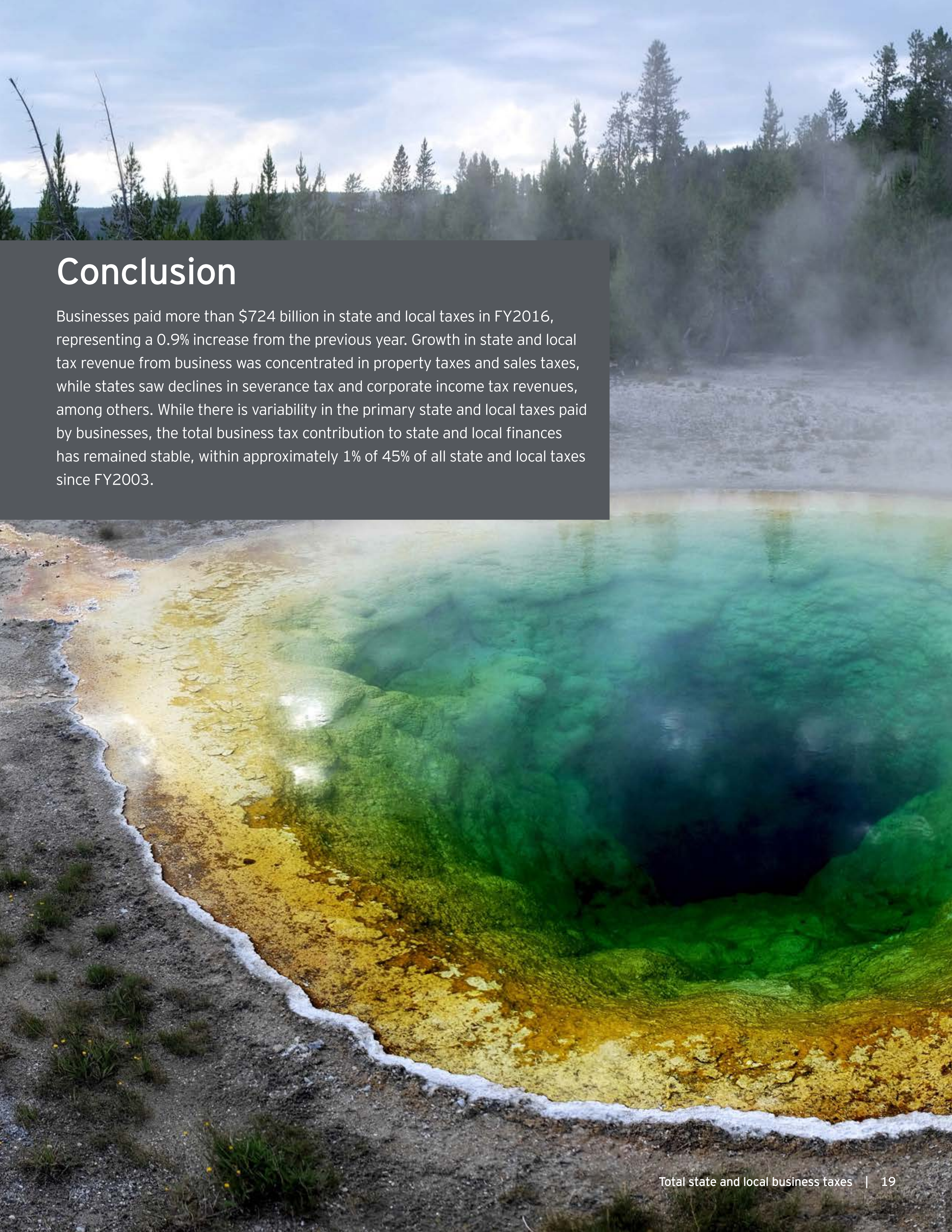
Note: Figures may not sum due to rounding. Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau, state and local government finances, and the National Association of State Budget Officers.

