

State-by-state estimates for fiscal year 2014

October 2015



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Executive summary

This report presents detailed state-by-state estimates of the state and local taxes paid by businesses for FY2014. It is the 13th annual study prepared by Ernst & Young LLP in conjunction with the Council On State Taxation (COST).

Businesses paid more than \$688 billion in state and local taxes in FY2014, an increase of 2.2% from FY2013. State business taxes grew less quickly than local taxes, with state taxes growing 1.5% compared to local tax growth of 3.1%. In FY2014, business tax revenue accounted for 45% of all state and local tax revenue. The business share has been within one percentage point of 45% since FY2003.

The state and local business tax estimates presented in this report reflect tax collections from July 2013 through June 2014 in most states. 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 non-corporate (passthrough) businesses, and other state and local taxes that are the statutory liability of business taxpayers.



Key findings of the report include:

- ▶ Revenue from state and local business taxes increased from FY2013 to FY2014. Overall state and local business tax revenue increased 2.2%, with state business tax revenue growing by 1.5% and local business tax revenue growing 3.1%.
- Business property tax revenue increased 3.2% in FY2014, a gain of \$7.8 billion. Property taxes remain by far the largest state and local tax paid by businesses, accounting for 36.4% of the total.
- General sales taxes on business inputs and capital investment totaled \$142.8 billion, or 20.7% of state and local business taxes. Overall sales taxes paid by businesses increased 4.3%.
- ► In FY2014, state and local corporate income tax revenue was \$64.4 billion, or 9.4% of all state and local business taxes. FY2014 marked the fourth consecutive year of corporate income tax growth.
- ▶ Individual income taxes on pass-through business income accounted for 4.9% of total state and local business tax revenue. Individual income tax revenue on business income decreased 4.8%, the largest decrease of any tax in FY2014.

- On average, business taxes are equal to 4.6% of 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 among states, with business tax revenue as a share of GSP ratios ranging from 3.4% to 11.5%.
- On average, businesses continue to pay more in state and local taxes than they receive in benefits. Businesses paid \$3.35 for every dollar of government spending benefiting businesses, on average, assuming that education spending does not benefit local businesses. An alternate assumption, that half of education spending benefits local businesses, results in businesses paying \$1.23 for every dollar of government spending benefiting businesses.
- ▶ Businesses paid 10.6% of their gross operating surplus (similar to net profits) in state and local taxes in 2014.

Total state and local business taxes in FY2014

Businesses paid \$688.7 billion in total state and local taxes in FY2014, 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, 36.4% or \$250.6 billion in FY2014. Business property tax revenue increased 3.2% in FY2014. It is the second time since FY2009 that the growth rate has been substantially higher than 1%. Additionally, Figure 2 shows business property tax revenue as a share of total property tax revenue in 2014. Of the \$468.3 billion of total property tax revenue, 54% (\$250.6 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 \$142.8 billion, or 20.7% of all state and local business taxes. General sales and use tax revenue derived from business increased 4.3% 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 2014, 42% of total sales tax revenue was from sales tax on business inputs.
- ► State and local corporate income tax revenue was \$64.4 billion in FY2014, an increase of 3% from FY2013. FY2014 was the fourth consecutive year of rising state and local corporate income taxes. Included in corporate income tax revenue are Ohio's Commercial Activity Tax, Texas' Margin Tax, and Washington's Business & Occupation Tax. These taxes are based on gross receipts and constitute the primary business entity tax in each state, none of which imposes a traditional corporate income tax.
- Employer contributions to unemployment insurance (unemployment taxes) were \$48.7 billion in FY2014, a decrease of 4.3% from FY2013. This is the first year that unemployment tax collections have declined since FY2008. States provided fewer unemployment benefits in 2014. In addition, tax rates on employers declined, and surcharges expired in some states, easing the burden on employers and lowering collections.
- Excise taxes paid by business were an estimated \$38.9 billion in FY2014. 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 \$33.6 billion, an increase of 4.8% from FY2013. In FY2014, business and corporate license tax revenue contributed 4.9% of total state and local business tax collections.

Table 1. Total state and local business taxes, FY2014 (\$ billions)

Business tax	FY2013*	FY2014	2014 % total taxes	One-year change
Property taxes on business property	\$242.8	\$250.6	36.4%	3.2%
General sales taxes on business inputs	137.0	142.8	20.7%	4.3%
Corporate income tax	62.5	64.4	9.4%	3.0%
Unemployment insurance	50.8	48.7	7.1%	-4.3%
Excise taxes	38.5	38.9	5.6%	1.1%
Individual income tax on business income	35.5	33.7	4.9%	-4.8%
Business and corporate license taxes	32.1	33.6	4.9%	4.8%
Public utility taxes	27.0	26.3	3.8%	-2.6%
Insurance premium taxes	18.2	18.9	2.7%	4.2%
Severance taxes	16.9	17.9	2.6%	6.0%
Other business taxes	12.6	12.9	1.9%	2.7%
Total state and local business taxes	\$673.7	\$688.7	100.0%	2.2%

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.

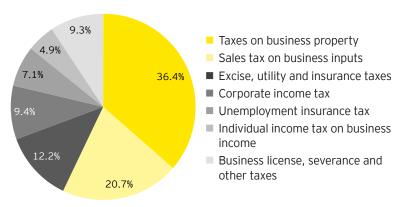
^{*}FY2013 tax estimates are revised from the COST FY2013 study due to newly released data from the US Census Bureau. See Appendix for more information.



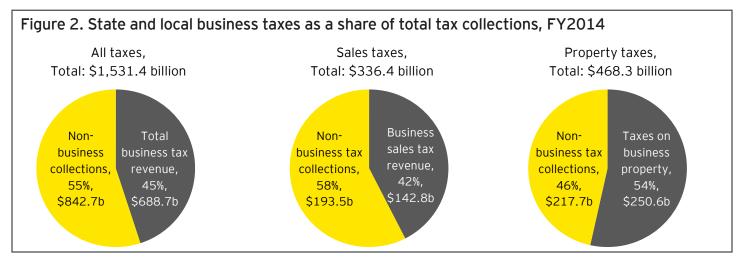
- Individual income tax revenue derived from owners of pass-through entities (e.g., partnerships, sole proprietorships, limited liability companies and S-corporations) totaled an estimated \$33.7 billion in FY2014. Individual income tax revenue from passthrough business income represents 4.9% of total state and local business taxes, equivalent to 52% of corporate income tax collections in FY2014. State and local collections of individual income tax revenue from pass-through business income fell by 4.8% in FY2014, the largest decline of any business tax. The FY2014 decline represents a significant change from FY2013, in which individual income taxes on pass-through business income grew 6.1%. This change, in part, reflects policy changes in a few states. Kansas eliminated taxes on pass-through business income midway through FY2013, which is showing up in the FY2014 collections. Also in 2013, Ohio passed legislation that allowed for a personal income tax deduction of some pass-through business income. Lastly, some income was likely accelerated into FY2013 that normally would have been reported in FY2014 in response to the increase in the 2013 federal individual income tax rates for high income taxpayers.
- Public utility tax revenue decreased by 2.6% to \$26.3 billion in FY2014, the third 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 \$18.9 billion in FY2014, an increase of 4.2%.

