



RESEARCH REPORT

Assessing Fiscal Capacities of States

A Representative Revenue System–Representative Expenditure System Approach, Fiscal Year 2012

Tracy Gordon

Richard Auxier

John Iselin

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Executive Summary

Reflecting the country's broad diversity and strong federalist traditions, there is enormous variation in the amount of revenue that state and local governments collect from taxes, fees, and charges, and how much they spend on public goods and services such as schools, hospitals, and roads. This report documents these differences. In addition, it looks beyond what state and local governments actually raise and spend to what they *could* generate in revenues and *would* spend if they followed national averages, taking into account their own demographics and economic conditions. We use an approach known as the representative revenue system (RRS)–representative expenditure system (RES) to calculate *revenue capacity* and *expenditure need* as well as the difference between these two measures—the *fiscal gap at capacity*.

We found that states vary widely in their revenue capacity and expenditure need. For example, in fiscal year 2012, revenue capacity ranged from roughly \$4,800 per state resident in Mississippi to \$10,200 per capita in North Dakota and \$11,400 in the District of Columbia (DC).¹ Expenditure need varied between about \$7,300 per capita in Hawaii and \$9,400 per capita in Mississippi.

There was also wide variation in states' ability to cover their own expenditure needs using their own resources. In 2012, 44 states faced a fiscal gap at capacity, or a negative difference between revenue capacity and expenditure need. These gaps ranged from -\$4,635 in Mississippi to -\$186 in New Hampshire. Only six states (Alaska, Connecticut, Hawaii, Massachusetts, North Dakota, and Wyoming) and DC did not have a gap at capacity. Further, the gap at capacity persisted in 26 states even after accounting for federal dollars received. (The US average per capita transfer was \$1,863 in 2012.)

In some sense, this residual gap is unsurprising: federal grants have many purposes apart from redistribution, including taking advantage of local information to promote better service delivery and policy innovation. Federal funds also typically come with strings attached, such as requirements that states and localities match federal dollars with their own funds or maintain previous spending levels as a condition of receiving federal funds. As a result, the correlation between a state's fiscal gap at capacity and federal grants received was only 0.3 in 2012.

These findings suggest that the federal government ought to pay greater attention to fiscal capacity when designing formulas for intergovernmental grants. The federal government could improve the targeting of its grant programs in various ways, including removing caps on funding streams tied to local

poverty rates and other measures of need as well as re-examining matching requirements. However, there would be federal budgetary costs associated with each program change. In any event, understanding how and why states differ in their taxes and spending is of vital importance to federal grant makers as well as citizens who want to understand how their state's fiscal choices compare to a national standard.

Overview

States and localities are the workhorses of the American public sector. Although the federal government collects more in taxes and other revenue, states, cities, counties, school districts, and other special-purpose entities (such as fire or library districts) undertake most direct spending on domestic programs (or spending apart from national defense and grants to other levels of government).² For example, state and local governments

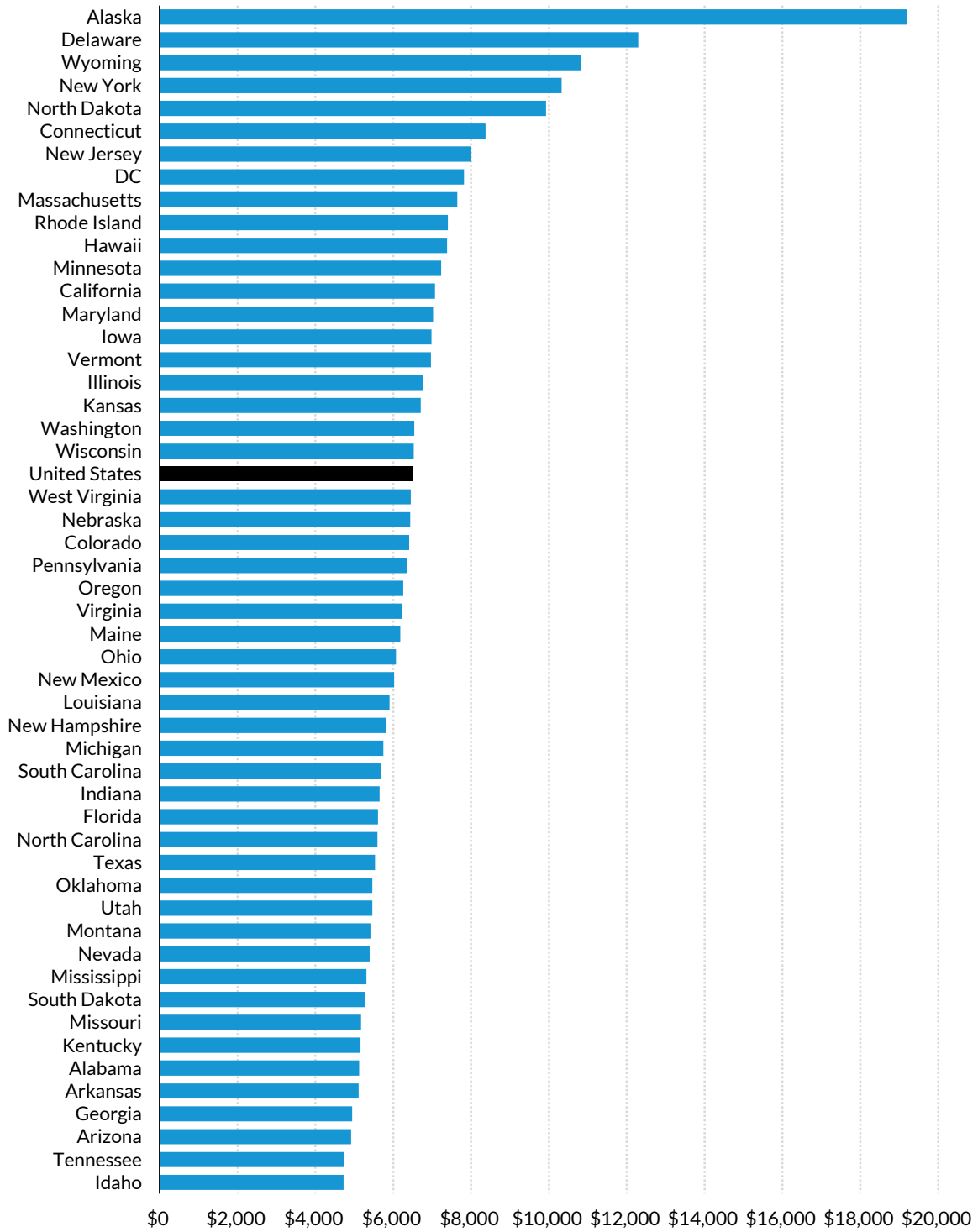
- build and operate public schools, colleges, and universities;
- provide cash assistance and services for low-income families;
- patrol streets, extinguish fires, and respond to natural disasters;
- construct and repair roads, highways, and bridges; and
- maintain parks and recreation centers.

State and local governments vary dramatically in how much revenue they raise and how much they spend on goods and services. In fiscal year 2012, the average state collected \$6,483 per capita in taxes, charges, and other miscellaneous general revenues (figure 1).³ However, this amount ranged from less than \$4,750 per resident in Idaho to nearly \$19,200 in Alaska.

At the same time, the average state spent \$8,443 per person on direct state and local general expenditures (excluding grants to other levels of government). Per person general expenditures also had a wide range: Idaho's state and local governments spent just over \$6,200 per person and Alaska's spent more than \$17,350 per person (figure 2). Similar differences show up in specific revenue sources including personal income and sales taxes, and in major spending categories, such as K-12 education and police and corrections.

