Total state and local business taxes

State-by-state estimates for FY22

December 2023

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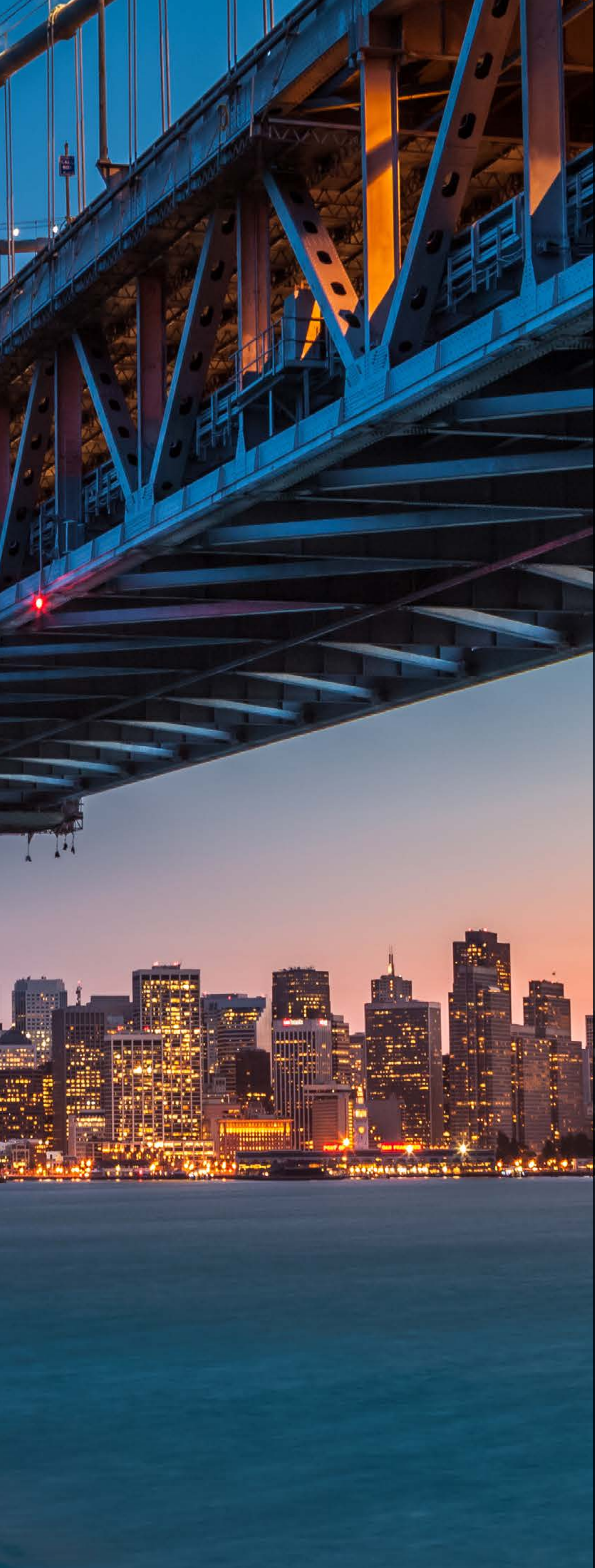


Executive summary

This study presents detailed state-by-state estimates of state and local taxes paid by businesses. It is the 21st annual report prepared by Ernst & Young LLP in conjunction with the Council On State Taxation (COST) and the State Tax Research Institute (STRI). The estimates presented in this study are for fiscal year 2022 (FY22), which ran from July 2021 through June 2022 for most states.[1]

Businesses paid $1,074.5 billion in state and local taxes in FY22, which was 44.6% of all tax revenue at the state and local level. Businesses paid $598.2 billion in state taxes in FY22, which was 17.8% higher than the prior fiscal year, and $476.3 billion in local taxes, which was 8.8% higher, for a combined year-over-year growth rate of 13.7% over FY21.

Business taxes include property taxes paid by businesses; sales and excise taxes on intermediate inputs and capital expenditures purchased by businesses; business entity taxes such as the corporate income tax, gross receipts tax, franchise tax and license taxes on businesses and corporations; the share of individual income taxes paid by owners of noncorporate businesses (pass-through entities (PTEs)); unemployment insurance taxes and all other state and local taxes that are the statutory liability of business taxpayers. The following are key findings of the study:

- Business property tax collections grew by 7.7% in FY22 to $373.1 billion. Property taxes account for 34.7% of all state and local taxes paid by businesses, the most of any tax category. Businesses primarily pay property taxes at the local level, where they make up 75.3% of all local business tax collections. Whereas they comprise only 2.4% of taxes paid by business at the state level.
- Sales tax on business purchases of intermediate inputs and capital expenditures are the second-largest source of business tax revenue for state and local governments, accounting for 20.9% of all taxes paid by businesses in FY22. The $225.0 billion in business sales tax collections was 16.0% higher than FY21.[2] The sales tax is the largest source of business tax revenue at the state level, accounting for 29.0% of all taxes paid by businesses. Although they are the second-largest local business tax, business sales taxes only make up 10.8% of total local business tax collections.

- Corporate income tax collections grew 26.7% in FY22 to $141.4 billion. Corporate income taxes are the third-largest business tax for state and local governments, making up 13.2% of tax collections. They are the second-largest business tax at the state level, accounting for 22.1% of taxes paid by businesses. Corporate income tax collections are included in the other business taxes category at the local level, which accounted for 8.7% of business tax revenue in FY22. Certain statewide gross receipts taxes levied in lieu of corporate income taxes are also included in this measure.[3]
- Individual income taxes paid on pass-through income were the fourth-largest business tax at 7.6% of total state and local business tax collections. Revenues grew 11.0% in FY22 to $81.4 billion.[4] Individual income taxes on business income are the third-largest business tax at the state level, at 12.4% of taxes paid by businesses.
- Total state and local taxes paid by businesses in FY22 equaled 5.0% of US private-sector gross state product (GSP), which measures the value of private-sector production of goods and services in a state. There was substantial variation across states with business taxes making up as little as 3.5% of private-sector GSP, and as high as 8.9%.
- An alternative measure of the tax burden on businesses is the "business tax-to-benefit" ratio, which is how much businesses pay in taxes to receive $1.00 in benefits from government spending. The ratio is sensitive to estimates of the benefit received from spending on education, which is the largest category of expenditures by state and local governments. Businesses paid on average $3.09 in taxes per dollar of government expenditures, assuming that in-state education spending does not benefit in-state businesses. Under an alternate assumption, businesses paid on average $1.29 in taxes for every dollar of government spending assuming that businesses benefit 50% from in-state educational expenditures.

Total state and local business taxes in FY22

This section summarizes state and local business tax collections in FY22.[5] Table 1 compares tax collections in FY22 to FY21 by tax type. The table also reports the share of total state and local business tax collections by tax type. Figures 1a and 1b report the share of state and local tax collections by tax type as well. Figure 1a reports shares of total state and local taxes paid by both businesses and households, while Figure 1b reports shares of total state and local taxes paid by businesses only. Figure 2 reports the amount and share of state and local taxes paid by either businesses or households for total tax collections, as well as general sales tax collections, and property tax collections.

- Table 1 reports that businesses paid $1,074.5 billion in state and local taxes in FY22, which was 13.7% higher than the prior fiscal year. As shown in Figure 2, this is 44.6% of total state and local tax collections. Households paid $1,332.6 billion, or 55.4% of total state and local taxes.
- The three primary drivers of the increase in business tax collections in FY22 are 1) general sales tax collections growth of 16.0%, which contributes 24.1% of the total increase in taxes, 2) corporate income tax increases of 26.7%, making up 23.1% of the total increment, and 3) an increase in business property tax collections of 7.7%, contributing approximately 20.7%. Collectively, these contributions constitute 67.9% of the total increase in collections for FY22. These increases reflect both changes in economic conditions and elevated inflation affecting prices.
- Businesses paid $373.1 billion in state and local property taxes in FY22, which is 7.7% higher than FY21 (Table 1). Taxes on both real and personal property are the largest source of state and local tax revenue according to Figures 1a and 1b. They were 28.7% of total state and local taxes paid by both businesses and households in FY22 (Figure 1a), while they were an even higher 34.7% of business tax collections (Figure 1b). Businesses paid 54.0% of state and local property taxes (Figure 2), while households paid the remaining $317.6 billion, or 46.0% of state and local property tax collections.[6]

Table 1. Total state and local business taxes, FY21–FY22 ($ billions)

Business tax	FY21*	FY22	2022 % total taxes	One-year change
Property taxes on business property	$346.3	$373.1	34.7%	7.7%
General sales taxes on business inputs	193.9	225.0	20.9%	16.0%
Corporate income tax	111.6	141.4	13.2%	26.7%
Individual income tax on business income	73.3	81.4	7.6%	11.0%
Excise taxes	51.9	56.3	5.2%	8.5%
Business and corporate license	45.7	49.2	4.6%	7.7%
Unemployment insurance	36.1	41.9	3.9%	16.0%
Insurance premium taxes	27.4	30.0	2.8%	9.4%
Public utility taxes	27.4	28.8	2.7%	5.4%
Severance taxes	11.8	22.8	2.1%	93.0%
Other business taxes	19.8	24.6	2.3%	23.9%
Total state and local business taxes	**$945.3**	**$1,074.5**	**100.0%**	**13.7%**

*FY21 business tax estimates are revised from the COST FY21 study because of newly released data from the U.S. Census Bureau. See Appendix for more information.
Note: Amounts may not sum because of rounding and changes to the estimation approaches for certain taxes.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau State and Local Government Finances.

- Businesses paid $225.0 billion in general sales taxes to state and local governments in FY22 for a year-over-year growth rate of 16.0% (Table 1). Sales tax collections are 22.4% of all state and local taxes paid by businesses and households (Figure 1a), and 20.9% of state and local taxes paid by businesses (Figure 1b). The $225.0 billion paid by businesses is 41.7% of total state and local sales tax collections. Households paid $314.9 billion in sales taxes, which was the remaining 58.3% of collections (Figure 2). The estimate of the business share of sales tax collections is based on prior research.[7]
- Businesses paid $141.4 billion in state and local corporate income taxes in FY22, an increase of 26.7% over FY21 (Table 1). Corporate income taxes, at 5.9%, were the sixth-largest source of total state and local tax revenue (Figure 1a), but the third-largest source of state and local business tax revenue, at 13.2% (Figure 1b). Corporate income tax collections include gross receipts or modified gross receipts taxes such as Nevada's Commerce Tax, Ohio's Commercial Activity Tax, Oregon's Corporate Activity Tax, Texas' Margin Tax, and Washington's Business & Occupation tax.
- Business owners paid an estimated $81.4 billion in individual income taxes on their income from PTEs in FY22 (e.g., partnerships, sole proprietorships, limited liability companies and S corporations), which was 11.0% more than the prior fiscal year (Table 1). Individual income taxes on pass-through business income represented 7.6% of total state and local business tax collections. At the federal level, taxpayers reporting certain types of pass-through income are entitled to a Qualified Business Income deduction equal to 20% of their pass-through income. A few states allow this deduction, but most do not conform to this provision.[8] Individual income tax paid by business includes PTE taxes that were in effect in 17 states in tax year 2021. PTE taxes were enacted as a work-around to state and local tax deduction limitations as part of the Tax Cuts and Jobs Act (TCJA). See the "Pass-through entity tax" section of this report for more details.

Figure 1a. Composition of total state and local taxes on businesses and households, FY22

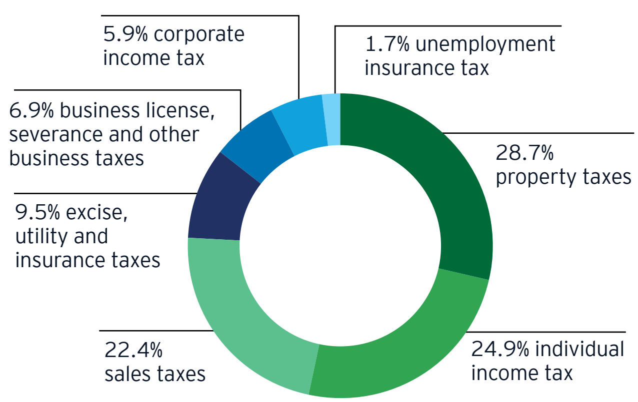
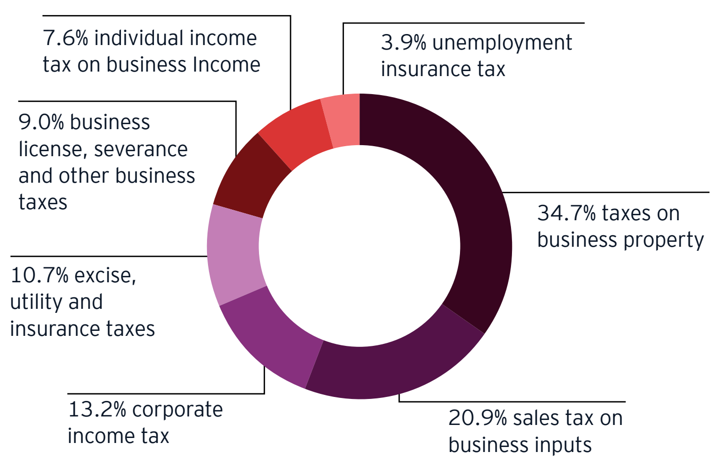


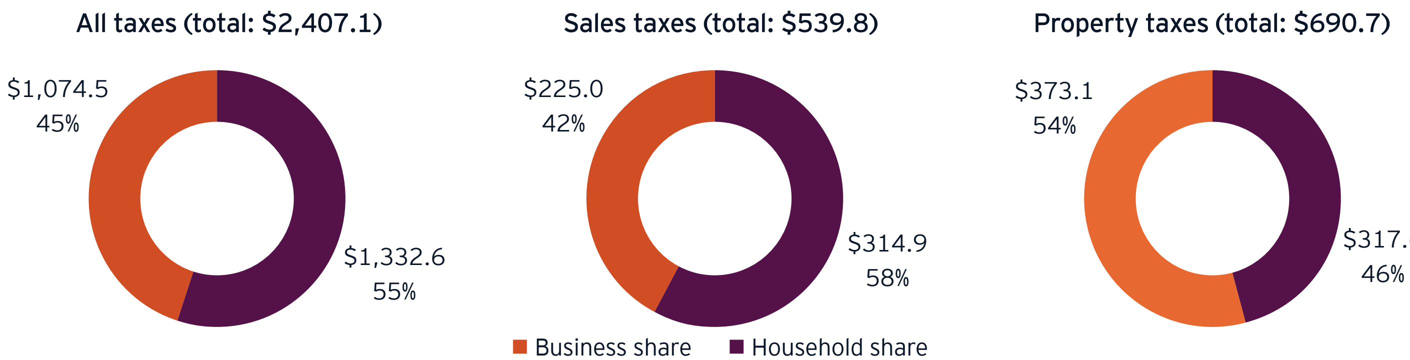
Figure 1b. Composition of total state and local taxes on businesses, FY22



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.

