The State of State (and Local) Tax Policy

What are the sources of revenue for state governments?

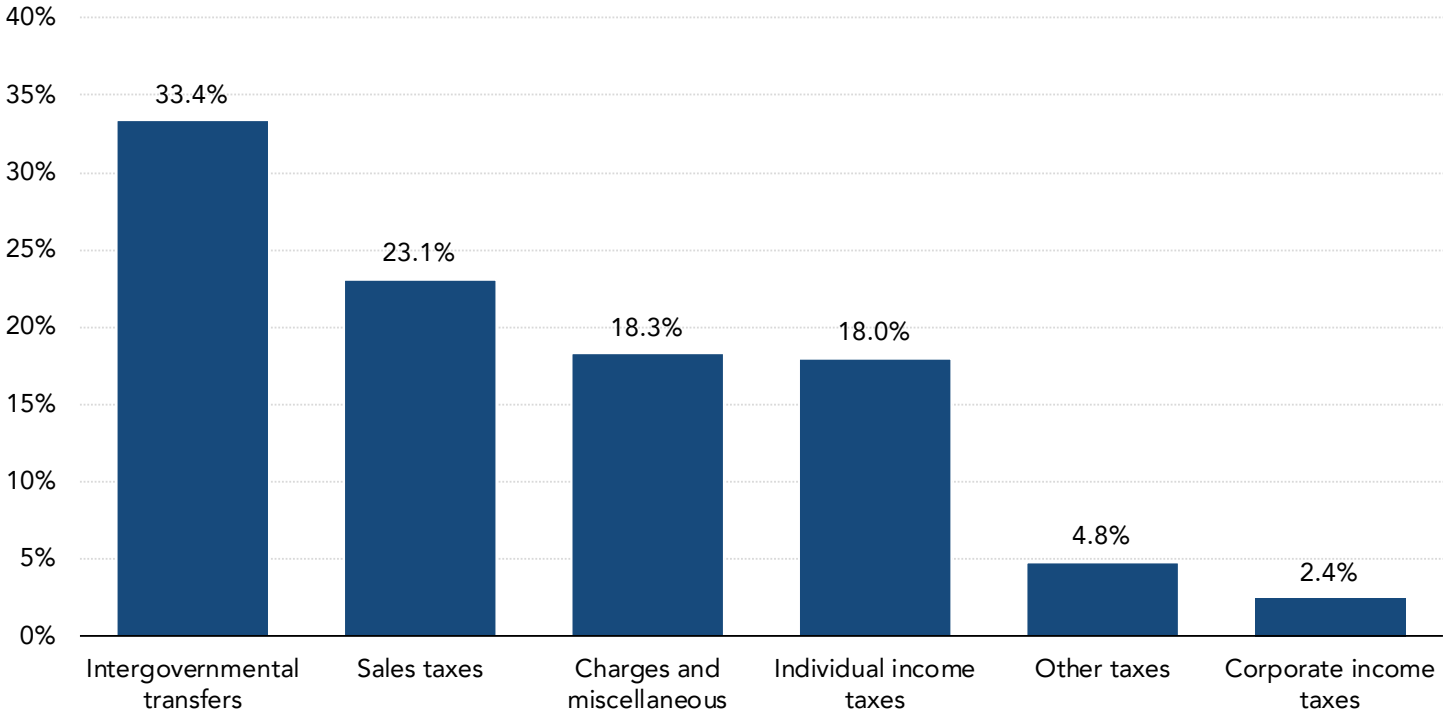
Q. What are the sources of revenue for state governments?

A. State government revenue comes from income, sales, and other taxes; charges and fees; and transfers from the federal government. Taxes account for about half of all general revenue.

State governments collected more than $1.9 trillion of general revenue in 2016. General revenue from income, sales, and other taxes totaled $923 billion—nearly half of all general revenue (figure 1). About one-third came from intergovernmental transfers.

FIGURE 1

Breakdown of State Government General Revenue



Source: Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System"; US Census Bureau, *Annual Survey of State and Local Government Finances* and *Census of Governments*, vol. 4, *Government Finances*.

The State of State (and Local) Tax Policy

What are the sources of revenue for state governments?

INTERGOVERNMENTAL TRANSFERS

Intergovernmental transfers to state governments—primarily from the federal government—totaled $637 billion in 2016. The largest were federal grants for public welfare programs, predominately Medicaid.

OWN-SOURCE REVENUE

Revenue from state sales and gross receipts taxes—including both general sales taxes and selective taxes on products such as alcohol, cigarettes, and motor fuels—was $441 billion in 2016, or 23 percent of state general revenue. Individual income taxes provided $344 billion (18 percent of state general revenue) and corporate income taxes accounted for $46 billion (2 percent of state general revenue). Revenue from all other taxes (including license fees, estate taxes, and severance taxes) was $92 billion—5 percent of state general revenue. Charges and fees—notably tuition paid to state universities, payments to public hospitals, and tolls on highways or bridges—and other miscellaneous revenue provided $349 billion, or 18 percent of state general revenue in 2016.

General revenue does not include revenue collected by states from "business-like" enterprises, such as state-run liquor stores, utilities, and pension funds.

CHANGING SOURCES

Since 1977, the share of state general revenue from intergovernmental transfers, as well as charges and user fees, has increased, while the share from taxes has declined (figure 2). Revenue from charges and user fees increased significantly from 11 percent in 1977 to 18 percent in 2002, as states sought to broaden their revenue bases, including large increases in public university tuition. Charges as a percentage of revenue has been fairly flat since 2002, however.

Over roughly the same period, the share of state general revenue from taxes declined from 60 percent to 50 percent. Revenue from taxes as a percentage of state general revenue has also been roughly flat since 2002. Among specific taxes, the portion from individual income taxes rose slightly from 1977 to 2016, but the share from sales and corporate taxes declined.

LONG-TERM REVENUE GROWTH

State revenue grew slightly faster than the national economy between 1977 and 2001, rising from 8 percent of gross domestic product (GDP) to 10 percent. However, state revenue as a percentage of GDP has stayed at roughly 10 percent over the past 15 years (figure 3). State revenues grew above that during the 2008 Great Recession and its aftermath because of an increase in federal transfer payments, peaking at nearly 11 percent of GDP in 2011 before falling back to 10 percent in 2012 as federal transfers abated in the wake of the economic recovery. In 2016 state revenue remained just above 10 percent of GDP.

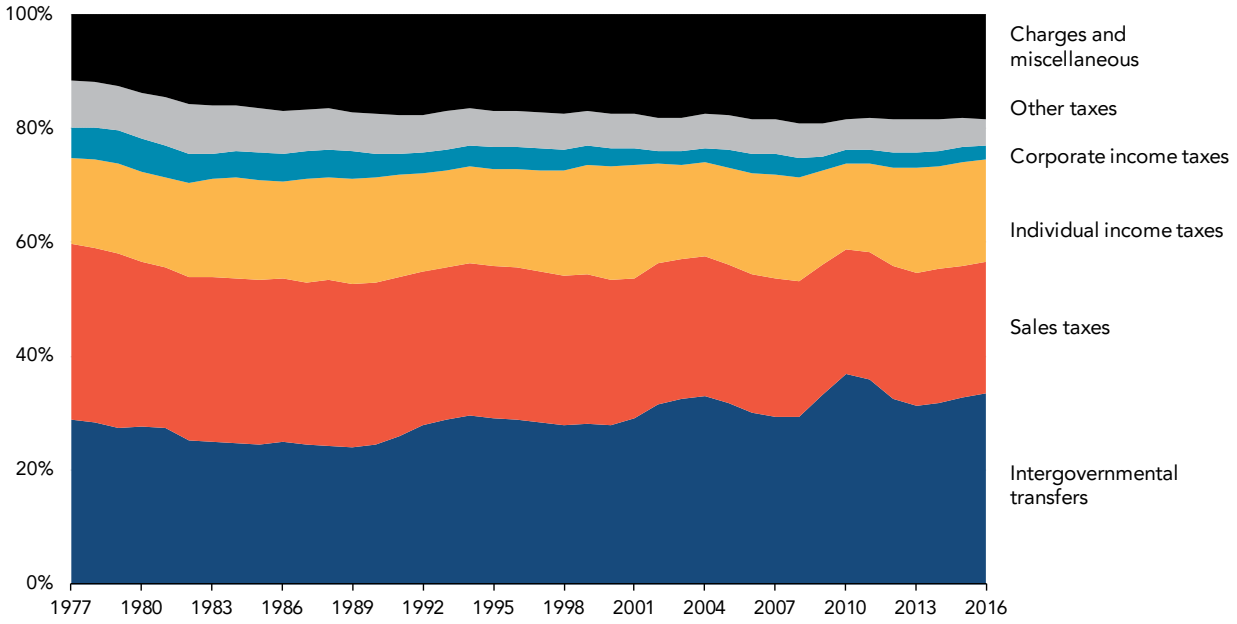
Revenue from charges and miscellaneous fees as well as individual income taxes grew from about 1 percent to 2 percent of GDP from 1977 to 2016, while sales tax revenue remained fairly constant at about 2.5 percent (figure 4). Intergovernmental transfers grew from about 2 percent to more than 3 percent of GDP over the period.

The State of State (and Local) Tax Policy

What are the sources of revenue for state governments?

FIGURE 2

Breakdown of State Government General Revenue

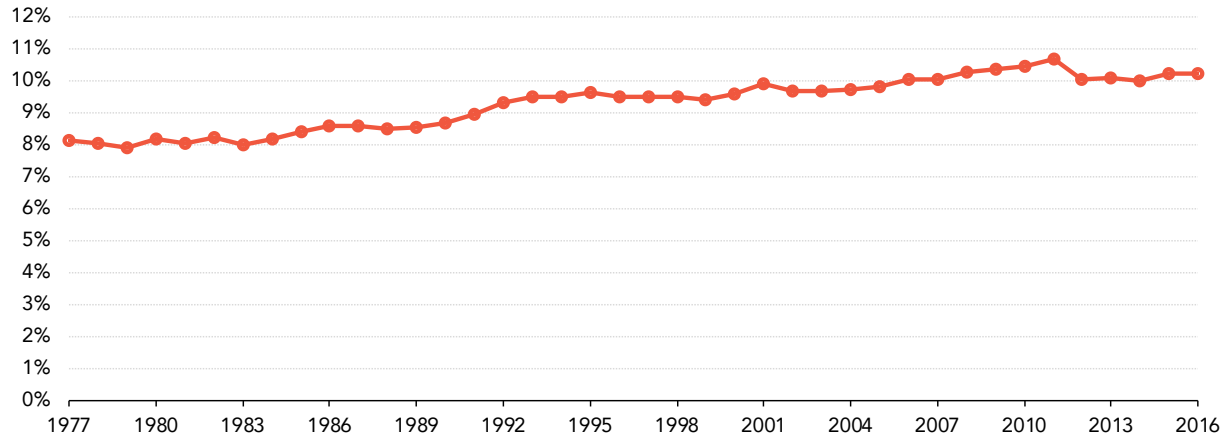


Source: Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System"; US Census Bureau, *Annual Survey of State and Local Government Finances* and *Census of Governments*, vol. 4, *Government Finances*.

FIGURE 3

Total State Government General Revenue

Share of GDP, fiscal years 1977–2016



Source: Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System"; US Census Bureau, *Annual Survey of State and Local Government Finances* and *Census of Governments*, vol. 4, *Government Finances*; US Department of Commerce, Bureau of Economic Analysis, "Gross Domestic Product, Third Quarter 2018 (Second Estimate); Corporate Profits, Third Quarter 2018 (Preliminary

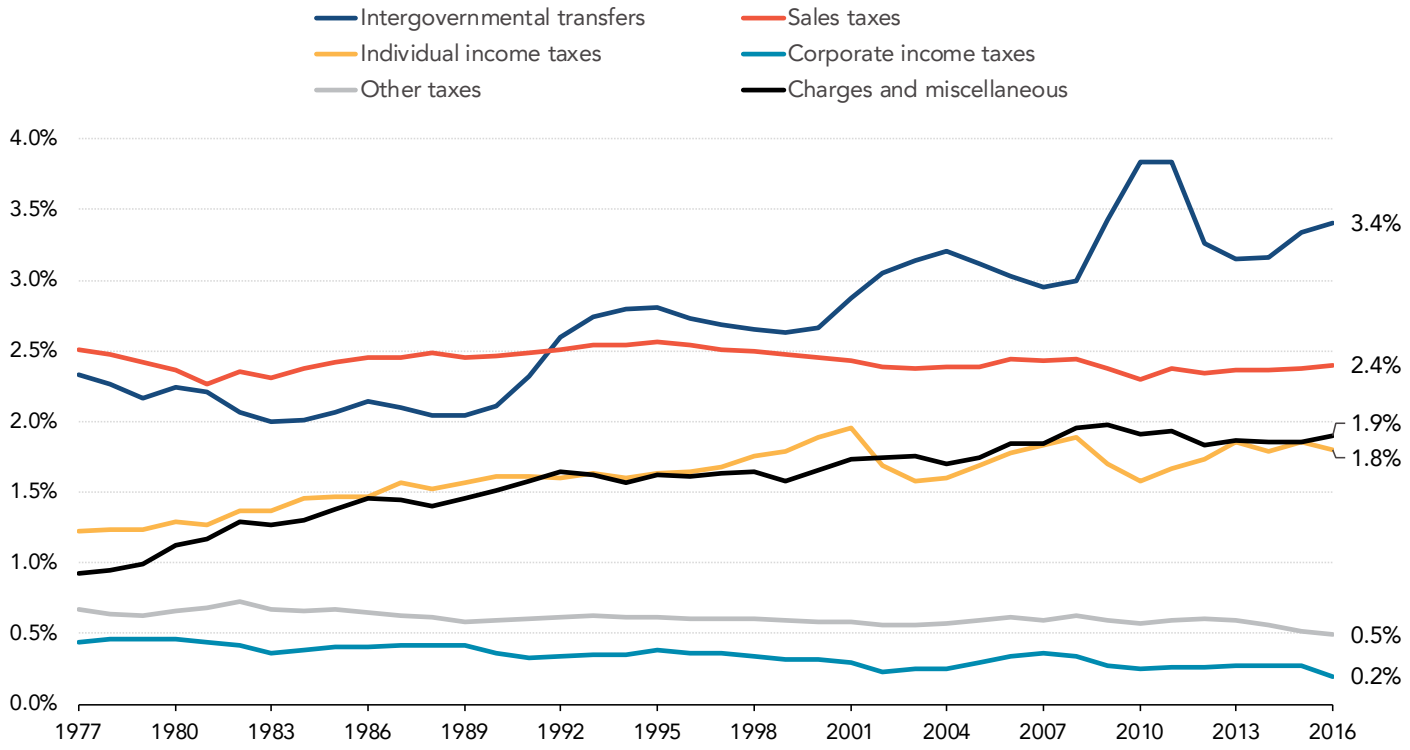
The State of State (and Local) Tax Policy

What are the sources of revenue for state governments?

FIGURE 4

State Government General Revenue

by category's share of GDP, fiscal years 1977–2016



Source: Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System"; US Census Bureau, *Annual Survey of State and Local Government Finances* and *Census of Governments*, vol. 4, *Government Finances*; US Department of Commerce, Bureau of Economic Analysis, "Gross Domestic Product, Third Quarter 2018 (Second Estimate); Corporate Profits, Third Quarter 2018 (Preliminary Estimate)."

Data Sources

Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System."

US Census Bureau. *Annual Survey of State and Local Government Finances.*

———. *Census of Governments*, vol. 4, *Government Finances.*

US Department of Commerce, Bureau of Economic Analysis. "Gross Domestic Product, Third Quarter 2018 (Second Estimate); Corporate Profits, Third Quarter 2018 (Preliminary Estimate."

Further Reading

Gordon, Tracy, Richard Auxier, and John Iselin. 2016. "Assessing Fiscal Capacities of States: A Representative Revenue System–Representative Expenditure System Approach, Fiscal Year 2012." Washington DC: Urban Institute.

Francis, Norton, and Frank Sammartino. 2015. "Governing with Tight Budgets." Washington DC: Urban Institute.

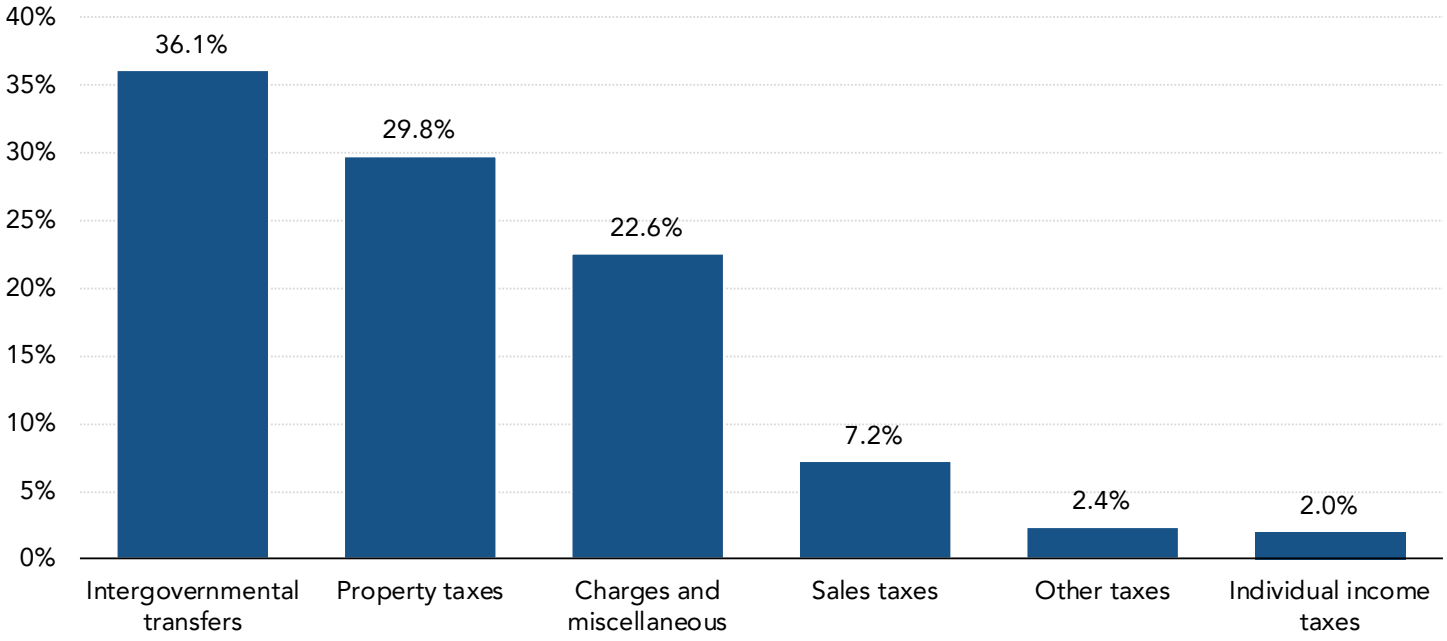
Q. What are the sources of revenue for local governments?

A. Local revenue comes from property, sales, and other taxes; charges and fees; and transfers from federal and state governments. Taxes accounted for roughly 40 percent of local general revenue in 2016.

Local governments collected over $1.6 trillion of general revenue in 2016. Revenue from property, sales, and other taxes totaled $677 billion, or 41 percent of general revenue. Intergovernmental transfers accounted for 36 percent of local general revenue in 2016 (figure 1).

FIGURE 1

Breakdown of Local Government General Revenue



Source: Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System"; US Census Bureau, *Annual Survey of State and Local Government Finances* and *Census of Governments*, vol. 4, *Government Finances*.

The State of State (and Local) Tax Policy

What are the sources of revenue for local governments?

INTERGOVERNMENTAL TRANSFERS

Local governments received 32 percent of their general revenue from state government transfers (including indirect federal funds) and 4 percent directly from the federal government. Local governments include county governments, municipalities, townships, special districts (such as water and sewage authorities), and school districts. Transfers for education programs account for over two-thirds of state government transfers to localities. Meanwhile, housing-program transfers are nearly 40 percent of federal transfers to local governments.

OWN-SOURCE REVENUE

Local governments collected $487 billion from property taxes in 2016, or 30 percent of local government general revenue. This was localities' largest single source of tax revenue. Sales taxes provided local governments $118 billion (7 percent of general revenue) and individual income taxes accounted for $33 billion (2 percent). All other taxes—including corporate income taxes, hotel taxes, and business license taxes—provided $31 billion in revenue (2 percent). Charges and miscellaneous fees, such as water, sewerage, and parking meter fees collected by municipal or county governments, provided $369 billion (23 percent of local general revenue).

CHANGING SOURCES

Since 1977, the share of local general revenue from taxes has remained steady at about 40 percent. However, the composition of tax revenue has changed somewhat. The contribution of property taxes to general revenue declined from 34 percent in 1977 to 30 percent in 1979, fell to a low of 27 percent in 2000, then returned to 30 percent in recent years. Meanwhile, revenue from sales taxes steadily increased from 5 percent to 7 percent between 1977 to 2016 (figure 2).

The share from intergovernmental transfers also fluctuated somewhat over time, falling from 43 percent of general revenue in 1977 to 36 percent in 2016. Revenue from charges and fees increased from 15 percent to 23 percent in 1985 and has remained roughly at that level since then (figure 2).

LONG-TERM REVENUE GROWTH

Although local government revenue was about the same relative to gross domestic product in 1977 (8.6 percent) and 2016 (8.7 percent), it has fluctuated over the period (figure 3). The percentage fell to a low of 8.0 percent in 1984 and peaked at 9.9 percent in 2009.

Much of the change in local government revenue relative to the economy resulted from increasing and decreasing transfers from federal and state governments. Transfers fell from 1977 through most of the 1980s but increased slowly though the 1990s. This source of revenue is mostly cyclical; it grew sharply during the 2001 and the 2007–09 recessions, receding in both cases as the economy recovered (figure 4).