FIGURE 1

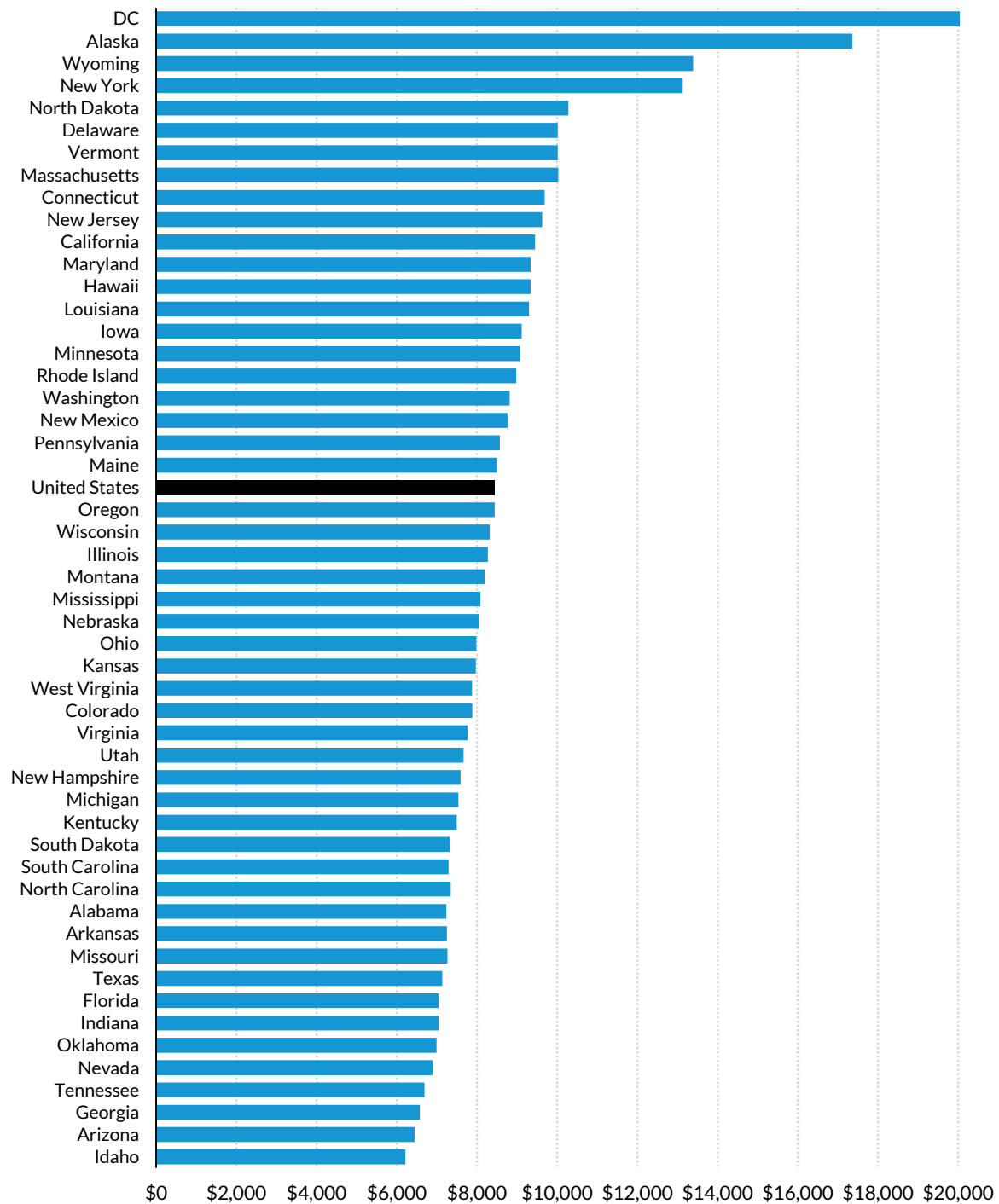
State and Local Own-Source General Revenue per Capita, 2012



Source: US Census Bureau, 2012.

FIGURE 2

State and Local Direct General Expenditures per Capita, 2012



Source: US Census Bureau, 2012.

Notes: Direct expenditures exclude payments to other governments. General expenditures fall under what the Census Bureau terms the “general government sector.” We add transit systems to this definition even though the Census Bureau categorizes these systems as a utility.

State and local revenue and spending differences arise for a variety of reasons, including geography, demographics, and history or tradition, as well as policy choices about what taxes and fees to levy or what goods and services to provide, to whom, and at what level of service or quality. These differences directly affect businesses and the individuals and families who live and work in these states.

State fiscal differences can also have consequences for the nation as a whole. For example, scholars from Harvard and UC Berkeley have documented how the likelihood of a child moving into a higher income bracket than his or her parents depends on where he or she was born and raised. These researchers further noted that areas with greater economic mobility tend to spend more on public schools, although the link between spending and outcomes is uncertain (Chetty et al. 2014).

Intergovernmental grants are one way the federal government smooths differences in what states and localities tax and spend.⁴ However, unlike in many other countries, in the United States federal grants usually have other primary purposes apart from redistribution, such as improving the efficiency of public service delivery or promoting policy innovation. Federal funds also typically come with strings attached, such as the requirement that states and localities contribute their own dollars or maintain previous spending levels as a condition of receiving federal aid (Congressional Budget Office 2013).

But should the federal government eliminate state or local fiscal disparities that arise from policy choices—such as decisions not to tax certain goods and services or to provide fewer services? Federal grant makers may want to know how and why states differ in their taxes and public spending before deciding on intergovernmental transfers. This information should also be of interest to citizens who want to understand why their state taxes and spends what it does and how it compares with other states.⁵

The representative revenue system (RRS)—representative expenditure system (RES) was designed to address these questions. For each major revenue source, the RRS applies an average national tax or fee assessment rate to the relevant economic base in each state. The result is a measure of *revenue capacity*, or what states hypothetically could collect from that revenue source before taking into account policy choices. Comparing a state's revenue capacity with actual collections yields a measure of *revenue effort*.

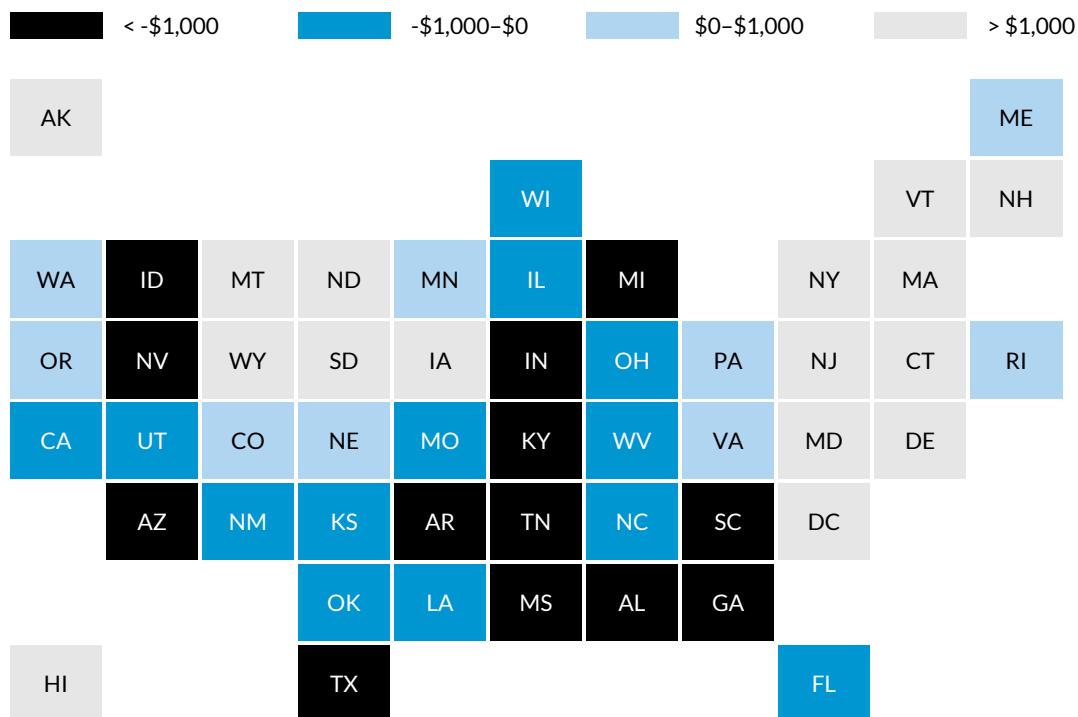
Similarly, the RES applies a national average of spending per capita to the population of each state. The method then adjusts for the costs of inputs and workload factors, or demographic features that may contribute to higher costs, such as more school-aged children to educate or more vehicle lane miles to operate and maintain. The result is a measure of state *expenditure need*. The difference between state revenue capacity and expenditure need is the *fiscal gap at capacity*.