- State and local severance taxes increased by 6% in FY2014. The \$1.0 billion cumulative increase in severance taxes was driven primarily by a \$1.2 billion increase in Texas and a \$0.8 billion increase in North Dakota. These increases were partially offset by a \$1.6 billion decrease in Alaska, which enacted tax reform in 2013 to lower severance taxes. Of the 36 states with severance tax collections, 24 states had increased severance tax collections in FY2014.
- Other business taxes, such as the motor vehicle license tax and the documentary and stock transfer tax, among others, totaled \$12.9 billion in FY2014, a 2.7% increase from the previous year.

Figure 1. Composition of total state and local business taxes, FY2014



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.



Classifying business taxes

This report 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 incomegenerating, 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 businesses' share of motor fuel 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 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 instead 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 includes gross receipts and value-added business entity taxes as corporate income tax revenue despite the different definition of the tax base. 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 FY2014

State and local business tax revenues both grew between FY2013 and FY2014, with local tax revenues growing at a faster rate than state tax revenues. Tables 2-A and 2-B provide dollar amounts, percentage distributions and growth rates in FY2014 for total business taxes at the state and local levels of government.

Total state and local business tax revenues from FY2013 increased by \$15.0 billion in FY2014, after growing by \$21.1 billion in FY2013 compared to FY2012. State and local business tax revenues grew 1.5% and 3.1%, respectively. The largest local tax, business property taxes, which remained relatively flat between FY2009 and FY2012, increased in revenue by \$9.1 billion in FY2013 and \$7.2 billion in FY2014. While local public utility tax revenue fell, the increase in property tax revenue alone more than offset that decline in revenue. Local excise and other business tax revenues rose 4.2% and 4.8%, respectively.

At the state level, there was little overall change in collections from FY 2013. Some state taxes declined, such as individual income taxes on pass-through business income, state unemployment insurance taxes and public utilities taxes. The increase in state business taxes was primarily due to increases in general sales and use, corporate income, and severance tax collections.

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 make up 76.4% of local business taxes.

The largest business tax at the state level, the sales and use tax, accounts for 29.9% 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."



Table 2-A. State business taxes, FY2014 (\$ billions)

Business tax	State business taxes, FY2013	State business taxes, FY2014	% total state business taxes	One-year growth, state business taxes
General sales and use tax on inputs	\$106.7	\$111.3	29.9%	4.4%
Corporate net income tax	\$55.0	\$56.4	15.1%	2.6%
Unemployment insurance	\$50.8	\$48.7	13.1%	-4.3%
Excise taxes on business inputs	\$32.4	\$32.6	8.7%	0.5%
Individual income tax	\$33.1	\$31.3	8.4%	-5.4%
Business license tax	\$21.6	\$22.7	6.1%	5.1%
Insurance premium tax	\$17.4	\$18.2	4.9%	4.2%
Severance taxes	\$16.8	\$17.8	4.8%	6.0%
Public utility tax	\$14.7	\$14.4	3.9%	-2.3%
Property tax on business property	\$8.6	\$9.3	2.5%	7.6%
Other business taxes	\$10.0	\$10.3	2.8%	2.3%
Total state business taxes	\$367.1	\$372.8	100.0%	1.5%

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 2-B. Local business taxes, FY 2014 (\$ billions)

Business tax	Local business taxes, FY2013	Local business taxes, FY2014	% total local business taxes	One-year growth, local business taxes
Property taxes on business property	\$234.2	\$241.3	76.4%	3.1%
General sales taxes on business inputs	\$30.4	\$31.5	10.0%	3.8%
Public utility taxes	\$12.3	\$11.9	3.8%	-2.9%
Excise taxes on business inputs	\$6.0	\$6.3	2.0%	4.2%
Other business taxes*	\$23.7	\$24.9	7.9%	4.8%
Total local business taxes	\$306.5	\$315.9	100.0%	3.1%

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 FY2013 and FY2014. States with significant tax changes in FY2014 and trends in business tax collections are described below.

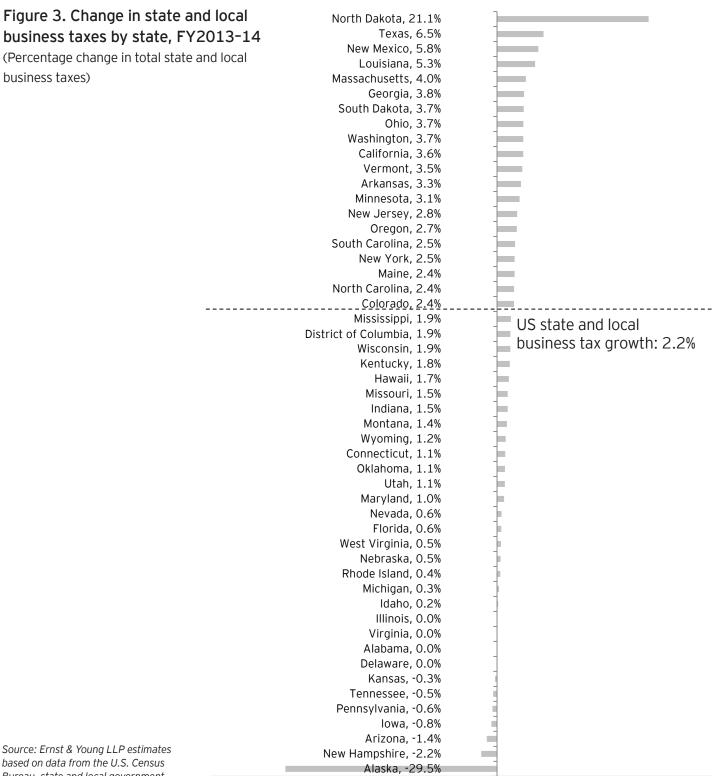
- In 2014, business property taxes increased substantially for the second year in a row since 2009. The \$7.8 billion in increased property tax revenue was driven largely by gains in five large states: California, Florida, Georgia, New York and Texas. Nationally, property tax revenue increased 3.2%, but 37 states grew at a slower rate than the national average. Texas had the largest dollar increase in business property tax revenue for the second year in a row, collecting \$1.8 billion more than in 2013. North Dakota had the highest growth rate for business property tax revenue, increasing 11.5%.
- ▶ Alaska saw the single largest decline in business tax revenue, driven by a 39% drop in severance tax revenue in FY2014. Unlike most states, severance taxes are by far the largest business tax in Alaska, accounting for 68% of Alaska's state and local business tax revenue in FY2013 and 59% in FY2014, even with the decline in severance tax rates that occurred in 2013.
- On the other end of the spectrum, North Dakota had the largest increase in state and local business tax revenue due to more than \$800 million in additional severance taxes in FY2014.