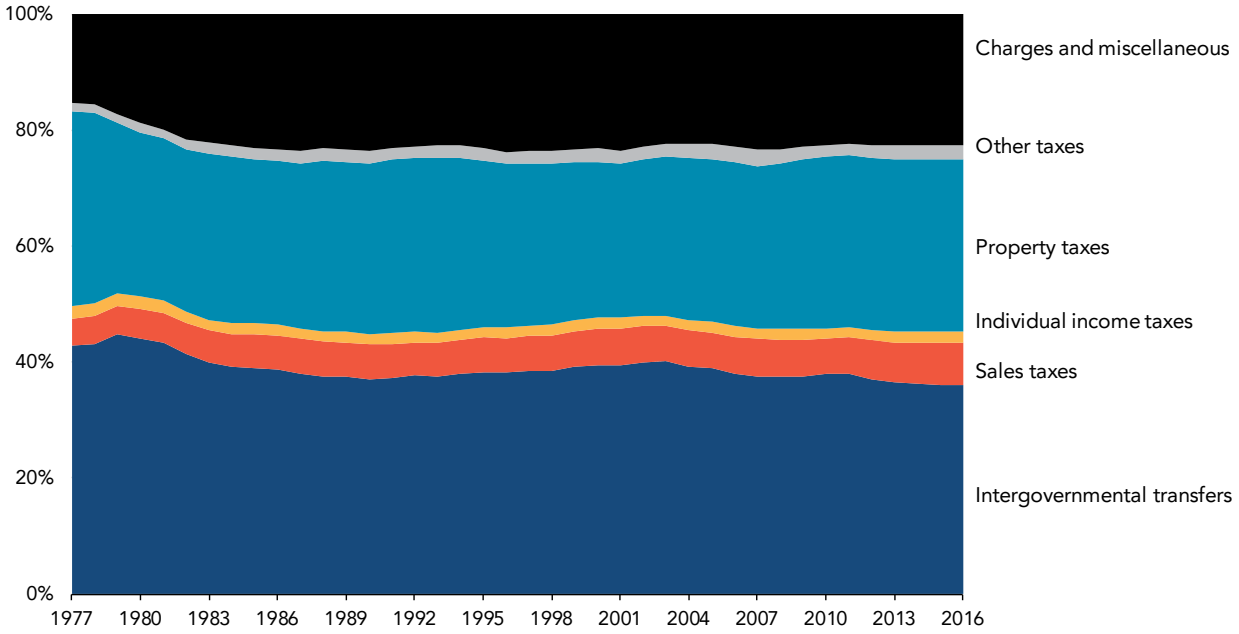
The State of State (and Local) Tax Policy

What are the sources of revenue for local governments?

FIGURE 2

Breakdown of Local Government General Revenue

by category, fiscal years 1977–2016

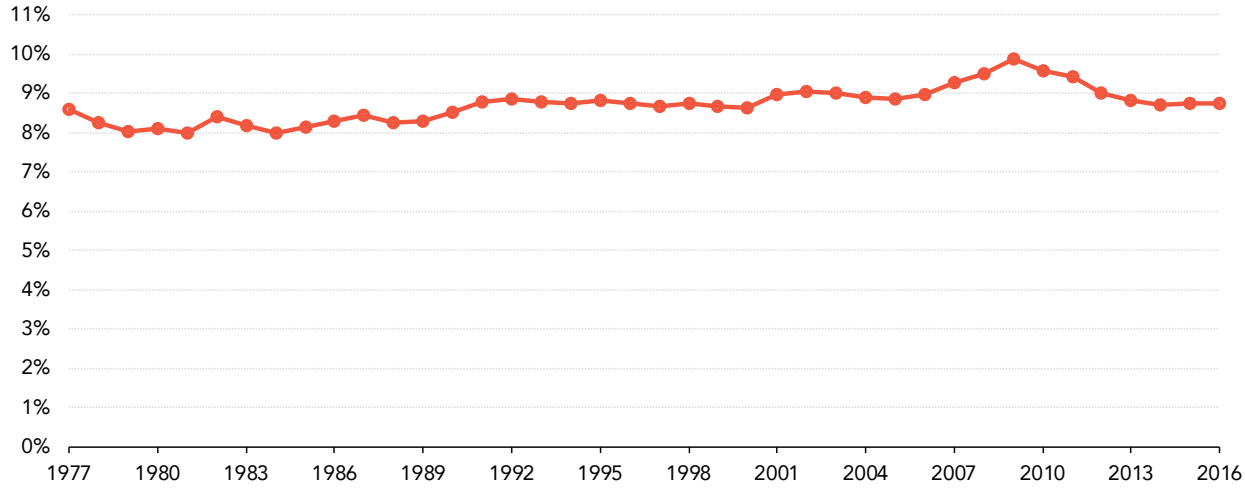


Source: Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System"; US Census Bureau, *Annual Survey of State and Local Government Finances* and *Census of Governments*, vol. 4, *Government Finances*.

FIGURE 3

Total Local Government General Revenue

Share of national GDP, fiscal years 1977–2016



Source: Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System"; US Census Bureau, *Annual Survey of State and Local Government Finances* and *Census of Governments*, vol. 4, *Government Finances*; US Department of Commerce, Bureau of Economic Analysis, "Gross Domestic Product, Third Quarter 2018 (Second Estimate); Corporate Profits, Third Quarter 2018 (Preliminary

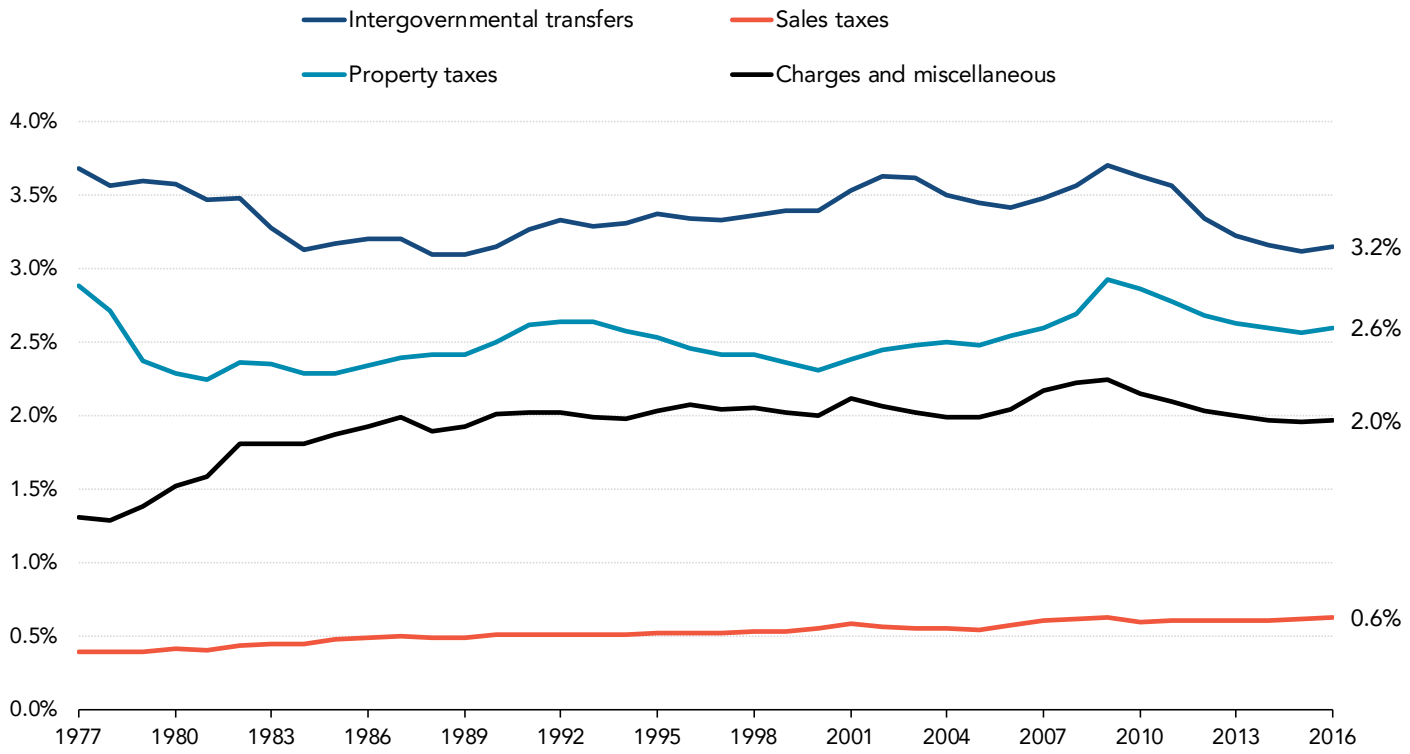
The State of State (and Local) Tax Policy

What are the sources of revenue for local governments?

FIGURE 4

Local Government General Revenue

By category's share of GDP, fiscal years 1977–2016



Source: Bureau of Economic Analysis; State & Local Government Finance Data Query System. http://slfdqs.taxpolicycenter.org/pages.cfm. The Urban Institute-Brookings Institution Tax Policy Center. Data from U.S. Census Bureau, Annual Survey of State and Local Government Finances, Government Finances, Volume 4, and Census of Governments (2016).

Data Sources

Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System."

US Census Bureau. *Annual Survey of State and Local Government Finances.*

———. *Census of Governments*, vol. 4, *Government Finances.*

US Department of Commerce, Bureau of Economic Analysis. "Gross Domestic Product, Third Quarter 2018 (Second Estimate); Corporate Profits, Third Quarter 2018 (Preliminary Estimate."

Further Reading

Gordon, Tracy. 2018. "Predicting Municipal Fiscal Distress: Aspiration or Reality?" Cambridge, MA: Lincoln Institute of Land Policy.

Gordon, Tracy, Richard Auxier, and John Iselin. 2016. "Assessing Fiscal Capacities of States: A Representative Revenue System–Representative Expenditure System Approach, Fiscal Year 2012." Washington DC: Urban Institute.

Q. How do state and local individual income taxes work?

A. Forty-one states and the District of Columbia levy broad-based taxes on individual income. New Hampshire and Tennessee tax only individual income from dividends and interest. Seven states do not tax individual income of any kind. Local governments in 13 states levy some type of tax on income in addition to the state income tax.

State governments collected $344 billion from individual income taxes in 2016, or 27 percent of state own-source general revenue (table 1). "Own-source" revenue excludes intergovernmental transfers. Local governments—mostly concentrated in Maryland, New York, Ohio, and Pennsylvania—collected just $33 billion from individual income taxes, or 3 percent of their own-source general revenue. (Census includes the District of Columbia's revenue in the local total.)

TABLE 1

State and Local Individual Income Tax Revenue
2016

	Revenue (billions)	Percentage of own-source general revenue
State and local	$376	16%
State	$344	27%
Local	$33	3%

Source: Urban-Brookings Tax Policy Center, "State and Local Finance Initiative Data Query System."

Note: Own-source general revenue does not include intergovernmental transfers.

Forty-one states and the District of Columbia levy a broad-based individual income tax. New Hampshire taxes only interest and dividends, and Tennessee taxes only bond interest and stock dividends. (Tennessee is phasing its tax out and will completely eliminate it in 2022.) Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming do not have a state individual income tax.

For combined state and local revenue, Maryland relied the most on the individual income tax in 2016, with the tax accounting for 29 percent of its revenue. The District of Columbia and nine states—California, Connecticut, Kentucky, Massachusetts, Minnesota, Montana, New York, Oregon, and Virginia—also collected 20 percent or more of their own-source revenue from individual income taxes in 2016.

The State of State (and Local) Tax Policy

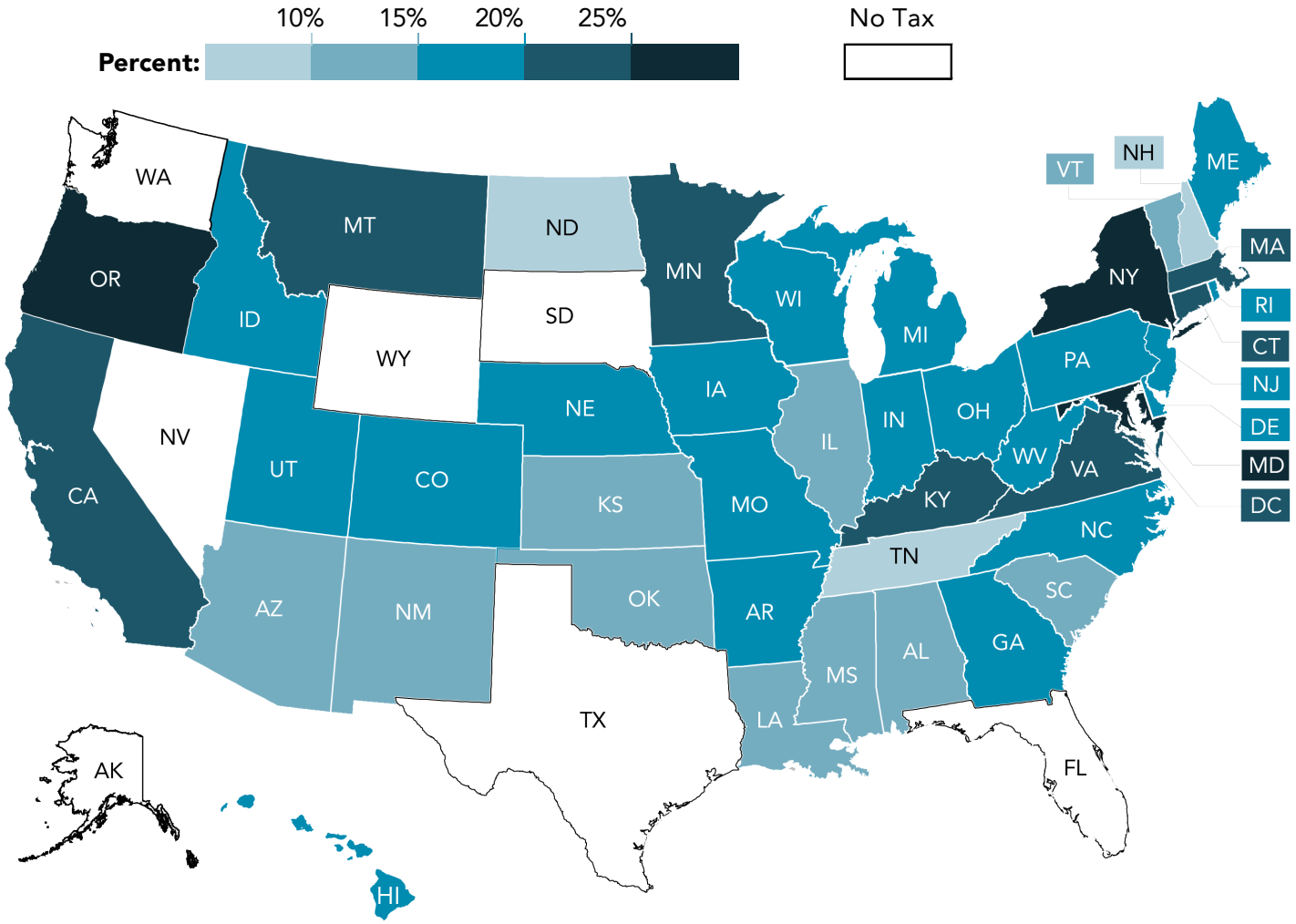
How do state and local individual income taxes work?

North Dakota's 5 percent of revenue from individual income taxes was the least of any state with a broad-based individual income tax. In every other state with a broad-based income tax, the tax provided at least 10 percent of own-source general revenue. New Hampshire and Tennessee, which levy a far more limited individual income tax, each collected about 1 percent of own-source revenue from their taxes.

FIGURE 1

Individual Income Tax as a Percentage of State and Local Own-Source General Revenue

2016



Source: Urban-Brookings Tax Policy Center, "State and Local Finance Initiative Data Query System."

Note: Own-source general revenue does not include intergovernmental transfers.

The State of State (and Local) Tax Policy

How do state and local individual income taxes work?

Local governments levy their own individual income taxes in 13 states. Localities in Indiana, Iowa, Maryland, and New York levy an individual income tax that piggybacks on the state tax. That is, local taxpayers in these states file their local tax on their state tax return and receive state deductions and exemptions when paying the local tax. Michigan localities also levy an individual income tax but use local forms and calculations.

Meanwhile, localities in Alabama, Delaware, Kansas, Kentucky, Missouri, Ohio, Oregon, and Pennsylvania levy an earnings or payroll tax. These taxes are separate from the state income tax. Earnings and payroll taxes are typically calculated as a percentage of wages, withheld by the employer (though paid by the employee) and paid by individuals who work in the taxing locality, even if the person lives in another city or state without the tax. Separately, localities in Kansas only tax interest and dividends (not wages).

In 2016, individual income taxes as a percentage of own-source local revenue ranged from less than 1 percent in Kansas and Oregon to 26 percent in Maryland. Local governments in Kentucky, Ohio, and Pennsylvania also collected more than 10 percent of own-source revenue from individual income taxes (or payroll taxes) in 2016.

WHAT INCOME IS TAXED?

The individual income tax base in most states is similar to the federal tax base. Most states start with federal adjusted gross income but a few start with federal taxable income (which is adjusted gross income minus certain deductions and exemptions). Alternatively, a handful of states use their own definition of income, but even these states rely heavily on federal rules when establishing their tax base.

Even the states that start with the federal tax base, however, often apply different rules for certain types of income. For example, unlike the federal government, states often tax municipal bond interest from securities issued outside that state, and many allow a full or partial exemption for pension income. In many states, but not all, taxpayers who itemize their federal tax deductions and claim deductions for state and local taxes cannot deduct those income taxes from their state income tax.

The 2017 Tax Cuts and Job Act created a new federal deduction for pass-through business income (income earned by sole proprietors, partnerships, and certain corporations). As such, states that use federal taxable income as their tax base had to decide whether to conform with the new federal deduction or establish separate treatment of pass-through income. For example, Idaho accepted the deduction as a part of its tax system while Oregon decoupled and rejected it. Critically, the deduction will not apply to state income taxes in states that use federal adjusted gross income, unless states pass legislation to adopt it.

Ohio already exempted a portion of pass-through business income from its income tax. Kansas exempted all pass-through income from its tax in 2012, but after budget problems it reversed course and ended the exemption in 2017.

HOW DO INDIVIDUAL INCOME TAX RATES VARY ACROSS STATES?

Most state income taxes are fairly flat, even in those states that apply graduated rates. Eight states impose a single tax rate on all income, while Hawaii has the most with 11 tax brackets. Top marginal rates for state income tax in 2018 ranged from 2.9 percent in North Dakota to 13.3 percent in California—including a 1 percent surcharge on incomes over $1 million (figure 2).

The State of State (and Local) Tax Policy

How do state and local individual income taxes work?

In some states with multiple tax brackets, the top tax bracket often begins at a low taxable income. Alabama, for example, has three rates, but the top tax bracket applies to taxable income over $3,000, making it essentially a flat tax. In other states, the difference between the lowest and the highest tax rates is small: about 2 percentage points in Arizona and Mississippi, for example.

While most states in the 1980s followed the federal government's lead in reducing the number of income tax brackets, some have increased the number of rates since then. California and New York have imposed new brackets (often called millionaire's taxes) for high-income taxpayers. California approved a millionaire's tax in 2004 that adds 1 percentage point to the rate applied to incomes over $1 million, and further increased the progressive bracket structure with another ballot measure in 2012. Similarly, New York's top tax rate of 8.82 percent applies to income above about $1 million.

At the start of 2018, California, Hawaii, Minnesota, and Oregon had top rates above 9 percent and another eight states had top income tax rates above 7 percent.

HOW DO STATES TAX CAPITAL GAINS AND LOSSES?

Eleven states and the District of Columbia treat capital gains and losses the same as under federal law. They tax all realized capital gains, allow a deduction of up to $3,000 for net capital losses, and permit taxpayers to carry over unused capital losses to subsequent years. However, most states tax capital gains at the same rate as ordinary income, while the federal government provides a preferential rate.

New Hampshire fully exempts capital gains, and Tennessee taxes only capital gains from the sale of mutual fund shares. Arizona exempts 25 percent of long-term capital gains, and New Mexico exempts 50 percent. Massachusetts has its own system for taxing capital gains, while Hawaii has an alternative capital gains tax. Pennsylvania and Alabama only allow losses to be deducted in the year that they are incurred, while New Jersey does not allow losses to be deducted from ordinary income.

The remaining 25 states that tax income generally follow the federal treatment of capital gains, with the exception of various state-specific exclusions and deductions.

HOW DO STATES TAX INCOME EARNED IN OTHER JURISDICTIONS?

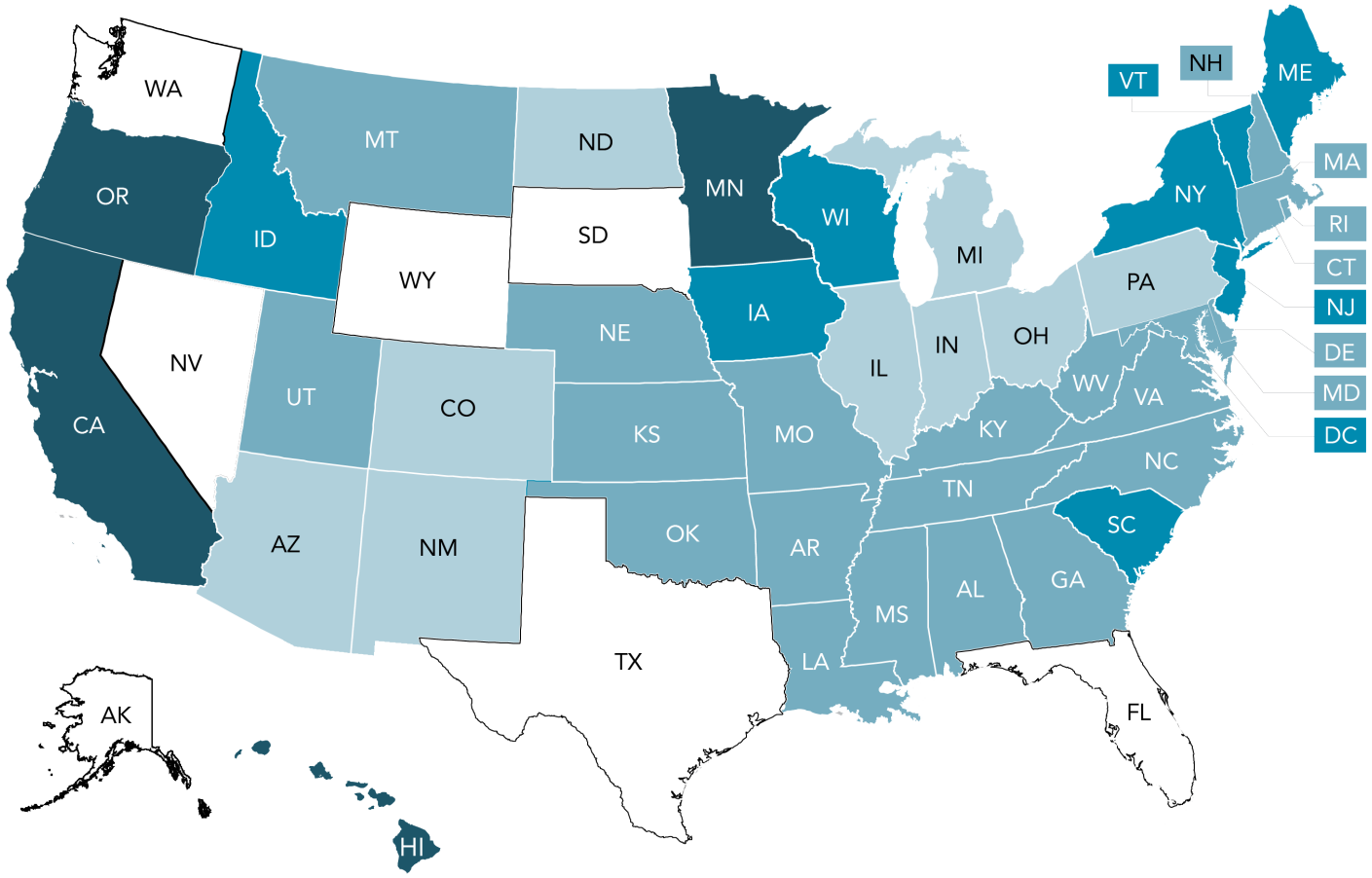
A state income tax is generally imposed by the state in which the income is earned and not the state where the earner lives. Some states, however, have entered into reciprocity agreements with other states that allow outside income to be taxed in the state of residence. For example, Maryland's reciprocity agreement with DC allows Maryland to tax income earned in the District by a Maryland resident. As of 2010, 15 states and DC had adopted reciprocity agreements with specific states. Typically, these are states with major employers close to the border and large commuter flows in both directions.