- Businesses paid $56.3 billion in excise taxes to state and local governments in FY22, an increase of 8.5% over the prior fiscal year (Table 1). Only a portion of excise tax collections is attributed to businesses since both businesses and households consume these goods. Excise taxes attributed to businesses include a portion of motor fuel taxes, taxes on hotel and rental car expenditures by businesses, as well as health care provider taxes on the revenue of hospitals and other providers of health services. Table 1 reports that excise taxes were 5.2% of total state and local business tax collections. In Figure 1b excise taxes are combined with utility and insurance premium taxes, which together made up 10.7% of state and local business tax collections.
- Business and corporate license taxes and fees grew 7.7% in FY22 to $49.2 billion (Table 1), which was 4.6% of total state and local business tax collections. Figure 1b combines business and corporate license taxes with severance taxes and other business taxes, which were 9.0% of state and local business tax collections.
- Employer contributions to unemployment insurance grew 16.0% in FY22 to $41.9 billion (Table 1), which was 3.9% of total state and local business tax collections (Figure 1b).
- Insurance premium taxes grew 9.4% in FY22 to $30.0 billion, which was 2.8% of state and local business tax collections (Table 1). They were combined with excise and utility taxes in Figure 1b, which were 10.7% of state and local business tax collections.
- Public utility taxes were $28.8 billion in FY22, an increase of 5.4% from the prior year (Table 1). Taxes on public utilities are generally based on gross receipts and are allocated solely to businesses because they are often levied in lieu of property or corporate income taxes. Utility tax collections were combined with excise and insurance premium taxes in Figure 1b, which were 10.7% of state and local business tax collections in FY22.
- Severance taxes grew 93.0% in FY22 to $22.8 billion, which was 2.1% of state and local business tax collections (Table 1). Severance taxes are included with business and corporate license taxes and other business taxes in Figure 1b, which were 9.0% of state and local business tax collections.
- Other state and local business taxes, which include items such as motor vehicle license taxes, and documentary and stock transfer taxes, totaled $24.6 billion in FY22, which was 23.9% higher than the prior year (Table 1).[9] Other state and local business taxes were combined with business and corporate license taxes and severance taxes in Figure 1b, which were 9.0% of total state and local tax collections.

Figure 2. Total state and local taxes ($ billions) and business and household taxes as a share of total tax collections, FY22



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.[2]

Classifying business taxes

This study generally defines business taxes as those that are the legal liability of businesses. Certain taxes, such as excise taxes on tobacco and alcohol, are not counted as business taxes because businesses are statutorily required to collect them on behalf of the individuals consuming them. Similarly, sales tax collections are separated into those that are levied on final goods purchased by individuals, which are not included, from those that are levied on intermediate inputs and capital equipment, which are included because they are purchased by businesses. The share of individual income taxes that arise from taxing pass-through business income is included as a business tax.[10] The business taxes included in the analysis are as follows:

- Property taxes paid by businesses on real and personal property, including taxes paid on income-generating residential rental property
- General sales taxes paid by businesses on purchases of intermediate inputs and capital equipment that are used in the production of goods and services; sales taxes on final goods consumed by households are not included
- The business share of excise taxes on goods such as motor fuels and hotel and rental car expenditures
- Business entity taxes such as the corporate income tax, gross receipts tax and franchise tax
- Taxes on insurance premiums and the gross receipts of public utility companies, which are often levied in lieu of other business entity taxes
- Individual income taxes on pass-through business income including PTE taxes; taxes withheld on employee earnings are not considered business taxes
- Unemployment insurance taxes 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

The corporate income tax is the primary business entity tax in most states. However, several states, such as Nevada, Ohio, Oregon, Texas and Washington, levy a gross receipts tax in lieu of the traditional corporate income tax. The gross receipts tax is categorized as corporate income tax revenue for these states since they are the primary business entity tax. As shown in Table 1 and Figures 1a and 1b, businesses pay more in property taxes and sales taxes than they do in business entity taxes such as the corporate income tax or the gross receipts tax.

State vs. local business taxes in FY22

Business taxes are separated into state tax collections (Table 2a) and local tax collections (Table 2b) and reported by major tax category. Each table reports business tax collections for FY21 and FY22, as well as the year-over-year growth rate and the share of total business tax collections in FY22.

State business tax collections were 17.8% higher than the prior fiscal year in FY22, reaching a total of $598.2 billion according to Table 2a. At the state level, corporate net income tax collections were 28.2% higher, while individual income tax collections on pass-through business income were 11.2% higher.

State business tax collections from sales and use taxes grew 15.7% in FY22, while other business taxes were 27.8% higher, and business license tax revenue was 6.0% higher. Insurance premiums tax collections grew 9.4% in FY22, while business property tax revenues were 9.5% higher. The year-over-year growth rates for the remaining taxes were in the 3.1% to 16% range in FY22, except for severance taxes, which increased by 93.2%.

Local business tax collections (Table 2b) reached $476.3 billion in FY22, which was 8.8% higher than the prior fiscal year. Property taxes, which were the largest source of business tax revenue at the local level, were 7.7% higher than in FY21, while sales taxes on business purchases, the second-largest source of local business taxes, were 17.0% higher.

The composition of business taxes differs significantly between state and local levels. According to Table 1, the four largest sources of state and local tax collections from businesses were the property tax (34.7%), general sales tax (20.9%), corporate income tax (13.2%) and the individual income tax (7.6%). However, according to Table 2a, businesses paid very little in real and personal property taxes at the state level, with property taxes making up only 2.4% of total state business tax collections. The sales and use tax, at 29.0%, was the largest source of business tax collections at the state level, followed by the corporate net income tax, at 22.1%, and individual income taxes on business income, at 12.4%.

Property taxes were the largest source of business tax collections at the local level, at 75.3%. The shares of the remaining tax types were in the single digits, except for local sales taxes on intermediate input purchases by businesses, which was second highest at 10.8%. Local corporate income taxes and individual income taxes on business income were included in the other business taxes category, which was 8.7% of local business tax collections.

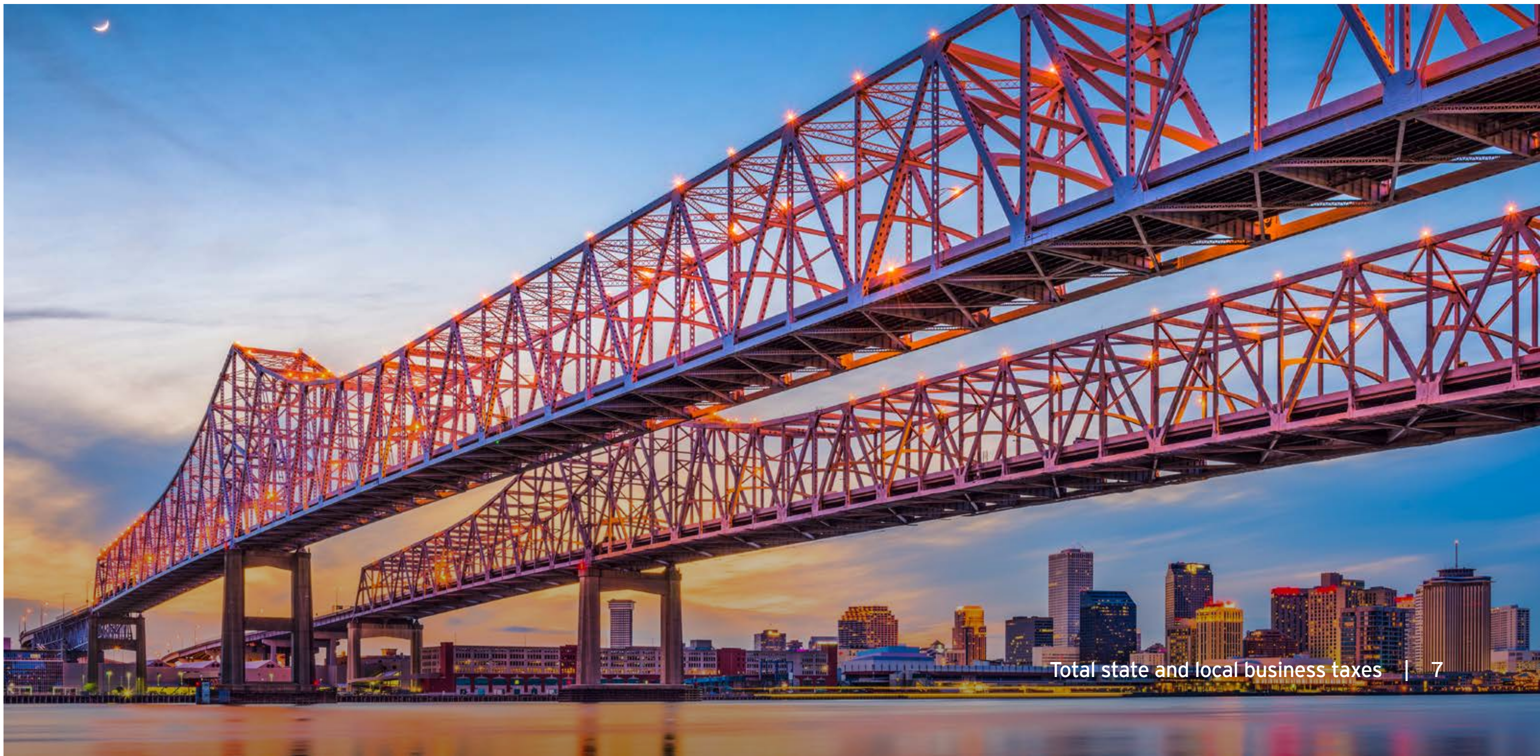


Table 2a. State business taxes, FY21–FY22 ($ billions)

Business tax	State business taxes FY21*	State business taxes FY22	% total state business taxes	One-year growth, state business taxes
General sales and use tax on inputs	$149.7	$173.3	29.0%	15.7%
Corporate net income	$103.1	$132.1	22.1%	28.2%
Individual income tax	$66.6	$74.1	12.4%	11.2%
Excise taxes on business inputs	$44.6	$48.2	8.1%	8.1%
Unemployment insurance	$36.1	$41.9	7.0%	16.0%
Business license tax	$28.5	$30.3	5.1%	6.0%
Insurance premium tax	$26.3	$28.8	4.8%	9.4%
Severance taxes	$11.8	$22.8	3.8%	93.2%
Property tax on business property	$13.0	$14.2	2.4%	9.5%
Public utility tax	$12.2	$12.6	2.1%	3.1%
Other business taxes	$15.6	$20.0	3.3%	27.8%
Total state business taxes	**$507.7**	**$598.2**	**100.0%**	**17.8%**

Table 2b. Local business taxes, FY21–FY22 ($ billions)

Business tax	Local business taxes FY21*	Local business taxes FY22	% total local business taxes	One-year growth, local business taxes
Property taxes on business property	$333.3	$358.8	75.3%	7.7%
General sales taxes on business inputs	$44.1	$51.6	10.8%	17.0%
Public utility taxes	$15.2	$16.3	3.4%	7.2%
Excise taxes on business inputs	$7.3	$8.1	1.7%	10.7%
Other business taxes**	$37.7	$41.4	8.7%	9.8%
Total local business taxes	**$437.6**	**$476.3**	**100.0%**	**8.8%**

*FY21 business tax estimates are revised from the COST FY21 study because of newly released data from the U.S. Census Bureau.
**Includes local corporate income taxes.
Note: Amounts may not appear to sum because of rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau State and Local Government Finances.

State-by-state business tax collections

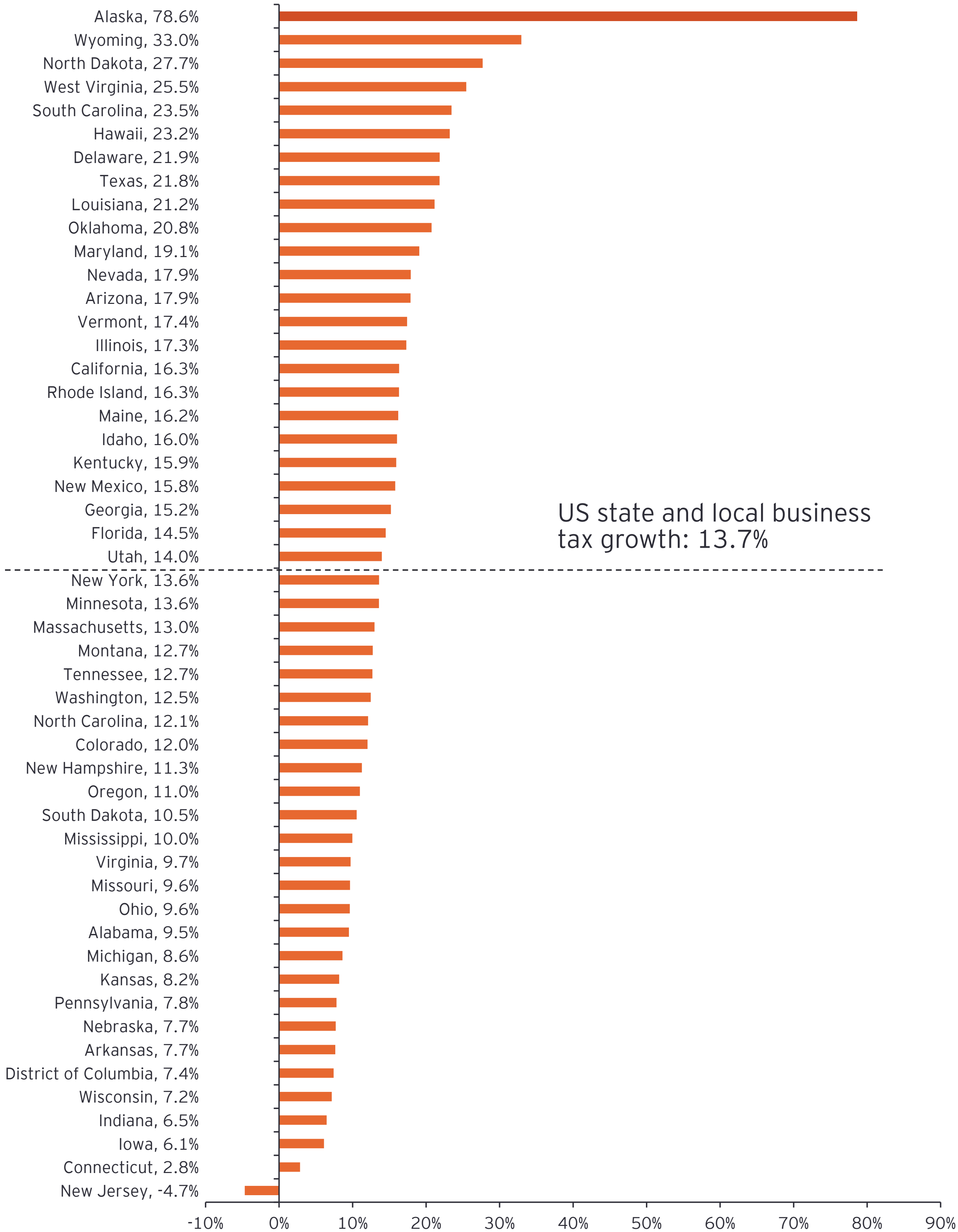
State and local business tax collections were 13.7% higher in FY22. Figure 3 shows the year-over-year growth rates in total state and local business tax collections by state in FY22. States with significant tax changes in FY22 are described below.