- ▶ Business tax revenue derived from individual income fell 4.8% in 2014, following an increase of 6.1% in 2013. Kansas enacted an exemption on the taxation of pass-through business income midway through FY2013, which is reflected in this year's tax receipts. Also in 2013, Ohio's legislature approved a new tax deduction on some income received from pass-through entities. Taxes on business income fell 13% in Ohio between FY2013 and FY2014. An increase in the 2013 federal income tax rates also likely accelerated income in FY2013 that normally would have been in FY2014.
- ▶ Gains in state sales tax collections were concentrated in California and Texas, which each experienced sales tax increases of approximately \$2 billion. Of the 45 states with a state sales tax, 39 experienced a sales tax collection increase. Arkansas, Maine, Ohio and Virginia raised state sales tax rates in FY2014. In contrast, Arizona let a temporary sales tax increase expire on July 1, 2013, and Kansas and the District of Columbia moderately lowered sales tax rates from 6.3% to 6.15% and 6% to 5.75%, respectively.

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.







based on data from the U.S. Census Bureau, state and local government finances.

-40%

-30%

-20%

-10%

0%

20%

30%

10%

Table 3. State and local business taxes by type, FY2014 (\$ billions)

			Excise tax including public	Corporate income and individual			
Jurisdiction	Property tax	Sales tax	utilities and insurance	income tax on business income	Unemployment insurance tax	License and other taxes*	Total business taxes
Alabama	\$1.9	\$1.5	\$1.6	\$0.8	\$0.4	\$0.8	\$7.1
Alaska	0.9	71.5	0.1	0.4	0.2	2.5	4.2
Arizona	5.0	3.8	1.1	0.9	0.4	0.5	11.8
Arkansas	1.1	1.5	0.5	0.7	0.4	0.4	4.5
California	28.4	18.7	10.0	15.8	6.4	8.5	87.8
Colorado	4.9	2.6	1.0	1.3	0.7	0.7	11.3
Connecticut	2.4	1.6	1.2	1.4	0.9	0.3	7.7
Delaware	0.3	_	0.2	0.4	0.1	1.3	2.4
Florida	15.3	8.2	7.1	2.0	2.1	2.5	37.1
Georgia	6.4	4.1	1.5	1.9	0.9	0.6	15.3
Hawaii	1.0	1.2	0.8	0.3	0.4	0.2	3.8
Idaho	0.9	0.5	0.2	0.4	0.3	0.2	2.4
Illinois	13.9	3.9	5.1	5.7	2.9	1.7	33.1
Indiana	4.5	2.3	1.4	1.5	0.8	0.2	10.6
Iowa	2.9	1.7	0.3	0.9	0.6	0.4	6.8
Kansas	2.5	1.6	0.6	0.3	0.4	0.4	5.9
Kentucky	2.1	1.5	1.5	1.3	0.5	0.6	7.5
Louisiana	2.7	2.8	1.0	0.9	0.3	1.4	8.9
Maine	1.7	0.4	0.3	0.3	0.2	0.2	3.1
Maryland	2.2	1.8	2.3	2.1	0.8	1.0	10.3
Massachusetts	6.5	2.6	1.1	3.4	1.9	0.9	16.4
Michigan	5.8	3.0	1.5	1.5	1.8	0.9	14.4
Minnesota	4.0	2.6	2.0	2.1	1.4	0.9	13.0
Mississippi	2.1	1.3	0.8	0.7	0.2	0.5	5.6
Missouri	3.3	2.2	0.7	1.0	0.6	0.8	8.7
Montana	0.9	_	0.2	0.3	0.2	0.5	2.0
Nebraska	1.9	1.0	0.3	0.7	0.1	0.3	4.2
Nevada	1.5	2.0	0.9	-	0.6	1.2	6.2
New Hampshire	1.2	_	0.4	0.6	0.2	0.2	2.5
New Jersey	11.0	3.9	2.2	3.5	3.0	1.2	24.9
New Mexico	0.9	1.9	0.4	0.3	0.2	1.2	4.9
New York	27.6	11.0	7.0	17.1	3.3	3.0	69.0
North Carolina	4.0	3.3	2.0	2.6	1.3	1.2	14.4
North Dakota	0.6	0.8	0.3	0.3	0.1	3.4	5.5
Ohio	6.6	5.1	2.8	3.4	1.2	2.6	19.9
Oklahoma	1.5	2.2	0.8	0.9	0.5	1.2	7.2
Oregon	2.3	_	0.9	1.1	1.1	0.9	6.3
Pennsylvania	8.7	4.1	3.6	4.2	3.1	2.5	26.1
Rhode Island	1.2	0.4	0.3	0.2	0.3	0.1	2.5
South Carolina	3.5	1.5	0.8	0.6	0.5	0.8	7.6
South Dakota	0.6	0.8	0.2	0.0	0.0	0.2	1.8
Tennessee	3.0	3.3	1.5	1.2	0.6	1.4	11.0
Texas	29.2	18.1	7.9	4.7	2.6	12.9	70.7
Utah Vermont	1.7	1.0 0.2	0.6 0.3	0.6 0.2	0.4	0.3 0.1	4.5
	1.0 6.3		2.0		0.1		1.9
Virginia Washington	6.3 4.5	1.8 8.2	2.0 2.6	1.6 3.3	0.8 1.4	1.6 1.3	14.2 18.0
•	4.5 1.0	8.2 0.5	2.6 0.7	3.3 0.4	0.2	0.9	3.8
West Virginia Wisconsin	1.0 4.6	2.0	1.2	1.6	1.2	0.9	3.8 11.4
Wyoming	0.9	0.6	0.1	1.6	0.1	1.0	2.7
District of Columbia	1.8	0.5	0.3	0.7	0.1	0.1	3.6
United States	\$250.6	\$142.8	\$84.0	\$98.2	\$48.7	\$64.4	\$688.7

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, or by measuring the final incidence of business taxes after they have been shifted to consumers or owners of factors of production, including workers.4 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 4.6%; Connecticut and Oregon had the lowest TEBTR on GSP at 3.4%, while North Dakota had the highest at 11.5%.

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 North Dakota and Alaska. These states rely on severance taxes (included in the "Other taxes" category in this analysis) that are imposed on businesses but are likely passed on to consumers, many of whom are located outside the state.⁵

Furthermore, two states with similar TEBTRs may vary in how they tax certain industries. For example, some states may levy relatively high taxes on capitalintensive 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.





The average TEBTR was 4.6%, ranging from 11.5% in North Dakota to 3.4% in Connecticut and Oregon. The average TEBTR on gross operating surplus was 10.6% in 2014, ranging from 26.1% in North Dakota to 7% in Oregon.

Several of the states with high TEBTRs derive a significant share of their tax revenue from natural resources. Natural resource severance tax revenues account for more than 12% of total revenues in North Dakota, Alaska, New Mexico and Wyoming. The high tax burden on the extractive industries in these states largely accounts for their high level of business taxes per dollar of GSP.