The State of State (and Local) Tax Policy

How do state and local individual income taxes work?

FIGURE 2

Top State Individual Income Tax Rates
2018



Source: Federation of Tax Administrators, "State Individual Income Taxes (Tax Rates for Tax Year 2018—as of January 1, 2018)."

The State of State (and Local) Tax Policy

How do state and local individual income taxes work?

Data Sources

Federation of Tax Administrators. "State Individual Income Taxes (Tax Rates for Tax Year 2018—as of January 1, 2018)."

Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System."

Further Reading

Auxier, Richard, and Frank Sammartino. 2018. "The Tax Debate Moves To The States: The Tax Cuts And Jobs Act Creates Many Questions for States That Link to Federal Income Tax Rules." Washington, DC: Urban-Brookings Tax Policy Center.

Francis, Norton, and Frank Sammartino. 2015. "Governing with Tight Budgets." Washington DC: Urban Institute.

Gordon, Tracy, Richard Auxier, and John Iselin. 2016. "Assessing Fiscal Capacities of States: A Representative Revenue System–Representative Expenditure System Approach, Fiscal Year 2012." Washington DC: Urban Institute.

Olin, Rick, and Sandy Swain. 2017. "Individual Income Tax Provisions in the States." Informational Paper 4. Madison: Wisconsin Legislative Fiscal Bureau.

Q. How do state and local sales taxes work?

A. Forty-five states and the District of Columbia levy general sales taxes that apply (with some exemptions) to all goods and certain services. Thirty-seven states (including, Alaska, which has no state tax) also allow general sales taxes at the local level. Most states apply separate sales taxes to particular goods, including tobacco, alcohol, and motor fuels.

HOW MUCH REVENUE DO STATE AND LOCAL GOVERNMENTS RAISE FROM SALES TAXES?

States rely on sales taxes more than local governments do. States collected $441 billion from sales taxes in 2016, or 35 percent of own-source state general revenue (table 1). "Own-source" revenue excludes intergovernmental transfers. Nearly two-thirds ($291 billion) of that total came from general sales taxes, while the other one-third ($150 billion) came from selective sales taxes (or excise taxes) on tobacco, alcohol, and the like. Local governments collected $118 billion from sales taxes in 2016, or 11 percent of local government own-source general revenue. Of that total, $85 billion came from general sales taxes and $32 billion came from selective sales taxes. (Census includes the District of Columbia's revenue in the local total.)

Nevada relied on sales tax revenue more than any other state in 2016, with sales and selective sales taxes accounting for 46 percent of combined state and local own-source general revenue. Sales and selective sales

TABLE 1

State and Local Sales Tax Revenue
2016

	General Sales Tax		Selective Sales Tax		Total Sales Tax	
	Revenue (billions)	Percentage of own source general revenue	Revenue (billions)	Percentage of own source general revenue	Revenue (billions)	Percentage of own source general revenue
State and local	377	16	182	8	559	24
State	291	23	150	12	441	35
Local	85	8	32	3	118	11

Source: Urban-Brookings Tax Policy Center, "State and Local Finance Initiative Data Query System."
Note: Own-source general revenue does not include intergovernmental transfers.

taxes also represented 30 percent or more of combined state and local revenue in Arizona, Arkansas, Florida, Hawaii, Louisiana, New Mexico, South Dakota, Tennessee, Texas, and Washington. Among the states with a general sales tax, Massachusetts (15 percent of revenue) relied least on sales and selective sales tax revenue as a percentage of combined state and local own-source revenue.

Every state and the District of Columbia collected some revenue from selective sales taxes in 2016. The average revenue from these taxes was 8 percent of state and local own-source general revenue, but 17 states collected 10 percent or more from selective sales taxes. Nevada's 17 percent from selective sales taxes was the highest revenue share of any state, while Wyoming's 4 percent was the lowest.

HOW DO GENERAL SALES TAX RATES DIFFER ACROSS STATES?

Among states with general sales taxes, Colorado has the lowest rate (2.9 percent) (figure 1). No other state with a general sales tax has a rate below 4.0 percent, but the state general sales tax rate is 4.0 percent in Alabama, Georgia, Hawaii, New York, and Wyoming. In addition to California, four states (Indiana, Mississippi, Rhode Island, and Tennessee) have rates at or above 7.0 percent. Alaska, Delaware, Montana, New Hampshire, and Oregon have no state general sales taxes.

Thirty-seven states (including Alaska, which has no statewide tax) allow local governments to impose their own general sales taxes. The maximum sales tax rates levied by local governments range from 0.5 percent in Hawaii to 8 percent in Colorado.

WHAT PURCHASES ARE SUBJECT TO THE GENERAL SALES TAX?

General sales taxes typically apply to most tangible goods. One notable exception is food purchased for use at home: only 13 states tax such purchases, and 6 of these states tax food at a lower rate than their general sales tax rate. Five of the 13 states that tax food for home consumption provide income tax credits to low-income residents to help offset the tax. In contrast, food bought for immediate consumption at restaurants is taxed in most states, and sometimes at a higher rate than the general sales tax rate.

Many states also exempt prescription and nonprescription drugs, textbooks, and clothing from general sales taxes. Some states have sales tax holidays, periods in which specific purchases—for example, clothes and school supplies right before the start of a new school year—are sold tax-free.

The taxation of services (e.g., dry cleaning, carpentry work, barbershops) is more complicated. All states tax some services, but exemptions are common. Very few states tax professional services, such as doctors and lawyers. Hawaii and New Mexico are exceptions to that rule, taxing nearly all services.

DO SALES TAXES APPLY TO ONLINE PURCHASES?

The treatment of online and other remote sales (e.g., catalog sales) is complex. In 1992, the Supreme Court ruled (*Quill Corp. v. North Dakota*) that under the commerce clause of the US Constitution, a retailer with no physical presence in the online purchaser's state of residence (technically called a "nexus" requirement) is not required to collect a state or local sales tax from the consumer.

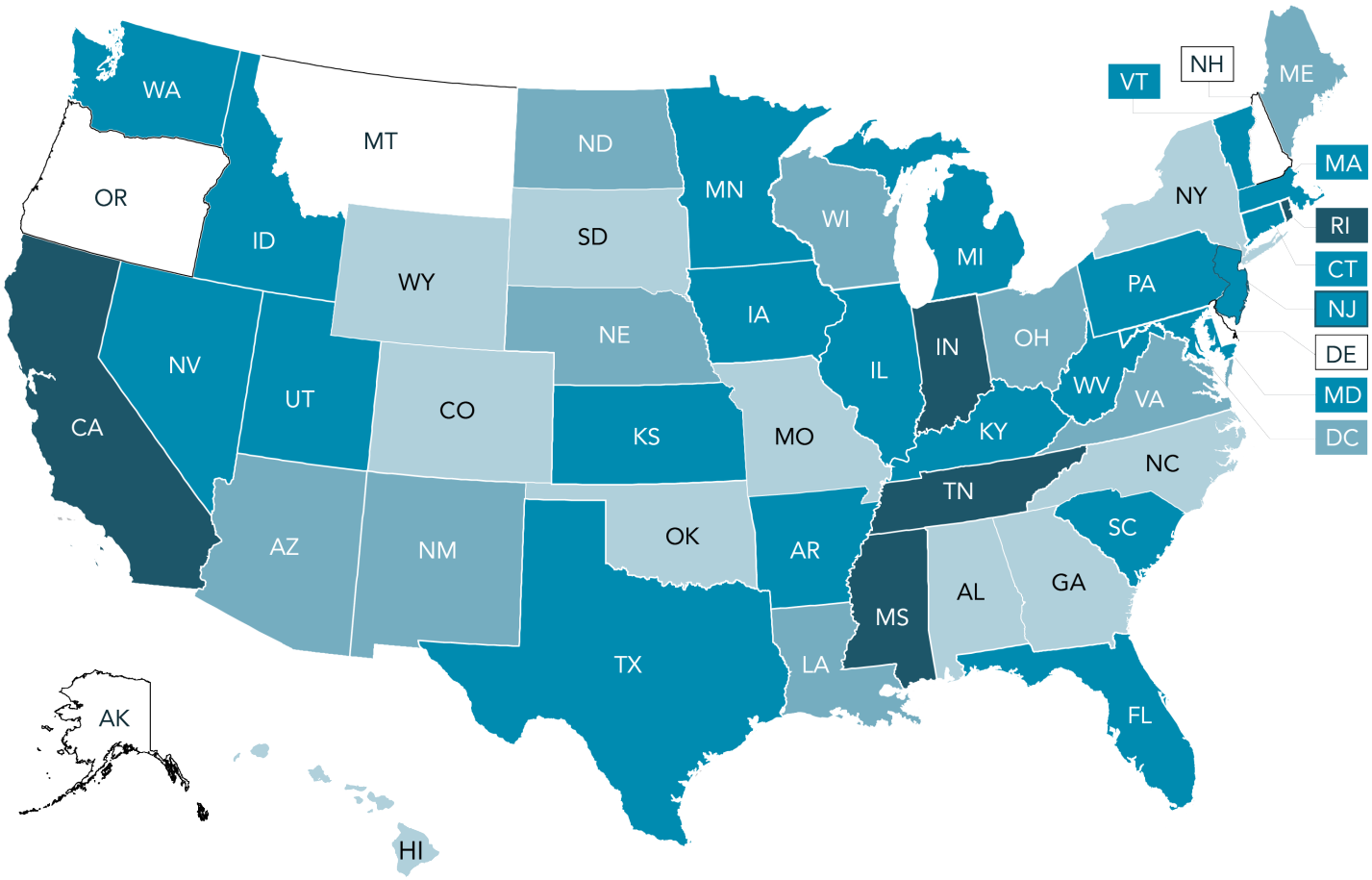
However, the Supreme Court revisited this issue in 2018 in *South Dakota v. Wayfair, Inc.*, overturned *Quill*, and gave states broad authority to collect the tax. The Supreme Court upheld a South Dakota law requiring any entity with sales of $100,000 or more or with at least 200 transactions in South Dakota to collect and

The State of State (and Local) Tax Policy

How do state and local sales taxes work?

FIGURE 1

State General Sales Tax Rates
2018



Source: Federation of Tax Administrators, "State Sales Tax Rates and Food & Drug Exemptions (As of January 1, 2018)."

remit the state's sales tax. Other states have quickly begun enacting similar laws.

Taxing online sales is not completely new, though. Many large retailers had already begun voluntarily collected the tax even before *Quill*. Most notably, Amazon has collected taxes in every state with a general sales tax since April 2017.

Further, states levy use taxes in addition to sales taxes. Consumers are subject to use taxes on goods purchased outside their state for use in their home state—if they did not pay a sales tax. This includes online purchases. The use tax rate is the same as the sales tax rate, but few consumers know it exists and actually pay it. Many states with both a sales tax and an individual income tax (such as California, Kentucky, Virginia, and Utah) give taxpayers a chance to declare liability and pay use taxes on their income tax returns.

WHAT TAXES DO STATES LEVY ON TOBACCO, ALCOHOL, AND MOTOR FUELS?

All states levy "selective" sales taxes—with different rates than the general sales tax—on some goods and services. Three of the best known are taxes on cigarettes (and other tobacco products), alcohol, and motor fuels. Those products are also subject to a federal tax. For cigarettes and alcohol, the taxes are sometimes called sin taxes because one purpose of the tax is to discourage consumption. Marijuana and soda are also increasingly taxed by states and localities.

Tobacco Taxes

Cigarette taxes are typically levied per pack. Missouri has the lowest rate (17 cents per pack) and Connecticut and New York have the highest ($4.35). In six states (Alabama, Illinois, Missouri, New York, Tennessee, and Virginia), some local governments levy an additional cigarette tax. Local cigarette tax rates range from 1 cent per pack in Alabama and Tennessee to $4.18 per pack in Chicago (a Cook County tax of $3.00, plus a city tax of $1.18).

Some states and cities levy their general sales taxes on the prices of cigarettes inclusive of the excise tax, while others include the general sales tax in the excise tax rate. Taxes are also levied on other tobacco products, including cigars and loose tobacco. There is new discussion about whether other nicotine delivery devices such as e-cigarettes should be taxed. The District of Columbia, California, Kansas, Louisiana, Minnesota, and North Carolina have already passed such taxes. State and local governments collected $18 billion in revenue from tobacco taxes in 2016.

Alcohol Taxes

Alcohol taxes are generally paid at the wholesale level, so the cost is incorporated into the retail price. The excise taxes are levied per gallon (not as a percentage of the price), and beer, wine, and distilled spirits have different tax rates. In addition to the excise tax, many states also levy a general sales tax on the final purchase price of alcohol, and some states and cities have special sales tax rates for alcohol.

Some states, such as New Hampshire and Pennsylvania, collected most of their revenue from government-run liquor stores instead of traditional alcohol taxes, generating revenue through various fees, price mark-ups, and net profits. In total, 21 states collected revenue from government-owned liquor stores.
State and local governments collected $16 billion in revenue from alcohol in 2015—$7 billion from alcohol taxes and $9 billion from government-owned liquor stores.

The State of State (and Local) Tax Policy

How do state and local sales taxes work?

Motor Fuel Taxes

Motor fuel taxes are typically per gallon taxes. That is, consumers pay tax based on how much gas they purchase, not as a percentage of the final retail price of gasoline. However, 20 states and the District of Columbia tie at least a portion of their gasoline tax rate to the retail price. The lowest gasoline tax rate is in Alaska (8.95 cents per gallon) and the highest is in Pennsylvania (57.6 cents per gallon).

States earmark much of their motor fuel tax revenue for transportation spending, which has meant funding gaps for transportation as gasoline has recently stagnated. States are considering options like tying the gas tax rates to inflation or population, taxing based on price, and taxing miles traveled instead of gas (as more drivers use hybrid or electric cars). State and local governments collected a combined $44 billion in revenue from motor fuel taxes in 2015.

Some cities (e.g., Boston, San Francisco, and Washington, DC) also have special tax rates for specific goods and services (e.g., restaurant meals, hotel accommodations, rental cars, and parking) that are higher than their general sales tax rates. These higher tax rates are often designed to collect a significant share of their revenue from visitors, who use and benefit from city services and presumably have less political clout than local voters.

Data Sources

Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System."

———. Statistics. "State Cigarette Tax Rates: 2001 to 2018"; "State Motor Fuels Tax Rates: 2000 to 2018"; and "State Sales Tax Rates: 2000 to 2018."

Further Reading

Auxier, Richard. 2014. "Reforming State Gas Taxes; How States Are (and Are Not) Addressing an Eroding Tax Base." Washington, DC: Urban-Brookings Tax Policy Center.

Auxier, Richard, and John Iselin. 2017. "Infrastructure, the Gas Tax, and Municipal Bonds." Washington, DC: Urban-Brookings Tax Policy Center.

Auxier, Richard C., and Kim S. Rueben. 2018. "The Evolution of Online Sales Taxes and What's Next for States." Washington, DC: Urban-Brookings Tax Policy Center.

Q. How do state and local property taxes work?

A. Jurisdictions in all 50 states and the District of Columbia impose property taxes. Most property tax revenue comes from local levies on land and improvements to it, but some states also tax personal property (such as machinery, equipment, and motor vehicles). The tax equals a percentage of the taxable value of the property and may be levied in some form at every level of government: state, county, municipal, township, school district, and special district.

HOW MUCH REVENUE DO STATE AND LOCAL GOVERNMENTS RAISE FROM PROPERTY TAXES?

While property taxes are a significant source of local government revenue, they are a very small revenue source for most states (table 1). State governments levied property taxes in 36 states in 2016, collecting $16 billion in revenue, or 1 percent of own-source state general revenue. (Own-source revenue excludes intergovernmental transfers.) Meanwhile, local governments collected $487 billion from property taxes in 2016, or nearly half of their own-source general revenue.

Property taxes are the largest own-source of revenue for counties, cities, townships, school districts, and special districts, which are specific-purpose units, such as water and sewer authorities. School districts rely quite heavily on property taxes, collecting $181 billion in 2012, which was 82 percent of their own-source general revenue. Because school districts receive substantial intergovernmental transfers, own-source revenue makes up less than half (about 45 percent) of their total general revenue. (Census only releases data for these specific local jurisdictions in years that end in 2 or 7.)

TABLE 1

State and Local Property Tax Revenue
2016

	Revenue (billions)	Percentage of own source general revenue
State and local	$503	22%
State	$16	1%
Local	$487	47%

Source: Urban-Brookings Tax Policy Center, "State and Local Finance Initiative, Data Query System."

Note: Own-source general revenue does not include intergovernmental transfers.

The State of State (and Local) Tax Policy

How do state and local property taxes work?

IN WHICH STATES ARE PROPERTY TAXES MOST IMPORTANT?

New Hampshire, which has neither a broad-based income tax nor a general sales tax, was the most reliant on property taxes in 2016, with property tax revenue accounting for 47 percent of its combined state and local own-source general revenue. Property taxes also contributed more than 30 percent of state and local revenue in Connecticut, Maine, New Jersey, Rhode Island, and Vermont. Alabama was the least reliant on property tax revenue in 2016, with only 10 percent of its combined state and local own-source general revenue coming from the tax. Arkansas, Delaware, Hawaii, Kentucky, Louisiana, New Mexico, North Dakota, Oklahoma, and West Virginia also collected less than 15 percent of combined state and local revenue from property taxes (figure 1).

Looking only at local governments, property taxes provided more three-quarters of own-source general revenue in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, and Rhode Island in 2016. Alabama's local governments received 19 percent of their own-source revenue from property taxes, the lowest percentage in any state.

At the state level, Vermont's property taxes contributed 27 percent of state own-source general revenue in 2016, far and away the highest percentage in any state. Nearly all of Vermont's education spending is financed at the state level, and the state property tax is the largest source of that funding. The next-highest percentage was in Wyoming, where property taxes were 11 percent of state own-source general revenue. Wyoming's revenue is relatively high in part because the state levies its tax on mineral production.

Property taxes were also 5 percent or more of state own-source revenue in Arizona, Arkansas, Kansas, Michigan, Montana, New Hampshire, and Washington. State property taxes are often on personal property and taxes on land that is used for utilities. Fourteen states did not levy a state-level property tax.

HOW MUCH DO PROPERTY TAX RATES DIFFER ACROSS THE COUNTRY?

Effective property tax rates differ widely across and within states, making them difficult to compare. In addition to variation in statutory tax rates, local governments use various methods to calculate their real property tax base.

The taxing jurisdiction typically assesses the real property value by estimating what the property would sell for in an arms-length transaction. However, some jurisdictions base value on the last sale price or acquisition value of the property, others consider the income that a property could generate (for example, an empty lot that could be used for a hotel), and some base the assessment solely on the size or physical attributes (e.g., design, location) of the property. There is also variation in the timing of assessments, with some jurisdictions assessing annually and others less frequently.

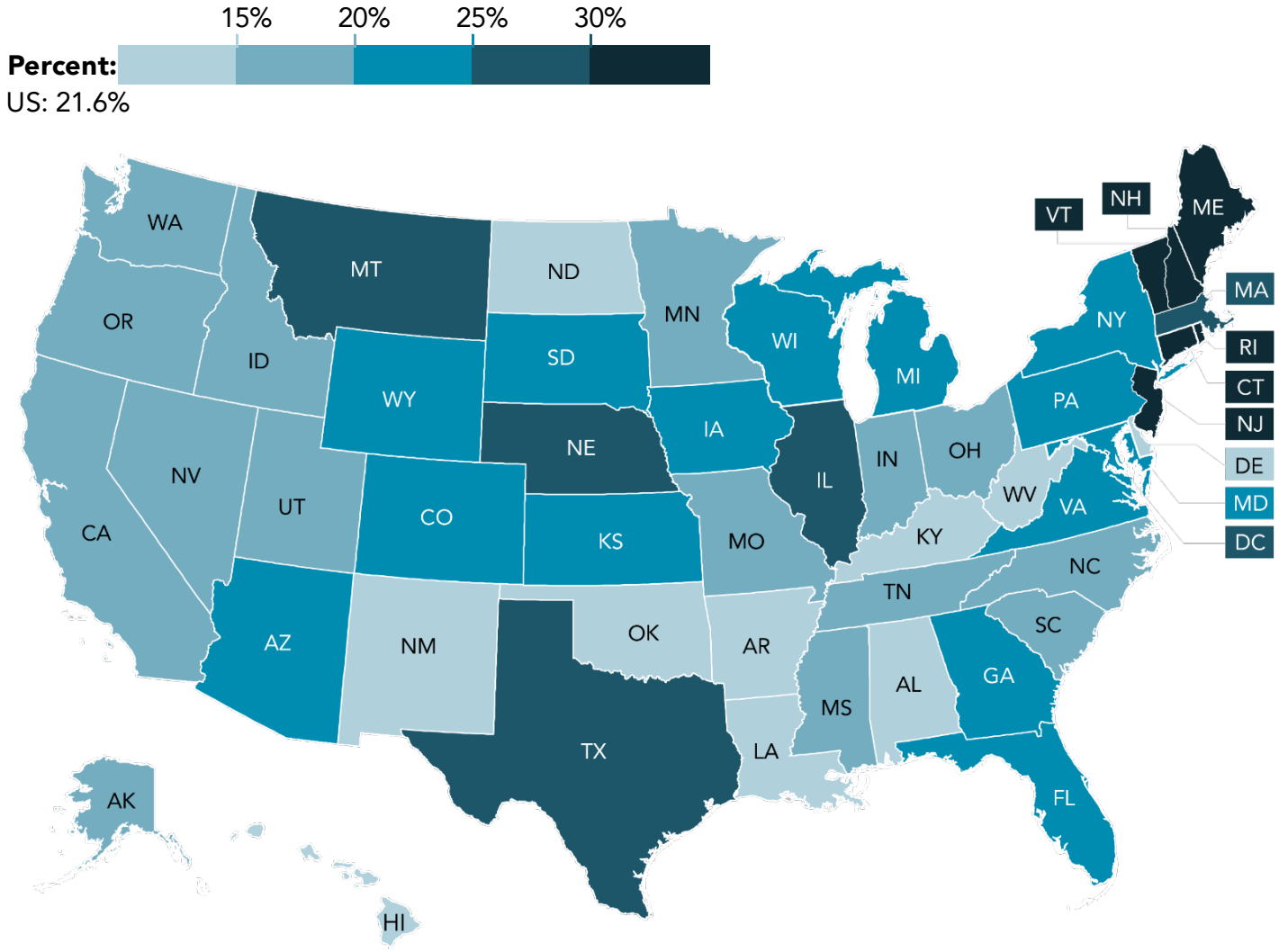
Some jurisdictions tax the entire assessed value of the property (before deductions and credits). Others tax only a fraction of the assessed value. For example, counties in South Carolina tax only 4 percent of a property's assessed value. Jurisdictions may impose different statutory tax rates ("classifications") for different types of property, most commonly distinguishing between residential and business property.