- Alaska had the largest year-over-year growth rate, at 78.6%, in state and local business tax collections in FY22 (Figure 3). This sharp increase in tax collections is largely driven by the increase in severance tax collections, without which Alaska would have had a 29% increase in business state and local tax collections. Alaska experienced negative growth in business state and local collections the prior year between FY20 and FY21. Severance tax revenue is extremely volatile as it is largely determined by the price of natural resources. Alaska collects the largest share of its tax from severance taxes compared with other states.
- There are 33 states with revenue from severance taxes in FY22. Crude oil, which makes up a large portion of severance tax receipts, saw a sharp increase in prices in 2022. This has led severance taxes to see the largest increase in revenue in 2022 compared with other types of tax revenues. In 2022, we see the second consecutive year of rising oil prices as the market rebounds from the substantial price decrease in 2020.
- Corporate income tax collections grew 26.7% in FY22, reaching $141.4 billion. This is the second year that corporate income tax collections had significant growth, although growth slowed compared with FY21, which saw more than a 50% increase in collections from FY20 due to timing of payments stemming extended due dates during COVID-19.
- Many states saw an increase in corporate tax collections due to economic conditions. Idaho had the largest percent increase in corporate income taxes collections in FY22, with an increase of 196%, surpassing the state's own revenue estimate for FY22 by over $0.6 billion.
- Illinois also had one of the largest increases in corporate income tax collections, going up by 68%. Illinois made a number of changes affecting corporate income tax collections, including imposing a cap on the corporate net operating loss deductions at $100,000 per year. Additionally, Illinois reversed the federal TCJA 100% accelerated depreciation deduction and brought the tax treatment of foreign source dividends in alignment with domestic dividends.
- Florida temporarily lowered its corporate income tax rate to 3.535% in tax year 2021, but it has reverted to 5.5% in tax year 2022. Florida corporate income tax collections were $3.8 billion in FY22, which is a $0.4 billion increase from FY21.
- Several states lowered their corporate income tax rates in FY22. Arkansas decreased its rate from 6.2% to 5.9% effective January 1, 2022; Nebraska reduced its top marginal rate from 7.81% to 7.5%; and Oklahoma lowered its rate from 6% to 4%.
- States continue to implement optional PTE taxes with the following states having optional PTE tax laws effective for tax year 2021 and FY22 — Alabama, California, Connecticut, Idaho, Illinois, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New York, Oklahoma, Rhode Island, South Carolina, Virginia and Wisconsin. Previously, the income of a PTE would be distributed to its owners, who then report the income on their individual income tax return and pay taxes at both the federal and state level. Under an optional PTE tax, the pass-through business pays the PTE tax and receives a credit on the individual income tax. The PTE tax is paid at the state level and is then deductible at the federal level. The PTE is then able to provide a credit for state income taxes paid to the owners of the business, who then use it to offset their pass-through business income on their state tax returns.

- Five states have no statewide sales tax, Alaska, Delaware, Montana, New Hampshire and Oregon. State sales tax collections range from $0.3 billion in Vermont to $28.9 billion in Texas. On average, sales tax collections increased by 16.0% between FY21 and FY22. Nevada is the only state with a decrease in state sales tax collections in FY22, going from $3.2 billion to $2.8 billion. The highest percent increase in tax collections from general sales tax between FY21 and FY22 was in the District of Columbia (41.1%), which saw a strong rebound in hotel and restaurant spending.[11] Wyoming (33.1%), Hawaii (29.4%) and Florida (26.7%) were next highest.
- The largest percent increase in excise taxes collections was in Hawaii, which increased from $0.7 billion to $0.9 billion, or about 41.5%, largely due to increase in transient occupancy taxes. Four states saw a decrease in excise taxes between FY21 and FY22: Oklahoma (-7.3%), North Dakota (-2.8%), Mississippi (-1.0%) and Iowa (-0.6%).
- The change in unemployment insurance collections between FY21 and FY22 exhibited large variation between states. Thirty-four states showed growth in unemployment insurance tax collections.

Table 3 presents state and local business tax collections by tax type and state. The results show that states vary widely in the composition of their business tax structures, which has implications for revenue growth and stability in each state. Appendix Table A3 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, FY21–FY22
(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, FY22 ($ billions)

	Property tax	Sales tax	Excise tax, including public utilities and insurance	Corporate income tax	Unemployment insurance tax	Individual income tax on business income	License and other taxes*	Total business taxes
Alabama	$2.8	$2.7	$2.1	$1.5	$0.4	$0.8	$1.0	$11.3
Alaska	1.2	–	0.2	0.4	0.2	–	1.6	3.5
Arizona	6.2	5.4	1.5	1.2	0.5	0.6	0.8	16.3
Arkansas	1.5	2.3	0.9	0.8	0.1	0.4	0.5	6.5
California	50.1	28.9	14.5	33.6	5.9	17.9	16.2	167.2
Colorado	8.3	4.4	1.7	1.5	0.7	1.3	0.9	18.9
Connecticut	3.5	2.0	1.3	1.2	0.7	2.3	0.3	11.4
Delaware	0.6	–	0.3	0.5	0.2	0.2	2.5	4.4
Florida	22.8	18.2	8.3	3.8	1.4	–	4.6	59.1
Georgia	9.4	6.3	2.6	2.5	0.6	1.8	1.0	24.3
Hawaii	1.4	1.7	0.9	0.3	0.2	0.4	0.3	5.2
Idaho	1.1	0.9	0.4	1.0	0.1	0.5	0.3	4.3
Illinois	19.9	6.6	6.8	9.6	1.6	2.2	2.1	48.9
Indiana	5.9	3.3	1.9	1.5	0.5	1.7	0.4	15.1
Iowa	3.8	2.2	0.7	0.9	0.4	0.7	0.6	9.3
Kansas	3.3	2.2	0.8	0.9	0.3	0.8	0.4	8.8
Kentucky	3.3	2.2	1.7	1.4	1.1	0.7	0.5	11.0
Louisiana	4.0	4.4	1.6	1.0	0.2	0.6	1.2	13.1
Maine	3.3	0.8	0.3	0.4	0.1	0.3	0.2	5.5
Maryland	4.1	2.8	2.8	2.1	1.8	1.5	1.4	16.5
Massachusetts	8.4	4.2	1.5	4.6	2.0	2.3	1.1	24.1
Michigan	7.5	4.4	1.8	1.8	1.2	2.2	1.4	20.2
Minnesota	5.5	3.6	2.4	2.9	1.4	1.6	1.0	18.3
Mississippi	3.3	1.7	0.8	0.7	0.2	0.3	0.5	7.5
Missouri	5.0	3.3	1.3	0.9	0.5	1.0	0.8	12.8
Montana	1.3	–	0.4	0.3	0.1	0.3	0.5	3.0
Nebraska	2.8	1.4	0.4	0.7	0.1	0.5	0.4	6.3
Nevada	3.2	2.8	1.5	0.3	0.6	–	1.8	10.3
New Hampshire	1.8	–	0.4	1.2	0.1	0.0	0.5	4.1
New Jersey	8.8	6.2	3.1	8.7	2.4	2.9	2.1	34.1
New Mexico	1.2	2.9	0.5	0.3	0.1	0.1	2.5	7.8
New York	42.5	15.8	8.8	15.6	3.1	20.6	4.5	110.9
North Carolina	6.4	6.4	2.6	1.6	0.6	1.6	2.2	21.4
North Dakota	1.0	0.7	0.3	0.2	0.1	0.1	3.0	5.3
Ohio	9.9	6.5	4.1	2.7	1.1	4.0	2.0	30.3
Oklahoma	2.5	3.1	0.8	0.8	0.4	0.8	2.3	10.7
Oregon	3.9	–	1.1	2.9	1.1	1.2	2.6	12.8
Pennsylvania	13.1	6.6	4.5	5.7	2.3	2.5	3.4	38.1
Rhode Island	1.4	0.5	0.5	0.3	0.2	0.2	0.1	3.3
South Carolina	6.1	2.3	1.2	1.2	0.3	0.6	1.2	12.9
South Dakota	1.0	1.2	0.3	0.1	0.1	–	0.3	2.8
Tennessee	4.2	6.2	2.3	3.0	0.3	0.0	2.6	18.5
Texas	43.4	28.5	10.9	5.7	2.8	–	14.1	105.3
Utah	2.7	2.2	1.0	0.9	0.2	0.6	0.4	8.0
Vermont	1.7	0.3	0.4	0.2	0.1	0.2	0.1	3.0
Virginia	10.9	3.6	3.9	2.0	0.4	1.3	2.2	24.4
Washington	6.8	7.9	4.3	5.8	1.9	–	2.5	29.3
West Virginia	1.6	0.8	0.8	0.4	0.4	0.2	1.1	5.2
Wisconsin	5.3	3.1	1.3	2.9	0.5	0.8	0.9	14.8
Wyoming	1.0	0.6	0.1	–	0.2	–	0.9	2.9
District of Columbia	2.4	0.7	0.4	1.0	0.1	0.5	0.4	5.5
United States	**$373.1**	**$225.0**	**$115.2**	**$141.4**	**$41.9**	**$81.4**	**$96.6**	**$1,074.5**

*"Corporate income tax" includes gross receipts taxes levied in Nevada, Ohio, Oregon, Texas and Washington and the business enterprise tax in New Hampshire. "Individual income tax on business income" includes PTE tax from S corporations, partnerships and sole proprietorships. The "License and other taxes" category includes 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 reflected in the state's "Corporate income" amount. The small amount of corporate profits taxes at the local level in Michigan is reflected in the state's "License and other taxes" amount.

Note: "–" indicates zero collections; "0.0" indicates collections of less than $50 million.

Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau State and Local Government Finances.

Pass-through entity tax

Pass-through entities, including sole proprietorships, partnerships and S-corporations are not subject to the corporate income tax. Instead, the entities' owners pay taxes based on their share of profits under the individual income tax.

Prior to 2018, individual taxpayers were generally able to deduct 100% of property tax, sales and use tax, and income tax paid to state and local governments as an itemized deduction on their federal income taxes. The TCJA of 2017 limited this deduction to $10,000 for tax years 2018 through 2025. The cap does not apply to tax that is "paid or accrued in carrying on a trade or business." This means that taxes paid at the entity level (i.e., by the business rather than personally by the business owner) are not subject to the cap. Some states have enacted special PTE taxes in which business owners pay state income tax at the entity level. This allows the business owners to show the portion of their income derived from trade or business, which excludes that deduction from the $10,000 limit. Business owners paying the PTE tax then receive a credit against their state income tax for their share of the PTE tax paid by the business.

In 2018, Connecticut was the first state to pass a PTE tax with 35 other states following suit in recent years. Seventeen of the 36 total states had the new system in effect for tax year 2021, generating FY22 PTE tax collections. Additionally, 17 of the remaining 19 states' PTE taxes are effective in tax year 2022 and beyond, and the final two states passed laws in 2023 that are retroactive to 2018, so the effect of these laws will be visible in future reports. Table 4 below shows the states that have passed these PTE taxes, broken down by the states with laws already in effect for FY22, the states that will become effective for future fiscal years, and the states that have not enacted PTE tax.

As PTE taxes are relatively new and continue to evolve, a standard method of reporting has not been established across all states in state revenue reports, nor has there been a clear standard set for reporting this tax in the Census Bureau state finance surveys. By comparing state reports with the Census reported numbers, it was possible to identify the reporting standards for some states, but the majority of states with active PTE taxes did not break out the tax in their revenue reports, and it is unclear where it is being included in their Census revenue data.

Michigan and Rhode Island included PTE tax in the individual income tax collections amounts reported to Census, while California and Connecticut included the PTE tax revenue in corporate income tax reported to Census, and Alabama and New York did not include PTE tax revenue in either individual income tax or business income tax Census numbers. The inclusion of PTE tax in business income by some states may explain a portion of the increase in corporate income tax from FY21 to FY22 of this report.[12]

States with available data have been adjusted to remove any PTE tax from corporate income and are reflected in the business portion of individual income tax. This tax and its associated reporting inconsistencies will continue to be monitored as PTE tax becomes effective in more states, and the analysis will continue to adjust at a state-by-state basis until a standard of reporting is established.

Table 4. States that have passed a pass-through entity tax

States with PTE tax active for FY22		States with PTE tax active for future years		States that have not enacted PTE tax	
Alabama	New Jersey	Arizona	Missouri	Alaska	Texas
California	New York	Arkansas	Montana	Delaware	Vermont
Connecticut	Oklahoma	Colorado	Nebraska	Florida	Washington
Idaho	Rhode Island	Georgia	New Mexico	Maine	Wyoming
Illinois	South Carolina	Hawaii	North Carolina	Nevada	
Louisiana	Virginia	Indiana	Ohio	New Hampshire	
Maryland	Wisconsin	Iowa	Oregon	North Dakota	
Massachusetts		Kansas	Utah	Pennsylvania	
Michigan		Kentucky	West Virginia	South Dakota	
Minnesota		Mississippi		Tennessee	

Note: In 2023 Colorado and Nebraska passed PTE taxes that are retroactive to 2018, but we will not see the effect of those laws until FY23.