Our results point to large fiscal gaps at capacity in several states, and federal grants do not always close these gaps. In 2012, 44 states had fiscal gaps at capacity, and 26 states had gaps even after including federal grants.⁶ For example, Mississippi's revenue capacity was about \$4,800 per capita in 2012, but its expenditure need was more than \$9,400 per capita, implying a fiscal gap at capacity of roughly -\$4,600. Federal grants went some way toward closing that gap: Mississippi received over \$2,750 per state resident from the federal government in 2012 (compared with a national average of roughly \$1,863 per capita). However, the remaining gap after transfers was still about -\$1,850 per state resident.

States similar to Mississippi in terms of large remaining fiscal gaps at capacity even after accounting for federal grants were Alabama, Arizona, Arkansas, Georgia, Idaho, Kentucky, Nevada, and South Carolina (figure 3). In contrast, federal grants offset fiscal gaps at capacity in states such as Delaware, New York, and Vermont in 2012.

FIGURE 3

Fiscal Gap at Capacity after Transfers



Source: Urban Institute calculations.

Note: Gap at capacity after transfers equals a state's revenue capacity plus federal transfers minus expenditure need.

The remainder of this report describes how we arrived at these results. After a brief description of state revenue systems, we compare actual collections from major taxes, fees, and charges with each state's capacity to raise revenues from these sources. We then perform the same type of calculations for expenditures by using the RES approach. The final section elaborates on fiscal gaps at capacity and offers recommendations to improve the redistributive aspect of federal funding formulas. Throughout this report, we focus on fiscal year 2012, the latest year for which comprehensive data were available at the time of this study.⁷ Unless otherwise specified, all revenue and expenditure data come from the US Census of Governments, the most comprehensive, reliable, and consistent data available on state and local government revenues and spending over time.

It is important to point out that the RRS-RES approach does not imply that all states should resemble the nation as a whole. Rather, RRS-RES provides a benchmark against which policymakers, journalists, and voters can assess state and local government finances and promote a more informed conversation about how state and local governments raise and spend money.

How Do State and Local Governments Raise Money?

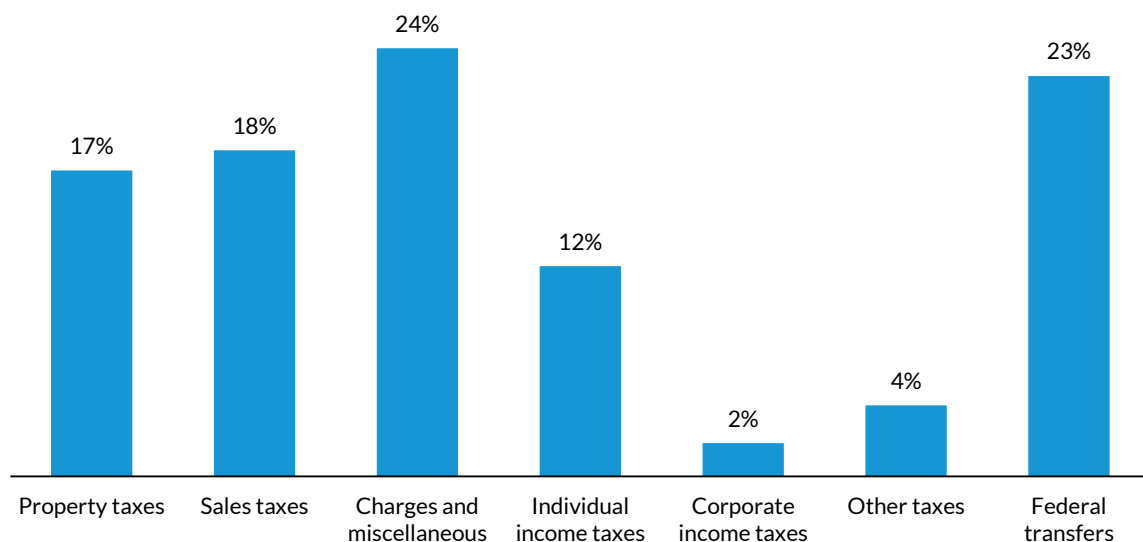
State and local governments collected roughly \$2.6 trillion in general revenue in 2012. Apart from federal grants, their largest individual revenue source was sales taxes (18 percent of general revenue), including general sales taxes on all retail sales (12 percent) and selective sales taxes (6 percent) on specific goods such as alcohol, cigarettes, and motor fuel (figure 4). Although both state and local governments collect sales taxes, sales tax revenue provided a larger share of state funds than local funds.

The second-largest contributor of own-source revenue for combined state and local governments was property taxes (17 percent). Property taxes are mostly a local government tax. In contrast, individual income taxes (12 percent of total state and local general revenue) and corporate income taxes (2 percent) are mostly state government taxes.⁸

FIGURE 4

State and Local General Revenue

By source



Source: US Census, 2012.

Charges and miscellaneous revenues accounted for about a quarter of state and local general revenue (16 percent and 8 percent, respectively). Charges include tuition paid to a state university, payments to a public hospital, tolls on a highway, and other government fees for services.

Miscellaneous revenue includes all other revenue governments collect from their own sources (e.g., special assessments). These revenue sources are used by both state and local governments.⁹ Federal government grants provided the final quarter of state and local general revenue.

How Do Revenue Systems Differ across States?

The 50 states and DC mostly make use of the same taxes. However, the degree to which they rely on these revenue streams varies widely (figure 5). For example, in 2012

- Hawaii, Nevada, and Washington derived more than 30 percent of state and local general revenue from sales taxes, but five states (Alaska, Delaware, Montana, New Hampshire, and Oregon) collected no general sales tax;¹⁰
- New Hampshire drew 36 percent of its combined state and local general revenues from the property tax, about twice the national average.¹¹ However, property taxes provided only 8 percent of general revenue in Alabama, Delaware, and New Mexico; and
- Connecticut and Maryland relied on individual income taxes for about a fifth of general revenue, but seven states (Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming) did not tax any kind of income.¹²

Similar differences across states are evident in every major state and local revenue source. This section explores reasons for this variation—policy choices, background conditions, or a combination of both. We start with total revenue and then delve into each major revenue source. For each source, we explain the policy levers (e.g., choice of tax rate and base) available to a state and its revenue base, or the value of all economic activity or resources in a state potentially subject to assessment for that tax, fee, or charge.