Figure 6. Business taxes per dollar of net government spending that benefits businesses, FY2016

(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 $724 billion in state and local taxes in FY2016, representing a 0.9% 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 severance tax and corporate income tax revenues, among others. While there is variability in the primary state and local taxes paid by businesses, the total business tax contribution to state and local finances has remained stable, within approximately 1% of 45% of all state and local taxes since FY2003.

Appendix

Table A-1. Total state and local business taxes, 2012–2016 ($billions)

State and local taxes	2012	2013	2014	2015	2016
Total business taxes	$657.5	$684.5	$695.3	$717.9	$724.1
Individual income taxes on non-business income	274.2	301.5	304.2	332.0	338.2
Other taxes	512.0	530.4	542.4	567.4	586.4
Total state and local taxes	**$1,443.7**	**$1,516.3**	**$1,541.9**	**$1,617.3**	**$1,648.6**

Composition of state and local taxes	2012	2013	2014	2015	2016
Total business taxes	45.5%	45.1%	45.1%	44.4%	43.9%
Individual income taxes on non-business income	19.0%	19.9%	19.7%	20.5%	20.5%
Other taxes	35.5%	35.0%	35.2%	35.1%	35.6%
Total state and local taxes	**100%**	**100%**	**100%**	**100%**	**100%**

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 A-2. Composition of state and local business taxes, 2012–2016 ($billions)

Business tax	2012	2013	2014	2015	2016
Property tax on business property	$237.7	$244.6	$250.1	$266.2	$278.1
General sales and use tax on inputs	135.0	139.1	144.2	151.2	153.9
Corporate net income	58.7	63.0	64.3	67.0	63.2
Unemployment comp.	48.4	50.8	48.7	45.9	43.1
Business license tax	31.2	32.5	33.9	34.9	33.8
Excise taxes	35.3	38.6	39.0	41.0	42.5
Public utility tax	29.0	29.0	28.3	26.3	26.1
Individual income tax	34.5	39.0	37.0	39.0	40.3
Severance taxes	17.7	16.9	17.9	12.7	7.7
Insurance premium tax	17.5	18.2	18.9	20.0	21.3
Other business taxes	12.4	12.8	13.2	13.7	14.1
Total business taxes	**$657.5**	**$684.5**	**$695.3**	**$717.9**	**$724.1**