Comparing state business tax levels

The state and local taxes paid by businesses are imposed on a number of different tax bases such as property value, net income, gross receipts, value of goods or services purchased (ad valorem sales taxes), or the quantity of goods or services purchased (excise taxes). Therefore, it is possible to measure a state's business tax burden in many different ways. This analysis measures the aggregate business tax burden of a state by comparing the level of business taxes with the level of economic activity subject to taxation, or private-sector gross state product (GSP). GSP is the total value of a state's annual production of goods and services, with private-sector GSP representing the value created by the private sector. The resulting ratio of business taxes to private-sector GSP is a state's total effective business tax rate (TEBTR).

Table 4 reports state tax collections, local tax collections and state and local tax collections paid by businesses, as well as businesses and households combined. In addition, Table 4 also reports the TEBTR for each state. Figure 4 is a map of the United States with each state shaded according to its TEBTR range. The average TEBTR across all states was 5.0% in FY22.

Seven states in FY22 had TEBTRs that were less than 4.0%. North Carolina had the lowest at 3.5%, followed by Georgia, Michigan, Utah, Indiana and Missouri, each with a TEBTR of 3.8%. The taxes imposed on businesses, as a share of economic activity, were lowest in these seven states.

Vermont had the highest TEBTR at 8.9%, followed by North Dakota (8.7%), New Mexico (8.7%), and Maine and Wyoming (7.6%). Five states had a TEBTR in the 6.3%–7.3% range: Alaska, Hawaii, West Virginia, Mississippi and New York.

There does not appear to be a strong relationship between geographic region and TEBTR. For instance, North Carolina had the lowest TEBTR at 3.5%, but South Carolina had a TEBTR of 5.3%. Similarly, New Mexico had one of the highest TEBTR at 8.7%, but Arizona had one of the lowest at 4.2%. Massachusetts had the fifth-lowest TEBTR at 4.0%, but its northeast neighbors of Pennsylvania (4.7%) and New York (6.3%) had higher effective tax rates.

TEBTRs provide a starting point for comparing business tax burdens across states,[13] but there are additional factors that determine a state's tax competitiveness, which are not captured by the metric. TEBTR does not capture economic incidence, which is the ability of businesses to shift the burden of taxes onto consumers. TEBTRs are also not able to measure the administrative burden companies face when filing their tax returns. States have different definitions of net income that may or may not conform to the federal definition. As a result, different states require companies to make different adjustments, such as addbacks or subtractions, when calculating their net income.

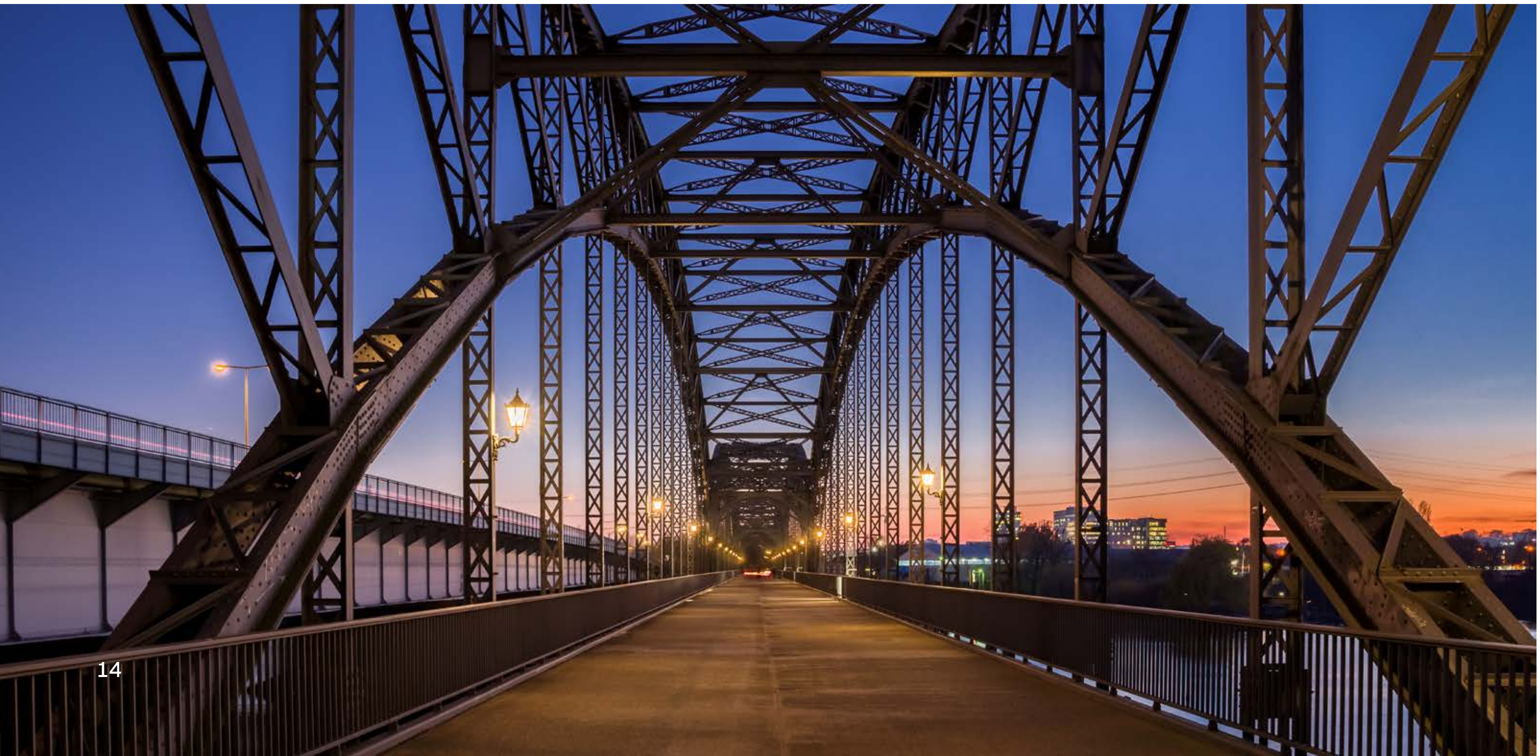


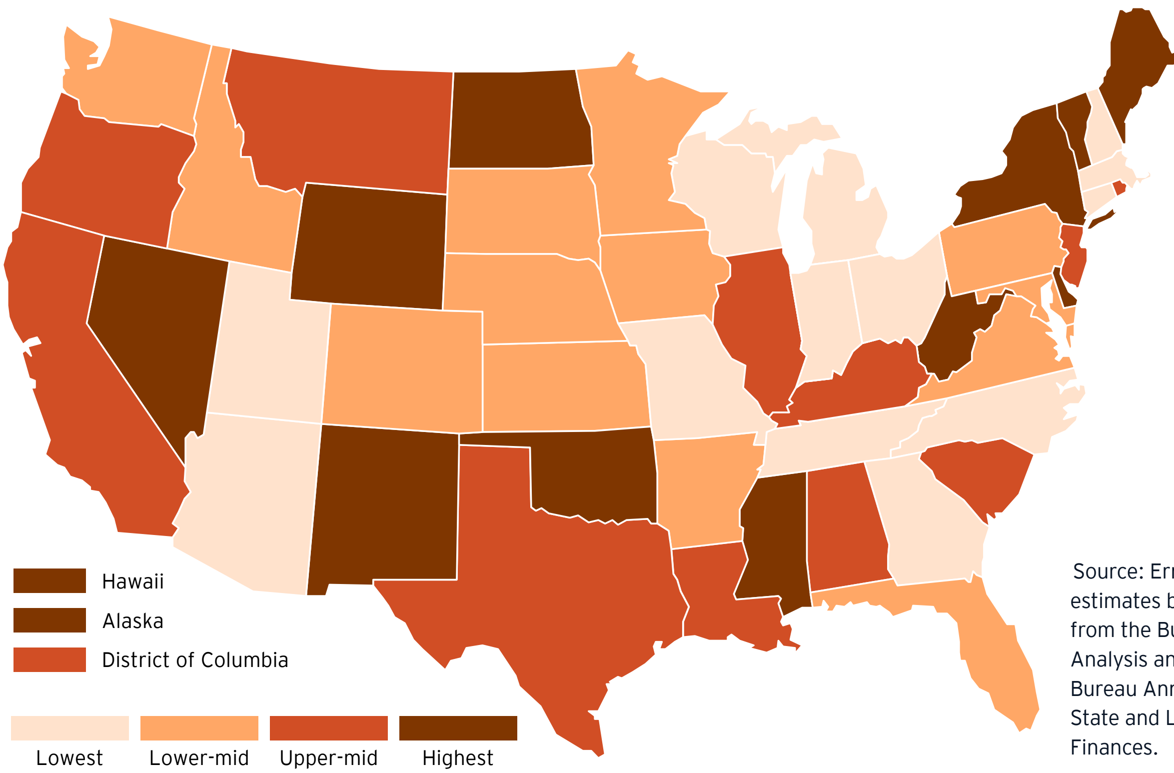
Table 5. State and local business taxes and business taxes as a share of private-sector gross state product (GSP), FY22 ($ billions)

State	State taxes		Local taxes		State and local taxes			
	Business	Total	Business	Total	Business	Total	TEBTR*	Business taxes per employee ($ thousands)**
Alabama	$6.8	$16.7	$4.5	$7.9	$11.3	$24.6	5.0%	$6.7
Alaska	2.3	2.6	1.2	2.3	3.5	4.9	7.3%	14.8
Arizona	8.8	24.9	7.5	14.6	16.3	39.5	4.2%	6.2
Arkansas	4.9	12.9	1.6	3.3	6.5	16.2	4.7%	6.2
California	98.5	274.3	68.7	125.4	167.2	399.7	5.4%	11.2
Colorado	7.3	22.4	11.6	20.8	18.9	43.2	4.6%	8.0
Connecticut	7.8	20.8	3.6	13.0	11.4	33.9	4.0%	7.9
Delaware	3.7	6.5	0.7	1.5	4.4	8.0	5.8%	11.5
Florida	28.5	60.6	30.5	52.2	59.1	112.8	4.9%	7.3
Georgia	10.8	34.6	13.5	24.2	24.3	58.7	3.8%	6.1
Hawaii	3.4	10.5	1.8	3.5	5.2	14.0	7.0%	11.0
Idaho	3.1	7.8	1.2	2.5	4.3	10.4	4.8%	6.4
Illinois	25.5	64.2	23.5	41.2	48.9	105.4	5.5%	9.6
Indiana	8.9	29.7	6.3	10.9	15.1	40.6	3.8%	5.5
Iowa	5.0	13.3	4.3	7.7	9.3	21.0	4.7%	7.1
Kansas	5.2	12.9	3.6	6.4	8.8	19.3	5.0%	7.6
Kentucky	7.0	17.6	4.0	7.0	11.0	24.6	5.1%	6.7
Louisiana	6.3	14.7	6.8	11.5	13.1	26.2	5.5%	8.2
Maine	2.2	6.6	3.3	4.2	5.5	10.8	7.6%	10.3
Maryland	11.1	31.1	5.4	20.8	16.5	51.9	4.6%	7.6
Massachusetts	15.3	45.5	8.8	21.9	24.1	67.4	4.0%	7.6
Michigan	13.4	38.2	6.9	16.9	20.2	55.2	3.8%	5.5
Minnesota	12.7	34.5	5.6	11.7	18.3	46.2	4.7%	7.4
Mississippi	4.1	10.3	3.4	4.1	7.5	14.5	6.7%	8.0
Missouri	5.1	17.4	7.6	14.8	12.8	32.1	3.8%	5.2
Montana	1.8	4.8	1.2	2.0	3.0	6.7	5.6%	7.3
Nebraska	2.9	7.5	3.5	6.1	6.3	13.6	4.7%	7.5
Nevada	6.6	12.7	3.7	6.2	10.3	18.9	5.6%	8.4
New Hampshire	2.4	3.6	1.7	4.7	4.1	8.3	4.4%	7.0
New Jersey	25.0	55.1	9.1	36.3	34.1	91.5	5.3%	9.7
New Mexico	5.5	8.7	2.2	3.9	7.8	12.6	8.7%	12.1
New York	45.6	121.0	65.3	121.8	110.9	242.9	6.3%	14.4
North Carolina	12.6	39.0	8.8	18.8	21.4	57.8	3.5%	5.4
North Dakota	4.1	5.4	1.2	1.8	5.3	7.2	8.7%	15.7
Ohio	16.9	38.5	13.4	30.6	30.3	69.1	4.3%	6.5
Oklahoma	6.6	13.6	4.1	7.4	10.7	21.0	5.6%	8.2
Oregon	7.3	20.0	5.5	10.8	12.8	30.8	5.1%	7.9
Pennsylvania	21.7	56.0	16.3	34.8	38.1	90.8	4.7%	7.3
Rhode Island	1.8	5.0	1.5	3.0	3.3	8.0	5.5%	7.8
South Carolina	5.3	16.3	7.6	10.7	12.9	27.0	5.3%	7.1
South Dakota	1.5	2.5	1.3	2.3	2.8	4.8	4.8%	7.6
Tennessee	12.7	22.9	5.8	10.9	18.5	33.8	4.5%	6.8
Texas	53.4	85.0	51.9	90.4	105.3	175.4	5.3%	9.5
Utah	4.2	14.0	3.9	7.0	8.0	21.0	3.8%	5.7
Vermont	2.3	4.5	0.7	0.8	3.0	5.3	8.9%	11.9
Virginia	10.5	37.2	13.9	22.9	24.4	60.1	4.7%	7.5
Washington	19.9	38.0	9.4	20.9	29.3	58.8	4.7%	10.1
West Virginia	3.2	7.4	2.0	2.6	5.2	10.1	6.8%	9.6
Wisconsin	9.2	23.8	5.7	12.2	14.8	36.0	4.3%	5.9
Wyoming	1.9	2.6	1.0	1.3	2.9	3.9	7.6%	13.8
District of Columbia	5.5	10.4	0.0	0.0	5.5	10.4	5.1%	10.9
United States	**$598.2**	**$1,486.7**	**$476.3**	**$920.4**	**$1,074.5**	**$2,407.1**	**5.0%**	**$8.5**

* Average of calendar year 2021 and calendar year 2022 private-industry GSP. This is the TEBTR on economic activity occurring within the state.
** "Business taxes per employee" calculated using 2021 private-sector employment from Bureau of Labor Statistics Quarterly Census of Employment and Wages and FY22 total state and local business tax collections.
Note: Amounts may not sum because of rounding. TEBTR equals taxes as a percentage of private-sector gross state product.
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, FY22

(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 Annual Survey of State and Local Government Finances.