We then compare actual revenue (from the US Census Bureau) with revenue capacity, which is based on multiplying the national average revenue rate (total US state and local revenue collections divided by the US revenue base) by the state base.¹³ Note that features of the overall revenue system will also influence the reliance on specific revenue sources. For example, states without an income tax

will likely impose higher sales or other taxes to make up for forgone revenue. In Alaska, revenue from oil (directly through severance taxes or indirectly through other taxes) has thus far obviated the need for income or general sales taxes.¹⁴

Revenue sources examined include

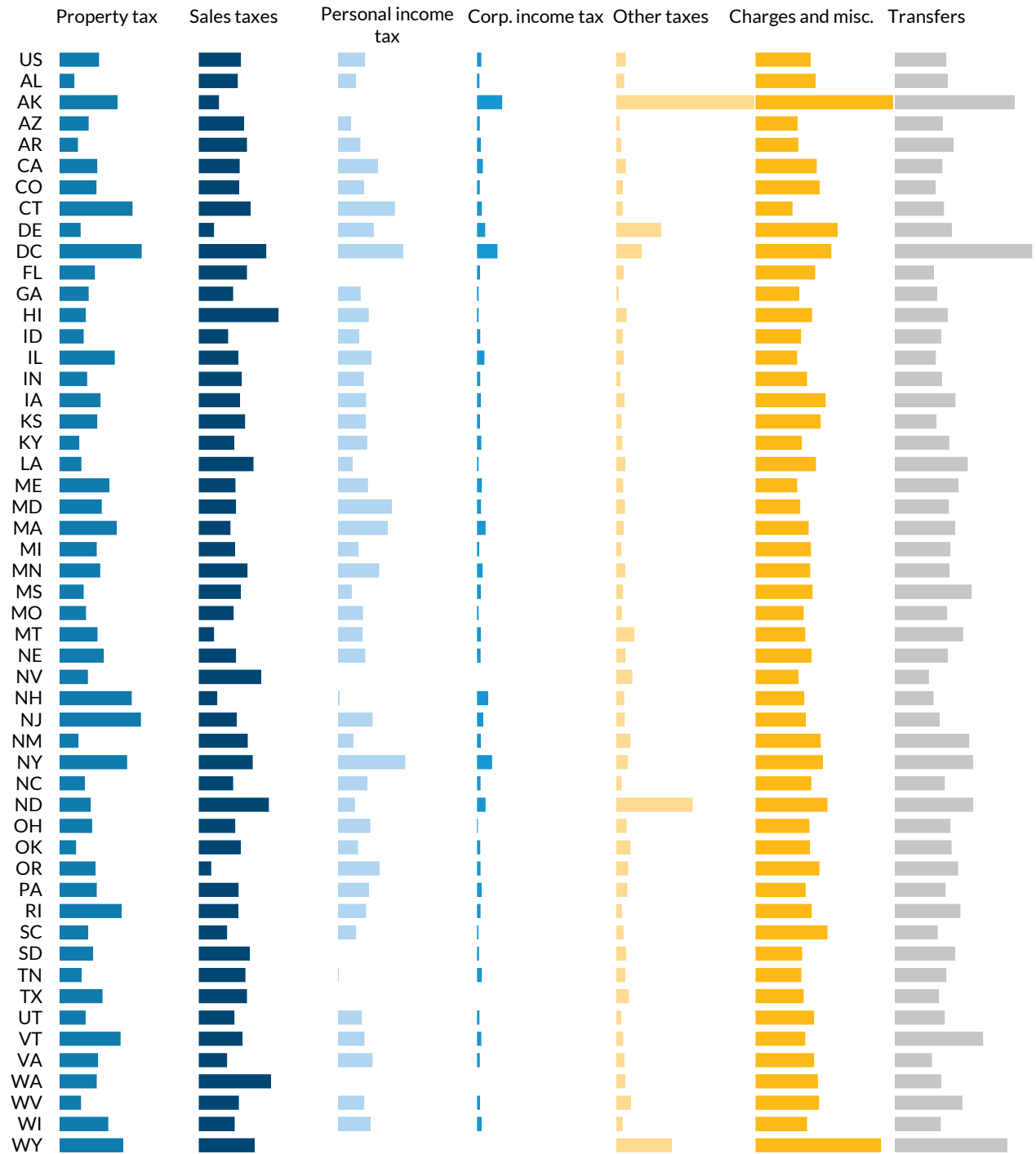
- General sales tax;
- Property tax;
- Individual income tax;
- Corporate income tax;
- General charges;
- Selective sales taxes on motor fuels, cigarettes, alcohol, and insurance;
- Severance tax;
- Estate, inheritance, and gift taxes;
- Lotteries;
- Licenses for corporations, hunting and fishing, motor vehicle operators, and motor vehicle registrations;
- All other taxes; and
- Other nontax revenues.

Detailed tables with results for all revenue sources and each state, DC, and the nation are presented in appendix D.

FIGURE 5

State and Local General Revenue, by Source

Per capita dollars



Source: Census, 2012.

Representative Revenue System Results

Total Revenue

State and local governments raised an average of \$6,483 per capita in revenue in fiscal 2012 (figure 6). By the RRS-RES approach, national revenue capacity always equals actual collections because capacity is the national average tax or fee rate multiplied by the national base. However, performing the same operation for states reveals differences. As a group, most states collected revenue in line with their capacity in 2012, but several states deviated from this trend.

CASE STUDIES: WEST VIRGINIA, TENNESSEE, NEW YORK, MISSISSIPPI, MASSACHUSETTS, AND MISSOURI

West Virginia and Tennessee had roughly the same per capita revenue capacity in 2012 (\$5,461 and \$5,571, respectively). Put another way, they had similar resources or economic activity available to tax. If both states had levied the national average rate for all taxes, fees, and charges, they would have collected similar amounts of revenue. However, West Virginia's \$6,453 in per capita revenue exceeded Tennessee's \$4,739. This difference suggests the states diverged when it came to policy choices.

Similar divergences between capacity and collections are evident in other states, often despite very different circumstances. For example, New York and Mississippi were on opposite ends of the spectrum when it came to actual revenue collections in 2012 (\$10,329 and \$5,308 per capita). However, both states collected more than their revenue capacity (\$7,659 and \$4,776 per capita). In contrast, Massachusetts' per capita revenue (\$7,647) far exceeded Missouri's (\$5,173), but collections in both states fell short of their capacity (\$8,472 and \$5,916).