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, FY2016

State	Property tax	Sales tax	Excise tax	Corporate income tax	Unemploy-ment insurance tax	Individual income tax on pass-through income	License and other taxes*	Total business taxes
Alabama	28.0%	23.3%	22.6%	5.3%	4.4%	4.7%	11.8%	100.0%
Alaska	52.8%	–	6.4%	10.9%	8.4%	–	21.4%	100.0%
Arizona	41.7%	33.3%	9.6%	4.6%	3.8%	2.7%	4.3%	100.0%
Arkansas	25.6%	34.4%	10.6%	9.4%	7.0%	6.0%	7.0%	100.0%
California	30.8%	20.8%	12.5%	10.4%	6.6%	10.1%	8.8%	100.0%
Colorado	45.1%	22.5%	9.8%	5.2%	5.6%	6.7%	5.1%	100.0%
Connecticut	33.7%	18.1%	12.6%	8.9%	10.1%	12.6%	4.0%	100.0%
Delaware	17.5%	–	9.7%	11.7%	4.8%	4.5%	51.8%	100.0%
Florida	43.1%	22.3%	18.1%	6.0%	3.3%	–	7.3%	100.0%
Georgia	43.1%	25.7%	11.0%	5.8%	4.8%	5.9%	3.8%	100.0%
Hawaii	22.3%	36.5%	21.0%	2.9%	5.7%	5.6%	5.9%	100.0%
Idaho	36.5%	20.8%	11.0%	7.6%	5.1%	9.5%	9.4%	100.0%
Illinois	44.4%	14.7%	15.1%	9.9%	7.0%	3.8%	5.1%	100.0%
Indiana	42.2%	21.0%	11.9%	9.2%	5.9%	7.3%	2.5%	100.0%
Iowa	43.0%	25.2%	6.2%	5.4%	5.6%	7.5%	7.0%	100.0%
Kansas	46.3%	25.8%	11.3%	5.9%	6.5%	–	4.2%	100.0%
Kentucky	29.5%	21.8%	19.3%	9.5%	7.0%	6.3%	6.6%	100.0%
Louisiana	35.3%	33.5%	11.7%	2.0%	2.6%	4.7%	10.2%	100.0%
Maine	58.7%	14.6%	8.4%	4.1%	4.5%	4.4%	5.4%	100.0%
Maryland	28.2%	16.2%	20.8%	9.4%	5.6%	11.1%	8.7%	100.0%
Massachusetts	44.8%	16.0%	6.6%	12.9%	7.9%	7.4%	4.4%	100.0%
Michigan	40.7%	22.0%	10.3%	6.0%	9.3%	5.4%	6.1%	100.0%
Minnesota	30.3%	20.5%	15.9%	11.4%	6.5%	7.5%	7.9%	100.0%
Mississippi	40.0%	23.5%	12.7%	8.3%	2.8%	4.0%	8.6%	100.0%
Missouri	37.4%	26.7%	8.8%	4.4%	6.6%	7.2%	9.0%	100.0%
Montana	50.8%	–	12.0%	6.0%	6.5%	6.9%	17.9%	100.0%
Nebraska	47.9%	19.9%	8.3%	6.4%	2.2%	9.1%	6.4%	100.0%
Nevada	22.0%	32.8%	15.9%	–	8.2%	–	21.2%	100.0%
New Hampshire	52.5%	–	13.9%	22.4%	2.3%	0.3%	8.6%	100.0%
New Jersey	47.7%	15.3%	8.4%	8.3%	10.3%	5.5%	4.5%	100.0%
New Mexico	19.7%	41.6%	10.5%	2.5%	7.4%	2.4%	15.9%	100.0%
New York	43.1%	16.2%	9.9%	14.0%	4.7%	8.1%	4.0%	100.0%
North Carolina	31.8%	25.4%	11.0%	6.7%	9.2%	7.0%	8.9%	100.0%
North Dakota	17.8%	17.6%	7.7%	3.0%	3.3%	1.4%	49.2%	100.0%
Ohio	33.3%	24.3%	13.7%	8.8%	5.2%	5.9%	8.9%	100.0%
Oklahoma	24.3%	31.5%	10.8%	5.0%	3.6%	11.5%	13.4%	100.0%
Oregon	37.6%	–	14.2%	9.3%	13.7%	10.5%	14.7%	100.0%
Pennsylvania	35.4%	14.9%	13.8%	9.8%	10.4%	7.3%	8.3%	100.0%
Rhode Island	45.4%	15.3%	14.6%	5.7%	10.7%	4.4%	4.0%	100.0%
South Carolina	48.0%	17.0%	9.6%	5.4%	5.1%	4.2%	10.6%	100.0%
South Dakota	36.0%	39.8%	11.5%	1.6%	1.9%	–	9.2%	100.0%
Tennessee	28.6%	30.1%	13.4%	12.3%	2.8%	0.5%	12.3%	100.0%
Texas	45.8%	27.1%	11.9%	5.7%	3.2%	–	6.3%	100.0%
Utah	40.6%	22.6%	12.8%	6.8%	5.3%	6.8%	5.2%	100.0%
Vermont	55.2%	10.1%	15.5%	5.0%	7.4%	3.7%	3.2%	100.0%
Virginia	46.4%	13.4%	15.3%	4.7%	4.1%	5.7%	10.4%	100.0%
Washington	23.1%	34.5%	13.6%	16.6%	6.1%	–	6.1%	100.0%
West Virginia	34.5%	14.8%	19.6%	4.0%	5.7%	4.3%	17.2%	100.0%
Wisconsin	41.8%	18.8%	9.6%	8.3%	8.8%	5.5%	7.2%	100.0%
Wyoming	18.4%	25.8%	5.1%	–	5.0%	–	45.7%	100.0%
District of Columbia	49.9%	14.1%	7.5%	13.5%	4.0%	7.7%	3.5%	100.0%
United States	**38.4%**	**21.2%**	**12.4%**	**8.7%**	**5.9%**	**5.6%**	**7.7%**	**100.0%**