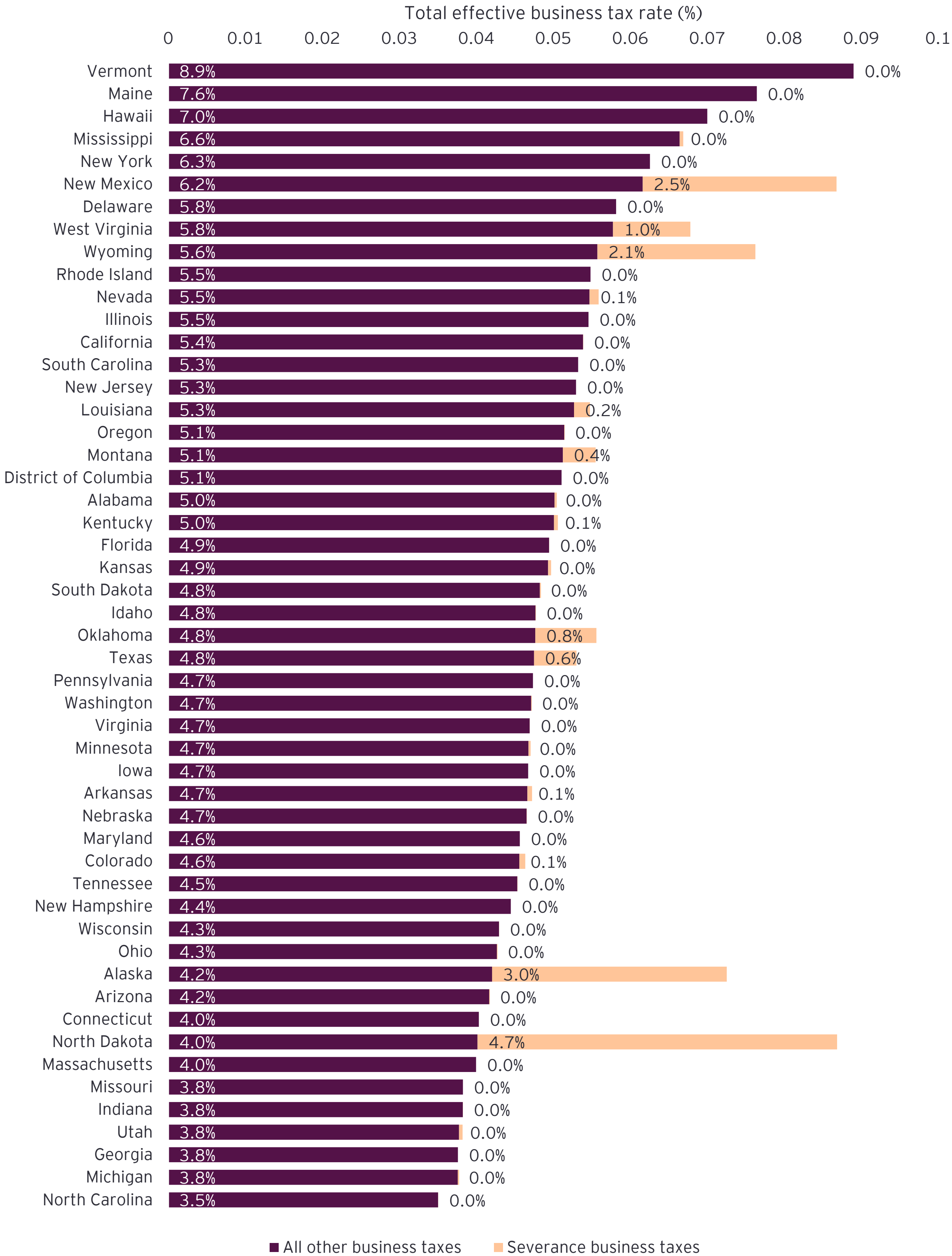
It is also important to note that the TEBTR measures the average tax burden on existing companies. Therefore, two states with similar TEBTRs may differ significantly in how they tax certain industries, which is not considered in this analysis. In addition, because the TEBTR is an average tax rate, it does not measure the marginal tax liability that a company bears when investing in a new or expanded facility. For this reason, the TEBTR is not a comprehensive measure of how competitive a state's business tax structure is in terms of attracting new investment.

There are many features to a state's corporate income tax structure that affect a business's tax liability beyond the statutory tax rate. Many states have adopted a single-sales factor apportionment formula, as well as market-based sourcing for services. Because these two rules allow a business to source income to their customer's location, businesses benefit when out-of-state customers reside in lower tax jurisdictions.

Although the TEBTR is a reasonable measure of the level of business taxation in a state as a share of private-sector economic activity, it was not designed to evaluate how the structure of a state's corporate income tax affects the effective tax burden of a company.

In certain states, severance taxes contribute significantly to TEBTR. Estimating TEBTR with severance taxes excluded provides a different view that excludes taxes on the natural resource endowments of states and the significant year-to-year variations related to commodity price changes. For instance, North Dakota, which currently has the second-highest TEBTR at 8.7%, has a TEBTR of 4.0% when severance tax is excluded (Figure 5). New Mexico, Alaska and Wyoming also have significantly lower TEBTR without severance taxes, decreasing by 2.5, 3.0 and 2.1 percentage points, respectively.

Figure 5. Total effective business tax rate (TEBTR) decomposition by severance taxes and other business taxes, FY22



Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau State and Local Government Finances.

Table 5 summarizes the share of state and local taxes paid by businesses in each state with severance taxes, reporting the share of state tax collections, the share of local tax collections, and the share of state and local tax collections. Although businesses paid 44.6% of state and local taxes in FY22, they only paid 40.2% of state tax collections, while paying 51.7% of local tax collections. The disparity can be explained by the type of taxes levied at each level. According to Table 2a, the sales tax was the largest source of business tax collections at the state level, at 29.0%, while Figure 2 reported that businesses only paid 41.7% of state and local sales taxes, or less than half. Table 2b reported that property taxes, at 75.3%, were the largest source of business tax collections at the local level, and Figure 2 showed that businesses paid a majority of state and local property tax collections at 54.0%.

Appendix Table A1 reports historical state and local business tax collections for five year intervals between 2002 and 2022. The business share of state and local tax collections has ranged between 43% and 46% between 2002 and 2022, averaging 44.6%. Although business income is taxed under the individual income tax, it is a small portion relative to overall individual income tax collections and was estimated to only be 13.6% in FY22. As a result, the majority of the individual income tax burden falls on households. Individual income taxes on nonbusiness income (i.e., households) accounted for 21.5% of total state and local tax collections in FY22, slightly above the five-year average of 21.1%.

The business share of state and local tax collections varies significantly by state. North Dakota had the highest business share value at 73.6%, while Maryland had the lowest at 31.8%. Businesses paid at least 60% of state and local tax collections in three other states besides North Dakota — Wyoming (72.6%), Alaska (72.0%) and New Mexico (61.4%). Texas was not far behind at 59.7%. In all, there are 15 states and the District of Columbia where businesses paid at least half of state and local tax collections.

Connecticut, at 33.5%, and Massachusetts, at 35.7%, joined Maryland as the three states where businesses paid the lowest share of total state and local tax collections. Eight other states had business shares in the 30% to 40% range, topping out at Minnesota at 39.7%. The remaining 24 states had business shares in the 40% range, from Arkansas's 40.3% business share to Louisiana's 49.97% business share.

The structure of the tax system within each state helps explain whether businesses pay the majority of state and local taxes or not. North Dakota, Alaska, New Mexico and Wyoming rely heavily on severance taxes at the state level, which are the responsibility of businesses. Alaska, North Dakota, Texas and Wyoming also rely more heavily on property taxes at the local level than the national average, and businesses typically pay the majority of property taxes. Lastly, Alaska, South Dakota, Texas and Wyoming do not have an individual income tax, which is predominantly borne by households, which means these states have to rely more heavily on business taxes.

On the other hand, Maryland, Connecticut, Michigan, Massachusetts and North Carolina, which have the lowest share of business taxes, rely on the individual income tax and the sales tax for between two-fifths and three-fifths of their total state and local tax collections. Households pay most individual income tax collections and the majority of sales taxes.

Table 6. Business share of total state and local taxes, FY22

	Business share of state taxes	Business share of local taxes	Business share of total state and local taxes
Alabama	41.0%	56.7%	46.1%
Alaska	89.8%	52.0%	72.0%
Arizona	35.5%	51.2%	41.3%
Arkansas	38.2%	48.6%	40.3%
California	35.9%	54.8%	41.8%
Colorado	32.4%	55.8%	43.7%
Connecticut	37.3%	27.5%	33.5%
Delaware	56.9%	49.2%	55.5%
Florida	47.0%	58.5%	52.3%
Georgia	31.3%	55.8%	41.4%
Hawaii	32.6%	51.5%	37.3%
Idaho	40.1%	47.5%	41.9%
Illinois	39.6%	56.9%	46.4%
Indiana	29.8%	57.4%	37.2%
Iowa	37.8%	55.9%	44.4%
Kansas	40.2%	56.2%	45.5%
Kentucky	39.6%	57.1%	44.6%
Louisiana	42.7%	59.2%	50.0%
Maine	33.0%	77.5%	50.4%
Maryland	35.6%	26.1%	31.8%
Massachusetts	33.7%	40.1%	35.7%
Michigan	35.0%	40.5%	36.7%
Minnesota	36.8%	48.2%	39.7%
Mississippi	39.4%	82.2%	51.6%
Missouri	29.6%	51.5%	39.7%
Montana	37.8%	59.2%	44.1%
Nebraska	38.1%	57.2%	46.6%
Nevada	51.9%	60.2%	54.6%
New Hampshire	66.0%	37.0%	49.7%
New Jersey	45.3%	25.0%	37.2%
New Mexico	63.5%	56.9%	61.4%
New York	37.7%	53.6%	45.7%
North Carolina	32.2%	47.0%	37.0%
North Dakota	76.3%	65.4%	73.6%
Ohio	44.0%	43.8%	43.9%
Oklahoma	48.6%	55.6%	51.1%
Oregon	36.6%	51.1%	41.7%
Pennsylvania	38.8%	47.0%	41.9%
Rhode Island	36.0%	48.9%	40.8%
South Carolina	32.7%	70.8%	47.8%
South Dakota	58.4%	58.4%	58.4%
Tennessee	55.6%	52.8%	54.7%
Texas	62.8%	57.4%	60.0%
Utah	29.9%	55.0%	38.3%
Vermont	51.5%	81.8%	56.3%
Virginia	28.2%	60.7%	40.6%
Washington	52.3%	45.0%	49.7%
West Virginia	43.2%	75.4%	51.6%
Wisconsin	38.5%	46.5%	41.2%
Wyoming	72.9%	72.1%	72.6%
District of Columbia	53.0%	n/a	53.0%
United States	**40.2%**	**51.7%**	**44.6%**

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.

The percentage of taxes paid by businesses in each category varies across states. Table 7 shows the minimum, maximum and average (mean) share those businesses paid in each state in FY22 across categories. Findings include:

- All (100%) of corporate income and unemployment insurance taxes are paid by businesses in each state.
- For licenses taxes, which include alcoholic beverage license, amusement license taxes, corporate license taxes and other licenses, the average business share of taxes contributed across the states is 62%. Indiana has the lowest average license tax percentage paid by businesses at 34%, while Delaware leads with the highest at 97%, primarily due to high corporate license fees.
- The average business share of property taxes across the states is 54%, with the lowest business share in New Jersey (25%), and the highest in Mississippi (84%). Business share of property tax varies across each state due to different approaches to taxing property by class, such as different rates, valuation methods, and assessment ratios for commercial and residential property; homestead exemptions; and difference in the taxation of business personal property. Mississippi specifically has historically had a high business share of property tax due to significant homestead exemptions that reduce the residential tax base by 50%.
- Excise taxes range from 36% contributed by businesses (Michigan) to 79% (District of Columbia) with an average of 51%, while sales tax business shares range from 32% (Indiana) to 60% (New Mexico) with an average of 42%.
- Other taxes include death and gift, documentary and stock transfer, and severance taxes. In states like Alaska, New Mexico, North Dakota and Texas, the share of taxes paid by businesses in the Other Tax category is nearly 100%, primarily due to high severance tax collections. States like Iowa have a low share of business taxes for the Other Tax category (7%).
- Individual income taxes on pass-through business income are highest in Connecticut. Virginia has the lowest with 7% of individual income taxes paid by businesses. The results are summarized in Table 7.

Table 7. Estimated range of business shares of tax collections, by tax

Value of business share in the state with the lowest and highest share of each tax category paid by business, and the overall US share

	Minimum state	Average (mean)	Maximum state
Corporate income tax	100%	100%	100%
Unemployment tax	100%	100%	100%
Licenses tax	34%	62%	97%
Property tax	25%	54%	84%
Excise tax	36%	51%	79%
Sales tax	32%	42%	60%
Other taxes	7%	53%	100%
Individual income tax	7%	14%	24%
Total business share	**32%**	**45%**	**74%**

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.

Total state and local business tax collections over time

The growth trajectory of total state and local business tax collections has outpaced the general economic expansion as measured by GDP (Figure 6). State business tax collections experienced a slower growth rate than local business tax collections, and at times, its rate of expansion falls behind the pace of the broader economic growth, namely between FY01 and FY03, FY08 and FY10, and FY15 and FY17. Both local and state tax collections grew considerably faster than GDP in FY21 and FY22. State business tax collections vary more year to year than local business taxes, as they have a greater reliance on corporate and individual income taxes and severance taxes, which vary with firm profitability and commodity prices over the business cycle. Together, these taxes make up 38.0% of state business taxes, and only 3.5% of local business taxes in FY22. Property taxes, which are more stable year to year, are a substantially larger share of local business (75.3%) at the local level than the state level (2.4%) in FY22.

Of the major business tax collections, only general sales tax on business inputs has grown more slowly than GDP since 2001. Individual income tax and property tax on business have outpaced economic growth since 2001, while corporate income tax broadly followed economic growth until 2020. Both individual and corporate income tax collections grew significantly in both 2021 and 2022.[14] The sizable growth in individual income tax is due in part to unusually large capital gains realizations.[15] State corporate income tax collections experienced high growth over the past five years due to a combination of federal corporate tax base expansion resulting from the Tax Cut and Jobs Act (TCJA) which impacted many states due to their conformity to federal definitions of taxable income and favorable business conditions which resulted in higher-than-typical corporate profits. This trend was also observed for the federal corporate income tax.