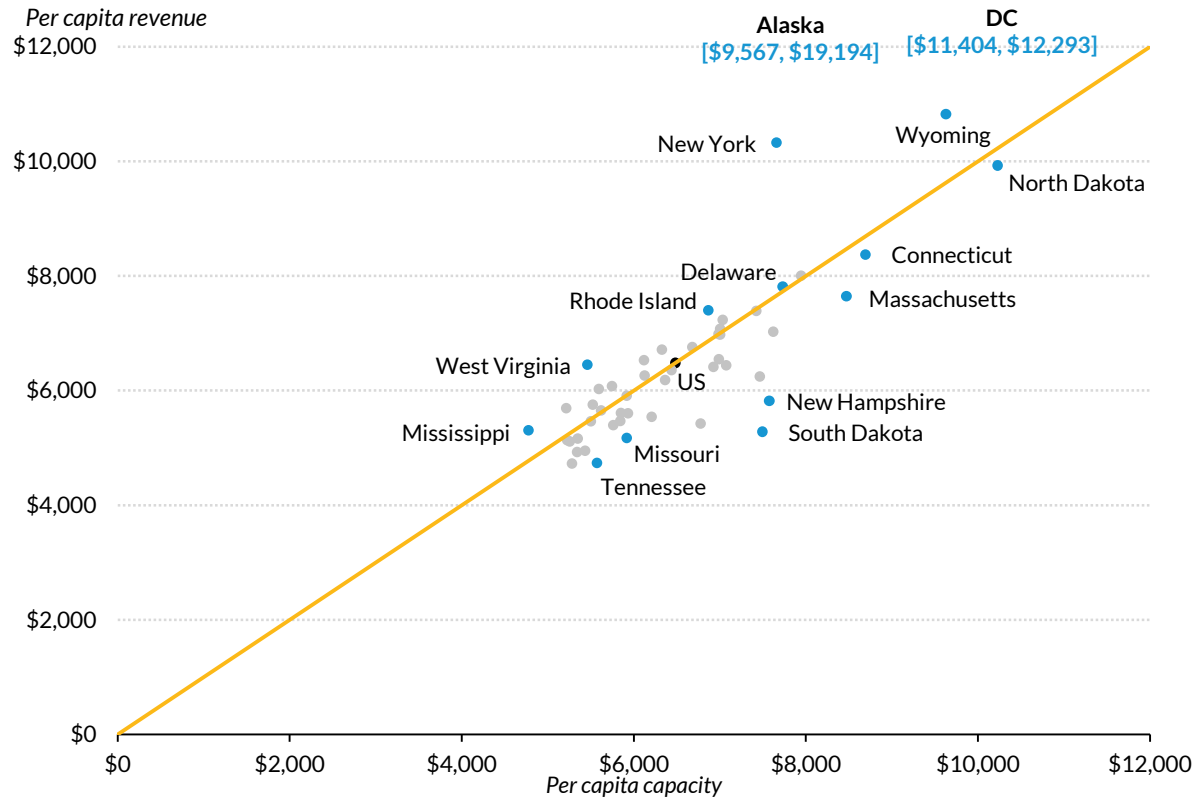
OUTLIERS: ALASKA AND DC

Alaska and DC took in far more revenue per capita than the other states in 2012. (In figure 5 and elsewhere, if a state or DC has bracketed dollar amounts it did not fit on the graph.) DC is often an outlier in this study because, although it functions as a state and a locality, it most closely resembles a central city in terms of its population and economic activity, much of which comes from nonresidents.¹⁵ As a result, at times we compare only the 50 states. However, we include DC in all tables and graphics.

Alaska benefited from especially high oil production and prices in 2012. The state collected 41 percent of its total revenue from taxes on oil (severance taxes); other revenue sources (e.g., property taxes and corporate income taxes, as well as rents and royalties) also benefited from oil profits in the state. North Dakota and Wyoming similarly experienced revenue gains related to natural resources in 2012. However, results for these states would look very different with (currently unavailable) 2015 data given recent declines in oil production and prices (Dadayan and Boyd 2016).

FIGURE 6

Total Revenue



Note: Bracketed pairs of dollar amounts shown in this and subsequent figures represent outliers.

General Sales Tax

Forty-five states—all but Alaska, Delaware, Montana, New Hampshire, and Oregon—and DC levied a state-level general sales tax in 2012 (figure 7). Thirty-six states (including Alaska) allowed local governments to collect an additional general sales tax. Some local governments also chose to levy higher tax rates for specific purchases such as restaurant meals, parking, and hotels.

In 2012, state general sales tax rates ranged from 2.9 percent in Colorado to 7.25 percent in California. Local sales tax rates ranged from 0.25 percent in Mississippi to 8 percent in Alabama.

General sales taxes typically apply to the purchase of nearly all tangible goods. Notable exceptions are food purchased for use at home (exempted in 31 states and DC in 2012) and nonprescription drugs (exempted in nine states and DC). Many states also exempt clothing and textbooks from the general sales tax.

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. Only Hawaii, New Mexico, South Dakota, and Washington taxed a broad set of professional services in 2012.

For the purposes of calculating state sales tax capacity, our potential tax base includes all final household consumer purchases including services.¹⁶ We consider all exemptions of items, such as food and medicine as well as specific services to be policy decisions. The best data for our calculations were personal consumption expenditure data from the Bureau of Economic Analysis (BEA).¹⁷

Per capita sales tax capacity measures ranged from \$792 in Mississippi to \$1,289 in Massachusetts. However, per capita revenue ranged from zero in no-sales-tax states to \$2,074 in Hawaii, with a national average of \$1,000.

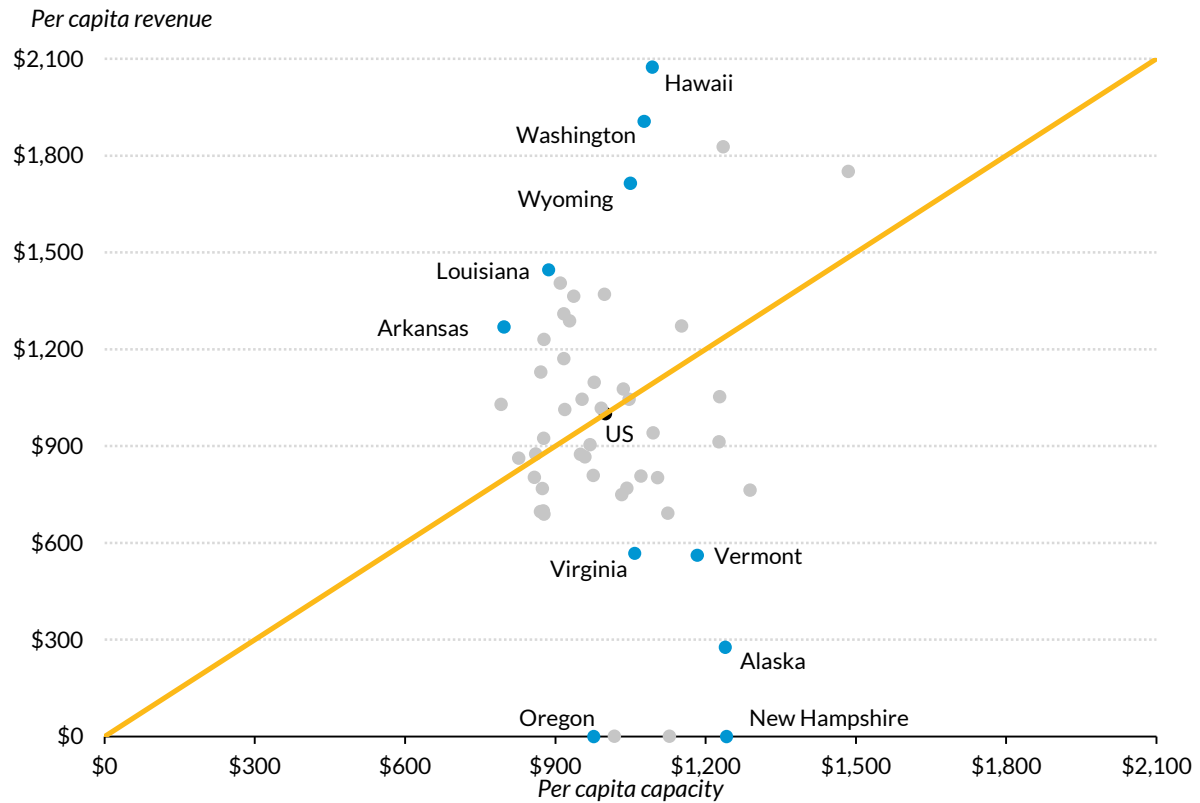
CASE STUDIES: HAWAII, LOUISIANA, VIRGINIA, AND NEW HAMPSHIRE

Hawaii's state general sales tax rate was not particularly high in 2012 (4 percent), but the state and its local governments collected far more revenue than its capacity (\$2,074 versus \$1,094 per capita). High collections stemmed in part from Hawaii levying its sales tax on a broader base compared to the average state, including professional services such as lawyers, accountants, and doctors. Hawaii's sales tax revenues also included taxes paid by nonresidents, whose consumption is not captured in our chosen tax capacity base. Other states that taxed professional services (New Mexico, South Dakota, and Washington) also collected far more revenues than the average state.¹⁸ Wyoming did not generally tax professional services, but it did levy a sales tax on specific businesses working in the oil and natural gas industry.¹⁹

Louisiana and Virginia had a similar sales tax capacity in 2012 (\$887 and \$1,058 per capita). However, Louisiana collected far more revenue than its capacity (\$1,446 per capita) because, in addition to the state's 4 percent general sales tax rate, localities levied sales taxes at rates as high as 7 percent. Other states—such as Arizona, Arkansas, Kansas, and Tennessee—also collected more revenue

than capacity because of high combined (state and local) sales tax rates. In contrast, Virginia’s per capita revenue was \$568, well below its \$1,058 capacity. The state’s sales tax rate was 5 percent and localities did not tax purchases. States similar to Virginia, with low per capita revenue relative to capacity, included Maryland, Massachusetts, and Vermont.