The State of State (and Local) Tax Policy

How do state and local property taxes work?

FIGURE 1

Property Tax Revenue as a Percentage of State and Local Own-Source General Revenue
2016



Source: Urban-Brookings Tax Policy Center, "State and Local Finance Initiative, Data Query System."
Note: Own-source general revenue does not include intergovernmental transfers.

The State of State (and Local) Tax Policy

How do state and local property taxes work?

HOW DO STATES LIMIT PROPERTY TAXES?

Many states have imposed limits on property tax rates, property tax revenue, or increases in assessed property values, reducing reliance on the property tax as a source of revenue. California, for example, limits the tax rate to 1 percent and annual assessment increases to 2 percent until a property is resold. As a result, neighbors with similar houses may have dramatically different tax liabilities depending on when their houses last changed hands.

States and local governments also often use limits, exemptions, deductions, and credits to lower tax liability. Here are some examples:

- Assessment limits prevent a property's assessed value from increasing by more than a fixed percentage between assessments. These limits can reduce a property's assessed value below its market value and prevent rapid property value increases from raising the owner's tax burden. When the property is sold, its assessed value is reset at market value.
- Homestead deductions and exemptions decrease the taxable value of real property by a fixed amount (much the same way a standard deduction decreases taxable income) for owners who occupy the property. Forty-one states and the District of Columbia have homestead exemptions that reduce the fraction of the assessed property value subject to tax.
- Circuit breaker programs provide relief for elderly and low-income residents with property tax liabilities above a specified percentage of their income. Although relief is based on property tax payments, it is typically provided via an income tax credit. In most states, the state government collects income tax while local jurisdictions collect property tax, making circuit breakers a type of subsidy from state to local governments. Unlike the other approaches described here, circuit breakers benefit renters as well as homeowners in some jurisdictions. According to the Lincoln Institute of Land Policy, 33 states and the District of Columbia offer some form of circuit breaker program. In 22 of these states and the District of Columbia, renters are eligible for a circuit breaker program (some states offer multiple programs for different types of residents).
- Property tax deferrals allow elderly and disabled homeowners to defer payment until the sale of the property or the death of the taxpayer.

Data Sources

US Census Bureau. *Annual Survey of State and Local Government Finances*.

Urban-Brookings Tax Policy Center. "State and Local Finance Initiative, Data Query System."

Further Reading

Harris, Benjamin H., and Brian David Moore. 2013. "Residential Property Taxes in the United States." Washington, DC: Urban-Brookings Tax Policy Center.

Lincoln Institute of Land Policy. "Significant Features of the Property Tax."

Q. How do state and local corporate income taxes work?

A. Forty-four states and the District of Columbia levy corporate income taxes. Ohio, Nevada, Texas, and Washington tax corporate gross receipts. South Dakota and Wyoming had no corporate income tax or gross receipts tax in 2016.

HOW MUCH REVENUE DO STATE AND LOCAL GOVERNMENTS RAISE FROM CORPORATE INCOME TAXES?

State and local governments raise a small share of revenue from corporate income taxes (table 1). States collected $46 billion from corporate income taxes in 2016, or 4 percent of state own-source general revenue. (Own-source revenue excludes intergovernmental transfers.) Local governments collected $8 billion from corporate income taxes in 2016, or 1 percent of own-source revenue. Census includes the District of Columbia's $500 million of revenue in the local total. The local total is low partly because only seven states allowed localities to levy a corporate income tax. Among them, New York (and mostly New York City) was responsible for 86 percent of all corporate income tax revenue collected by local governments.

TABLE 1

State and Local Corporate Income Tax Revenue
2016

	Revenue (billions)	Percentage of own source general revenue
State and local	$54	2%
State	$46	4%
Local	$8	1%

Source: Urban-Brookings Tax Policy Center, "State and Local Finance Initiative, Data Query System."
Note: Own-source general revenue does not include intergovernmental transfers.

At the state level, New Hampshire collected 16 percent of state own-source general revenue from corporate income taxes in 2016, the highest share of any state. New Hampshire does not have a broad-based individual income tax or general sales tax. Corporate income taxes were also more than 5 percent of state own-source revenue in Delaware, Illinois, Massachusetts, and Tennessee. Among the 44 states with a corporate income tax, the lowest percentage was in Hawaii, Louisiana, and New Mexico, which all collected only 1 percent of revenue from the tax.

The State of State (and Local) Tax Policy

How do state and local corporate income taxes work?

WHAT INCOME IS TAXED?

Most states use the federal definition of corporate income as a starting point. However, states deviate from federal rules in some instances. For example, when the federal government enacted "bonus depreciation" in 2008, which allowed businesses to deduct a larger portion of capital investment in the year the investment is first made, many states did not enact conforming rules. Many states will again have to decide if they want to conform or decouple from several corporate income tax provisions in the recently passed Tax Cuts and Jobs Act.

While states benefit from federal tax administration and enforcement by following the federal definition of corporate income, they must take additional steps to determine what portion of multistate corporation income is taxable in their states.

States must first establish whether a company has "nexus" in the state, that is, enough physical or economic presence to owe income tax. Next, they must determine the taxable income generated by activities in the state. For example, multistate companies often have subsidiaries in no-tax or low-tax states that hold intangible assets such as patents and trademarks. The rent or royalty payments to those wholly owned subsidiaries may or may not be considered income of the parent company operating in another state. Finally, states must determine how much of a corporation's taxable income is properly attributed to that state.

Until recently, most states used a three-factor formula based on the Uniform Division of Income for Tax Purposes Act to determine the portion of corporate income taxable in the state. That formula gave equal weight to the shares of a corporation's payroll, property, and sales in the state. In the last 20 years, however, states have moved toward formulas that either weight more heavily or rely exclusively on sales within the state to apportion income. By using the portion of a corporation's sales rather than employment or property to determine tax liability, states hope to encourage companies to relocate or to expand their operations within these states.

HOW MUCH DO CORPORATE INCOME TAX RATES DIFFER ACROSS STATES?

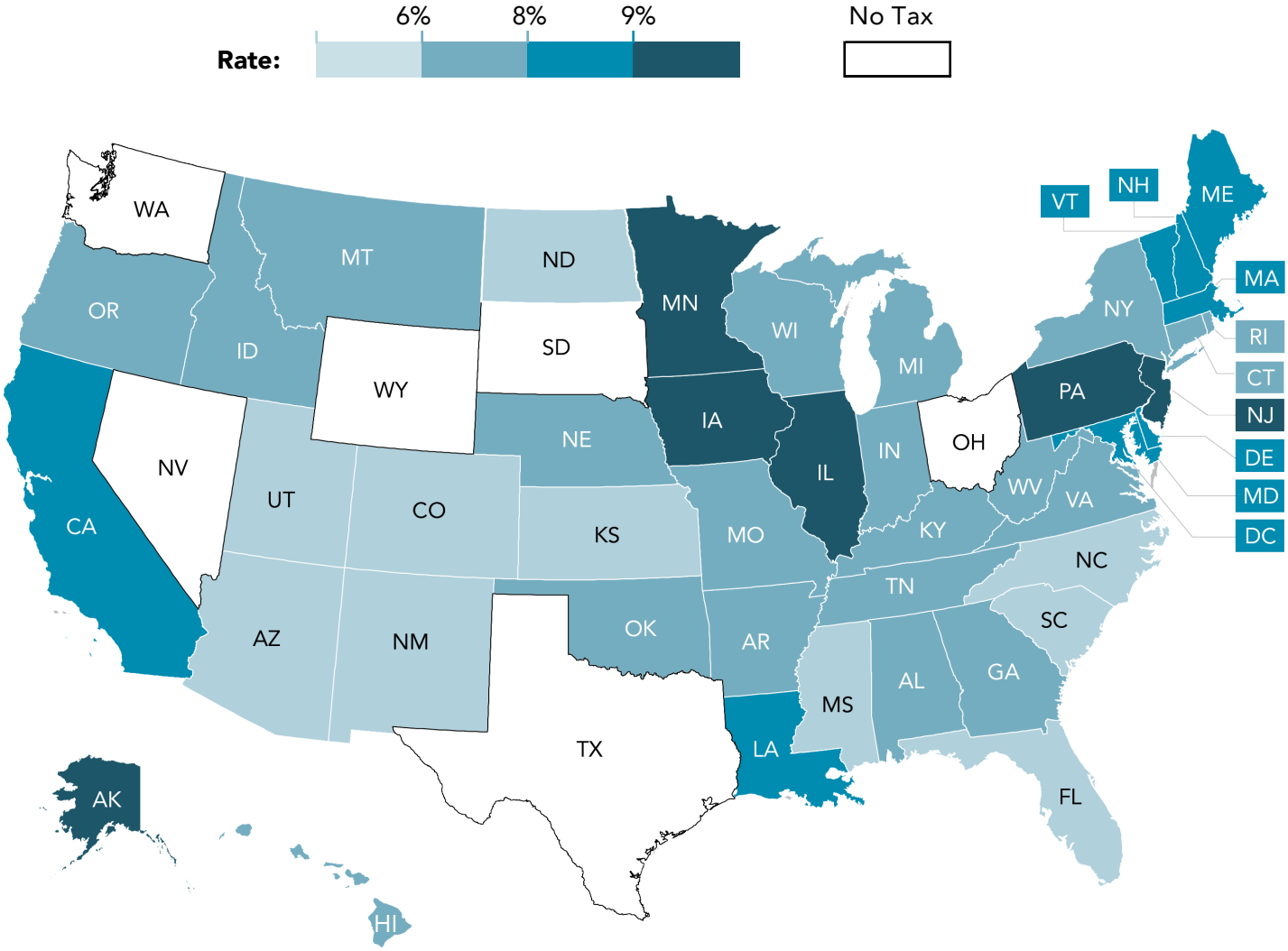
In 2018, top corporate income tax rates ranged from 3 percent in North Carolina to 12 percent in Iowa (figure 1). Six states (Alaska, Illinois, Iowa, Minnesota, New Jersey, and Pennsylvania) had top corporate income tax rates at or above 9.0 percent. Ten states (Arizona, Colorado, Florida, Kansas, Mississippi, New Mexico, North Carolina, North Dakota, South Carolina, and Utah) had top rates below 6.0 percent.

The State of State (and Local) Tax Policy

How do state and local corporate income taxes work?

FIGURE 1

Top State Corporate Income Tax Rates
2018



Source: Federation of Tax Administrators.

Data Sources

Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System."

———. *Statistics*. "State Corporate Income Tax Rates: 2002 to 2018."

Further Reading

Francis, Norton. 2013. "Business Franchise Taxes in the District of Columbia." Washington DC: Urban-Brookings Tax Policy Center.

Q. How do state estate and inheritance taxes work?

A. Twelve states and the District of Columbia have an estate tax and six have an inheritance tax (Maryland has both). Before 2001, when a federal credit offset the cost of state taxes, all states taxed the transfer of wealth at death.

State and local governments collected $5 billion from estate and inheritance taxes in 2016, well less than 1 percent of combined state and local own-source general revenue. In 2000, the last year all states levied an estate tax, these taxes still provided less than 1 percent of combined state and local own-source general revenue.

ESTATE TAX

An estate tax is paid by the estate itself on the transfer of property at the time of a person's death. States must allocate assets across jurisdictions if the deceased person lived or owned property in multiple jurisdictions.

Before 2001, all 50 states and the District of Columbia had an estate tax because the federal estate tax provided a state tax credit worth 16 percent of the taxable value of the estate. Thus, states could raise revenue without increasing the net tax burden on their residents by linking directly to the federal credit, and all states did this by setting their estate tax rate equal to the maximum credit. However, federal tax changes in 2001 replaced the credit with a less valuable deduction, and many states eliminated their tax.

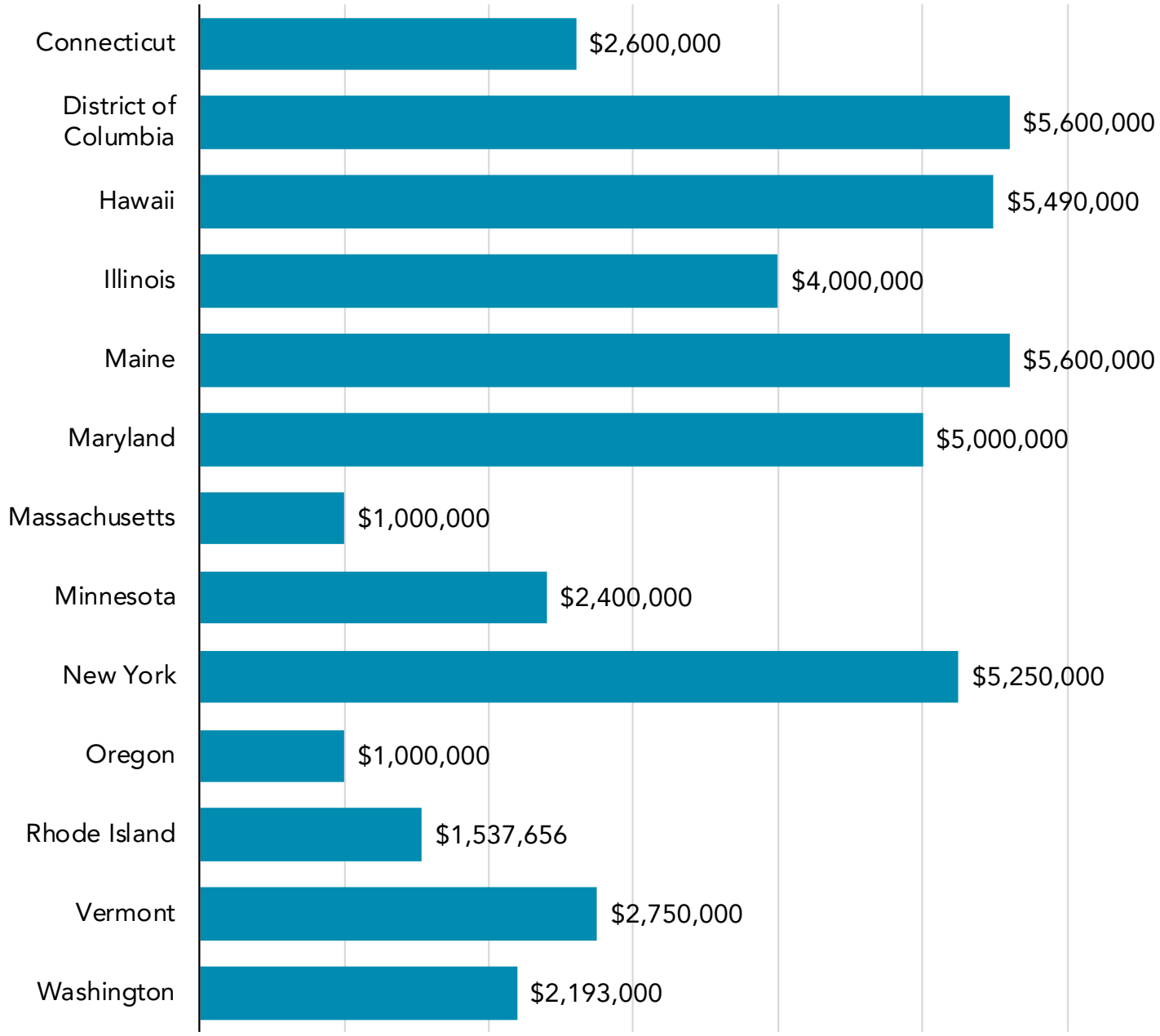
Currently, only 12 states and the District of Columbia levy an estate tax. Delaware and New Jersey repealed their estate taxes on January 1, 2018. Kansas, North Carolina, Ohio, Oklahoma, and Tennessee also recently repealed their estate taxes.

Each state exempts a gross amount from its tax (figure 1). These exemptions range from $1 million in Massachusetts and Oregon to $5.6 million in the District of Columbia and Maine. Some states previously tied their exemption to the federal amount, but after the Tax Cuts and Jobs Act raised the federal exemption from $5.49 million to $11.2 million beginning in 2018, the District of Columbia, Hawaii, Maryland, and Maine all decoupled and established their own exemption amounts. Connecticut was planning to match the federal amount in 2020, but recent legislation pushed the conformity date to 2023. New York is still set to match the federal exemption in 2019.

Most states have a top estate tax rate of 16 percent, a relic of the previous federal estate tax credit system (see below). However, Connecticut (12 percent), Hawaii (15.7 percent), Maine (12 percent), and Washington (20 percent) have different top rates.

FIGURE 1

Exemption Amounts for States with Estate Taxes 2018



Source: State tax codes.
Notes: The federal exemption threshold is $11,200,000.

The State of State (and Local) Tax Policy

How do state estate and inheritance taxes work?

INHERITANCE TAX

An inheritance tax is similar to an estate tax but is paid by the heirs rather than the estate. The tax is levied on a resident's estate or a nonresident's in-state property at the time of death. The tax depends on the heir's relationship to the decedent. Surviving spouses are exempt in all states with inheritance taxes; some states also exempt direct descendants. Iowa, Kentucky, Maryland, Nebraska, New Jersey, and Pennsylvania have inheritance taxes. Indiana recently repealed its inheritance tax.

BACKGROUND

From 1924 to 2005, the federal government shared estate tax revenue with the states by allowing a credit for state estate and inheritance taxes. From 1924 to 1954, the credit was equivalent to 25 percent of the federal estate tax. After 1954, estates could claim a credit for state estate and inheritance taxes according to a progressive schedule with a top rate of 16 percent of the taxable value of the estate. As a consequence, rather than establishing unique taxes, states enacted estate taxes that equaled the maximum credit. In 2000, the last year the full credit was available, the state tax credits totaled $6.4 billion.

The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) phased out the credit, replacing it with a less generous deduction. Many states directly linked the estate tax to the amount of the credit, and estate taxes would go to zero if they did not "decouple" from the federal law. In fact, 30 states let their tax go away by doing nothing. Fifteen states and DC did decouple, establishing separate estate taxes; five states explicitly repealed their taxes.

All provisions of EGTRRA were scheduled to expire in 2010 but were extended to 2012. In 2012, Congress did not address EGTRRA until the very end of the year, creating a fiscal cliff for most federal taxes and the possibility that the federal credit for state death taxes would return. In the end, Congress permanently replaced the state credit with a deduction for estate taxes paid to the states.

Data Sources

Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System."

Further Reading

Francis, Norton. 2013. "Back from the Dead: State Estate Taxes after the Fiscal Cliff." Washington, DC: Urban Institute.

Harris, Benjamin. 2013. "Estate Taxes after ATRA." Tax Notes. February 25.

Q. How do state earned income tax credits work?

A. In 2018, 28 states and the District of Columbia offered their own earned income tax credit (EITC). States typically set their credits as a percentage of the federal EITC. However, unlike the federal credit, some state EITCs are not refundable, which makes them much less valuable to very low income families who rarely owe income tax.

Twenty-eight states and DC offered their own earned income tax credit (EITC) in 2018. This does not include Washington's credit which, while a part of the state's tax code, has never been implemented or funded. If Washington did fund its credit, it would be the only state without an income tax to offer an EITC.

In all but six states—Delaware, Hawaii, Ohio, Oklahoma, South Carolina, and Virginia—state EITCs, like the federal credit, are refundable. That is, if a refundable credit exceeds a taxpayer's state income tax, the taxpayer receives the excess amount as a payment from the state. A nonrefundable EITC can only offset state income taxes, so the benefit is limited for low-income families with little taxable income.

All states but one set their credits as a percentage of the federal credit, the exception being Minnesota, which calculates its credit as a percentage of income (table 1). State credits as a percentage of the federal credit ranged from 3 percent in Montana to a nonrefundable 125 percent in South Carolina. The highest refundable credit is in the District of Columbia (40 percent).

California's credit is 85 percent of the federal credit but is based on a smaller earnings range than the federal EITC. In 2018, the state will expand the income range and allow previously ineligible self-employed workers to qualify for the credit.

Wisconsin's EITC depends on the number of qualified children: 4 percent of the federal credit for filers with one child, 11 percent for filers with two children, and 34 percent for filers with three or more children. A filer in Wisconsin without children is not eligible for the state EITC.

The District of Columbia also offers 100 percent of the federal EITC to earners without qualifying children and expanded the range of eligible income beyond the federal limits. The maximum federal credit for earners without a qualifying child is far lower ($519) than the max credit for earners with at least one child ($3,461), and the eligible income range is also far smaller for earners without qualifying children.

In 2018, Maryland passed legislation that extends eligibility for the state's credit to workers without a qualifying child who are between 21 and 24 years old (workers without qualifying children must be between 25 and 65 years old to claim the federal credit).

The State of State (and Local) Tax Policy

How do state earned income tax credits work?

TABLE 1

Description of State Earned Income Tax Credits
2018

State	Year enacted	Refundable	Percentage of federal EITC
California	2015	Yes	85 percent (applies to a smaller range of eligible income than the federal credit)
Colorado	2015		10
Connecticut	2011	Yes	27.5
Delaware	2005	No	20
District of Columbia	2000	Yes	40 (100 for childless workers)
Hawaii	2018	No	20
Illinois	2000	Yes	10
Indiana	1999	Yes	9
Iowa	1989	Yes	15
Kansas	1998	Yes	17
Louisiana	2007	Yes	3.5
Maine	2000	Yes	5
Maryland	1987	Yes	Refundable: 27; nonrefundable: 50
Massachusetts	1997	Yes	23
Michigan	2006	Yes	6
Minnesota	1991	Yes	Calculated as a percentage of income
Montana	2020	Yes	3
Nebraska	2006	Yes	10
New Jersey	2000	Yes	30
New Mexico	2007	Yes	10
New York	1994	Yes	30
Ohio	2013	No	10, limited to 50 percent of liability for Ohio taxable income over $20,000
Oklahoma	2002	No	5
Oregon	1997	Yes	8
Rhode Island	1986	Yes	12.5
South Carolina	2018	No	125
Vermont	1988	Yes	32
Virginia	2004	No	20
Washington	2008 (never implemented)	Yes	10 (or $50, whichever is greater)
Wisconsin	1989	Yes	4 for families with one child; 11 for families with two children; 34 for families with three or more children

Source: Tax Credits for Workers and Their Families, "State Tax Credits."

Data Sources

Tax Credits for Workers and Their Families. "State Tax Credits." Accessed June 1, 2018.

Further Reading

Maag, Elaine. 2015a. "Earned Income Tax Credit in the United States." *Journal of Social Security Law* 22 (1): 20–30.

———. 2015b. "Federal and State Income Taxes and Their Role in the Social Safety Net." Washington, DC: Urban Institute.

———. 2015c. "Investing in Work by Reforming the Earned Income Tax Credit." Washington, DC: Urban Institute.

Rueben, Kim, Frank Sammartino, and Kirk Stark. 2017. "Upward Mobility and State-Level EITCs: Evaluating California's Earned Income Tax Credit." *Tax Law Review* 70: 477–511.