Figure 6. State, local business taxes vs. GDP, FY01–FY22 (indexed to 2001)

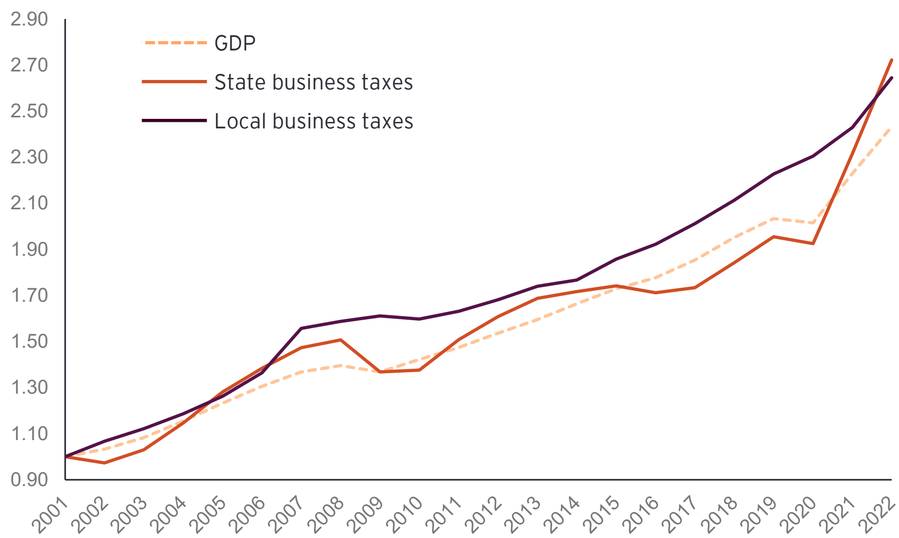
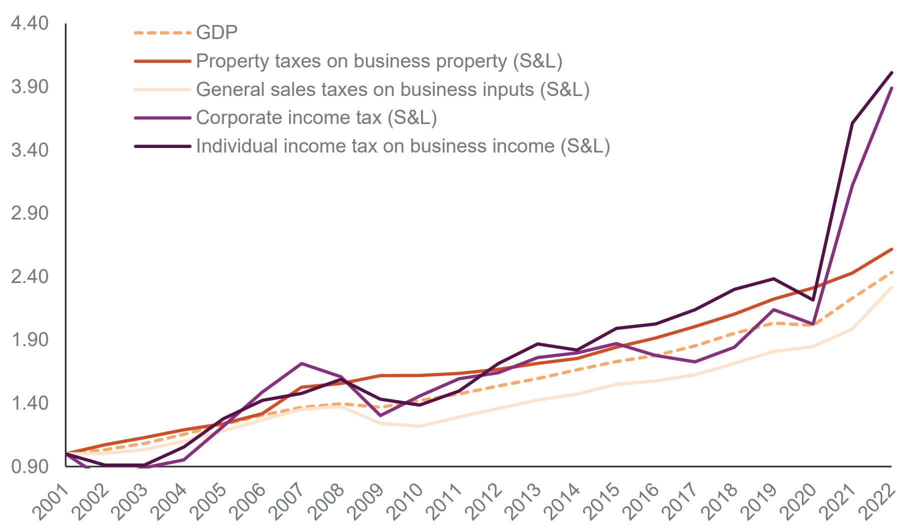


Figure 7. Major state and local business taxes vs. GDP, FY01–FY22 (indexed to 2001)



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.
GDP data is from U.S. Bureau of Economic Analysis, Gross Domestic Product [GDP], retrieved from FRED, Federal Reserve Bank of St. Louis.

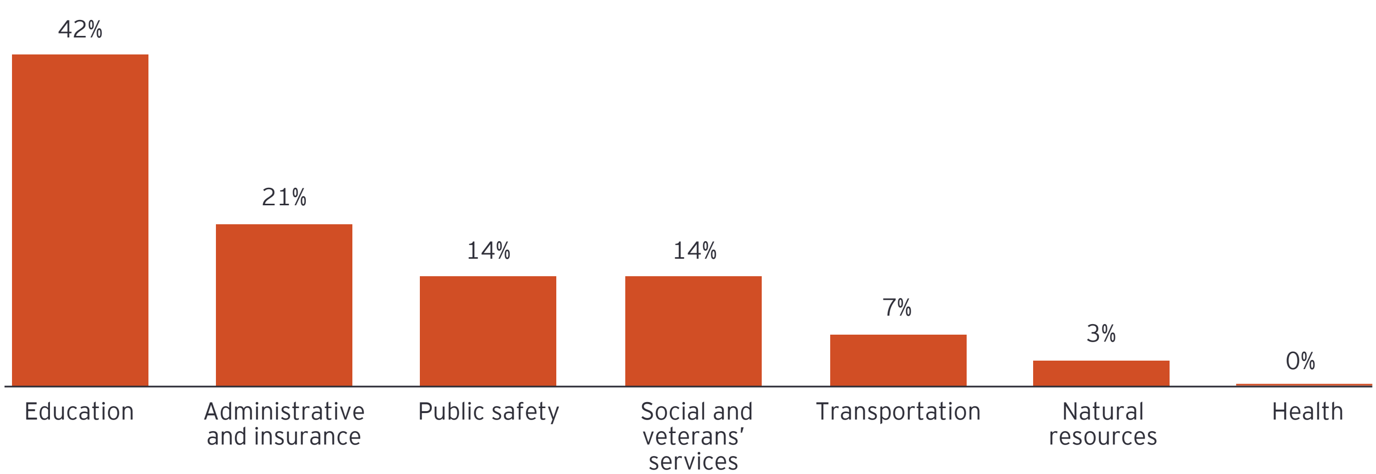
Governmental benefits received by businesses vs. taxes paid

Another method to evaluate the business tax burden is to measure the benefit that businesses receive from government spending. Two identical businesses that pay the same amount of taxes do not face the same tax burden if one receives larger benefits from government spending than the other. Therefore, a "business tax-to-benefit" ratio is estimated as an alternative way of measuring the business tax burden.

Figure 8 shows the share of state and local government spending by major expenditure category in FY22. Education was the largest expenditure category for state and local governments at 42% of total spending. Administrative and insurance was the second-largest expenditure category, accounting for 21% of spending by state and local governments. This category includes spending on standard government services such as public buildings, libraries and sanitation. It also includes spending on social insurance items such as unemployment insurance and workers' compensation. Spending on public safety accounted for 14% of total expenditures, while spending on social welfare and veterans' services made up 14% as well. The latter category includes functions such as veterans' services, housing and community development, and welfare, which includes Medicaid spending. Health was the smallest expenditure category at 0%. Typically, health expenditures are 6% of the total, but they were affected by broader industry changes in health care utilization during the COVID-19 pandemic.

The analysis follows a methodology that was developed by researchers at the Federal Reserve Bank of Chicago to allocate expenditures between businesses and households, as well as estimate the extent to which each group benefits from the different types of expenditures.[16] Certain expenditures, such as health and human services, were assigned entirely to households because that is where the benefit lay. The benefit of other categories, such as highway infrastructure (transportation) and public safety, were allocated evenly between businesses and households. The "business tax-to-benefit" ratio was calculated by dividing the amount of business taxes in each state by the estimated amount of government expenditures that benefits businesses.

Figure 8. Net state and local government expenditures by category, FY22 (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.

Because spending on education is by far the largest expenditure category, estimates of the "business tax-to-benefit" ratio are sensitive to how the benefits of education are allocated between businesses and households. Although economic theory suggests that individuals are the primary beneficiaries of education spending, business owners also benefit because an educated workforce generates higher returns to capital by improving the productivity of that capital. A review of the literature finds that a 1% increase in the share of workers with a college degree in a city increases output by 0.5 to 0.6 percentage points.[17] To the extent that businesses are able to capture some or all of the additional productivity from higher education levels, they are deriving benefits from governmental spending on education.

Higher levels of education can also indirectly impact a business's profitability. For example, a more educated populace may result in lower levels of property crime, which would then lower business costs and increase the return to capital. One study on the social returns of an educated workforce finds that the social benefits, in the form of lower spending on police services and incarceration costs, are equal to between 14% and 26% of the private return to education that accrues to individuals in the form of higher wages.[18]

Given the uncertainty to the degree to which businesses benefit from education spending, and the sensitivity of the "business tax-to-benefit" ratio to this assumption, the analysis presents a range of estimates for the share of educational expenditures that benefit local businesses. The "business tax-to-benefit" ratio is estimated assuming that the benefit of education spending to businesses is either 0%, 25% or 50%.[19]

The results are summarized in Table 8 and Figure 9. The national average "business tax-to-benefit" ratio was 3.09 under the assumption that businesses did not directly benefit from state and local spending on education, meaning businesses paid $3.09 in taxes to receive $1.00 in benefits. Delaware, at 8.4, and Wyoming, at 6.7, had the highest "business tax-to-benefit" ratios. New Hampshire, at 6.2, Maine, at 5.0, Texas at 4.7, Louisiana at 4.6, South Carolina and North Dakota at 4.5, and New Mexico, at 4.3, were the other states that had ratios above 4.0. Alaska had the lowest ratio, at 1.7, followed by the Utah and Maryland at 1.9, and District of Columbia at 2.0. Eighteen states had a "business tax-to-benefit" ratio in the 2.0 range including Indiana (2.98), Nevada (2.96), and New York (2.95), while an additional 21 states had a ratio in the 3.0 range including Tennessee at 3.96. For these 39 states, businesses had to pay between $2.00 and $4.00 in taxes to receive $1.00 in benefits from government spending.

The national average "business tax-to-benefit" ratio was 1.82 under the assumption that businesses received 25% of the benefit from state and local spending on education. North Dakota had the highest ratio at 3.1, while Delaware was next at 3.0. Maine at 2.7; Wyoming, Texas, New Mexico and New Hampshire at 2.5; Montana and Hawaii at 2.3; Tennessee and Louisiana at 2.2; Vermont, Illinois, Oklahoma and South Carolina at 2.1; and Georgia at 2.0 are the only other states that had ratios of 2.0 or higher. Utah had the lowest ratio, with 1.1. Businesses in the remaining 34 states and the District of Columbia had to pay at least $1.00 in taxes in order to receive $1.00 in benefits from government spending since they all had ratios of at least 1.0.

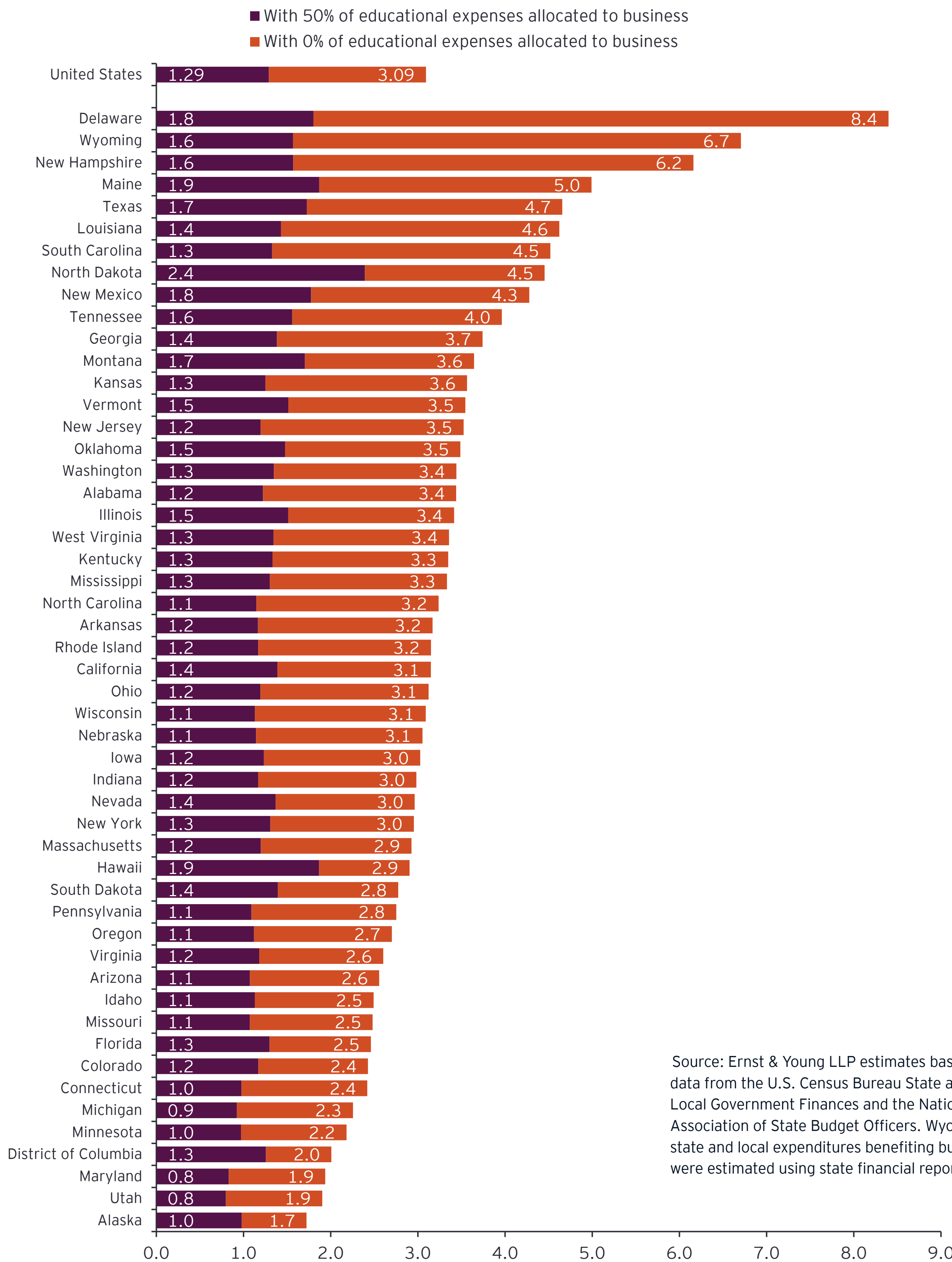
North Dakota at 2.4, had the highest "business tax-to-benefit" ratios under the assumption that businesses received 50% of the benefit from government spending on education. Maine, at 1.9, had the second-highest ratio. There were six states with a ratio less than 1 ranging from Utah at 0.8 to Alaska and Connecticut at 0.98. In these states, businesses paid less than $1.00 in taxes to receive $1.00 in benefits from government spending. On average across the 50 states and the District of Columbia, businesses paid $1.29 in taxes to receive $1.00 in benefits when half of education spending is assumed to benefit businesses.