FIGURE 7
General Sales Taxes



New Hampshire ranked after only Massachusetts in its sales tax capacity (\$1,242 per capita). However, the state collected no revenue from this source because it does not have a general sales tax, similar to Delaware, Montana, and Oregon. Alaska collected \$276 per capita because local governments taxed sales even though the state did not.

Property Tax

A property tax is a tax on “real property” (land and buildings) or personal property (such as business equipment, inventories, and noncommercial motor vehicles). Taxpayers in all 50 states and DC pay property taxes, but the tax is primarily levied at the local level by cities, counties, and school districts.

The government levying the property tax assesses the value of real property in its district. Typically, the estimate is what the property would sell for in an arms-length transaction.²⁰ After assessing the property's value, governments set both the tax rate and what percentage of the property's value is taxable. Some localities levy high tax rates but only apply the rate to a fraction of the property's value; others have low tax rates but apply it to the property's entire value.

States and local governments often use abatements, limits, exemptions, deductions, and credits to lower a real property's taxable value or the taxpayer's payment. Businesses also receive property tax credits from local governments, often in attempts to attract businesses to the jurisdiction.

To establish a property tax base for revenue capacity calculations, we need a measure of all property value in a given state. Our chosen tax base combined estimates from four property categories: corporate, farm, residential, and utility. These estimates were either calculated with state-level property value data (residential and farm) or by allocating national value data among the states with a state-level proxy (utility and corporate).²¹

Applying the RRS method, states ranged in property tax capacity from \$871 per capita in Mississippi to \$2,453 per capita in Hawaii. Per capita revenue spanned from \$530 in Alabama to \$2,921 in New Jersey, with a national average of \$1,423 in 2012 (figure 8).²²

CASE STUDIES: NEW JERSEY AND ALABAMA

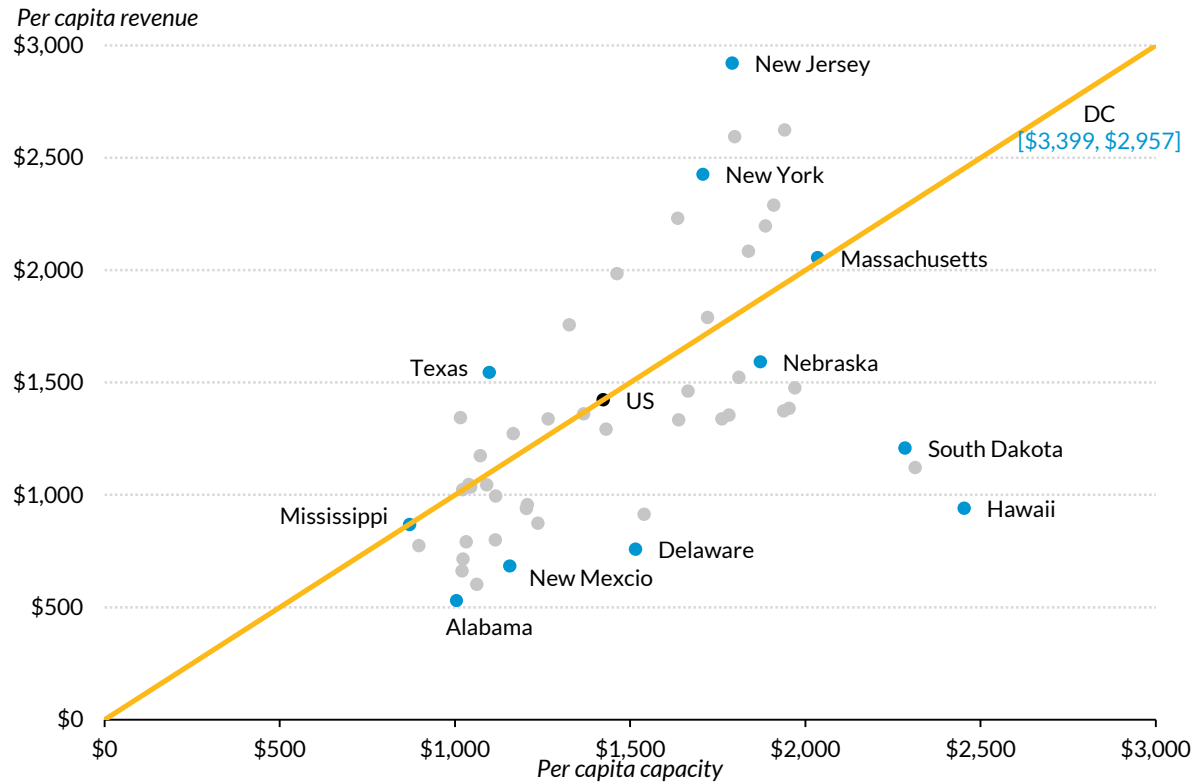
New Jersey collected the most per capita property tax revenue (\$2,921) in 2012. New Jersey's per capita revenue was well above its capacity (\$1,791), implying the state's rates and assessment levels were higher than the national average. States similar to New Jersey, with far higher revenue than capacity, included New Hampshire, New York, and Texas. New York, like New Jersey, had higher reliance on property taxes reflecting higher overall revenue. In contrast, Texas' and New Hampshire's high property taxes in part reflect their lack of a broad-based income tax, and in New Hampshire's case, a general sales tax.

Massachusetts also had high per capita revenue (\$2,055) but it was very close to its per capita capacity (\$2,035). In contrast, Mississippi's per capita revenue also equaled its per capita capacity, but its collections (\$868) were among the lowest in the country.

Iowa and Nebraska were high-revenue states that nonetheless collected less than their capacity based on national average rates and assessment practices.

Alabama had the lowest per capita property tax revenue in 2012 (\$530) and the third-lowest capacity (\$1,004). The next seven states (Oklahoma, Arkansas, New Mexico, Kentucky, Delaware, West Virginia, Louisiana, and Tennessee) lowest in per capita revenue also had revenue below capacity.

FIGURE 8
Property Taxes



Individual Income Tax

In 2012, 41 states and DC levied broad-based individual income taxes (figure 9). That is, they taxed wages, salaries, dividends, interest, and other income earned in the state.²³ Two states (New Hampshire and Tennessee) taxed only specific types of income such as bond interest and stock dividends and they collected very little revenue from these sources. Seven states (Alaska, Florida, Nevada, South Dakota, Texas, Washington, and Wyoming) had no individual income tax.

State income taxes differ along several dimensions including deductions, exemptions, tax rates, and brackets. In 2012, 32 states and DC offered a standard deduction, which reduces a filer’s taxable income by a flat amount. Standard deductions mostly benefit low- and middle-income taxpayers

because the reduction is a larger share of their income. For high income taxpayers, itemizing or summing specific deductions, such as deductions for charitable donations, yields a higher tax break. In 2012, 31 states and DC allowed itemized deductions. Every state except Pennsylvania that taxed income in 2012 offered a personal exemption. Like a standard deduction, a personal exemption also lowers taxable income. The exemption is typically multiplied by every person in the household or tax filing unit (e.g., dependents).

More than deductions and exemptions, tax rates and brackets differentiate state income tax systems. In 2012, top tax rates ranged from 3.07 percent in Pennsylvania to 11 percent in Hawaii. Twenty-one states had a top rate of 6 percent or less. Only California, Hawaii, and Oregon had top rates above 9 percent. The amounts of income subject to these rates are also important. Most state income taxes were fairly flat. Seven states had only one tax rate (a perfectly flat rate), and in another 14 states the threshold for the top tax rate was below \$40,000 in taxable income.