On the other end of the spectrum, North Carolina, Oregon, Connecticut and Maryland have low ratios of tax collections to GSP.

- Connecticut is home to several high-output industries, including insurance, financial services and aerospace. Connecticut's economy generates a large amount of GSP per worker, meaning that while Connecticut imposes higher-than-average taxes on a per-worker basis, its business taxes are significantly below the national average when measured per dollar of GSP. These results should not be interpreted to mean that Connecticut is a low-tax environment overall.
- North Carolina's effective tax rate on GSP is among the lowest due partially to the significant share of revenue that North Carolina derives from the individual income tax. As a share of total state and local tax revenue, North Carolina derives 27% of its revenue from individual income taxes, the fourthhighest share in the nation.

- ▶ Oregon also ranks among the lowest states in terms of TEBTR on GSP due to its lack of a sales tax, which accounts for more than 21% of state and local business taxes nationwide. If sales tax revenue is excluded from the TEBTR on GSP calculation for all states, Oregon's TEBTR stays at 3.4% but moves from the lowest TEBTR to the 20th-lowest rate. Oregon also generates higher-than-average GDP per worker, which reduces the TEBTR by increasing the denominator relative to other states.
- Maryland's TEBTR is among the lower rates, at 3.8%, due to its heavy reliance on the individual income tax because of significant non-taxable Federal Government and nonprofit activity in the state as well as the significant number of Maryland residents that work in the District of Columbia or Virginia. Individual income tax on business income consists of 11% of Maryland's total state and local business tax collections, while the overall US average (excluding Maryland) is 4.8%, which results in a lower business share and lower TEBTR.

Table 4 also presents the level of business taxes per private-sector employee. In states with above-average GSP, such as Connecticut and Oregon, the denominator of the effective tax rate calculation is larger than average, causing the overall effective tax rate on GSP to be below average. Business taxes per private-sector employee presents an additional way to measure business tax levels.

Table 4. Business taxes as a share of state, local and total taxes and private sector GSP, FY2014 (\$ billions)

luniadistica	State	taxes	Local	taxes	State and	d local taxes	TERTR	Business taxes
Jurisdiction	Business	Total	Business	Total	Business	Total	TEBTR*	per employee (\$ thousands)**
Alabama	\$4.1	\$9.7	\$3.0	\$5.4	\$7.1	\$15.1	4.4%	\$4.8
Alaska	3.3	3.6	0.8	1.6	4.2	5.2	8.9%	16.4
Arizona	5.6	13.5	6.2	9.8	11.8	23.3	4.9%	5.5
Arkansas	3.6	9.3	0.9	2.0	4.5	11.3	4.3%	4.7
California	50.2	144.5	37.6	72.9	87.8	217.4	4.4%	6.5
Colorado	4.4	12.5	6.8	11.7	11.3	24.2	4.3%	5.5
Connecticut	5.2	16.8	2.4	9.7	7.7	26.5	3.4%	5.4
Delaware	2.0	3.3	0.4	0.8	2.4	4.1	4.4%	6.6
Florida	17.3	37.4	19.8	33.2	37.1	70.6	5.2%	5.5
Georgia	6.7	19.5	8.6	15.7	15.3	35.2	3.8%	4.5
Hawaii	2.5	6.4	1.3	2.0	3.8	8.4	6.4%	7.5
Idaho	1.5	4.0	0.9	1.5	2.4	5.5	4.5%	4.6
Illinois	16.7	42.1	16.3	31.1	33.1	73.2	5.0%	6.6
Indiana	5.8	17.6	4.8	8.4	10.6	26.0	3.7%	4.2
lowa	3.4	8.8	3.4	5.8	6.8	14.6	4.5%	5.3
Kansas	2.7	7.7	3.1	5.2	5.9	13.0	4.7%	5.3
Kentucky	4.9	11.6	2.6	4.6	7.5	16.2	4.7%	5.0
Louisiana	4.3	9.9	4.6	8.0	8.9	18.0	4.0%	5.5
Maine	1.4	4.0	1.7	2.4	3.1	6.4	6.4%	6.2
Maryland	6.9	19.8	3.4	13.1	10.3	32.9	3.8%	5.0
Massachusetts	9.5	27.1	6.8	14.8	16.4	41.9	4.1%	5.6
Michigan	9.2	26.6	5.3	13.0	14.4	39.6	3.7%	4.1
Minnesota	9.1	24.5	3.9	7.9	13.0	32.4	4.6%	5.5
Mississippi	3.4	7.8	2.3	2.9	5.6	10.7	6.5%	6.5
Missouri	3.8	11.9	4.8	9.5	8.7	21.4	3.5%	3.9
Montana	1.3	2.8	0.7	1.2	2.0	4.0	5.4%	5.6
Nebraska	1.8	5.0	2.3	4.1	4.2	9.1	4.3%	5.3
Nevada	4.0	7.7	2.2	3.9	6.2	11.7	5.4%	5.9
New Hampshire	1.4	2.4	1.1	3.2	2.5	5.6	4.1%	4.7
New Jersey	13.6	32.7	11.3	27.5	24.9	60.2	5.1%	7.6
New Mexico	3.4	6.0	1.5	2.5	4.9	8.5	7.0%	8.0
New York	25.6	80.2	43.4	84.7	69.0	164.9	5.7%	9.2
North Carolina	9.2	24.7	5.2	12.3	14.4	37.1	3.5%	4.3
North Dakota	4.7	6.2	0.8	1.2	5.5	7.5	11.5%	14.7
Ohio	12.2	28.2	8.6	21.6	20.8	49.8	4.1%	4.6
Oklahoma	4.5	9.6	2.7	4.8	7.2	14.4	4.7%	5.7
Oregon	3.3	10.8	3.0	6.0	6.3	16.8	3.4%	4.3
Pennsylvania	15.3	37.3	10.9	24.5	26.1	61.8	4.5%	5.3
Rhode Island	1.3	3.2	1.2	2.5	2.5	5.7	5.3%	6.1
South Carolina	3.3	9.4	4.3	6.5	7.6	15.9	4.9%	4.9
South Dakota	1.0	1.7	0.9	1.4	1.8	3.1	4.6%	5.4
Tennessee	6.7	12.4	4.3	8.4	11.0	20.8	4.2%	4.7
Texas	35.7	57.8	34.9	55.0	70.7	112.9	4.9%	7.4
Utah	2.3	6.7	2.2	3.9	4.5	10.6	3.8%	4.2
Vermont	1.6	3.1	0.3	0.5	1.9	3.6	7.5%	7.4
Virginia	5.6	19.7	8.5	15.1	14.2	34.9	3.8%	4.8
Washington	12.9	20.8	6.6	12.7	19.5	33.6	5.4%	7.7
West Virginia	2.5	5.6	1.3	1.7	3.8	7.3	6.2%	6.8
Wisconsin	6.5	17.6	4.9	10.9	11.4	28.6	4.5%	4.8
Wyoming	1.8	2.4	0.9	1.2	2.7	3.6	7.3%	12.4
District of Columbia	3.6	6.5	0.0	0.0	3.6	6.5	4.8%	7.2
United States	\$372.8	\$920.8	\$315.9	\$610.6	\$688.7	\$1,531.4	4.6%	\$6.0

Note: TEBTR equals taxes as a percent of gross state product.