Table 8. Ratio of business taxes to government expenditures benefiting businesses, FY22 ($ 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	$11.3	$3.3	$3.4	$6.3	$1.8	$9.3	$1.2
Alaska	3.5	2.0	1.7	2.8	1.2	3.6	1.0
Arizona	16.3	6.4	2.6	10.8	1.5	15.2	1.1
Arkansas	6.5	2.1	3.2	3.8	1.7	5.6	1.2
California	167.2	53.1	3.1	86.7	1.9	120.3	1.4
Colorado	18.9	7.8	2.4	11.9	1.6	16.1	1.2
Connecticut	11.4	4.7	2.4	8.2	1.4	11.6	1.0
Delaware	4.4	0.5	8.4	1.5	3.0	2.5	1.8
Florida	59.1	24.0	2.5	34.7	1.7	45.4	1.3
Georgia	24.3	6.5	3.7	12.0	2.0	17.6	1.4
Hawaii	5.2	1.8	2.9	2.3	2.3	2.8	1.9
Idaho	4.3	1.7	2.5	2.8	1.6	3.8	1.1
Illinois	48.9	14.3	3.4	23.3	2.1	32.3	1.5
Indiana	15.1	5.1	3.0	9.0	1.7	12.9	1.2
Iowa	9.3	3.1	3.0	5.3	1.8	7.6	1.2
Kansas	8.8	2.5	3.6	4.8	1.9	7.0	1.3
Kentucky	11.0	3.3	3.3	5.8	1.9	8.2	1.3
Louisiana	13.1	2.8	4.6	6.0	2.2	9.2	1.4
Maine	5.5	1.1	5.0	2.0	2.7	2.9	1.9
Maryland	16.5	8.5	1.9	14.2	1.2	19.9	0.8
Massachusetts	24.1	8.2	2.9	14.2	1.7	20.1	1.2
Michigan	20.2	9.0	2.3	15.4	1.3	21.9	0.9
Minnesota	18.3	8.4	2.2	13.6	1.3	18.9	1.0
Mississippi	7.5	2.2	3.3	4.0	1.9	5.7	1.3
Missouri	12.8	5.1	2.5	8.5	1.5	11.9	1.1
Montana	3.0	0.8	3.6	1.3	2.3	1.7	1.7
Nebraska	6.3	2.1	3.1	3.8	1.7	5.5	1.1
Nevada	10.3	3.5	3.0	5.5	1.9	7.5	1.4
New Hampshire	4.1	0.7	6.2	1.7	2.5	2.6	1.6
New Jersey	34.1	9.7	3.5	19.1	1.8	28.5	1.2
New Mexico	7.8	1.8	4.3	3.1	2.5	4.4	1.8
New York	110.9	37.5	3.0	61.2	1.8	84.8	1.3
North Carolina	21.4	6.6	3.2	12.6	1.7	18.6	1.1
North Dakota	5.3	1.2	4.5	1.7	3.1	2.2	2.4
Ohio	30.3	9.7	3.1	17.6	1.7	25.4	1.2
Oklahoma	10.7	3.1	3.5	5.2	2.1	7.3	1.5
Oregon	12.8	4.8	2.7	8.1	1.6	11.5	1.1
Pennsylvania	38.1	13.8	2.8	24.4	1.6	34.9	1.1
Rhode Island	3.3	1.0	3.2	1.9	1.7	2.8	1.2
South Carolina	12.9	2.9	4.5	6.3	2.1	9.7	1.3
South Dakota	2.8	1.0	2.8	1.5	1.9	2.0	1.4
Tennessee	18.5	4.7	4.0	8.3	2.2	11.9	1.6
Texas	105.3	22.6	4.7	41.8	2.5	61.0	1.7
Utah	8.0	4.2	1.9	7.2	1.1	10.1	0.8
Vermont	3.0	0.8	3.5	1.4	2.1	2.0	1.5
Virginia	24.4	9.4	2.6	15.0	1.6	20.6	1.2
Washington	29.3	8.5	3.4	15.1	1.9	21.7	1.3
West Virginia	5.2	1.5	3.4	2.7	1.9	3.9	1.3
Wisconsin	14.8	4.8	3.1	9.0	1.7	13.1	1.1
Wyoming	2.9	0.4	6.7	1.1	2.5	1.8	1.6
District of Columbia	5.5	2.7	2.0	3.6	1.5	4.4	1.3
United States	**$1,074.5**	**$347.4**	**$3.09**	**$589.8**	**$1.82**	**$832.2**	**$1.29**

Note: Amounts may not sum because of 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 9. Business taxes per dollar of net government spending that benefits businesses, FY22 (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 Officers. Wyoming's state and local expenditures benefiting business were estimated using state financial reports.

Conclusion

Tax collections totaled $1,074.5 billion in state and local taxes in FY22, representing a 13.7% increase over the previous year. The business share of state and local tax collections was 44.6%, which was in line with historical years. The overall total effective business tax rate was 5.0% in FY22.

Business property tax collections grew by 7.7% in FY22 to $373.1 billion. Property taxes account for 34.7% of all state and local taxes paid by businesses, the most of any tax category. Sales tax collections from business purchases of intermediate inputs and capital expenditures are the second-largest source of business tax revenue for state and local governments, accounting for 20.9% of all taxes paid by businesses in FY22. The $225.0 billion in sales tax collections was 16.0% higher than FY21. Corporate income tax collections grew 26.7% in FY22 to $141.4 billion. Individual income tax on pass-through business income accounts for 7.6% of total business tax collections and grew 11.0% from FY21, which captures recently enacted state pass-through entity taxes.

Appendix

Appendix Table A1. Total state and local taxes, FY02–FY22 ($ billions)

State and local taxes	2002	2007	2012	2017	2022
Total business taxes	$406.0	$603.5	$656.9	$745.0	$1,074.5
Individual income taxes on non-business income	184	260	274	341	519
Other taxes	336	456	513	604	814
Total state and local taxes	**$926.1**	**$1,319.3**	**$1,443.7**	**$1,689.8**	**$2,407.1**

Composition of state and local taxes	2002	2007	2012	2017	2022
Total business taxes	43.8%	45.7%	45.5%	44.1%	44.6%
Individual income taxes on non-business income	19.9%	19.7%	19.0%	20.2%	21.5%
Other taxes	36.3%	34.6%	35.5%	35.8%	33.8%
Total state and local taxes	**100%**	**100%**	**100%**	**100%**	**100%**

Note: Amounts may not sum because of rounding.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau State and Local Government Finances.

Appendix Table A2. Composition of state and local business taxes, FY18–FY22 ($ billions)

Business tax	2018	2019	2020	2021	2022
Property tax on business property	$294.1	$311.0	$324.1	$346.3	$373.1
General sales and use tax on inputs	167.4	176.6	180.4	193.9	225.0
Corporate net income	65.9	76.5	72.4	111.6	141.4
Unemployment compensation	37.8	36.2	34.8	36.1	41.9
Business license tax	38.5	41.1	42.4	45.7	49.2
Excise taxes on business inputs	49.0	51.4	52.6	51.9	56.3
Public utility tax	27.9	27.4	27.6	27.4	28.8
Individual income tax	46.7	48.4	45.3	73.3	81.4
Severance taxes	12.7	15.0	11.6	11.8	22.8
Insurance premium tax	23.5	24.6	25.8	27.4	30.0
Other business taxes	17.5	18.3	17.9	19.8	24.6
Total business taxes	**$780.9**	**$826.4**	**$834.8**	**$945.3**	**$1,074.5**

Note: Amounts may not sum because of rounding. FY21 tax estimates are revised from the COST FY21 study because of newly released data from the U.S. Census Bureau.
Source: Ernst & Young LLP estimates based on the most recent data from the U.S. Census Bureau State and Local Government Finances.

Appendix Table A3. Composition of state and local business taxes by type, FY22

State	Property tax	Sales tax	Excise tax	Corporate income tax	Unemployment insurance tax	Individual income tax on pass-through income	License and other taxes*	Total business taxes
Alabama	24.7%	23.7%	18.8%	12.9%	3.2%	7.4%	9.3%	100.0%
Alaska	34.1%	–	4.9%	11.7%	4.6%	–	44.7%	100.0%
Arizona	38.1%	33.0%	9.4%	7.2%	3.3%	3.9%	5.2%	100.0%
Arkansas	22.4%	35.7%	14.1%	12.7%	1.8%	6.1%	7.2%	100.0%
California	30.0%	17.3%	8.7%	20.1%	3.5%	10.7%	9.7%	100.0%
Colorado	44.1%	23.4%	8.9%	8.0%	3.8%	6.9%	4.9%	100.0%
Connecticut	30.6%	17.8%	11.8%	10.4%	5.9%	20.5%	2.9%	100.0%
Delaware	14.2%	–	7.6%	11.4%	5.1%	5.0%	56.8%	100.0%
Florida	38.6%	30.8%	14.1%	6.4%	2.4%	–	7.7%	100.0%
Georgia	38.8%	26.1%	10.9%	10.3%	2.6%	7.3%	4.0%	100.0%
Hawaii	26.4%	32.4%	17.6%	6.0%	4.4%	7.1%	6.0%	100.0%
Idaho	25.5%	21.7%	8.5%	23.9%	3.2%	10.4%	6.8%	100.0%
Illinois	40.8%	13.5%	13.9%	19.7%	3.3%	4.4%	4.4%	100.0%
Indiana	38.8%	21.9%	12.5%	10.2%	3.1%	11.0%	2.5%	100.0%
Iowa	40.3%	23.9%	7.8%	9.2%	4.7%	7.7%	6.4%	100.0%
Kansas	37.4%	25.3%	9.6%	9.9%	3.7%	9.5%	4.6%	100.0%
Kentucky	29.8%	20.4%	15.8%	12.9%	9.6%	6.7%	4.8%	100.0%
Louisiana	30.8%	33.6%	12.3%	7.9%	1.5%	4.5%	9.3%	100.0%
Maine	60.4%	13.9%	6.1%	7.6%	2.7%	5.1%	4.2%	100.0%
Maryland	24.8%	16.7%	17.1%	13.0%	10.7%	9.1%	8.6%	100.0%
Massachusetts	34.8%	17.4%	6.1%	19.1%	8.4%	9.7%	4.6%	100.0%
Michigan	36.8%	22.0%	9.0%	8.9%	5.7%	10.8%	6.9%	100.0%
Minnesota	29.8%	19.5%	13.0%	15.6%	7.7%	8.8%	5.5%	100.0%
Mississippi	43.9%	22.9%	10.3%	9.5%	2.0%	4.1%	7.2%	100.0%
Missouri	38.9%	26.1%	10.0%	6.7%	3.8%	7.9%	6.6%	100.0%
Montana	45.4%	–	12.4%	9.8%	4.4%	10.3%	17.7%	100.0%
Nebraska	44.3%	22.0%	6.0%	11.3%	1.2%	8.5%	6.7%	100.0%
Nevada	31.1%	27.0%	15.0%	2.7%	6.2%	–	17.9%	100.0%
New Hampshire	44.0%	–	10.4%	29.4%	3.2%	0.5%	12.6%	100.0%
New Jersey	25.9%	18.1%	9.0%	25.4%	6.9%	8.6%	6.1%	100.0%
New Mexico	15.5%	38.0%	6.8%	4.0%	1.7%	1.5%	32.5%	100.0%
New York	38.3%	14.2%	7.9%	14.1%	2.8%	18.6%	4.1%	100.0%
North Carolina	30.1%	29.8%	12.2%	7.6%	2.7%	7.6%	10.1%	100.0%
North Dakota	18.5%	12.6%	5.2%	4.3%	1.5%	2.0%	55.9%	100.0%
Ohio	32.7%	21.3%	13.5%	8.8%	3.7%	13.3%	6.7%	100.0%
Oklahoma	23.1%	28.6%	7.7%	7.6%	3.7%	7.8%	21.5%	100.0%
Oregon	30.7%	–	8.3%	22.3%	8.9%	9.2%	20.5%	100.0%
Pennsylvania	34.3%	17.4%	11.8%	14.9%	6.1%	6.5%	8.9%	100.0%
Rhode Island	43.4%	16.6%	13.7%	8.9%	7.4%	5.5%	4.5%	100.0%
South Carolina	47.2%	18.2%	9.2%	9.3%	2.0%	4.6%	9.5%	100.0%
South Dakota	34.2%	41.7%	10.6%	2.2%	2.1%	–	9.2%	100.0%
Tennessee	22.8%	33.4%	12.3%	16.2%	1.4%	0.0%	13.9%	100.0%
Texas	41.2%	27.0%	10.3%	5.4%	2.6%	–	13.4%	100.0%
Utah	33.5%	27.7%	12.2%	11.6%	2.7%	7.4%	4.8%	100.0%
Vermont	56.4%	9.5%	13.5%	8.0%	2.3%	6.8%	3.5%	100.0%
Virginia	44.7%	14.6%	16.2%	8.1%	1.7%	5.4%	9.2%	100.0%
Washington	23.3%	27.2%	14.6%	19.7%	6.5%	–	8.7%	100.0%
West Virginia	31.5%	14.8%	14.8%	7.1%	7.0%	4.2%	20.6%	100.0%
Wisconsin	35.5%	21.0%	8.8%	19.7%	3.1%	5.7%	6.2%	100.0%
Wyoming	36.1%	22.5%	3.9%	–	5.9%	–	31.7%	100.0%
District of Columbia	43.3%	12.8%	7.0%	18.1%	2.7%	9.3%	6.9%	100.0%
United States	**34.7%**	**20.9%**	**10.7%**	**13.2%**	**3.9%**	**7.6%**	**9.0%**	**100.0%**

* "Corporate income" and "individual income tax on business income" include gross receipts taxes levied in Nevada, Ohio, Texas, and Washington and the business enterprise tax in New Hampshire. "Excise taxes" include insurance premiums and public utilities. "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."
Note: Amounts may not sum because of rounding. "–" indicates 0; "0.0%" indicates less than 0.05%.
Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau State and Local Government Finances.