Note: Figures may not sum due to rounding. "–" indicates 0; "0.0%" indicates less than 0.05%.
**Taxes categorized under "other" include death and gift taxes, 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, FY2016

State	Property tax	Sales tax	Excise tax	Corporate income tax	Unemployment insurance tax	Individual income tax	License and other taxes*	Total taxes
Alabama	16.9%	29.6%	17.7%	2.4%	2.0%	22.8%	8.6%	100.0%
Alaska	54.9%	6.0%	11.1%	6.9%	5.3%	–	15.9%	100.0%
Arizona	29.3%	37.6%	9.2%	2.3%	1.9%	15.9%	3.8%	100.0%
Arkansas	17.4%	37.0%	11.1%	3.8%	2.8%	23.3%	4.6%	100.0%
California	25.3%	20.9%	8.2%	4.1%	2.6%	33.1%	6.0%	100.0%
Colorado	30.7%	25.0%	9.5%	2.4%	2.6%	24.8%	5.1%	100.0%
Connecticut	39.8%	13.9%	8.9%	2.7%	3.0%	28.1%	3.6%	100.0%
Delaware	18.8%	–	11.7%	6.8%	2.8%	24.9%	35.0%	100.0%
Florida	36.7%	33.1%	15.8%	3.1%	1.7%	–	9.5%	100.0%
Georgia	32.2%	24.1%	9.7%	2.5%	2.1%	26.6%	2.9%	100.0%
Hawaii	16.5%	36.7%	14.2%	1.2%	2.2%	22.5%	6.7%	100.0%
Idaho	27.2%	25.6%	9.8%	3.1%	2.1%	24.9%	7.4%	100.0%
Illinois	37.7%	17.6%	13.3%	4.5%	3.2%	18.4%	5.4%	100.0%
Indiana	25.9%	27.2%	13.0%	3.8%	2.5%	24.3%	3.2%	100.0%
Iowa	33.0%	22.2%	9.4%	2.4%	2.5%	23.5%	7.1%	100.0%
Kansas	35.7%	29.3%	9.6%	2.7%	3.0%	15.7%	4.0%	100.0%
Kentucky	19.8%	19.8%	16.0%	4.2%	3.1%	32.5%	4.6%	100.0%
Louisiana	22.0%	40.4%	13.7%	0.9%	1.3%	15.9%	5.9%	100.0%
Maine	39.4%	19.3%	10.2%	1.9%	2.1%	22.0%	5.0%	100.0%
Maryland	25.9%	11.9%	14.0%	3.0%	1.8%	37.2%	6.3%	100.0%
Massachusetts	36.3%	13.2%	6.5%	5.1%	3.1%	31.2%	4.7%	100.0%
Michigan	34.5%	21.5%	10.2%	2.1%	3.3%	23.1%	5.3%	100.0%
Minnesota	24.2%	17.1%	13.8%	4.4%	2.5%	31.4%	6.5%	100.0%
Mississippi	26.4%	30.5%	14.4%	4.3%	1.5%	16.7%	6.3%	100.0%
Missouri	27.5%	26.0%	8.7%	1.7%	2.6%	27.8%	5.6%	100.0%
Montana	38.9%	–	13.8%	2.9%	3.1%	28.6%	12.7%	100.0%
Nebraska	36.2%	21.8%	7.5%	3.2%	1.1%	23.0%	7.1%	100.0%
Nevada	23.7%	36.2%	22.0%	–	4.3%	–	13.8%	100.0%
New Hampshire	64.3%	–	14.9%	10.6%	1.1%	1.3%	7.8%	100.0%
New Jersey	45.9%	14.4%	6.3%	3.5%	4.3%	20.7%	5.0%	100.0%
New Mexico	18.8%	36.2%	11.2%	1.4%	4.1%	16.9%	11.5%	100.0%
New York	30.9%	16.1%	7.5%	5.8%	1.9%	32.2%	5.6%	100.0%
North Carolina	25.4%	24.0%	10.3%	2.5%	3.5%	28.7%	5.6%	100.0%
North Dakota	17.5%	23.9%	10.3%	2.1%	2.3%	7.2%	36.7%	100.0%
Ohio	28.4%	23.9%	11.4%	3.6%	2.1%	24.9%	5.6%	100.0%
Oklahoma	18.7%	32.5%	11.2%	2.4%	1.8%	22.3%	11.1%	100.0%
Oregon	30.9%	–	10.5%	3.4%	5.1%	39.6%	10.4%	100.0%
Pennsylvania	28.9%	15.7%	13.9%	4.2%	4.4%	25.3%	7.7%	100.0%
Rhode Island	42.1%	15.7%	11.6%	2.3%	4.4%	19.9%	4.1%	100.0%
South Carolina	34.2%	20.9%	9.5%	2.5%	2.4%	22.2%	8.3%	100.0%
South Dakota	34.8%	38.9%	14.9%	1.0%	1.1%	–	9.3%	100.0%
Tennessee	26.2%	40.4%	14.0%	6.6%	1.5%	1.4%	9.9%	100.0%
Texas	42.3%	31.7%	14.5%	3.5%	2.0%	–	6.0%	100.0%
Utah	27.2%	24.2%	11.0%	2.8%	2.2%	28.5%	4.2%	100.0%
Vermont	41.7%	10.1%	17.7%	2.6%	3.8%	19.3%	4.8%	100.0%
Virginia	33.5%	13.5%	11.3%	1.9%	1.7%	31.1%	7.0%	100.0%
Washington	28.3%	34.9%	14.5%	9.6%	3.5%	–	9.3%	100.0%
West Virginia	22.2%	17.6%	19.3%	2.0%	2.8%	25.3%	10.8%	100.0%
Wisconsin	35.2%	18.4%	9.4%	3.3%	3.5%	25.3%	4.9%	100.0%
Wyoming	17.1%	32.3%	9.0%	–	3.7%	–	38.0%	100.0%
District of Columbia	32.4%	17.9%	5.7%	7.4%	2.2%	25.5%	8.9%	100.0%
United States	**31.2%**	**22.0%**	**10.9%**	**3.8%**	**2.6%**	**23.0%**	**6.5%**	**100.0%**