Twelve states authorized local governments to impose their own income taxes in 2012. Local governments typically piggyback off the structure of state taxes described above.

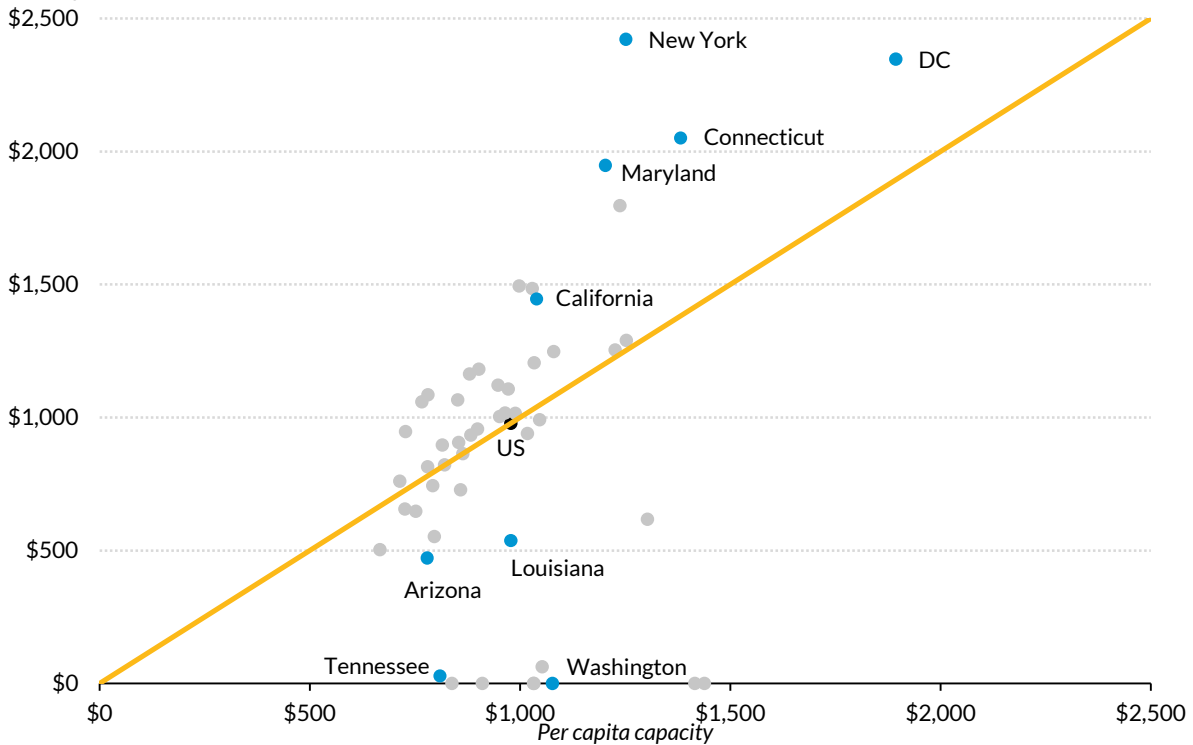
According to the RRS method, the tax base for the individual income tax should be the value of all economic activity and resources in a state potentially subject to tax. For our study, we used the US Treasury Department's estimate of Total Taxable Resources to ensure consistency across states while avoiding subjective determinations about what was a "standard" versus a "nonstandard" personal income tax.²⁴

We found income tax capacity ranged from \$668 per capita in Mississippi to \$1,439 in Alaska. The range in actual revenue collections for states with an income tax—\$472 in Arizona to \$2,422 in New York (the national average was \$978 in 2012)—was far larger than for capacity, even when excluding the nine states without a broad income tax.

FIGURE 9

Individual Income Tax

Per capita revenue



CASE STUDIES: NEW YORK AND LOUISIANA

New York had the highest per capita revenue because of a combination of factors: the state’s per capita capacity (\$1,252) was among the highest in the nation because of a large share of income, the state levied high tax rates, and local governments (particularly New York City) also taxed income. Other states with relatively high capacity and revenue were California, Connecticut, Maryland, Massachusetts, and Oregon.

In contrast, Louisiana had a per capita income tax capacity of \$978 but collected only half of that in revenue (\$537). The state had relatively low income tax rates, and local governments did not tax income. Other states with lower revenue than capacity included Arizona, North Dakota, and New Mexico. Most states had similar amounts of per capita capacity and revenue.

NO-TAX STATES

The seven states that did not tax any income collected nothing in income taxes. New Hampshire and Tennessee, which only taxed limited forms of income, collected \$62 and \$28 in per capita revenue,

respectively. In these states, per capita income tax capacity ranged from \$810 in Tennessee to \$1,439 in Alaska.

Corporate Income Taxes

Forty-four states and DC levied a corporate income tax in 2012. Two states, Ohio and Texas, taxed corporations' gross receipts instead of income (which we and the Census Bureau count as general sales tax revenue).²⁵ Nevada, South Dakota, Washington, and Wyoming had no corporate income tax or gross receipts tax in 2012.²⁶ Local governments in seven states collected corporate income revenue.²⁷ Although corporate income taxes make up a relatively small share of revenue, they often follow fairly complex rules.²⁸

A state's corporate income tax is levied on business profits. Multi-state corporations must calculate how much income is "apportioned" to each state in which it operates. Apportionment is based on a three-part equation that uses how much sales, personnel, and property a corporation has in each state. Recently, states have emphasized sales above the other two components, or have used only sales to apportion profits. A multi-state corporation then pays each state's tax rates on the state's share of the taxable income for all the states in which it operates.

Top state corporate income tax rates ranged from 4.63 percent in Colorado to 12 percent in Iowa in 2012. DC and 31 of the 44 states with a corporate income tax had a flat rate. Several states also had minimum tax payments (for businesses with no taxable income) that ranged from \$50 in Arizona to \$200 in Rhode Island.

States also provided a mix of exemptions and credits with the corporate income tax. Some of these provisions (such as business expenses that reduce taxable income) were broad and used by all states; others were extremely targeted. For example, a state attempting to keep or attract a particular type of business might lower its tax rates for qualifying businesses or exempt all their income from taxation.

Because comprehensive state-level data are generally not available, to calculate corporate income tax capacity we used national corporate profits and allocated these totals to states by using a three-factor formula based on sales, payroll, and property. More specifically, we used receipts and payroll data from the Census Bureau, and doubled the payroll data as a proxy for property.²⁹

National per capita corporate income tax revenue was \$156 in 2012 (figure 10). Among the states, per capita capacity ranged from \$85 in Idaho to \$239 in Connecticut. Most states actual revenue

clustered around the national average, but nine states and DC had per capita revenue greater than \$200.

CASE STUDIES: MASSACHUSETTS, SOUTH CAROLINA, AND TEXAS

Massachusetts, with large amounts of business activity and an 8 percent corporate income tax rate, had high per capita revenue capacity (\$210) and collections (\$301). Other states with high capacity and revenue included California, Delaware, and New Hampshire. In contrast, South Carolina's per capita revenue (\$54) was only half of its per capita capacity (\$109). The state has a relatively low flat tax rate (5 percent) and, like many states, most likely offers a host of exemptions and deductions that further reduce the corporate income tax revenue it collects. Other states with per capita revenue below per capita capacity were Connecticut, Georgia, Louisiana, and Michigan.