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

^{*}Average of calendar year 2013 and calendar year 2014 private industry GSP. This is the TEBTR on economic activity occurring within the state.

^{**}Business taxes per employee calculated using 2014 private-sector employment from Bureau of Labor Statistics Quarterly Census of Employment and Wages and FY2014 total state and local business tax collections.



Figure 4. TEBTR by state, FY2014

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

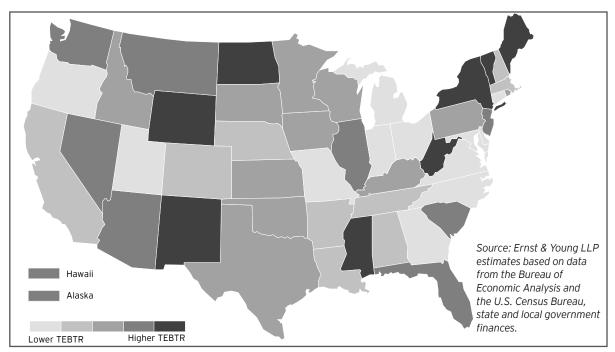


Table 5 summarizes the share of taxes paid by business in each state. Business taxes accounted for 45% of total state and local taxes in FY2014. Business taxes accounted for a smaller share of state taxes (40.5%) than local taxes (51.7%). The share of local taxes paid by business is higher than the state share because businesses pay 53% of local property taxes, which account for 74% of total (business and household) local tax collections, while state governments rely most heavily on the individual income tax, which is paid primarily 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 one 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 accounted for 17.9% of total state and local tax revenue in FY2010 and 19.8% in 2014.

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, 62.6% of Texas taxes are paid by business compared to 45% nationwide (39.2% higher than average), but the TEBTR in Texas is 4.9% compared to the US average of 4.6% (only 5.5% higher than average). This suggests that while Texas collects a larger-thanaverage share of its taxes from business, its overall level of business taxes is near average by this measure.

A similar result occurs in Delaware, where 57.9% of taxes are paid by business (28.8% above average), but the TEBTR is 4.4% (5.7% below average). In this case, 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, FY2014

	Business share of state	Business share of local	Business share of total
Jurisdiction	taxes	taxes	state and local taxes
Alabama	42.4%	56.1%	47.3%
Alaska	92.2%	51.9%	80.0%
Arizona	41.6%	63.1%	50.6%
Arkansas	38.7%	46.2%	40.0%
California	34.7%	51.6%	40.4%
Colorado	35.4%	58.3%	46.5%
Connecticut	31.2%	25.0%	28.9%
Delaware	61.1%	45.4%	57.9%
Florida	46.3%	59.7%	52.6%
Georgia	34.4%	54.7%	43.5%
Hawaii	38.7%	64.7%	44.8%
Idaho	38.3%	60.8%	44.6%
Illinois	39.8%	52.4%	45.1%
Indiana	32.8%	57.6%	40.8%
lowa	38.6%	57.8%	46.2%
Kansas	35.1%	60.2%	45.2%
Kentucky	42.2%	56.4%	46.2%
Louisiana	43.2%	58.0%	49.8%
Maine	34.7%	69.9%	47.8%
Maryland	34.9%	25.8%	31.3%
Massachusetts	35.2%	46.2%	39.1%
Michigan	34.6%	40.3%	36.5%
Minnesota	37.2%	49.4%	40.1%
Mississippi	43.2%	77.3%	52.5%
Missouri	32.4%	50.8%	40.6%
Montana	45.7%	59.9%	50.0%
Nebraska	36.9%	57.0%	45.9%
Nevada	51.4%	56.0%	53.0%
New Hampshire	58.3%	35.4%	45.3%
New Jersey	41.6%	41.0%	41.4%
New Mexico	57.1%	60.3%	58.0%
New York	31.9%	51.3%	41.8%
North Carolina	37.2%	42.1%	38.8%
North Dakota	76.2%	63.0%	74.0%
Ohio	43.1%	39.9%	41.7%
Oklahoma	46.4%	56.7%	49.8%
Oregon	30.5%	50.4%	37.6%
Pennsylvania	41.0%	44.2%	42.3%
Rhode Island	39.3%	48.4%	43.3%
South Carolina	34.7%	66.7%	47.8%
South Dakota	59.4%	60.3%	59.8%
Tennessee	54.1%	51.2%	52.9%
Texas	61.8%	63.5%	62.6%
Utah	34.1%	57.7%	42.8%
Vermont	49.9%	68.5%	52.3%
Virginia	28.5%	56.3%	40.6%
Washington	62.0%	51.6%	58.0%
West Virginia	44.6%	75.0%	51.9%
Wisconsin	37.1%	44.5%	39.9%
Wyoming	76.3%	72.1%	74.9%
District of Columbia	54.6%	n/a	54.6%
United States	40.5%	51.7%	45.0%



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' non-tax costs, if two businesses pay the same amount of taxes but one receives larger benefits from government spending, the true tax burden 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 FY2014 total estimated state and local government spending by category (net of user charges and other non-tax 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.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 points.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 education spending benefits businesses.⁹

Calculating tax-benefit ratios using net government spending can yield different results than using gross spending. Net government spending subtracts non-tax revenue and estimates tax-funded state and local government spending. While taxes are the largest source of state and local government revenue, more than 60% of total revenue was derived from other sources in 2011, the last year for which complete state and local government finance 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 non-tax revenue changed.

Figure 6 and Table 6 summarize the results using the three educational share assumptions for FY2014. Assuming that education spending does not directly benefit local business, the ratio of business taxes paid to government services received by business is 3.4, indicating that businesses are taxed \$3.35 per dollar of government services they receive (i.e., a ratio of 3.4 to 1). The ratio drops to 1.8

when one-quarter of education spending is assumed to benefit business and 1.2 when half of education spending is assumed to benefit local business. Under these three educational assumptions, the business share of total net state and local government expenditures is 12% with zero educational benefit, 22% with oneguarter of educational spending benefiting businesses, and 33% if half of educational expenditures are assumed to benefit business.

While net government expenditures have increased in the past two years, the level of expenditures benefiting business has remained stable. Increased spending by state and local governments on some infrastructure and public safety items were offset by reductions in other government services, such as improvements to sewage and solid waste systems, and government administration. That has resulted in a lower business share of total net state and local government expenditures in FY2014.