Urban Institute. "State Earned Income Tax Credits."

Q. How do state and local severance taxes work?

A. Thirty-four states levy severance taxes, which are taxes on the extraction of natural resources (including oil and natural gas). The revenue from these taxes is extremely volatile because it rises and falls with the price and production of natural resources.

HOW MUCH REVENUE DO STATE AND LOCAL GOVERNMENTS RAISE FROM SEVERANCE TAXES?

State and local governments collected $8 billion from severance taxes in 2016. Nearly all this revenue came from state taxes. Only 12 states allowed local severance taxes in 2016, collecting a combined $225 million that year.

Severance taxes accounted for less than 1 percent of national state and local own-source general revenue in 2016, but provided a substantial amount of own-source revenue in a few resource-rich states, such as North Dakota (21 percent) and Wyoming (10 percent) (figure 1). "Own-source" revenue excludes intergovernmental transfers.

The states with the next-highest contributions from severance taxes were Alaska, New Mexico, and West Virginia—all collected 4 percent of state and local own-source revenue from severance taxes. Severance taxes in Texas account for 30 percent of national state and local severance tax revenue, but they provide only 1 percent of Texas's state and local own-source revenue. Sixteen states and the District of Columbia do not levy severance taxes.

Alaska typically depends on severance tax revenue more than any other state. However, the price and production of oil have fallen dramatically and so has the state's tax revenue. In 2012, Alaska's severance tax revenue was nearly $6 billion and accounted for over 40 percent of the state's combined state and local own-source general revenue. Since then, however, revenue has fallen to $4 billion in 2013 (33 percent), $2 billion in 2014 (23 percent), $636 million in 2015 (8 percent), and $337 million in 2016 (4 percent).

Alaska highlights the volatility of severance taxes and the challenges that poses to states that heavily rely on them. Therefore, these states must have flexible budgeting arrangements or significant rainy day funds to accommodate unforeseen changes in severance tax revenue flows.

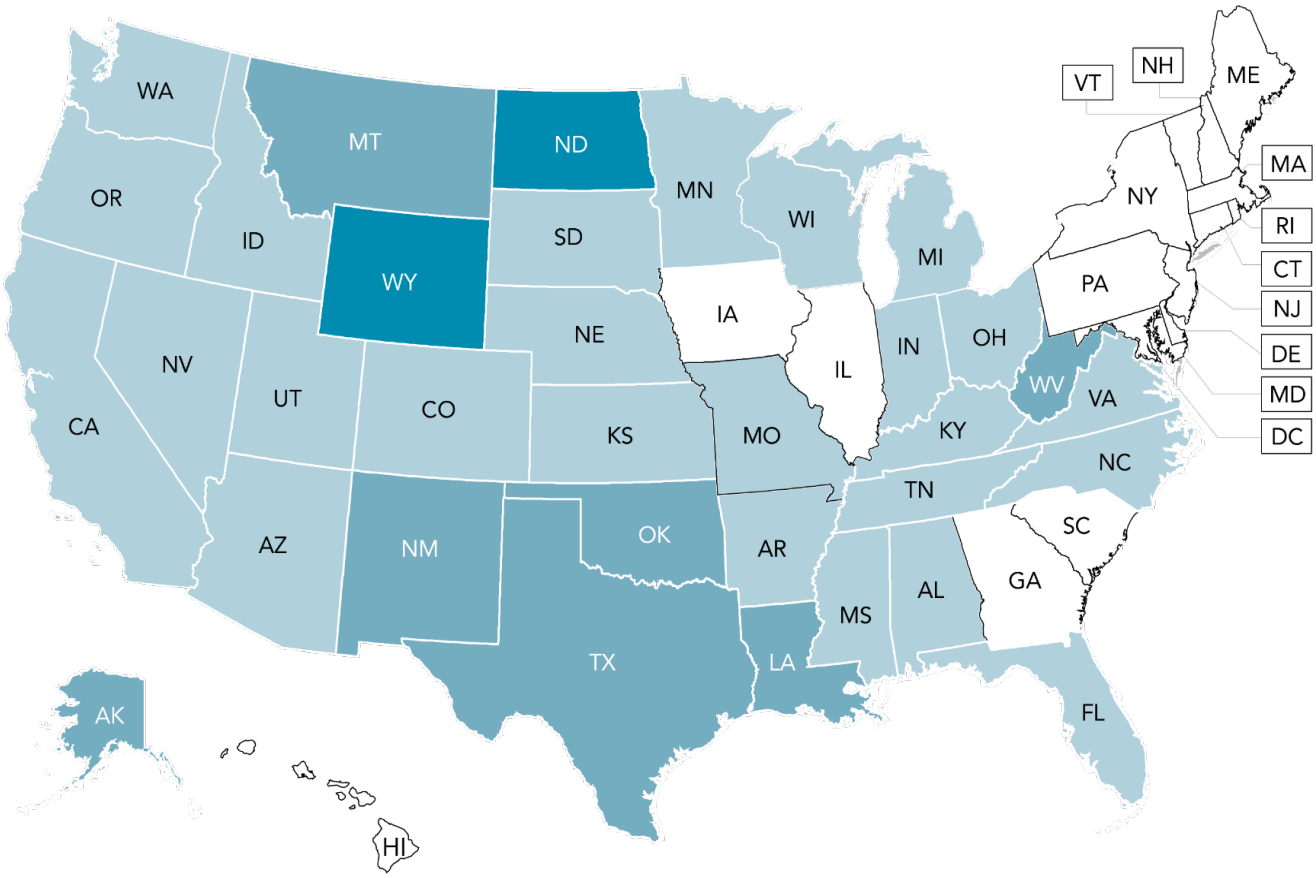
The State of State (and Local) Tax Policy

How do state and local severance taxes work?

FIGURE 1

Severance Tax Revenue as a Percentage of State and Local Own-Source General Revenue

2016



Source: US Census Bureau, Census of Governments.

Note: Own-source general revenue does not include intergovernmental transfers.

Data Sources

Urban-Brookings Tax Policy Center. "State and Local Finance Initiative, Data Query System."

US Census Bureau. *Annual Survey of State and Local Government Finances*.

———. *Census of Governments*, vol. 4, *Government Finances*.

Further Reading

Francis, Norton. 2014. "What Falling Oil Prices Will Mean for State Budgets." *TaxVox* (blog). November 25.

Q. How do state and local soda taxes work?

A. While no state currently taxes sweetened beverages, several localities levy what's commonly referred to as a soda tax. Six local governments levy a per volume excise tax on drinks sweetened with sugar and one government levies a per volume tax on all sweetened drinks.

HOW MUCH REVENUE DO STATE AND LOCAL GOVERNMENTS RAISE FROM SODA TAXES?

No state currently has an excise tax on sugar-sweetened beverages. Instead, soda taxes are levied locally in Boulder, Colorado; Philadelphia, Pennsylvania; Seattle, Washington; and four California cities: Albany, Berkeley, Oakland, and San Francisco.

Philadelphia's tax is nearly 2 percent of its own-source revenue, but the taxes in the other jurisdictions account for 1 percent or less of own-source general revenue. (Own-source revenue excludes intergovernmental transfers.)

HOW DO SODA TAX RATES DIFFER?

All current soda taxes are based on a drink's volume. Tax rates range from 1 cent per ounce in all four California jurisdictions to 2 cents per ounce in Boulder (table 1). For concentrates (i.e., fountain soda), the tax is typically applied to the maximum volume the syrup can produce. As with state alcohol taxes, distributors or wholesalers pay the tax when they deliver products to retailers. The expectation is that much or all of the tax on soda is then passed on to customers in the form of higher retail prices. No current soda taxes are levied as a percentage of retail price.

Each jurisdiction exempts some beverages from its tax, including alcoholic beverages, milk, infant formula, and drinks for medical purposes (not including sports and energy drinks). Philadelphia's tax base is notably larger than other jurisdictions' because it includes any beverage with real or artificial sweeteners. As such, Philadelphia is the only jurisdiction that taxes diet sodas. In the other six localities, a drink is only taxed if the sweetener adds calories. Further, some jurisdictions only tax drinks if the drink surpasses a calorie minimum (e.g., 2 calories per ounce in Berkeley).

Cook County, Illinois (which includes Chicago), passed a 1 cent per ounce soda tax in November 2016. However, that tax was in effect for only a few months before the county board reversed itself and repealed it in October 2017.

Arizona and Michigan preemptively blocked local governments from enacting soda taxes. California,

despite already having four local soda taxes, passed legislation in June 2018 banning any new locality from establishing a tax for 12 years.

Washington voters also approved a ban on local soda taxes in November 2018. The ban does not affect Seattle's soda tax, though. Oregon voters rejected a similar ballot initiative that would have preemptively blocked local soda taxes.

TABLE 1

Soda Tax Rates

City	Tax rate	Eligible drinks	Paid by
Albany, CA	1 cent per ounce	Sugar-sweetened beverages	Distributors
Berkeley, CA	1 cent per ounce	Sugar-sweetened beverages	Distributors
Boulder, CO	2 cents per ounce	Sugar-sweetened beverages	Distributors
Oakland, CA	1 cent per ounce	Sugar-sweetened beverages	Distributors
Philadelphia, PA	1.5 cents per ounce	Sweetened beverages (includes diet drinks)	Distributors
San Francisco, CA	1 cent per ounce	Sugar-sweetened beverages	Distributors
Seattle, WA	1.75 cents per ounce	Sugar-sweetened beverages	Distributors

Source: City government websites.
Notes: Every jurisdiction exempts certain drinks such as milk. Seattle's tax is on "sweetened beverges" but their definition of these drinks only includes drinks with "caloric sweetener." Manufacturers in Seattle can apply for a lower rate based on gross income.

WHAT ARE THE OBJECTIONS TO TAXING SODA?

Soda taxes tend to be regressive because lower-income consumers spend a larger share of their income on the tax than higher-income consumers. Further, families with lower incomes typically spend more of their income on groceries—specifically, on products like sugar-sweetened beverages. However, policymakers could soften the regressivity of the tax by using the revenue for targeted tax relief (e.g., the earned income tax credit) or spending it on programs aimed at lower-income communities. Further, the tax might encourage the purchases of healthier beverages and thus amplify positive public health effects for this group.

Also, while sugar is consistently identified as contributing to obesity, it is not the only factor. And the health effects and medical costs of obesity are not uniform. Some consumers with no risk of harm or medical cost will pay the tax. Meanwhile, others may substitute equally or more unhealthy options (such as alcohol) to avoid the tax.

Further Reading

Auxier, Richard, and John Iselin. 2018. "Philadelphia's Soda Tax Shouldn't Take Kids Out of the Classroom." *TaxVox* (blog). March 12.

Francis, Norton, Donald Marron, and Kim S. Rueben. 2016. "The Pros and Cons of Taxing Sweetened Beverages Based on Sugar Content." Washington, DC: Urban-Brookings Tax Policy Center.

Marron, Donald. 2016. "Building a Better Soda Tax." *TaxVox* (blog), December 12.

Marron, Donald, Maeve Gearing, and John Iselin. 2015. "Should We Tax Unhealthy Food and Drinks?" Washington, DC: Urban-Brookings Tax Policy Center.

Q. How do marijuana taxes work?

A. Marijuana sales are legal and taxed in seven states. Most of these states tax the consumer purchase of marijuana (similar to a retail sales tax) but some tax the transaction between cultivators and distributors or retailers (similar to taxes on alcohol).

HOW MUCH REVENUE DO STATE AND LOCAL GOVERNMENTS RAISE FROM MARIJUANA TAXES?

Although prohibited under federal law, marijuana sales are legal and taxed in seven states: Alaska, California, Colorado, Massachusetts, Nevada, Oregon, and Washington. Marijuana is legal in Maine and Vermont but neither state has established its tax system yet. Michigan voters approved legal and taxable marijuana in November 2018. The District of Columbia also legalized marijuana but Congress currently prevents the city from regulating and taxing sales (figure 1).

In Colorado and Washington, where marijuana has been taxed since 2014, marijuana taxes bring in hundreds of millions of dollars, or roughly 1 percent of each state's own-source general revenue. (Own-source revenue excludes intergovernmental transfers.) Nevada collected nearly $70 million in its first year of taxable sales, which is also roughly 1 percent of its own-source general revenue. In the past year, Alaska collected $10 million and Oregon collected $80 million—both totals are well below 1 percent of each state's own-source general revenue. California and Massachusetts have taxed marijuana for less than a year.

Medical marijuana is legal in 32 states and some of these states levy a tax on the purchase. But these tax rates are often the same as or close to the state's general sales tax rate and do not raise much revenue.

HOW DO MARIJUANA TAX RATES DIFFER?

Most states tax marijuana as a percentage of the retail price (table 1). These rates range from 10 percent in Nevada to 37 percent in Washington. California, Colorado, Massachusetts, and Oregon also use these taxes, which are similar to a retail sales tax the consumer pays on the purchase and the retailer remits to the state. Michigan's legislature will set up its tax system, but the ballot initiative called for a 10 percent excise tax on retail sales. Localities can also levy an additional tax in some states, mostly as an excise tax on retail sales.

Colorado and Nevada additionally have a tax on the wholesale transaction between cultivators and distributors or retailers. The expectation is that some or all of these wholesale taxes are passed through to the consumer via higher purchase prices—similar to how alcohol taxes work. Alaska and California also levy a tax at this stage of production but tax marijuana per ounce instead of as a percentage of price (similar to a cigarette tax).

Some states also levy their general sales tax on the purchase of marijuana in addition to the excise taxes.

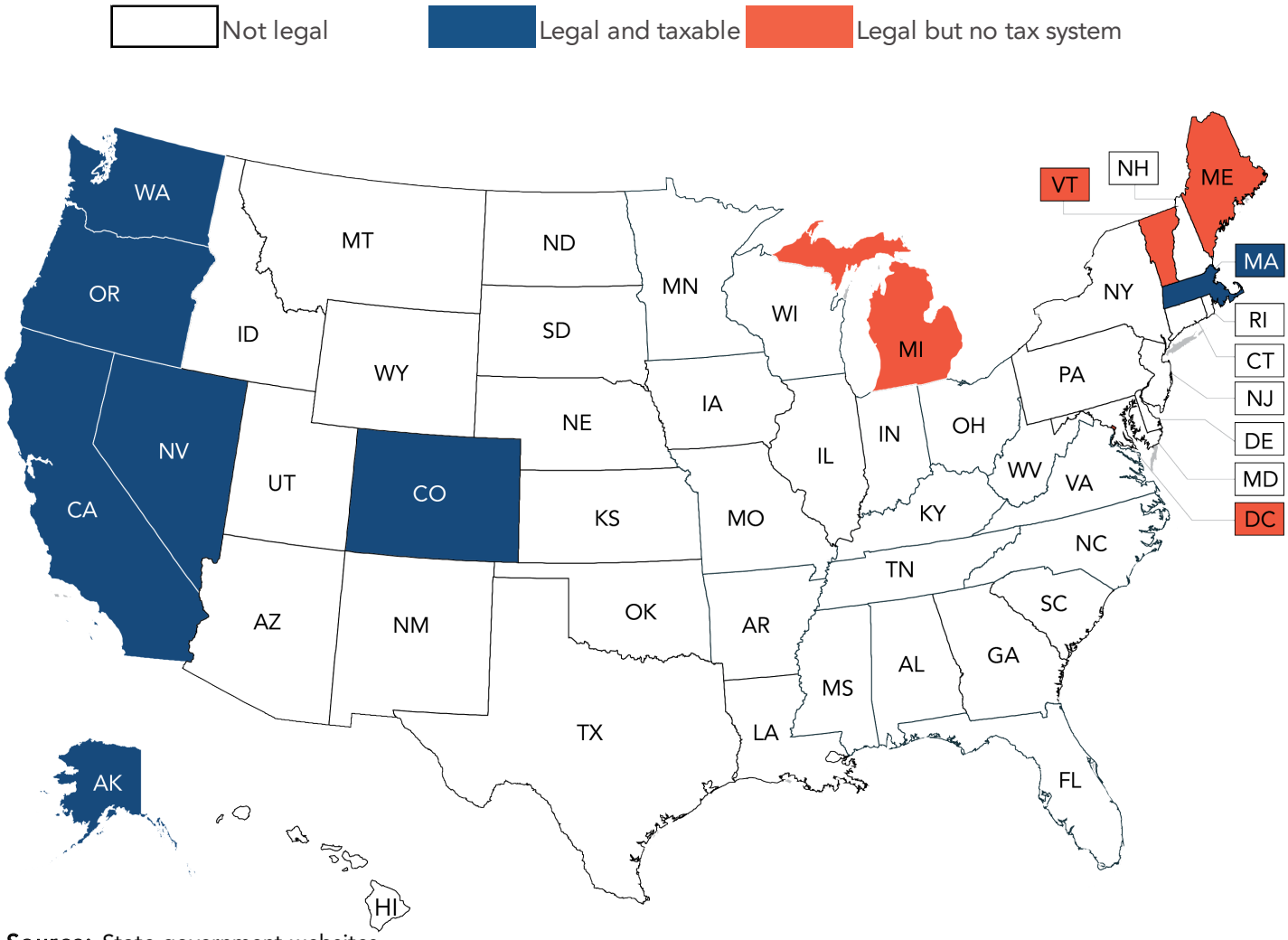
The State of State (and Local) Tax Policy

How do marijuana taxes work?

FIGURE 1

Where is Marijuana Legal and Taxable?

2018



Source: State government websites.

Note: Medical marijuana is legal in 32 states.

The State of State (and Local) Tax Policy

How do marijuana taxes work?

TABLE 1

Marijuana Tax Rates

State	Taxes	Legalization Date
Alaska	Cultivators pay $50 per ounce for bud/flowers and $15 per ounce for remainer of plant Localities can levy an excise tax on retail sales	2014
California	15% state excise tax on retail sale Cultivators pay $9.25 per ounce for flowers and $2.75 per ounce for leaves Localities can levy an excise tax on retail sales	2016
Colorado	15% state excise tax on retail sale 15% marijuana tax on contract price (cultivator) Localities can levy both a retail and/or cultivator tax	2012
District of Columbia	Prevented from taxing sales	2014
Maine	No tax system in place	2016
Massachusetts	10.75% state excise tax on retail sale Local excise taxes on retail sales capped at 3%	2016
Michigan	No tax system in place Ballot initiative proposed 10% excise tax on retail sale	2018
Nevada	15% state excise tax on wholesale sale (cultivator) 10% state excise tax on retail sale Localities can levy an excise tax on retail sales	2016
Oregon	17% state excise tax on retail sale Local excise taxes on retail sales capped at 3%	2014
Vermont	No tax system in place	2018
Washington	37% state excise tax on retail sale	2012

Source: State government websites.

Notes: Some states also levy their general sales tax on mariujana purchases. The legalization date is when the law passed and not when taxable sales began.

HOW DO STATES USE MARIJUANA REVENUE?

- Alaska sends half of its revenue to its general fund and half to programs aimed at reducing repeat criminal offences.
- California's revenue pays for administrative costs associated with marijuana legalization, and then uses excess funds for programs related to drug use, including economic development, academic studies, and youth programs.
- Colorado's revenue is dedicated to education programs.
- Massachusetts distributes its revenue to various public safety programs.
- Nevada's revenue is sent to education programs and its rainy day fund.
- Oregon dedicates its revenue to education programs, drug prevention and treatment programs, and transfers to local governments.
- Washington dedicates its revenues to health care programs.

Further Reading

Auxier, Richard. 2017. "A Trump Crack Down on Legal Marijuana Would Hurt State Budgets." *TaxVox* (blog). April 4.

Marron, Donald. 2015. "Should We Tax Internalities Like Externalities?" Washington, DC: Urban-Brookings Tax Policy Center.

Marron, Donald, and Adele Morris. 2016. "How Should Governments Use Revenue from Corrective Taxes?" Washington, DC: Urban-Brookings Tax Policy Center.

Q. How does the deduction for state and local taxes work?

A. Taxpayers who itemize deductions on their federal income tax returns can deduct state and local real estate and personal property taxes, as well as either income taxes or general sales taxes. The Tax Cut and Jobs Act limits the total state and local tax deduction to $10,000.

The state and local tax (SALT) deduction has been one of the largest federal tax expenditures, with an estimated revenue cost of $100.9 billion in 2017. The estimated revenue cost for 2018 drops to $43.1 billion because the Tax Cut and Jobs Act (TCJA) significantly increased standard deduction amounts (thereby reducing the number of taxpayers who will itemize deductions) and capped the total SALT deduction at $10,000.

State and local taxes have been deductible since the inception of the federal income tax in 1913. Initially, all state and local taxes not directly tied to a benefit were deductible against federal taxable income. In 1964, deductible taxes were limited to state and local property (real and personal property), income, general sales, and motor fuels taxes.

Congress eliminated the deduction for taxes on motor fuels in 1978, and eliminated the deduction for general sales tax in 1986. It temporarily reinstated the sales tax deduction in 2004, allowing taxpayers to deduct either income taxes or sales taxes but not both. Subsequent legislation made that provision permanent starting in 2015. Starting in 2018, taxpayers cannot deduct more than $10,000 of total state and local taxes. That provision of the law is scheduled to expire after 2025.

WHO CLAIMS THE SALT DEDUCTION?

Less than one-third of tax filers opted to itemize deductions on their federal income tax returns in 2016, but virtually all who itemized claimed a deduction for state and local taxes paid. High-income households are more likely than low- or moderate-income households to benefit from the SALT deduction. The amount of state and local taxes paid, the probability that taxpayers itemize deductions, and the reduction in federal income taxes for each dollar of state and local taxes deducted all increase with income.

About 11 percent of tax filers with incomes less than $50,000 claimed the SALT deduction in 2016, compared with about 80 percent of tax filers with incomes exceeding $100,000 (figure 1). The latter group, which made up about 17 percent of tax filers, accounted for about 77 percent of the total dollar amount of SALT deductions reported. The average claim in this group was of about $21,000.