Note: Figures may not sum due to rounding. "–" indicates 0; "0.0%" indicates less than 0.05%.
**Taxes categorized under "other" include death and gift taxes, 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. 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.
3. 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.
4. Congressional Budget Office, Budget and Economic Data.
5. The IL sales tax numbers show a significant change compared with reports from previous years due to a revision in the underlying census data.
6. For an analysis of the incidence of state and local taxes on business, see Robert Cline, Andrew Phillips, Joo Mi Kim and Tom Neubig, "The Economic Incidence of Additional State Business Taxes," State Tax Notes, Tax Analysts, January 11, 2010.
7. Robert Cline, Andrew Phillips, Joo Mi Kim and Tom Neubig, "The Economic Incidence of Additional State Business Taxes," State Tax Notes, January 11, 2010.
8. 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-to-benefit ratio generally applicable to most firms. EY added in expenditure categories to the analysis not included in the 2007 data.
9. Evidence is reviewed in Enrico Moretti, "Workers' Education, Spillovers, and Productivity: Evidence from Plant-Level Production Functions," The American Economic Review, June 2004.
10. 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.
11. The tax-benefit ratios shown in this study were constructed in the following way. EY followed 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 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 Rick Mattoon, William A. Testa allocation for all categories included in their analysis. For new categories, EY followed Mattoon and Testa's general principles in allocating net expenditures. Using data from the National Association of State Budget Officers' State Expenditure Report (2012), the 2010 amounts were adjusted to 2012 using the All Funds growth rate. For the District of Columbia, EY used data from the Statistical Section of the District of Columbia's 2012 Comprehensive Annual Financial Report to grow state and local net expenditures.
12. Administrative and insurance share is negative because non-tax revenue from investments, interest, and other sources exceed total outlays.

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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.

The State Tax Research Institute (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 the Council On State Taxation (COST).

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ED None