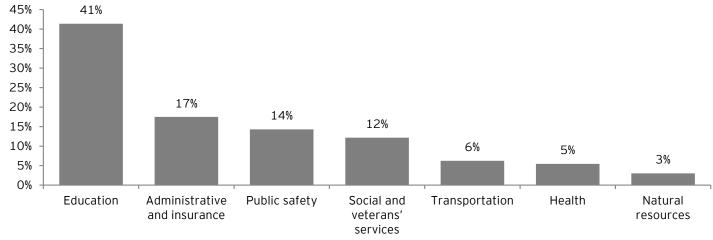
North Dakota has the highest tax-benefit ratios due in large part to the state's

reliance on severance taxes. In North Dakota, the ratio of business taxes to expenditures benefiting local businesses is 6.8, assuming education benefits households only. Sixteen additional states have tax-benefit ratios above 4.0, assuming educational expenditures do not benefit business. Excluding Maryland (ratio of 1.7), every other state has a ratio between 2.2 and 4.0, meaning that under the assumption that all education benefits accrue to households, businesses pay at least twice as much in state and local taxes as they receive in tax-funded benefits from state and local governments.

If educational expenditures are split between households and businesses, the tax-benefit ratios are fairly similar across states, with all states except North Dakota, Tennessee and Alaska having taxbenefit ratios between 0.7 and 1.9. While Wyoming's tax-to-benefit ratio under the 50% assumption was previously closer to Alaska and North Dakota, recent increases in state education spending reduced its ratio so that it now falls more in line with the other states.

Figure 5. Net state and local government expenditures by category, as a percent of total net expenditures, FY2014

(for both households and businesses)



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. Business taxes per dollar of state and local government expenditures benefiting businesses, FY2014 (\$ billions)

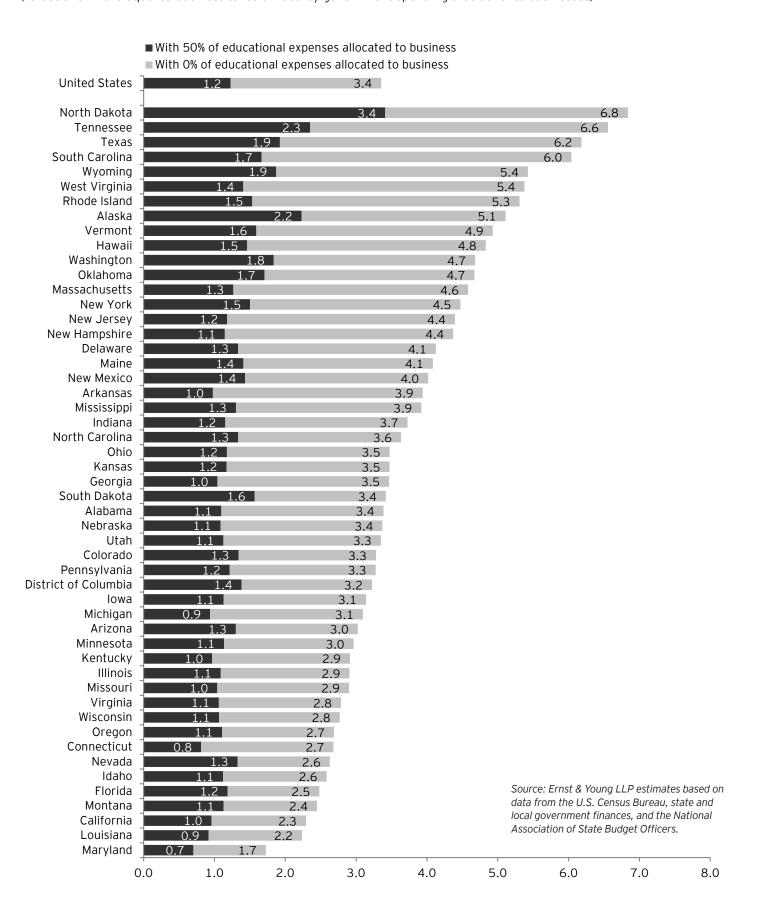
		0% of educati benefiting		25% of education spending benefiting business		50% of educat benefiting	
		Total state and		Total state and		Total state and	
		local spending	Tax-benefit	local spending	Tax-benefit	local spending	Tax-benefit
	State and local	benefiting	ratio (taxes/	benefiting	ratio (taxes/	benefiting	ratio (taxes/
Jurisdiction	business taxes	business	benefits)	business	benefits)	business	benefits)
Alabama	\$7.1	\$2.1	3.4	\$4.3	1.7	\$6.5	1.1
Alaska	4.2	0.8	5.1	1.3	3.1	1.9	2.2
Arizona	11.8	3.9	3.0	6.5	1.8	9.1	1.3
Arkansas	4.5	1.2	3.9	2.9	1.6	4.6	1.0
California	87.8	38.3	2.3	65.0	1.4	91.7	1.0
Colorado	11.3	3.4	3.3	5.9	1.9	8.4	1.3
Connecticut	7.7	2.9	2.7	6.2	1.2	9.4	0.8
Delaware	2.4	0.6	4.1	1.2	2.0	1.8	1.3
Florida	37.1	15.0	2.5	23.2	1.6	31.3	1.2
Georgia	15.3	4.4	3.5	9.6	1.6	14.7	1.0
Hawaii	3.8	0.8	4.8	1.7	2.2	2.6	1.5
Idaho	2.4	0.9	2.6	1.6	1.6	2.2	1.1
Illinois	33.1	11.4	2.9	20.9	1.6	30.4	1.1
Indiana	10.6	2.8	3.7	6.0	1.8	9.2	1.2
lowa	6.8	2.2	3.1	4.1	1.7	6.0	1.1
Kansas	5.9	2.2 1.7	3.5	3.4	1.7	5.0	1.1
	7.5	2.6	2.9	5.2	1.5	7.7	1.0
Kentucky							
Louisiana	8.9	4.0	2.2	6.9	1.3	9.7	0.9
Maine	3.1	0.8	4.1	1.5	2.1	2.2	1.4
Maryland	10.3	6.0	1.7	10.3	1.0	14.6	0.7
Massachusetts	16.4	3.6	4.6	8.3	2.0	12.9	1.3
Michigan	14.4	4.7	3.1	10.0	1.4	15.4	0.9
Minnesota	13.0	4.4	3.0	7.9	1.6	11.4	1.1
Mississippi	5.6	1.4	3.9	2.9	2.0	4.3	1.3
Missouri	8.7	3.0	2.9	5.7	1.5	8.4	1.0
Montana	2.0	0.8	2.4	1.3	1.5	1.8	1.1
Nebraska	4.2	1.2	3.4	2.5	1.6	3.8	1.1
Nevada	6.2	2.4	2.6	3.5	1.8	4.7	1.3
New Hampshire	2.5	0.6	4.4	1.4	1.8	2.2	1.1
New Jersey	24.9	5.7	4.4	13.4	1.9	21.1	1.2
New Mexico	4.9	1.2	4.0	2.3	2.1	3.4	1.4
New York	69.0	15.4	4.5	30.7	2.2	45.9	1.5
North Carolina	14.4	4.0	3.6	7.4	2.0	10.8	1.3
North Dakota	5.5	0.8	6.8	1.2	4.6	1.6	3.4
Ohio	20.8	6.0	3.5	11.8	1.8	17.6	1.2
Oklahoma	7.2	1.5	4.7	2.9	2.5	4.2	1.7
Oregon	6.3	2.3	2.7	4.0	1.6	5.7	1.1
Pennsylvania	26.1	8.0	3.3	14.7	1.8	21.5	1.2
Rhode Island	2.5	0.5	5.3	1.0	2.4	1.6	1.5
South Carolina	7.6	1.3	6.0	2.9	2.6	4.6	1.7
South Dakota	1.8	0.5	3.4	0.9	2.1	1.2	1.6
Tennessee	11.0	1.7	6.6	3.2	3.5	4.7	2.3
Texas	70.7	11.4	6.2	24.1	2.9	36.7	1.9
Utah	4.5	1.4	3.3	2.7	1.7	4.0	1.1
Vermont	1.9	0.4	3.3 4.9	0.8	2.4	1.2	
	1.9 14.2	5.1	2.8	9.2	2.4 1.5	13.3	1.6
Virginia							1.1
Washington	19.5	4.2	4.7	7.4	2.6	10.6	1.8
West Virginia	3.8	0.7	5.4	1.7	2.2	2.7	1.4
Wisconsin	11.4	4.1	2.8	7.4	1.5	10.7	1.1
Wyoming	2.7	0.5	5.4	1.0	2.8	1.4	1.9
District of Columbia	3.6	1.1	3.2	1.8	1.9	2.6	1.4
United States	\$688.7	\$205.3	3.35	\$383.2	1.80	\$561.1	1.23