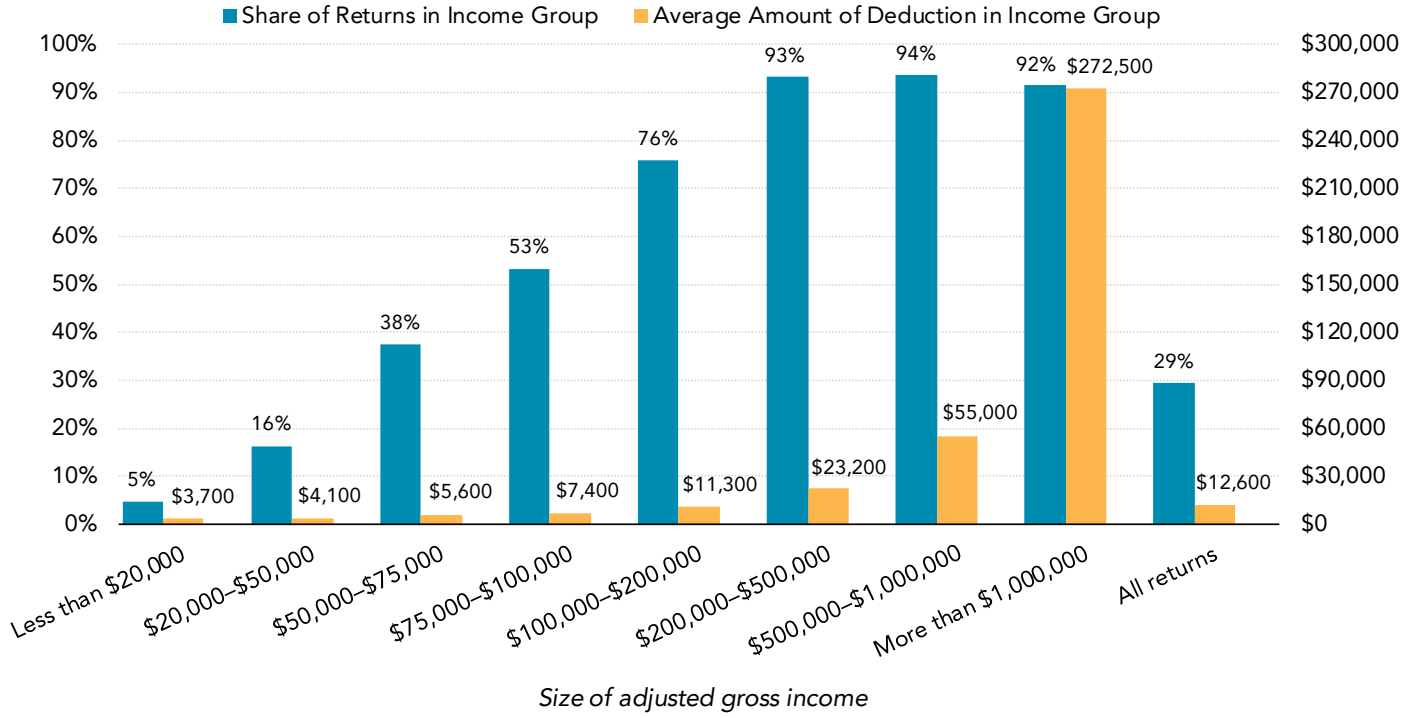
The State of State (and Local) Tax Policy

How does the deduction for state and local taxes work?

FIGURE 1

State and Local Tax Deduction

Share of returns claiming the deduction by AGI and average amount, tax year 2016



Source: Internal Revenue Service, Statistics of Income (SOI), Publication 1304, Individual Income Tax Returns, Tax Year 2016, Table 2.1 and Table 1.2, 2018; Urban-Brookings Tax Policy Center calcuations.

Although most high-income taxpayers claimed a SALT deduction, the federal individual alternative minimum tax (AMT) limited or eliminated the benefit for many of them. The AMT is a parallel income tax system with fewer exemptions and deductions than the regular income tax as well as a narrower set of tax rates. Taxpayers potentially subject to the AMT must calculate their taxes under both the regular income tax and the AMT and pay the higher amount. Taxpayers cannot claim the SALT deduction when calculating their AMT liability, and under tax law prior to 2018, the disallowance of the deduction was the major reason why taxpayers were required to pay the AMT.

Although some taxpayers in every state and DC claim the deduction, taxpayers in states with a disproportional share of high-income taxpayers and relatively high state and local taxes are more likely to claim the deduction (figure 2). The percentage claiming the deduction ranged from 17 percent in South Dakota and West Virginia to 46 percent in Maryland in 2016. In general, a higher percentage of taxpayers in states in the Northeast and the West claimed the deduction than in states in other regions. The average deduction claimed was also higher in those regions.

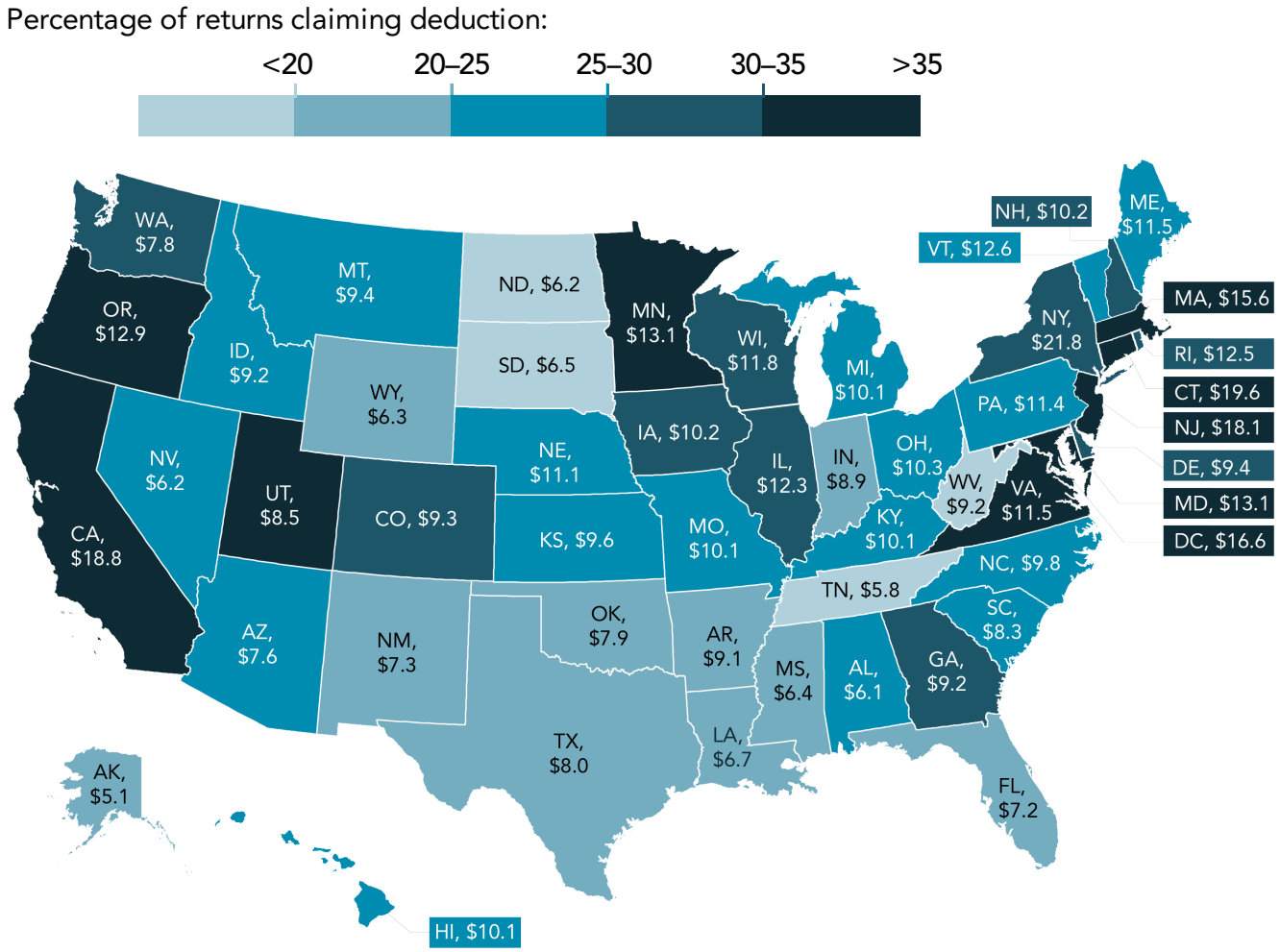
The State of State (and Local) Tax Policy

How does the deduction for state and local taxes work?

FIGURE 2

State and Local Tax Deduction

Number of returns and average deduction in thousands of dollars, 2016



Source: Internal Revenue Service (IRS), Statistics of Income (SOI), Historical Table 2, Tax Year 2016; Urban-Brookings Tax Policy Center calculations.

THE EFFECT OF TCJA ON THE SALT DEDUCTION

TCJA will have a significant effect on the average tax saving from the SALT deduction. Both the percentage of taxpayers claiming the deduction and the average amount claimed will fall dramatically in 2018 because of the changes enacted. Figure 3 compares the tax saving from claiming the deduction in 2017 and 2018, before and after the new law is in place. The tax benefit is measured as the reduction in tax liability from the deduction, which considers the applicable tax rates in each year, the effects of the alternative minimum tax (which disallows the SALT deduction), and the limit on itemized deductions (the "Pease" limit) that was in place in 2017 but eliminated for 2018 by TCJA.

The State of State (and Local) Tax Policy

How does the deduction for state and local taxes work?

Measured as a percentage of after-tax income, the tax saving from the SALT deduction in 2018 will be about one-quarter of what it was in 2017 overall. For taxpayers in the top 1 percent of the income distribution, the tax saving in 2018 will be about one-tenth of the tax saving in 2017.

EFFECTS OF THE DEDUCTION

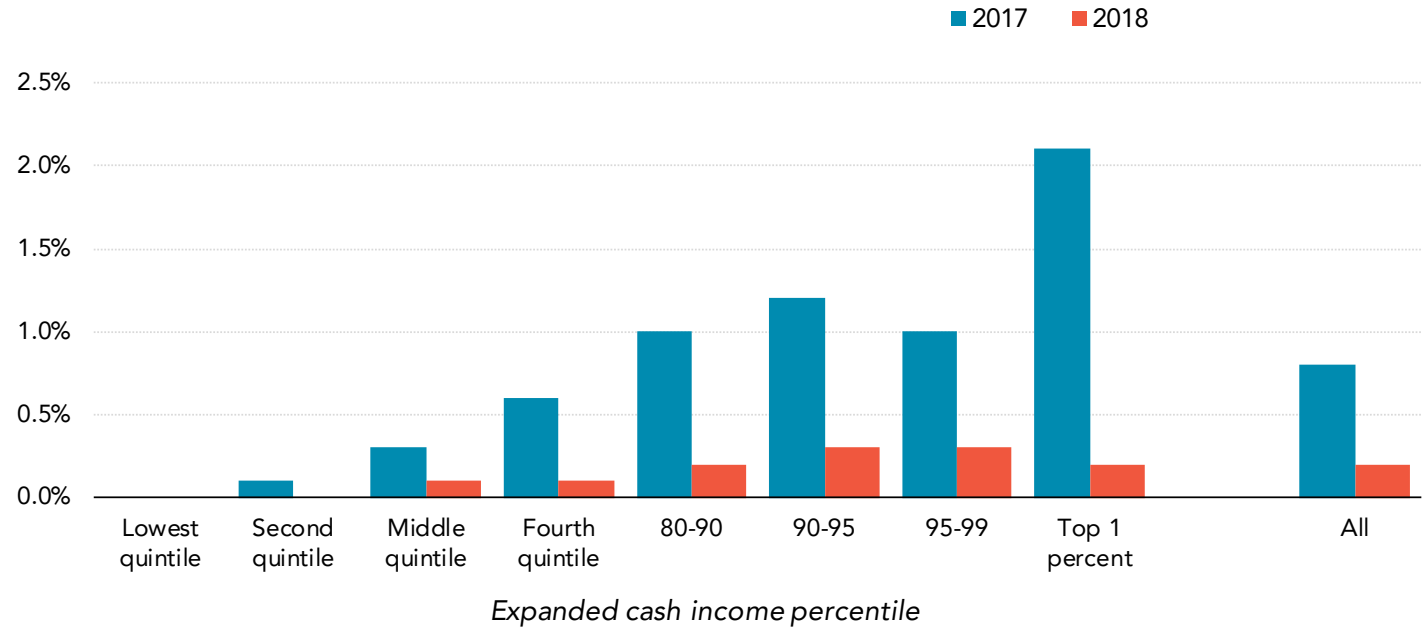
The SALT deduction provides state and local governments with an indirect federal subsidy by decreasing the net cost of nonfederal taxes for those who pay them. For example, if state income taxes increase by $100 for families in the 35 percent federal income tax bracket claiming the SALT deduction, the net cost to them is $65; that is, state taxes go up by $100, but federal taxes go down by $35. This federal tax expenditure encourages state and local governments to levy higher taxes (and, presumably, provide more services) than they otherwise would. It also encourages those entities to use deductible taxes in place of nondeductible taxes (such as selective sales taxes on alcohol, tobacco, and gasoline), fees, and other charges.

Critics of the deduction argue that state and local taxes simply reflect payments for the services those jurisdictions provide and, as such, should be treated no differently than other spending. They also point to the uneven distribution of benefits across income groups and states.

FIGURE 3

Itemized Deduction for State and Local Taxes

Benefit as a share of after-tax income, 2017 and 2018



Source: Urban-Brookings Tax Policy Center, "TPC Microsimulation Model, version 0718-1."

The State of State (and Local) Tax Policy

How does the deduction for state and local taxes work?

Proponents of the deduction counter that the portion of an individual's income claimed by state and local taxes is not disposable income, and that taxing it at the federal level is double taxation. Moreover, they argue that federal subsidies are warranted because a significant portion of state and local government spending is for education, health, public welfare, and transportation, all of which benefit the population in other jurisdictions as well. A counterargument, however, is that while federal support may be warranted, the substantial revenues gained by eliminating or limiting the deduction could be used to provide direct support through federal grants and loans.

Data Sources

Internal Revenue Service. "SOI Tax Stats—Historic Table 2."

———. *SOI Tax Stats—Individual Income Tax Returns, Publication 1304*. Table 1.2. "All Returns: Adjusted Gross Income, Exemptions, Deductions, and Tax Items, 2016"; and Table 2.1. "Returns with Itemized Deductions: Sources of Income, Adjustments, Itemized Deductions by Type, Exemptions, and Tax Items, 2016."

Urban-Brookings Tax Policy Center. "TPC Microsimulation Model, version 0718-1."

———. Table T18-0161. "Tax Benefit of the Itemized Deduction for State and Local Taxes, Baseline: Current Law, Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2017"; and Table T18-0163. "Tax Benefit of the Itemized Deduction for State and Local Taxes, Baseline: Current Law, Distribution of Federal Tax Change by Expanded Cash Income Percentile, 2018."

Further Reading

Burman, Leonard E., and Frank Sammartino. 2018. "State Responses to the TCJA's SALT Deduction Limit May Be Costly and Favor High-Income Residents." *TaxVox* (blog). January 30.

Gordon, Tracy. 2018. "The Price We Pay for Capping the SALT Deduction." *TaxVox* (blog). February 15.

Joint Committee on Taxation. 2018a. "Estimates of Federal Tax Expenditures for Fiscal Years 2017–2021." JCX-34-18. Washington, DC: Joint Committee on Taxation.

———. 2018b. "Estimates of Federal Tax Expenditures for Fiscal Years 2018–2022." JCX-81-18. Washington, DC: Joint Committee on Taxation.

Sammartino, Frank. 2016. "A Closer Look at the State and Local Tax Deduction." *TaxVox* (blog). April 16.

———. 2018. "How New York State Responded to The SALT Deduction Limit." *TaxVox* (blog). May 14.

Sammartino, Frank, and Kim Rueben. 2016. "Revisiting the State and Local Tax Deduction." Washington, DC: Urban-Brookings Tax Policy Center.

Office of Tax Analysis. 2018. "Tax Expenditures." Washington, DC: US Department of the Treasury.

Q. What are municipal bonds and how are they used?

A. Municipal bonds (a term that encompasses both state and local government debt) are obligations that entitle owners to periodic interest payments plus repayment of principal at a specified date. States and localities (cities, townships, counties, school districts, and special districts) issue bonds primarily to pay for large, expensive, and long-lived capital projects

State and local governments issue bonds to pay for large, expensive, and long-lived capital projects, such as roads, bridges, airports, schools, hospitals, water treatment facilities, power plants, courthouses, and other public buildings. Although states and localities can and sometimes do pay for capital investments with current revenues, borrowing allows them to spread the costs across multiple generations. Future project users bear some of the cost through higher taxes or tolls, fares, and other charges that help service the debts.

States and localities issue short-term debt or notes to help smooth uneven cash flows (e.g., when tax revenues arrive in April but expenditures occur throughout the year). They also issue debt on behalf of private entities (e.g., to build projects with public benefit or for so-called public-private partnerships).

HOW LARGE IS THE MUNI BOND MARKET?

At the end of 2017, state and local governments had $3.84 trillion in debt outstanding (figure 1). About 98 percent of this debt was long term or with a maturity of 13 months or longer, while the remaining 2 percent was short term. As in most years, roughly 40 percent of municipal debt was issued by states and 60 percent by local governments.

Although municipal debt has more than tripled in nominal terms since the mid-1980s, the change is less dramatic as a percentage of gross domestic product.

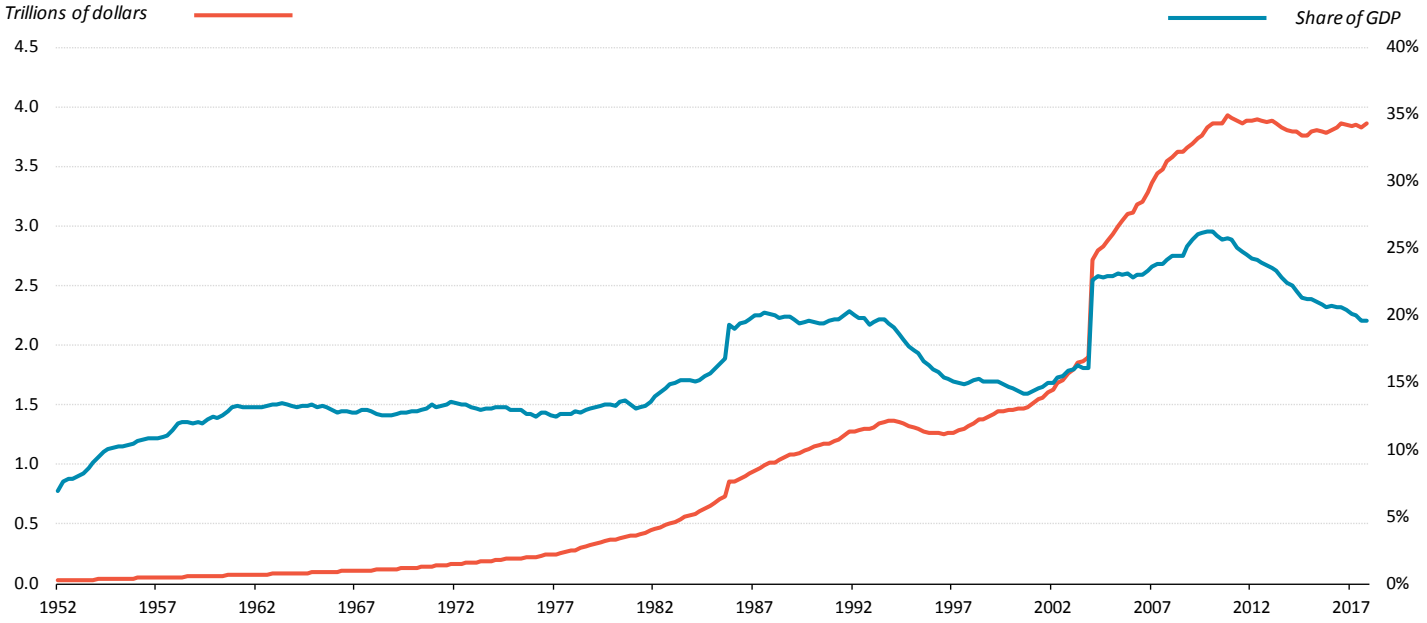
States vary widely in their long-term municipal debt outstanding (figure 2).

The State of State (and Local) Tax Policy

What are municipal bonds and how are they used?

FIGURE 1

State and Local Government Debt Outstanding
1952–2017



Source: Federal Reserve Bank, June 2018.
Note: Starting in the first quarter of 2004, the Federal Reserve made a one-time $800 billion adjustment to the stock of municipal debt oustanding.

WHAT ARE THE MAIN TYPES OF STATE AND LOCAL GOVERNMENT DEBT?

General obligation bonds are backed by an issuer's "full faith and credit," including its power to tax. Bonds may also be secured by future revenue streams, such as dedicated sales taxes or tolls and other user charges generated by the project being financed.

General obligation bonds typically require voter approval and are subject to limits on total debt outstanding. Revenue bonds and bonds secured by anticipated legislative appropriations are not subject to these requirements or limits. In 2017, roughly 60 percent of state and local issuances were revenue bonds and 40 percent were general obligation bonds.

WHO HOLDS STATE AND LOCAL GOVERNMENT DEBT?

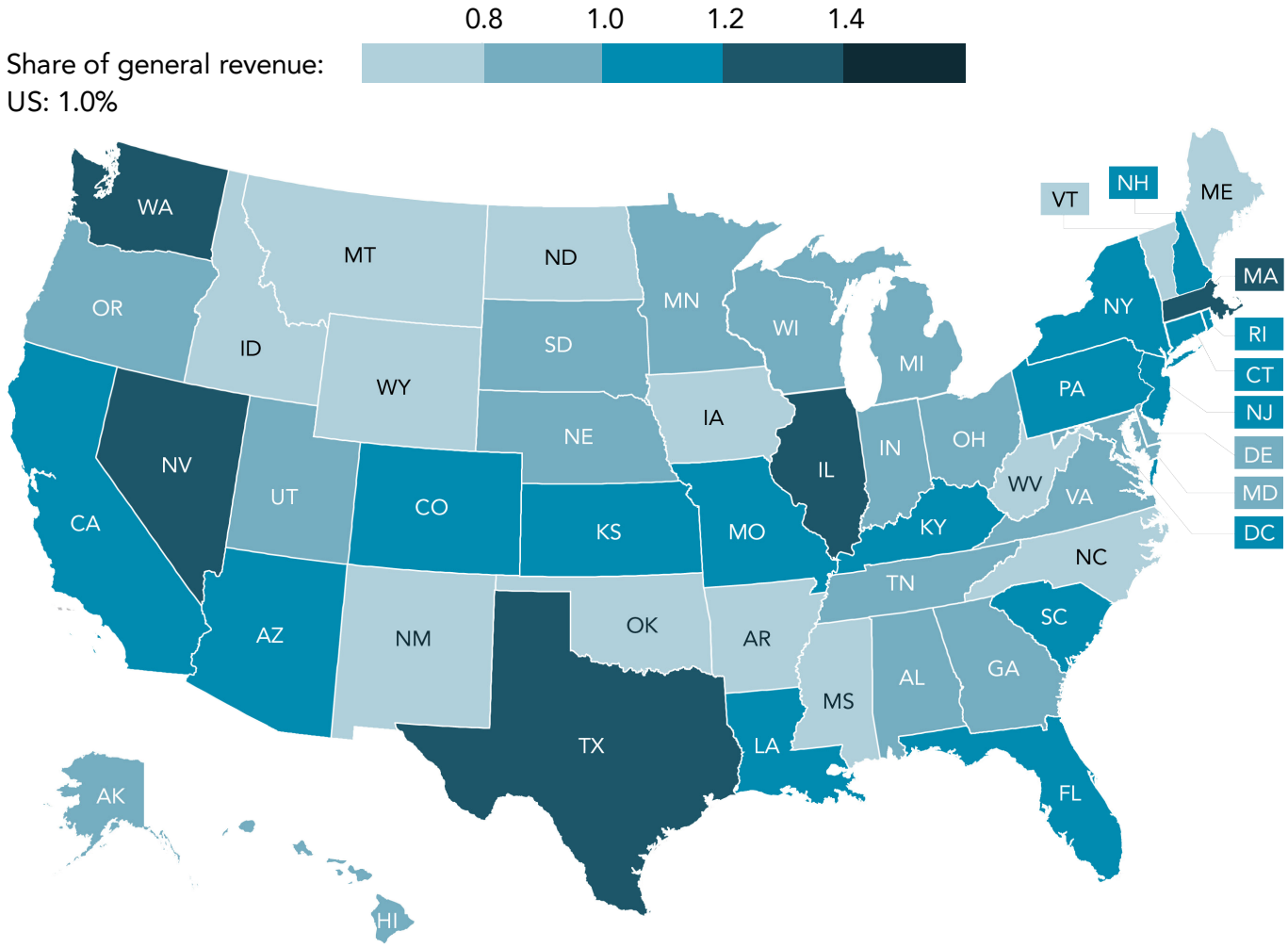
Most state and local bonds are held by households, followed by mutual funds (which also represent household investors) (figure 3). Banks and life insurance companies used to be more prominent municipal bond holders until the Tax Reform Act of 1986 and subsequent litigation limited the advantages of doing so.