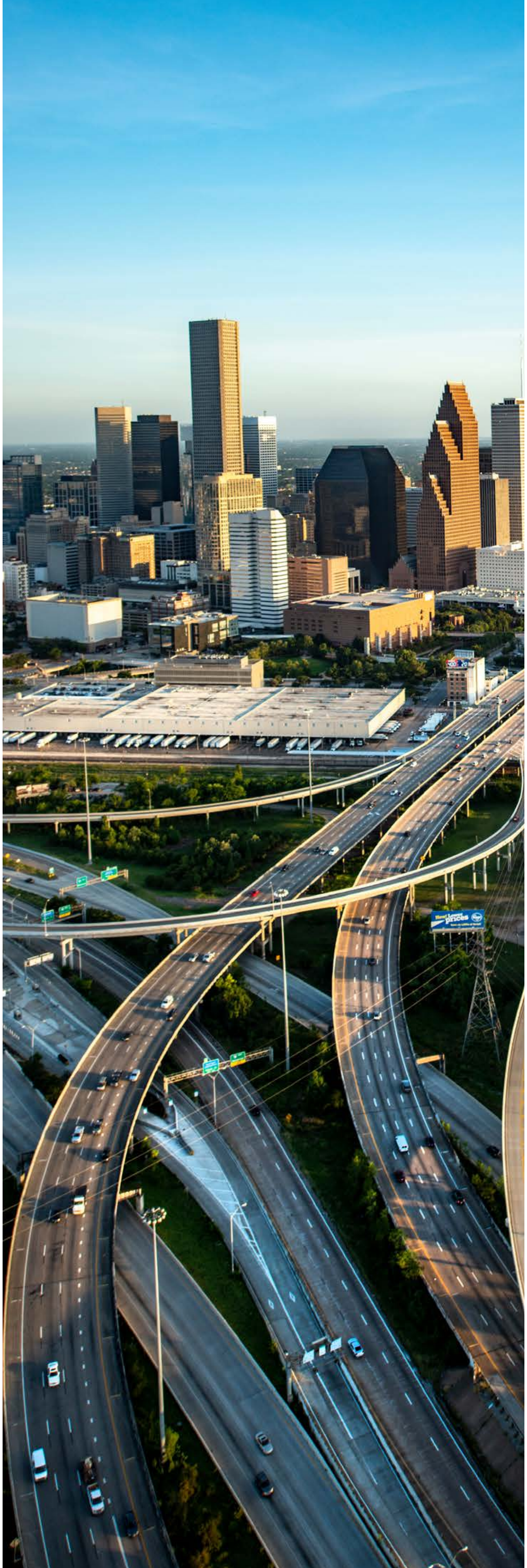
Appendix Table A4. Composition of total state and local taxes by type, FY22

State	Property tax	Sales tax	Excise tax	Corporate income tax	Unemployment insurance tax	Individual income tax	License and other taxes*	Total taxes
Alabama	14.8%	31.0%	15.3%	6.0%	1.5%	25.4%	6.0%	100.0%
Alaska	39.5%	6.2%	8.7%	8.4%	3.3%	–	33.9%	100.0%
Arizona	24.9%	41.0%	6.9%	3.0%	1.4%	19.1%	3.7%	100.0%
Arkansas	16.5%	38.4%	11.7%	5.1%	0.7%	23.0%	4.6%	100.0%
California	22.2%	18.6%	6.5%	8.4%	1.5%	36.6%	6.3%	100.0%
Colorado	31.0%	24.4%	8.5%	3.5%	1.7%	27.0%	3.9%	100.0%
Connecticut	37.8%	15.3%	8.9%	3.5%	2.0%	29.1%	3.4%	100.0%
Delaware	14.9%	–	8.3%	6.3%	2.8%	30.1%	37.5%	100.0%
Florida	35.0%	38.1%	12.0%	3.4%	1.3%	–	10.2%	100.0%
Georgia	28.2%	24.6%	8.0%	4.3%	1.1%	31.1%	2.7%	100.0%
Hawaii	18.1%	33.4%	11.3%	2.2%	1.7%	26.8%	6.5%	100.0%
Idaho	23.0%	28.1%	7.2%	10.0%	1.3%	25.0%	5.4%	100.0%
Illinois	32.4%	16.9%	13.5%	9.1%	1.5%	21.5%	4.9%	100.0%
Indiana	22.4%	25.6%	12.0%	3.8%	1.2%	32.2%	2.9%	100.0%
Iowa	31.8%	22.5%	8.7%	4.1%	2.1%	24.2%	6.5%	100.0%
Kansas	29.4%	28.2%	7.6%	4.5%	1.7%	25.0%	3.6%	100.0%
Kentucky	19.2%	21.0%	13.6%	5.8%	4.3%	32.6%	3.7%	100.0%
Louisiana	19.2%	41.0%	12.7%	4.0%	0.8%	17.1%	5.2%	100.0%
Maine	39.2%	20.0%	7.5%	3.8%	1.4%	23.9%	4.2%	100.0%
Maryland	22.9%	12.8%	12.3%	4.1%	3.4%	38.1%	6.4%	100.0%
Massachusetts	31.3%	12.9%	5.0%	6.8%	3.0%	36.2%	4.8%	100.0%
Michigan	32.8%	22.1%	9.2%	3.3%	2.1%	24.6%	5.9%	100.0%
Minnesota	24.9%	16.7%	10.9%	6.2%	3.1%	32.8%	5.5%	100.0%
Mississippi	27.1%	33.0%	11.0%	4.9%	1.1%	17.6%	5.4%	100.0%
Missouri	27.8%	26.4%	7.9%	2.6%	1.5%	29.5%	4.3%	100.0%
Montana	33.6%	–	13.1%	4.3%	2.0%	35.5%	11.6%	100.0%
Nebraska	34.3%	23.4%	5.5%	5.3%	0.5%	23.8%	7.2%	100.0%
Nevada	27.8%	32.0%	22.8%	1.5%	3.4%	–	12.5%	100.0%
New Hampshire	59.7%	–	11.6%	14.6%	1.6%	1.8%	10.7%	100.0%
New Jersey	39.1%	15.5%	6.2%	9.5%	2.6%	22.6%	4.6%	100.0%
New Mexico	17.8%	38.7%	7.9%	2.5%	1.0%	10.3%	21.8%	100.0%
New York	29.5%	15.5%	6.3%	6.4%	1.3%	35.9%	5.2%	100.0%
North Carolina	22.5%	26.8%	10.1%	2.8%	1.0%	30.6%	6.1%	100.0%
North Dakota	19.7%	19.2%	7.4%	3.2%	1.1%	6.5%	42.8%	100.0%
Ohio	28.9%	23.1%	12.5%	3.9%	1.6%	25.8%	4.2%	100.0%
Oklahoma	19.8%	30.8%	9.4%	3.9%	1.9%	19.8%	14.5%	100.0%
Oregon	27.4%	–	7.4%	9.3%	3.7%	38.2%	14.0%	100.0%
Pennsylvania	26.2%	17.4%	12.7%	6.2%	2.6%	26.4%	8.5%	100.0%
Rhode Island	36.3%	18.7%	11.0%	3.6%	3.0%	24.1%	3.3%	100.0%
South Carolina	29.2%	23.6%	9.6%	4.5%	0.9%	25.4%	6.9%	100.0%
South Dakota	34.1%	41.7%	12.5%	1.3%	1.2%	–	9.2%	100.0%
Tennessee	21.4%	45.2%	13.2%	8.9%	0.8%	0.0%	10.5%	100.0%
Texas	43.0%	30.9%	11.7%	3.2%	1.6%	–	9.6%	100.0%
Utah	21.6%	28.6%	8.5%	4.5%	1.0%	32.4%	3.5%	100.0%
Vermont	38.3%	10.6%	16.1%	4.5%	1.3%	23.8%	5.5%	100.0%
Virginia	29.7%	14.7%	12.3%	3.3%	0.7%	32.9%	6.4%	100.0%
Washington	26.6%	36.9%	12.4%	9.8%	3.2%	–	11.1%	100.0%
West Virginia	21.5%	17.2%	16.3%	3.6%	3.6%	24.9%	12.8%	100.0%
Wisconsin	31.5%	20.8%	8.3%	8.1%	1.3%	25.0%	5.0%	100.0%
Wyoming	34.8%	27.9%	5.9%	–	4.3%	–	27.1%	100.0%
District of Columbia	28.0%	16.4%	4.7%	9.6%	1.4%	30.1%	9.9%	100.0%
United States	**28.7%**	**22.4%**	**9.5%**	**5.9%**	**1.7%**	**24.9%**	**6.9%**	**100.0%**

* Taxes in the "License and other taxes" column include death and gift taxes, documentary and stock transfer taxes, severance taxes and local gross receipts taxes.

Note: Amounts may not sum because of rounding. "–" indicates 0; "0.0%" indicates less than 0.05%.

Source: Ernst & Young LLP estimates based on data from the U.S. Census Bureau State and Local Government Finances.



Endnotes

1 The fiscal year runs from July 1 to June 30 for 46 states. States that follow a different fiscal year are New York (ends March 31), Texas (ends August 31), Alabama (ends September 30) and Michigan (ends September 30). The data presented in this study is for each state's fiscal year.

2 The EY sales tax model used to estimate business shares was updated for all 50 states in FY17. As a result, prior year estimates for sales taxes paid by businesses were updated and are shown in the historical appendix tables. See Andrew Phillips and Muath Ibaid, *The Impact of Imposing Sales Taxes on Business Inputs*, prepared for the State Tax Research Institute and Council On State Taxation, Ernst & Young LLP, May 2019.

3 California and Connecticut included pass-through entity (PTE) tax in their Census-reported corporate income tax. To be consistent with other states, this PTE tax was removed from corporate income tax and accounted for in the business share of individual income tax.

4 The methodology for estimating business share of individual income tax has been updated to better reflect state-level changes in PTE tax in the wake of the Tax Cuts and Jobs Act of 2017. States that publish their PTE tax collections have been updated to use state reporting over Census data, including in California and Connecticut where PTE tax had to be removed from Census-reported corporate income tax. These states with available PTE data were also adjusted slightly upward to account for those that pay business income tax through individual income tax and not PTE tax. States with graduated tax rates have also had their business share of individual income tax adjusted upward, with the assumption that those with business income are more likely to be in the higher tax brackets.

5 The general methodology used to estimate state and local business taxes is described in detail in the appendix of the EY/COST 50-state business tax study for FY05 (published in March 2006 and available at cost.org). Note that business tax estimates for prior years have been revised from earlier editions of this study because of revisions to Census Bureau data. All references to prior fiscal year estimates of business taxes refer to the updated estimates in this study rather than previously published estimates.

6 The business share of property by state has been updated for FY22. The methodology has broadly remained the same, but estimation methods have been updated in some states due to changes in the available data. New Jersey began publishing assessed values by category, and Idaho no longer publishes estimated tax collections by category, so both were updated to use estimated tax levies. Vermont's commercial personal property tax calculations were updated to use newly available assessed values and millage rates. Other state methodologies were updated to improve the estimates. Arkansas has been updated to use a millage rate weighted by county assessed values instead of a simple average millage rate to estimate tax levied. Nevada was updated to reflect property tax exemptions more accurately. South Carolina was updated to use assessment ratios by category of property to estimate property tax levies.

7 Andrew Phillips and Muath Ibaid, T*he Impact of Imposing Sales Taxes*

on Business Inputs, prepared for the State Tax Research Institute and Council On State Taxation, Ernst & Young LLP, May 2019.

8 States that conform to the Qualified Business Income deduction are Colorado, Idaho, Minnesota and North Dakota. Iowa allows for a partial deduction of 75% to be taken.

9 The business share of documentary and stock transfer was updated in the FY22 report to reflect the updated average share of commercial transactions as a percent of total real estate transactions.

10 For states that do not publish income tax revenue from pass-through income tax, the methodology for estimating the business share of individual income tax has been updated with the assumption that businesses paying tax through income tax are more likely to be in the highest tax bracket, and thus would be paying a larger portion of income tax in states with graduated income tax rates.

11 Muriel Bowser and Glen Lee, *Annual Comprehensive Financial Report: Fiscal Year 2022*, District of Columbia Office of the Chief Financial Officer, 2022.

12 Due to the inconsistency in PTE tax reporting, each state with available data was adjusted using state reports. The business share for these states were also slightly increased to account for the small number of businesses that pay business tax through individual income tax instead of pass-through income tax. Alabama's business share of individual income tax was increased from 9.1% to 13.4%. California had its $12.4 billion of PTE revenue removed from corporate income tax revenue, and the state's PTE tax rate is 4 percentage points lower than the top marginal rate, so there is a still a sizable portion of business revenue being paid at the individual level that is not netted out by the credits from the PTE tax. California's business share of individual income tax was increased from 10.1% to 12.3% to reflect those differences in PTE treatment. Similarly, Connecticut has $2.3 billion of PTE revenue removed from its corporate income tax revenue numbers, and its business share of individual income tax was increased from 11.5% to 23.6%. The business share of individual income tax in Michigan and Rhode Island was increased from 8.3% to 16.1% and from 7.8% to 9.4%, respectively, to reflect the inclusion of the new PTE tax.

13 Robert Cline, Andrew Phillips, Joo Mi Kim and Tom Neubig, "The Economic Incidence of Additional State Business Taxes," *State Tax Notes*, January 11, 2010.

14 "How Inflation Affects the Census Bureau's Income and Earnings Estimates," *U.S. Census Bureau website,* https://www.census.gov/newsroom/blogs/research-matters/2023/09/inflation-income-and-earnings-estimates. html, September 6, 2023.

15 James Pearce and Naveen Singhal, "CBO's Projections of Realized Capital Gains Subject to the Individual Income Tax," February 15, 2023.

16 The methodology used to allocate state and local government expenditures between businesses and households 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 as well as Richard H. Mattoon and William A. Testa, "How Closely Do Business Taxes Conform to the Benefits Principle?" Future State Business Tax Reforms: Perspectives from the Business, Government and Academic Communities Conference, Federal Reserve Bank of Chicago (September 17, 2007). Businesses benefit from various government expenditures such as general government "overhead" (e.g., legislative, administrative and judicial services), police and fire protection, transportation, and water and sewer infrastructure.

17 Enrico Moretti, "Workers' Education, Spillovers, and Productivity: Evidence from Plant-Level Production Functions," *American Economic Review*, June 2004.

18 Lance Lochner and Enrico Moretti, "The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports," *National Bureau of Economic Research Working Paper 8605*, November 2001.

19 The tax-benefit ratios constructed in this study follow the general methodology of Mattoon and Testa and Oakland and Testa to allocate expenditures between businesses and households. Expenditure data from the U.S. Census Bureau's State and Local Government Finances survey was used to estimate state and local spending for different major categories. Ernst & Young LLP added additional expenditure categories to the analysis. The general principles of Mattoon and Testa and Oakland and Testa were followed in allocating expenditures to these new categories.

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Special thanks to Alex Rosaen, Nahla Almbaid and Brett Syndergaard for their contributions to the analysis.

This study was prepared by the QUEST practice of Ernst & Young LLP in conjunction with COST and STRI.

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

COST is a nonprofit trade association based in Washington, DC. COST was formed in 1969 as an advisory committee to the Council of State Chambers of Commerce and today has an independent membership of about 500 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.

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