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, FY2014

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



Conclusion

Businesses paid more than \$688 billion in state and local taxes in FY2014, representing a 2.2% revenue increase from the previous year. Growth in tax revenue from business was concentrated in property taxes, sales taxes and corporate income taxes. Several states enacted reforms to exempt pass-through business income from the individual income tax, reversing a trend of growth in this category and leading to the largest tax category decline in FY2014.

Business taxes as a share of economic activity (measured by private sector gross state product) declined slightly in FY2014, as state and local business tax growth was half the growth in private sector GSP between 2013 and 2014. The share of tax revenue derived from business stayed constant at 45%, continuing the trend of modestly declining business share since 2007. On average, businesses paid 10.6% of gross operating surplus in state and local taxes nationwide. Governmental spending that benefits business remained flat between 2013 and 2014, while overall net state and local expenditures grew, meaning that businesses received a smaller share of the benefit of government spending in 2014.







Table A-1. Total state and local business taxes, 2010-14 (\$ billions)

Other taxes	481.8	500.5	508.0	523.5	539.8
Total business taxes Individual income taxes on non-business income	\$595.4 234.1	\$628.6 255.6	\$652.6 273.6	\$673.7 298.3	\$688.7 302.9
State and local taxes	2010	2011	2012	2013	2014

Composition of state and local taxes	2010	2011	2012	2013	2014
Total business taxes	45.4%	45.4%	45.5%	45.0%	45.0%
Individual income taxes on non-business income	17.9%	18.5%	19.1%	19.9%	19.8%
Other taxes	36.7%	36.1%	35.4%	35.0%	35.2%
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, 2010-14 (\$ billions)

Total business taxes	\$595.4	\$628.6	\$652.6	\$673.7	\$688.7
Other business taxes	11.0	11.7	12.4	12.6	12.9
Insurance premium tax	16.5	17.1	17.4	18.2	18.9
Severance taxes	11.5	13.9	17.7	16.9	17.9
Individual income tax	27.1	29.5	33.4	35.5	33.7
Public utility tax	28.5	28.8	28.8	27.0	26.3
Excise taxes	30.1	35.0	35.3	38.5	38.9
Business license tax	29.5	30.2	31.1	32.1	33.6
Unemployment compensation	32.4	41.2	48.4	50.8	48.7
Corporate net income	52.1	57.0	58.4	62.5	64.4
General sales and use tax on inputs	125.4	130.7	133.5	137.0	142.8
Property tax on business property	\$231.3	\$233.5	\$236.1	\$242.8	\$250.6
Business tax	2010	2011	2012	2013	2014

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-3. Composition of state and local business taxes by type, FY2014