The State of State (and Local) Tax Policy

What are municipal bonds and how are they used?

FIGURE 2

Long-Term Outstanding Debt
2015



Source: US Census Bureau.

HOW DOES THE FEDERAL TAX EXEMPTION WORK AND WHAT ARE PROPOSALS FOR REFORM?

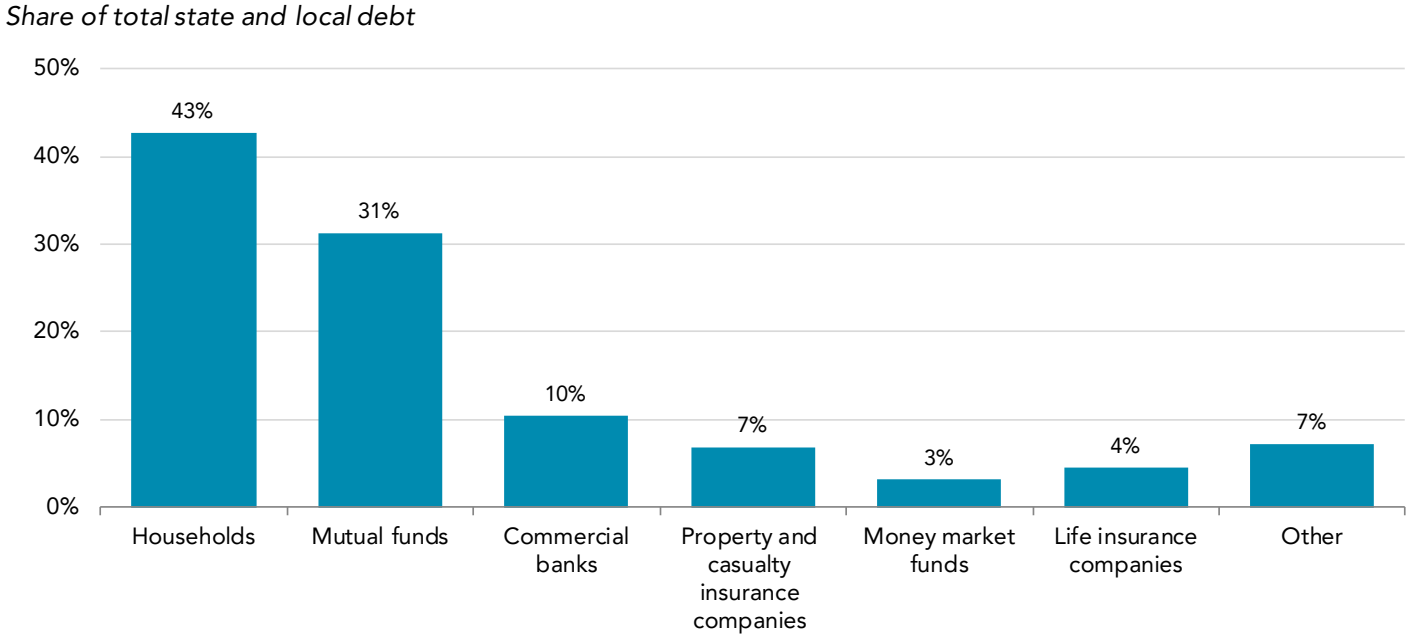
Since its inception in 1913, the federal income tax has exempted interest payments received from municipal bonds from taxable income. State and local governments also typically exempt interest on bonds issued by taxpayers' state of residence. However, the US Supreme Court in *Department of Revenue of Ky. v. Davis* upheld states' ability to tax interest on bonds issued by other jurisdictions.

Because of the federal tax exemption, state and local governments can borrow more cheaply than other debt issuers, such as corporations, for a given level of risk and length of maturity. The federal tax exemption

FIGURE 3

Holders of State and Local Debt

First quarter, 2018



Source: Federal Reserve Bank, June 2018.
Note: "Other" category includes closed-end funds, foreign investors, brokers and dealers, nonfinancial corporate businesses, government-sponsored enterprises, savings institutions, exchange-traded funds, state and local government general funds, and state and local government retirement funds.

therefore functions as a federal subsidy to state and local public infrastructure investment. This subsidy comes at a cost in foregone tax revenues, estimated at $28 billion in fiscal year 2018.

The federal tax exemption has been criticized as inefficient because high-bracket taxpayers receive more than the inducement needed to purchase municipal bonds. In 2017, for example, a high-grade taxable municipal bond yielded 3.36 percent. The yield for a comparable tax-exempt bond was 3.74 percent. Thus, taxpayers whose federal tax rate is about 10 percent should be just indifferent between the two types of bonds (the gap in yields—0.38 percentage points—is about 10 percent of 3.74 percentage points). Anyone in a higher tax bracket receives a windfall that generates no additional benefit for the borrower.

In light of this inefficiency, proposals have long circulated to cap the federal tax exemption. However, the revenue gain from eliminating or capping the deduction would depend on whether states and localities responded by issuing as many or fewer bonds and whether bondholders responded by shifting their portfolios toward taxable bonds or other investments (Poterba and Verdugo 2011). It is also difficult to hold constant all relevant bond features, including risk, time to maturity, fixed versus variable interest payments, and liquidity (Congressional Budget Office and Joint Committee on Taxation 2009).

Notably, President Donald Trump's most recent budget proposals have not suggested a cap on the bond interest exemption.

The State of State (and Local) Tax Policy

What are municipal bonds and how are they used?

Data Sources

Board of Governors of the Federal Reserve System. "Financial Accounts of the United States." June 7, 2018.

Securities Industry and Financial Markets Association. "US Municipal Issuance." https://www.sifma.org/resources/research/us-municipal-issuance/.

Urban-Brookings Tax Policy Center. "State and Local Finance Initiative Data Query System." Accessed July 10, 2018.

US Census Bureau. *Annual Survey of State and Local Government Finances*. Government Finances, Volume 4, and Census of Governments (Years). Accessed July 10, 2018.

US Census Bureau. *Annual Survey of State and Local Government Finances*.

———. *Census of Governments*, vol. 4, *Government Finances*.

Further Reading

Congressional Budget Office and Joint Committee on Taxation. 2009. "Subsidizing Infrastructure Investment with Tax-Preferred Bonds." Washington, DC: Congressional Budget Office and Joint Committee on Taxation.

Galper, Harvey, Kim Rueben, Richard Auxier, and Amanda Eng. 2014. "Municipal Debt: What Does It Buy and Who Benefits?" *National Tax Journal* 67 (4): 901–24.

Gordon, Tracy. 2011. "Buy and Hold (on Tight): The Recent Muni Bond Rollercoaster and What It Means for Cities." Washington, DC: Urban Institute.

Maguire, Steven. 2012. "Tax-Exempt Bonds: A Description of State and Local Government Debt." RL30638. Washington, DC: Congressional Research Service.

Office of Management and Budget. 2017. *Analytical Perspectives: Budget of the United States Government, Fiscal Year 2018*. Washington, DC: Office of Management and Budget.

Poterba, James M., and Verdugo, Arturo Ramírez. 2011. "Portfolio Substitution and the Revenue Cost of the Federal Income Tax Exemption for State and Local Government Bonds." *National Tax Journal* 64 (2): 591–614.

Securities and Exchange Commission (SEC). 2012. "Report on the Municipal Securities Market." Washington, DC: SEC.

US Government Accountability Office (GAO). 2012. "Municipal Securities: Overview of Market Structure, Pricing, and Regulation." Washington, DC: US GAO.

Zimmerman, Dennis. 2005. "Tax Exempt Bonds." In *The Encyclopedia of Taxation and Tax Policy*, 2nd ed., edited by Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle, 404–406. Washington, DC: Urban Institute Press.

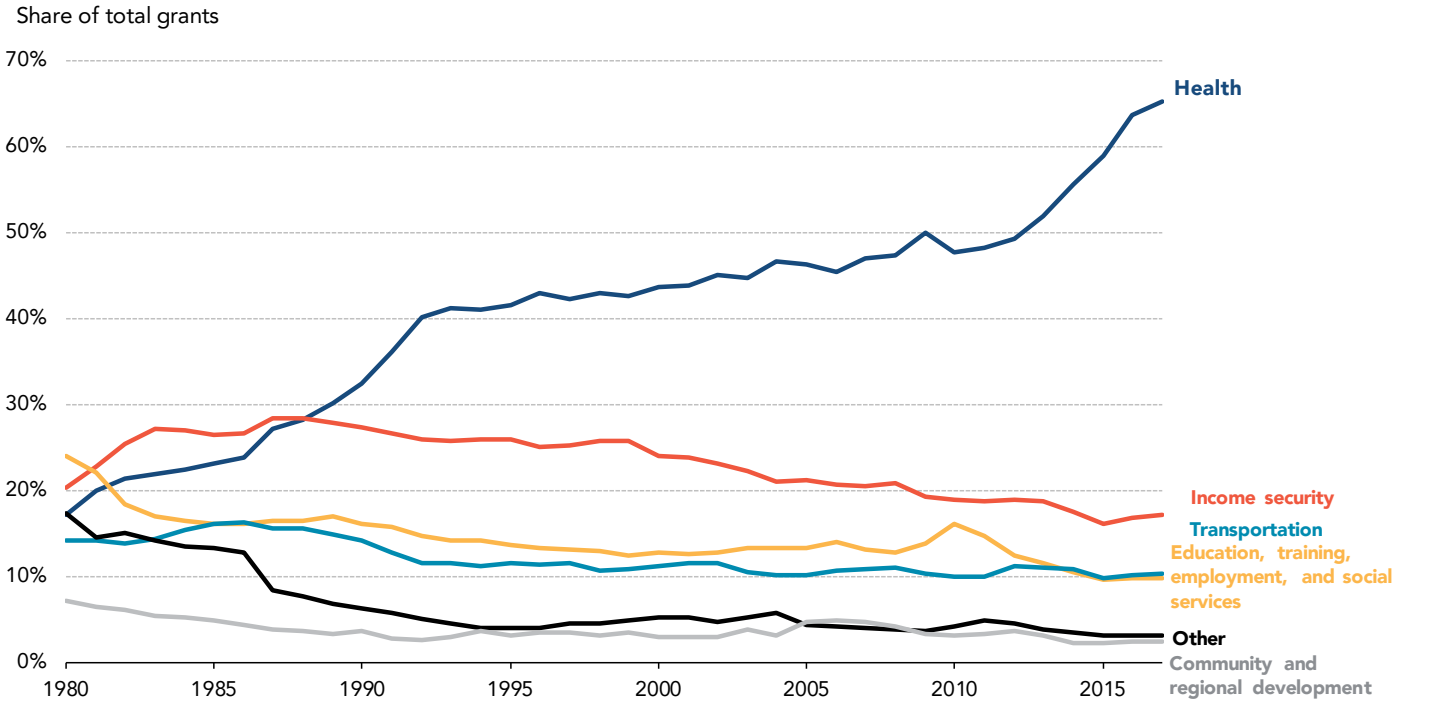
Q. What types of federal grants are made to state and local governments and how do they work?

A. The federal government distributes grants to states and localities for many purposes, but the bulk are dedicated to health care. Some grants are restricted to a narrow purpose but block grants give recipients more latitude in meeting program objectives.

The federal government distributes about $700 billion (17 percent of its budget) to states and localities each year, providing about one-quarter of these governments' total revenues. In 2017 about 65 percent of the funds were dedicated to health care (figure 1).

FIGURE 1

Federal Grants to State and Local Governments by Category
1980–2017



Source: Office of Management and Budget, Historical Tables, Table 12.2.

The State of State (and Local) Tax Policy

What types of federal grants are made to state and local governments and how do they work?

The federal government distributes grants to state and local governments for several reasons. In some cases, the federal government may devolve or share responsibility for a given service or function because state and local governments have better information about local preferences and costs. In others, the federal government may offer states and localities incentives to undertake additional spending benefiting neighboring jurisdictions or the country as a whole.

Over the past 50 years, the composition of federal grants has shifted dramatically. Today, federal grants for health programs, predominantly Medicaid, represent 65 percent of total federal grant outlays, compared with less than 20 percent in 1980.

There are two main types of federal grants. Categorical grants are restricted to a narrow purpose, such as providing nutrition under the Special Supplemental Nutrition Program for Women, Infants, and Children, also known as WIC. Even more restricted are grants limited to specific projects, such as building a highway. Block grants give recipients more latitude in meeting program objectives, such as assisting needy families and promoting work under the Temporary Assistance for Needy Families (TANF) program. States also set TANF eligibility requirements within federal parameters. Less common are grants targeted to redistributing resources across jurisdictions, such as the General Revenue Sharing program that ended in 1986.

Federal grants may also be classified according to how funds are awarded. Formula grants allocate federal dollars to states based on formulas set in law and linked to factors such as the number of highway lane miles, school-aged children, or low-income families. A prime example is the federal-state Medicaid program, which provides subsidized health insurance to low-income households.

Grants may also be awarded competitively according to specified criteria, as in the Race to the Top or Transportation Investment Generating Economic Recovery awards. In addition, grants may require states and localities to contribute their own funds (matching requirements) or maintain previous spending despite the infusion of federal cash (maintenance-of-effort requirements).

A recurring question with federal grants is how they influence state and local behavior. Research finds that states and localities substitute federal dollars for some of their own spending. However, magnitudes vary and in some cases federal grants may "crowd in" rather than crowd out state and local dollars. (See, for example, Gramlich and Galper (1973), who found that $1.00 of unrestricted federal aid stimulated $0.36 in state and local spending, $0.28 in lower state and local taxes, and $0.36 in higher fund balances or saving. However, other research has found evidence that federal dollars stimulate more than the expected state and local spending response. Some early "flypaper effect" research may have mistaken matching as lump-sum grants or overlooked maintenance-of-effort requirements. Other explanations include tacit understandings between federal appropriators and grant recipients about how recipients will respond to federal money (Chernick 1979; Knight 2002). See also Leduc and Wilson (2017).)

Beyond grants, the federal government also subsidizes state and local governments by allowing federal income taxpayers to deduct state and local taxes already paid (up to a $10,000 cap in 2018 through 2025 under current law) and by excluding bond interest from taxable income. The value of these subsidies was $133 billion in foregone dollars to the US Treasury in FY 2017 (Office of Management and Budget 2018).

The State of State (and Local) Tax Policy

What types of federal grants are made to state and local governments and how do they work?

Data Sources

Office of Management and Budget. *Budget of the United States Government, Fiscal Year 2016: Analytical Perspectives*. Table 14-1. "Estimates of Total Income Tax Expenditures for Fiscal Years 2014–2024."

———. *Budget of the United States Government, Fiscal Year 2019 , Historical Tables*. Table 12.2. "Total Outlays for Grants to State and Local Governments, by Function and Fund Group: 1940–2023"; and Table 14.2. "Total Government Expenditures: 1948–2017."

Further Reading

Chernick, Howard A. 1979. "An Economic Model of the Distribution of Project Grants." In *Fiscal Federalism and Grants-in-Aid*, edited by Peter M. Mieszkowski and William H. Oakland, 81–103. Washington, DC: Urban Institute.

Congressional Budget Office. 2013. "Federal Grants to State and Local Governments." Washington, DC: Congressional Budget Office.

Gordon, Tracy. 2018. "Harnessing the US Intergovernmental Grant System for Place-Based Assistance in Recession and Recovery." Policy Proposal 2018-12. Washington DC: Hamilton Project.

Gramlich, Edward M., and Harvey Galper. 1973. "State and Local Fiscal Behavior and Federal Grant Policy." *Brookings Papers on Economic Activity* 1: 15–65.

Knight, Brian. 2002. "Parochial Interests and the Centralized Provision of Local Public Goods: Evidence from Congressional Voting on Transportation Projects." *Journal of Public Economics* 88: 845–66.

Leduc, Sylvain, and Daniel Wilson. 2017. "Are State Governments Roadblocks to Federal Stimulus? Evidence on the Flypaper Effect of Highway Grants in the 2009 Recovery Act." *American Economic Journal: Economic Policy* 9 (2): 253–92.

US Government Accountability Office (GAO). 2012. "Grants to State and Local Governments: An Overview of Federal Funding Levels and Selected Challenges." Washington, DC: GAO.

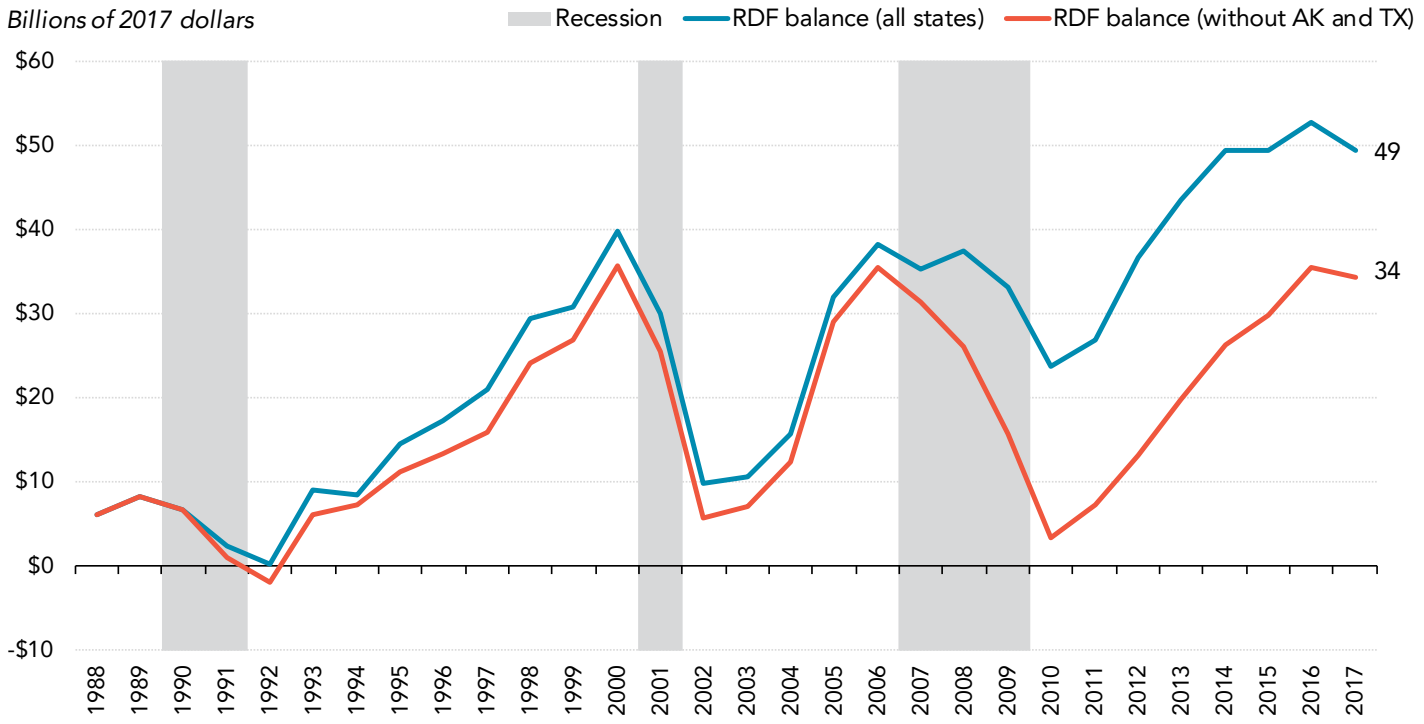
Q. What are state rainy day funds, and how do they work?

A. Rainy day funds, also known as budget stabilization funds, allow states to set aside surplus revenue for use during unexpected deficits. Every state has some type of rainy day fund, though deposit and withdrawal rules vary considerably.

FIGURE 1

Total Rainy Day Fund Balance

All states, 1988–2017



Source: National Association of State Budget Officers, Fiscal Survey of the States, various years, https://www.nasbo.org/reports-data/fiscal-survey-of-states; and National Bureau of Economic Research, "US Business Cycle Expansions and Contractions," http://www.nber.org/cycles.html.

Note: Data are reported in state fiscal years.

The State of State (and Local) Tax Policy

What are state rainy day funds, and how do they work?

SOURCES OF FUNDING

States finance their reserve funds differently (table 1). Most allow some or all of their year-end surplus to flow to the rainy day fund (RDF). Other states require a flat contribution out of total or special revenue sources. California, for example, dedicates a portion of its capital gains tax revenue to its budget stabilization account. Similarly, natural resource–rich states like Texas and Louisiana dedicate a portion of oil extraction revenues to various reserve funds, in combination with other deposit mechanisms.

A handful of states tie their reserve accounts to either revenue or economic growth. Arizona, for example, ties its deposits to a personal income growth formula, although the legislature must authorize the transfer. Other states require specified set-asides until the fund reaches its minimum required balance. A few states replenish their funds with discretionary appropriations as part of the budget process, but regular contributions are not automatic or required in these states. Except for the few states (such as Colorado) required to remit surplus revenues to voters, most states can also carry additional general fund surpluses into the following fiscal year once any RDF funding requirements are met.

TABLE 1

Rainy Day Fund Deposit Mechanisms

August 2018

Deposit mechanism	States
All or portion of year-end surplus	Connecticut, Georgia, Kentucky, Maine, Minnesota, Mississippi, Montana, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Dakota, Utah, Vermont, West Virginia, Wisconsin
Portion of total or special revenues	Alaska, California, Nevada, Rhode Island
Tied to revenue or economic growth	Arizona, Idaho, Illinois, Indiana, Michigan, New Mexico, North Carolina, Tennessee, Virginia
Required minimum balance	Colorado, Florida, Iowa, Missouri, South Carolina
Combination	Delaware, District of Columbia, Hawaii, Louisiana, Maryland, Massachusetts, Texas, Washington
No required payments	Alabama, Arkansas, Kansas, Wyoming

Sources: National Association of State Budget Officers, *Budget Processes in the States*, 2015, https://www.nasbo.org/reports-data/budget-processes-in-the-states; the Pew Charitable Trusts, "Building State Rainy Day Funds," July 15, 2014, http://www.pewtrusts.org/en/research-and-analysis/reports/2014/07/15/building-state-rainy-day-funds-policies-to-harness-revenue; the Pew Charitable Trusts, "State Rainy Day Funds in 2017, July 18, 2017, http://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2017/07/state-rainy-day-funds-in-2017; and Tax Policy Center staff review of state constitutions and statutes.