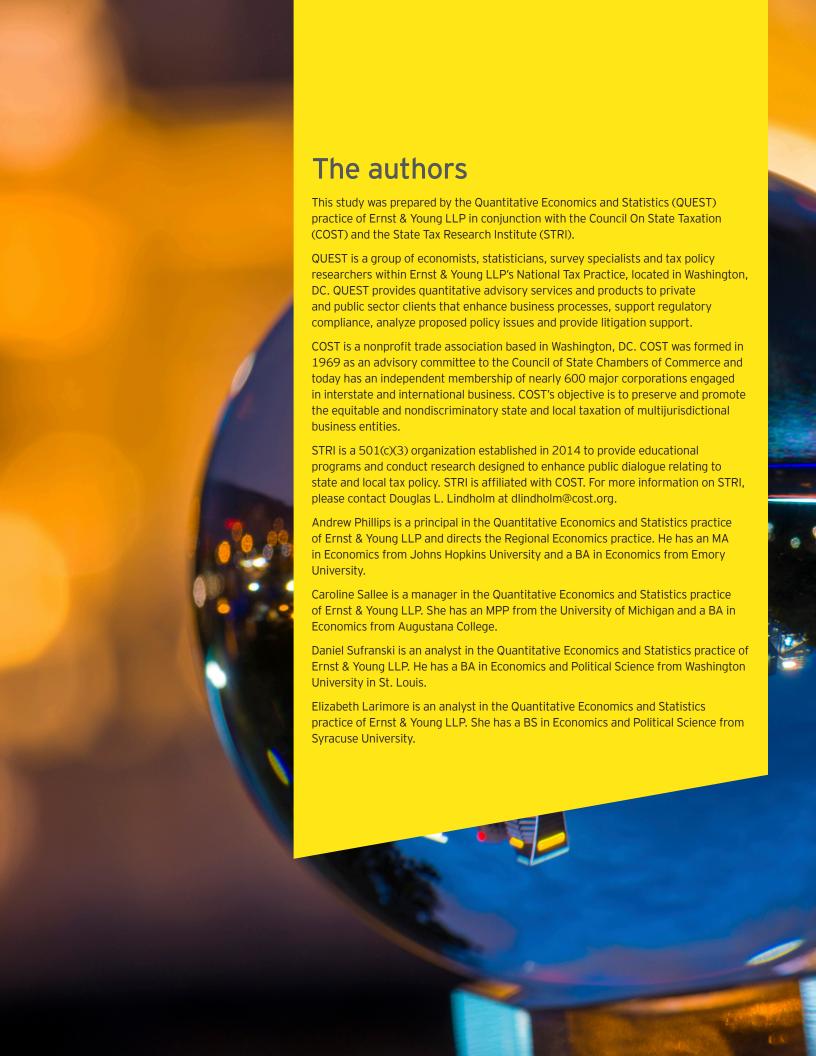
Jurisdiction Alabama Alaska Arizona	Property tax 27.2%	Sales tax		C		income tax on		
Alabama Alaska Arizona		Salos tay			Unemployment	nacc-through	License and	Total business
Alabama Alaska Arizona			Excise tax	Corporate income tax	insurance tax	pass-through income	other taxes*	taxes
Alaska Arizona		21.6%	22.8%	5.7%	5.8%	5.4%	11.5%	100.0%
Arizona	20.5%	_	2.9%	9.8%	5.7%	-	61.1%	100.0%
	42.8%	32.5%	8.9%	4.9%	3.8%	2.7%	4.4%	100.0%
Arkansas	24.6%	33.7%	10.6%	8.8%	8.1%	5.8%	8.4%	100.0%
California	32.3%	21.3%	11.4%	10.1%	7.3%	7.9%	9.7%	100.0%
Colorado	43.1%	22.7%	9.2%	6.4%	6.5%	5.6%	6.5%	100.0%
Connecticut	31.1%	20.3%	15.5%	8.2%	11.2%	9.9%	3.9%	100.0%
Delaware	14.1%	20.5%	9.9%	11.8%	5.5%	5.3%	53.3%	100.0%
Florida	41.1%	22.0%	19.2%	5.5%	5.5%	5.5% -	6.7%	100.0%
Georgia	41.1%	26.6%	9.7%	6.2%	5.9%	5.9%	3.9%	100.0%
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Hawaii	25.5%	31.6%	19.9%	3.3%	10.5%	4.4%	4.8%	100.0%
Idaho	36.3%	18.6%	8.6%	7.8%	11.6%	8.6%	8.6%	100.0%
Illinois	41.9%	11.7%	15.3%	13.0%	8.9%	4.2%	5.1%	100.0%
Indiana	42.3%	21.4%	13.2%	8.2%	7.1%	5.6%	2.3%	100.0%
lowa	43.3%	25.2%	4.5%	5.7%	8.1%	7.2%	6.0%	100.0%
Kansas	42.9%	27.6%	10.7%	5.6%	7.0%	_	6.2%	100.0%
Kentucky	27.7%	20.5%	19.6%	10.7%	7.0%	6.5%	7.9%	100.0%
Louisiana	30.7%	30.8%	10.9%	5.4%	2.8%	4.1%	15.2%	100.0%
Maine	54.8%	13.9%	9.7%	6.0%	5.7%	4.5%	5.3%	100.0%
Maryland	21.8%	17.6%	22.5%	9.6%	8.0%	10.9%	9.6%	100.0%
Massachusetts	39.7%	16.0%	6.6%	13.4%	11.4%	7.3%	5.6%	100.0%
Michigan	39.9%	20.9%	10.2%	6.1%	12.2%	4.5%	6.1%	100.0%
Minnesota	30.6%	20.0%	15.5%	10.1%	10.8%	6.4%	6.6%	100.0%
Mississippi	37.1%	23.3%	13.5%	9.3%	4.0%	3.8%	9.1%	100.0%
Missouri	37.5%	25.8%	7.9%	5.1%	7.5%	6.9%	9.3%	100.0%
Montana	43.0%	_	11.5%	7.5%	7.9%	5.9%	24.1%	100.0%
Nebraska	45.2%	23.0%	6.8%	7.4%	3.2%	8.3%	6.1%	100.0%
Nevada	24.4%	32.1%	14.8%	_	9.2%	_	19.4%	100.0%
New Hampshire	48.6%	_	15.0%	21.3%	6.3%	0.4%	8.4%	100.0%
New Jersey	44.2%	15.8%	8.9%	9.5%	12.0%	4.6%	4.9%	100.0%
New Mexico	17.3%	39.2%	7.3%	4.2%	4.4%	2.7%	24.8%	100.0%
New York	40.1%	15.9%	10.1%	17.0%	4.7%	7.8%	4.3%	100.0%
North Carolina	27.4%	23.0%	14.1%	9.5%	9.1%	8.3%	8.6%	100.0%
North Dakota	11.5%	13.9%	4.9%	4.5%	2.0%	0.8%	62.4%	100.0%
Ohio	31.6%	20.4%	13.3%	10.8%	5.8%	5.9%	12.4%	100.0%
Oklahoma	20.7%	30.6%	10.8%	5.5%	7.6%	7.6%	17.1%	100.0%
Oregon	36.9%	_	13.8%	8.8%	17.1%	9.2%	14.3%	100.0%
Pennsylvania	33.2%	15.7%	13.6%	10.1%	11.8%	6.0%	9.6%	100.0%
Rhode Island	47.4%	14.8%	13.9%	4.8%	10.7%	4.5%	3.9%	100.0%
South Carolina	45.8%	19.2%	10.0%	4.3%	6.0%	4.1%	10.5%	100.0%
South Dakota	33.7%	41.1%	10.2%	1.3%	2.4%	-	11.3%	100.0%
Tennessee	27.5%	30.1%	13.7%	10.7%	5.2%	0.4%	12.4%	100.0%
Texas	41.4%	25.6%	11.1%	6.7%	3.7%	0.470	11.5%	100.0%
Utah	37.8%	21.0%	12.7%	6.8%	8.0%	6.0%	7.7%	100.0%
Vermont				5.7%	7.7%	4.0%	3.0%	100.0%
Virginia	52.8% 44.5%	10.0%	16.8%	5.7%	7.7% 5.5%	4.0% 6.1%		100.0%
	44.5%	13.0%	14.3%				11.3%	
Washington	23.2%	33.0%	13.5%	16.8%	7.1%	- F 0%	6.5%	100.0%
West Virginia	27.5%	13.3%	19.6%	5.3%	5.6%	5.0%	23.6%	100.0%
Wisconsin	40.6%	17.9%	10.5%	8.7%	10.6%	5.2%	6.6%	100.0%
Wyoming	34.6%	21.1%	3.5%	_	5.0%	-	35.8%	100.0%
District of Columbia United States	49.9% 36.4%	14.2% 20.7 %	9.5% 12.2%	9.4%	4.5% 7.1%	6.8% 4.9%	3.5% 9.3 %	100.0% 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 LLP/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. 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.
- 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 to benefit ratio generally applicable to most firms. Ernst & Young LLP 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 in the following way. Ernst & Young LLP 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, Ernst & Young LLP 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 non-tax 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, Ernst & Young LLP 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, Ernst & Young LLP used data from the Statistical Section of the District of Columbia's 2012 Comprehensive Annual Financial Report to grow state and local net expenditures.



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SCORE No. YY3703 BSC No. 1610-2102018

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