Notes: Connecticut currently funds its rainy day fund (RDF) out of year-end surplus, but in 2015 it adopted new rules that will tie deposits to revenue growth. Illinois' RDF has loose deposit and withdrawal rules, and thus does not meet the definition of a rainy day fund for some researchers and state budget analysts. The state has not contributed to the fund since the deposit rules were established in 2004. Kansas established an RDF in 2016 and enacted a funding mechanism that will go into effect in 2019, dedicating 10 percent of unappropriated general fund surplus to its RDF. Currently, it is funded via discretionary legislative appropriation. Montana established its reserve fund in 2017 and currently funds it via end-of-year surpluses, but in 2021 will switch to a deposit mechanism based on revenue growth.

The State of State (and Local) Tax Policy

What are state rainy day funds, and how do they work?

USE OF FUNDS

In most states, the RDF is dedicated to closing deficit gaps in the current year or maintaining government spending when revenues are projected to decline. However, withdrawal rules vary. Some states include transfers from the rainy day fund to the general fund in normal appropriations bills, while others require an emergency declaration or a supermajority (e.g., three-fifths or two-thirds) of the legislature to make a transfer. Several states can use the RDF to cover short-term cash flow gaps. Money is transferred to the general fund and must be paid back by the end of the fiscal year.

In addition to an RDF that can be used for general purposes during a fiscal crisis, some states have reserve funds available only for specific uses. For example, 36 states have a reserve account dedicated to natural disaster recovery. Other states have separate reserve funds for education or Medicaid spending, designed to cover shortfalls in these vital programs. Deposit and withdrawal rules for these supplemental reserve accounts may vary considerably from the rules governing the state's primary RDF.

CAPS ON FUND BALANCES

Thirty-one states cap the balances of their funds. The cap is typically a percentage of either revenues or expenditures, although some states have more complex formulas for determining maximum fund size. Most states that finance their RDF with operating surpluses stop transfers once the cap has been reached, allowing the surplus to remain in the general fund. A few redirect those operating surpluses to other funds for special projects or taxpayer relief. Maine, for example, after transferring the required fixed amounts to several other reserve funds, directs 80 percent of the remaining surplus to its budget stabilization fund and the remaining 20 percent to its tax relief fund for residents. If the RDF is at its cap, excess surplus flows to the tax relief fund.

MITIGATING FISCAL CRISIS

An economic downturn can cause significant fiscal stress for states because, without changes in policy, revenues decline even as demands on programs such as unemployment insurance and Medicaid increase. Savings in rainy day funds help states weather a fiscal downturn with fewer expenditure cuts. The median balance of state RDFs declined significantly after each of the last three recessions, but states have gradually built them back up each time (figures 1 and 2).

Capping the amount in the RDF is a sensible approach to preventing the unnecessary build-up of restricted funds, but the cap must be set appropriately. Before the Great Recession, a typical rule of thumb was to maintain at least 5 percent of total expenditures or revenues in reserves. States that cap out at 5 percent or less, therefore, may find reserves inadequate to close fiscal gaps. Currently, 7 of the 31 states with caps top out at 5 percent or less.

Many states have reconsidered the 5 percent rule since the Great Recession, as even states with robust prerecession RDFs exhausted much of their reserves. The Government Finance Officers Association now recommends states set aside at minimum two months of operating expenditures (i.e., roughly 16 percent of total general fund spending). Only four states had RDF balances at or above 16 percent at the end of 2017, and all were natural resource–rich states (i.e., Alaska, North Dakota, Texas, and Wyoming). In another approach, also recommended by the Government Finance Officers Association and others, some states have begun to tie and tailor their caps and deposit mechanisms to their own revenue volatility.

The State of State (and Local) Tax Policy

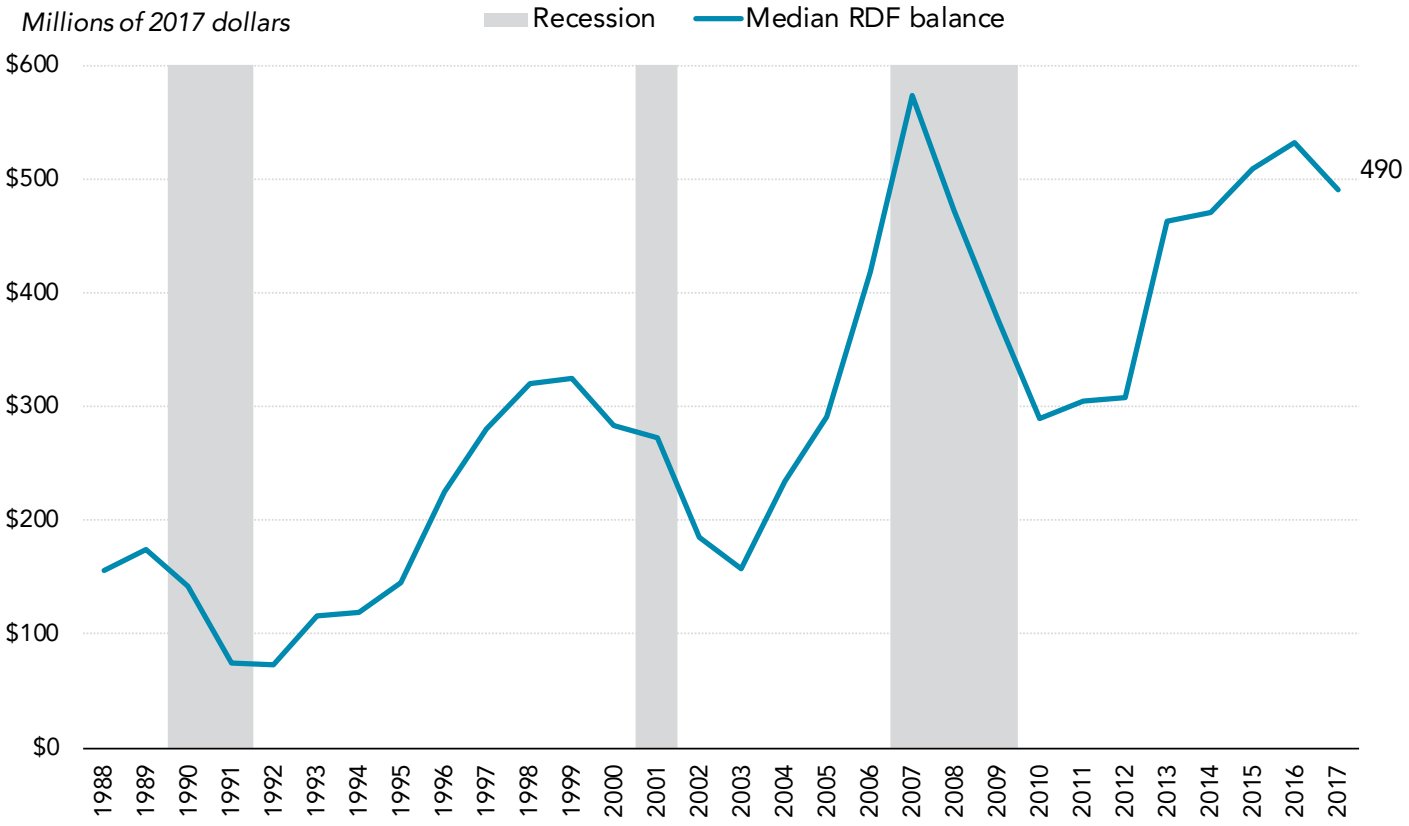
What are state rainy day funds, and how do they work?

RDFs are an important tool for states to avoid sharp cuts in spending or tax increases when they are hurting economically. In 2017, Randall and Rueben synthesized literature on rainy day funds (and other budget rules) from the past thirty years, recommending that states reduce fiscal and economic volatility by pairing strong balanced budget requirements with robust RDFs. Moreover, states should design their RDF deposit mechanisms and limits with an understanding of their own revenue volatility.

FIGURE 2

Median Rainy Day Fund Balance

All states, 1988–2017



Source: National Association of State Budget Officers, Fiscal Survey of the States, various years, https://www.nasbo.org/reports-data/fiscal-survey-of-states; and National Bureau of Economic Research "US Business Cycle Expansions and Contractions," http://www.nber.org/cycles.html.
Note: Data are reported in state fiscal years.

The State of State (and Local) Tax Policy

What are state rainy day funds, and how do they work?

Data Source

National Association of State Budget Officers (NASBO). 1988–2017. *Fiscal Survey of the States*. Washington, DC: NASBO.

———. 2015. *Budget Processes in the States*. Washington, DC: NASBO.

National Bureau of Economic Research. "US Business Cycle Expansions and Contractions."

Further Reading

Eckl, Corina, and Jed Kee. 2005. "Rainy Day Funds (Budget Stabilization, Budget Reserve Funds)." In Encyclopedia of Taxation and Tax Policy, 2nd ed., edited by Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle, 327–28. Washington, DC: Urban Institute Press.

Government Finance Officers Association (GFOA). 2015. "Fund Balance Guidelines for the General Fund." Chicago: GFOA.

Gonzalez, Christian, and Arik Levinson. 2003. "State Rainy Day Funds and the State Budget Crisis of 2002–?" State Tax Notes. August 11.

Haggerty, Todd, and Jonathan Griffin. 2014. "A Drop in the Bucket: Rainy Day Funds Proved No Match against Recession-Era Budget Gaps." State Legislatures Magazine. April.

Maag, Elaine, and David F. Merriman. 2007. "Understanding States' Fiscal Health during and after the 2001 Recession." State Tax Notes. August 6.

McNichol, Elizabeth. 2014. "When and How Should States Strengthen Their Rainy Day Funds?" Washington, DC: Center on Budget and Policy Priorities.

Pew Charitable Trusts. 2014. "Building State Rainy Day Funds: Policies to Harness Revenue Volatility, Stabilize Budgets, and Strengthen Reserves." Washington, DC: Pew Charitable Trusts.

———. 2017a. "State Rainy Day Funds in 2017." Washington, DC: Pew Charitable Trusts.

———. 2017b. "When to Use State Rainy Day Funds." Washington, DC: Pew Charitable Trusts

Randall, Megan. 2017. "How Much Rainier Does It Need to Get for Texas to Use Its Rainy Day Fund?" Urban Wire (blog). October 5.

Randall, Megan, and Kim Rueben. 2017 "Sustainable Budgeting in the States: Evidence on State Budget Institutions and Practices." Washington, DC: Urban Institute.

Rueben, Kim, and Megan Randall. 2017. "Budget Stabilization Funds: How States Save for a Rainy Day." Washington, DC: Urban Institute.

Urban-Brookings Tax Policy Center. "Building State Budgets: Effective Process and Practice."

Volcker Alliance. 2017. "Truth and Integrity in State Budgeting." New York: Volcker Alliance.

Q. What are tax and expenditure limits?

A. Tax and expenditure limits (TELs) restrict the growth of government revenues or spending by either capping them at fixed-dollar amounts or limiting their growth rate to match increases in population, inflation, personal income, or some combination of those factors. As of 2015, 34 states had at least one kind of TEL, including those states requiring a supermajority vote of the legislature to raise new taxes or revenues.

DESIGNING TAX AND EXPENDITURE LIMITS

Spending versus revenue limits. States can limit their own revenues, appropriations, or both. Many states, also, limit the growth of local revenues by, for example, restricting the growth of local property taxes. Appropriations and spending limits are more common than revenue limits. In 2015, 27 states imposed limits on their own government spending. By contrast, only 17 limited revenue; of those 10 capped both. Twenty-four states required a legislative supermajority (usually three-fifths or two-thirds of the legislature) to raise taxes or revenues (figure 1).

Mechanism. The means states use to limit spending and revenue vary considerably. The limit can be either a cap on growth or a restriction on the level, for example. The most common formula restricts expenditure *growth* to the pace of personal income, but some states include population and inflation growth in the formula. Other states restrict expenditures to a specific *level*, also often determined by a formula, such as a set percentage of personal income. Idaho, for example, limits expenditures to 5.33 percent of state personal income, thereby allowing expenditures to grow at the same rate as the economy. Another method is to restrict expenditures to a percentage of *projected* revenue, maintaining a cushion in case revenues fall short of projections.

Stringency. In general, constitutional provisions are more difficult to change or override than statutory TELs. By the same token, TELs imposed directly by voters rather than by legislators are more restrictive (New 2010). The most stringent revenue limits require that surplus revenues go back to taxpayers as rebates or be sequestered in rainy day funds. Oregon's "Kicker" rebate and Colorado's Taxpayer Bill of Rights (TABOR)are examples.

In some states, lawmakers can evade their TELs by imposing unfunded mandates upon, or transferring program responsibility to, local governments. Several states prohibit such actions, however and, more often, the measure of a TEL's stringency is whether the governor or legislature can override the cap with a simple majority. Several states have what, at first glance, appear to be restrictive TELs, but require only simple legislative majorities to override (i.e., the same threshold for approving a standard budget). Twelve states

require either a legislative supermajority or a popular vote to override their spending limits, and 16 impose this requirement on their revenue limits.

BACKGROUND

Most TELs emerged during the "tax revolt" of the late 1970s or the economic recession of the early 1990s. Although many of the best-known local property tax limits, such as California's Proposition 13 and Massachusetts's Proposition 2½, were adopted through citizen initiatives, most state TELs originated in their legislatures and limited expenditures, not revenues. As of 2015, only nine states had enacted TELs through voter initiative. New (2010) found that TELs adopted through citizen referendum were more effective than those adopted by legislatures.

Evidence on whether TELs limit state and local spending is mixed (Gordon 2008). Rueben (1996) found that laws' details matter and that TELs requiring a legislative supermajority or popular vote to modify spending reduced state general fund expenditures by 2 percent. However, those savings were partly offset by higher local spending.

Knight (2000) found that states with both a supermajority requirement to raise taxes (a kind of revenue limit) and an additional tax or expenditure limit had lower expenditures than states with just one constraint. Poterba and Rueben (1999) found that TELs affect the costs of state borrowing in two ways: not surprisingly, spending limits lower the costs and revenue limits increase them.

The strictest tax limitations, like the original implementation of the TABOR rule in Colorado, can prevent states from saving revenues in rainy day funds to cushion against downturns. In 2017, Randall and Rueben synthesized decades of research on TELs and other budgetary institutions, concluding that states should reform TELs that prevent them from saving during good times. Rueben, Randall and Boddupalli (2018) found that, during the Great Recession, states with binding revenue limits or a combination of binding revenue and expenditure limits were more responsive to deficit shocks than states with weaker rules.

PROPERTY TAX LIMITS

Property tax limits constitute a special category of revenue limit because, in most cases, they are set by state governments but apply to local governments. Only three states—Hawaii, New Hampshire, and Vermont—do not limit property taxes. State restrictions can apply to the property, to the jurisdiction, or both. Rate limits impose maximum rates on jurisdictions (e.g., counties, municipalities, and school districts). Limits on the growth of property tax assessments are typically applied to properties.

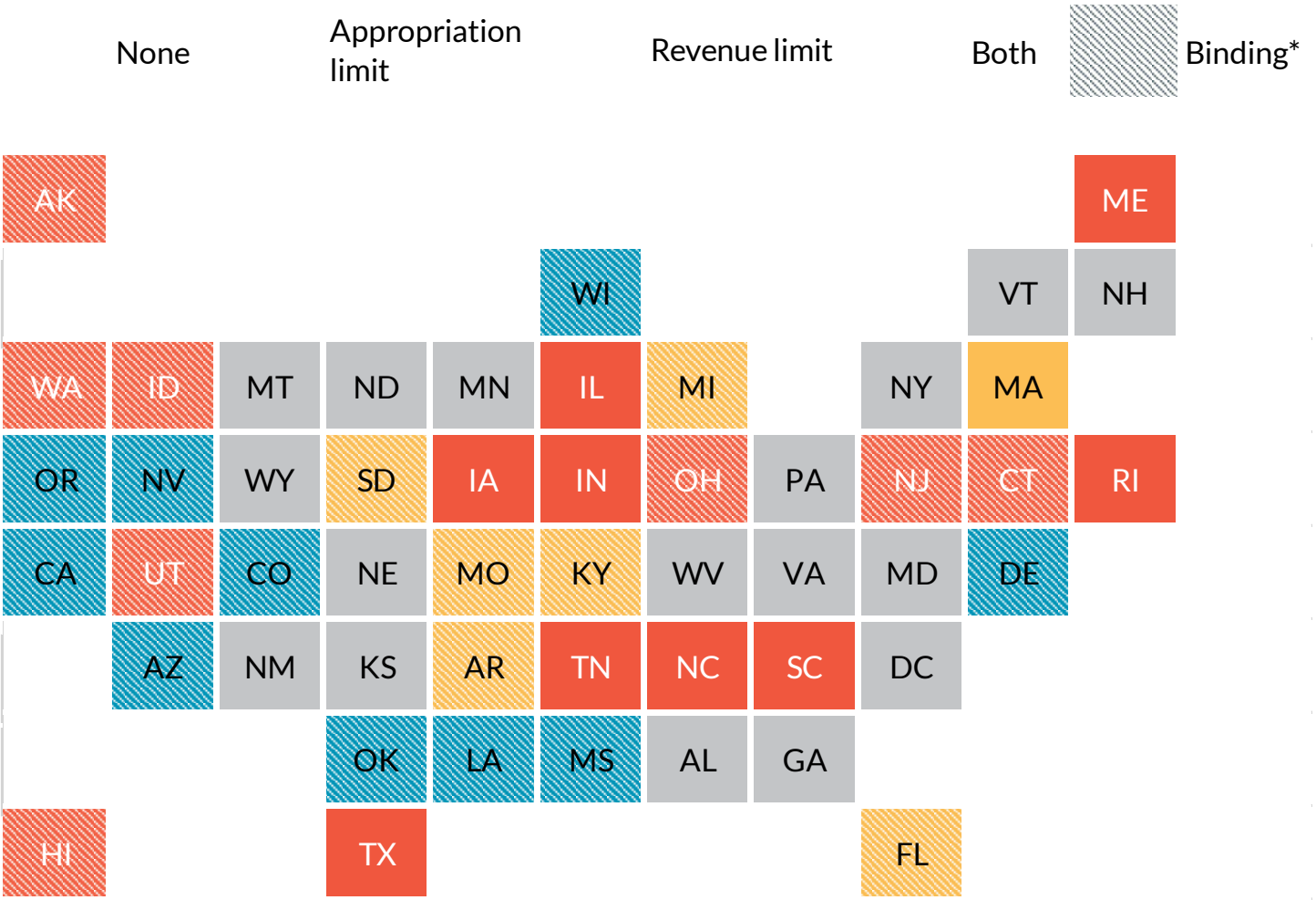
For example, Arizona limits residential property assessment to 10 percent of a home's value, growth in its property tax base to 5 percent annually, combined state and local tax rates for owner-occupied residences to a maximum of 1 percent of the state's limited property value, and growth in local property tax levies to 2 percent annually plus new construction. The state also caps expenditures for most local governments.

The State of State (and Local) Tax Policy

What are tax and expenditure limits?

FIGURE 1

Tax and Expenditure Limits by State
2015



Source: Tax Policy Center analysis based on various sources and independent data collection. Key sources included National Association of State Budget Officers *Budget Processes in the States* (1975 – 2015); Waisanen (2010); state-specific or other authoritative sources, including Skidmore (1999), Rueben (1996) and Mitchell (2010); and direct outreach to state budget staff.

Note: Revenue limits include requirements for a legislative supermajority to raise new taxes or revenues. States with both a binding revenue and expenditure limit are classified as binding if either the expenditure or revenue limit, or both, meet the requirement below.

*Binding appropriations and revenue limits require a vote of the people or legislative supermajority to override.

The State of State (and Local) Tax Policy

What are tax and expenditure limits?

Data Source

Lincoln Institute of Land Policy. "State-by-State Property Tax at a Glance Visualization Tool."

Further Reading

Arizona Constitution. Art. IX, §20.

Brooks, Leah, Yosh Halberstam, and Justin Phillips. 2014. "Spending within Limits: Evidence from Municipal Fiscal Restraints." Working paper. Toronto: University of Toronto.

Gordon, Tracy. 2008. "The Calculus of Constraint: A Critical Review of State Fiscal Institutions." In *Fiscal Challenges: An Interdisciplinary Approach to Budget Policy*, edited by Elizabeth Garrett, Elizabeth Graddy, and Howell E. Jackson, 271–87. New York: Cambridge University Press.

Haveman, Mark, and Terry A. Sexton. 2008. "Property Tax Assessment Limits: Lessons from Thirty Years of Experience." Cambridge, MA: Lincoln Institute of Land Policy.

Knight, Brian J. 2000. "Supermajority Voting Requirements for Tax Increases: Evidence from the States." *Journal of Public Economics* 76 (1): 41–67.

McGuire, Therese J., and Kim S. Rueben. 2006. "The Colorado Revenue Limit: The Economic Effects of TABOR." Washington, DC: Economic Policy Institute.

Mitchell, Matthew D. 2010. "TEL It Like It Is: Do State Tax and Expenditure Limits Actually Limit Spending?" Working Paper No. 10-71. Arlington, VA: Mercatus Center.

Mullins, Daniel R., and Bruce A. Wallin. 2004. "Tax and Expenditure Limitations: Introduction and Overview." *Public Budgeting and Finance* 24 (4): 2–15.

National Association of State Budget Officers (NASBO). 2015. *Budget Processes in the States*. Washington, DC: NASBO.

New, Michael. 2010. "US State Tax Expenditure Limitations: A Comparative Political Analysis." *State Politics and Policy Quarterly* 10 (1): 25–50.

Poterba, James M., and Kim S. Rueben. 1999. "Fiscal Rules and State Borrowing Costs: Evidence from California and Other States." San Francisco: Public Policy Institute of California.

Randall, Megan, and Kim Rueben. "Sustainable Budgeting in the States." Washington, DC: Urban Institute.

Rueben, Kim S. 1996. "Tax Limitations and Government Growth: The Effect of State Tax and Expenditure Limits on State and Local Government." San Francisco: Public Policy Institute of California.

Rueben, Kim, Megan Randall, and Aravind Boddupalli. 2018. "Budget Processes and the Great Recession: How Fiscal Institutions Shape Tax and Spending Decisions." Washington, DC: Urban Institute.

Skidmore, Mark. 1999. "Tax and Expenditure Limitations and the Fiscal Relationships between State and Local Governments." *Public Choice* 99 (1): 77–102.

Urban-Brookings Tax Policy Center. 2018. "Building State Budgets: Effective Process and Practice."

Waisanen, Bert. 2010. "State Tax and Expenditure Limits." Denver: National Conference of State Legislatures.

Watkins, Kate. 2009. "State Spending Limitations: TABOR and Referendum C." Memorandum, July 6. Denver: Colorado Legislative Council.