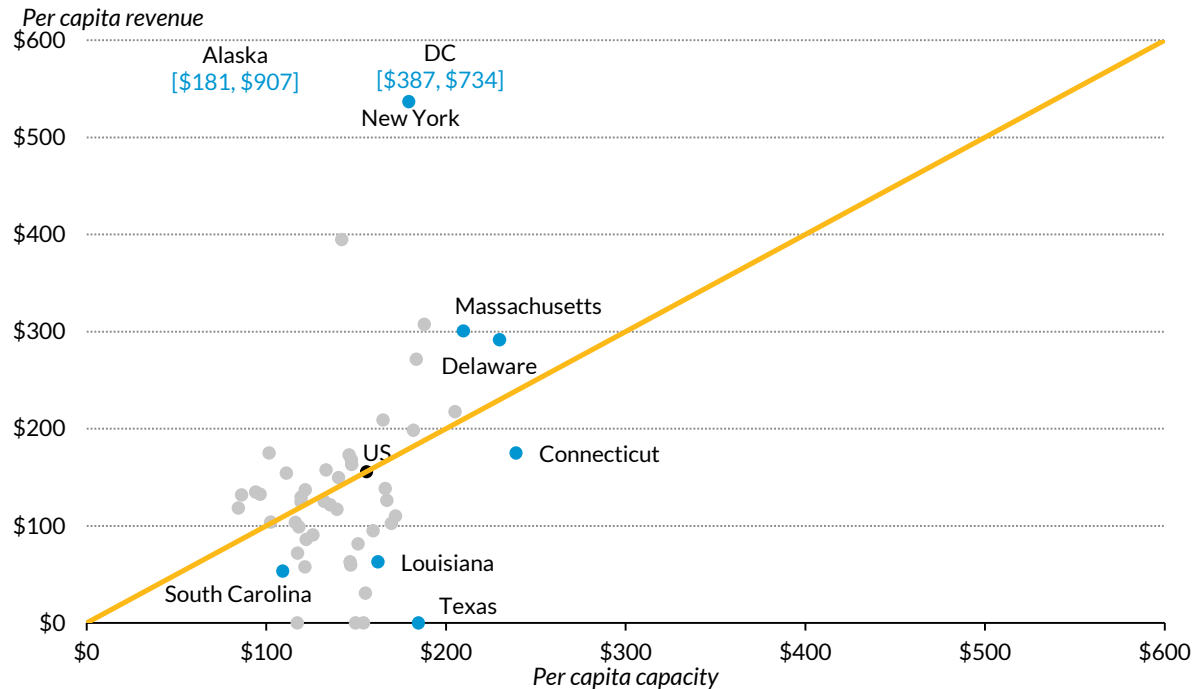
The four states with no corporate income tax or taxes on financial institutions collected no revenue. Among these states, Texas had the most per capita capacity (\$185).

OUTLIERS: ALASKA, DC, AND NEW YORK

Per capita revenue was extremely high in Alaska (\$907), DC (\$734), and New York (\$537). Alaska's high revenue was the result of an extremely successful year among oil companies, which account for most of the state's corporate income tax revenue.³⁰ High revenues in DC and New York reflect a concentration of business activity as well as relatively high tax rates in these jurisdictions.

FIGURE 10

Corporate Income Taxes



General Charges

In addition to taxes, state and local governments levy fees and charges for services rendered. Examples include tuition paid to a state university, payments to a public hospital, tolls on highways, and sewerage and parking meter fees collected by a city.³¹ Although individual charges can be as little as a few dollars, in aggregate general charges provide a substantial amount of revenue for state and local governments. This is especially true in states that collect relatively little tax revenue.

In 2012, general charges provided 16 percent of state and local revenue—a greater percentage than individual income taxes and corporate income taxes, and nearly as much as sales taxes and property taxes. National per capita revenue from general charges was \$1,358 (figure 11).

Because general charges include a wide variety of payments and could be reasonably collected in line with a population’s overall resources, we used state personal income for the fee base.

CASE STUDIES: CONNECTICUT AND SOUTH CAROLINA

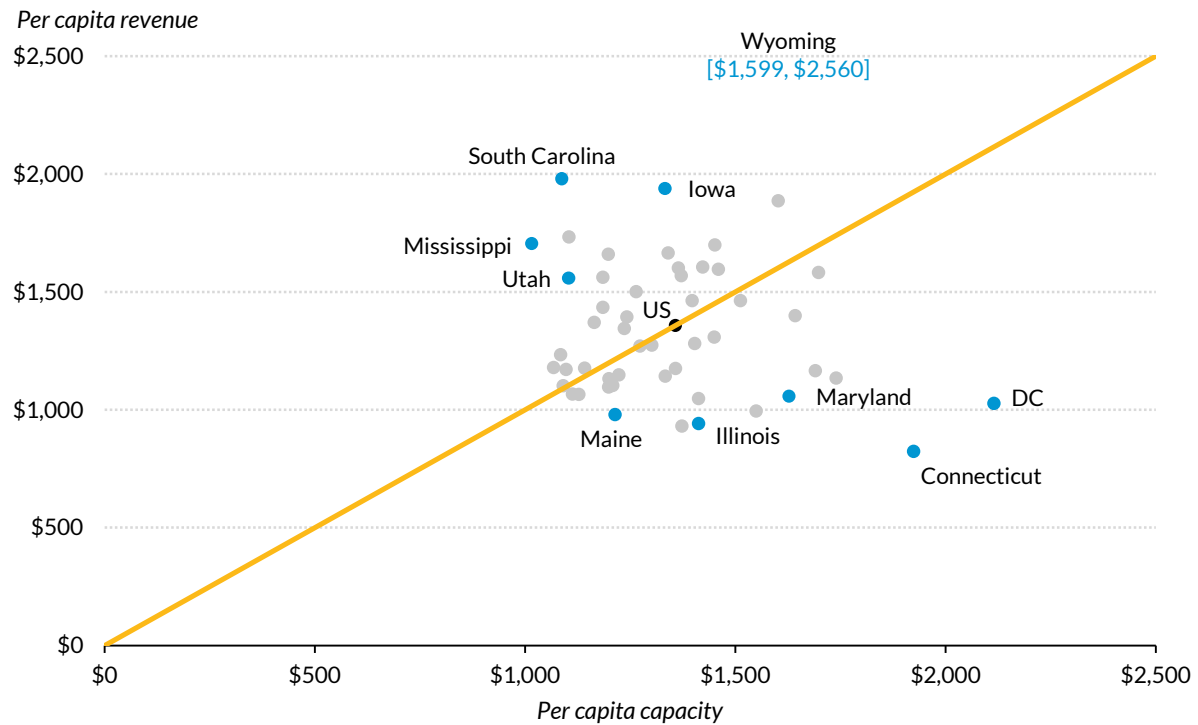
Connecticut had nearly double the per capita capacity (\$1,924) of South Carolina (\$1,088) but it collected less than half as much per capita revenue from general charges compared to South Carolina

(\$824 versus \$1,980). This difference was in part a reflection of the two states tax systems: Connecticut collected 69 percent of its state and local general revenue from taxes, but South Carolina collected just 42 percent from taxes. (The national average was 53 percent.) Essentially, South Carolina used charges to make up some of the revenue it did not collect in taxes.

Illinois, Maine, and Maryland also collected low fee and charge revenue relative to capacity. Similar to Connecticut, the three states also collected more in taxes as a percentage of general revenue. In contrast, Iowa, Mississippi, Utah, and Wyoming all collected a large amount of fee and charge revenue relative to capacity. As in South Carolina, all four states collected less than the national average in taxes as a percentage of general revenue.

FIGURE 11

General Charges



Selective Sales Taxes

In contrast to a general sales tax, a selective sales tax is a special tax rate on a specific type of good or service. All states had selective sales taxes in 2012, including the five states without a general sales tax. Selective sales taxes may be levied for a variety of purposes. Alcohol and cigarette taxes are in part

intended to dissuade residents from consuming the product, and proceeds from the motor fuel tax are often earmarked specifically for transportation spending. In this study, we analyzed selective sales taxes on motor fuels, cigarettes, alcohol, and insurance.³²

Motor Fuel Taxes

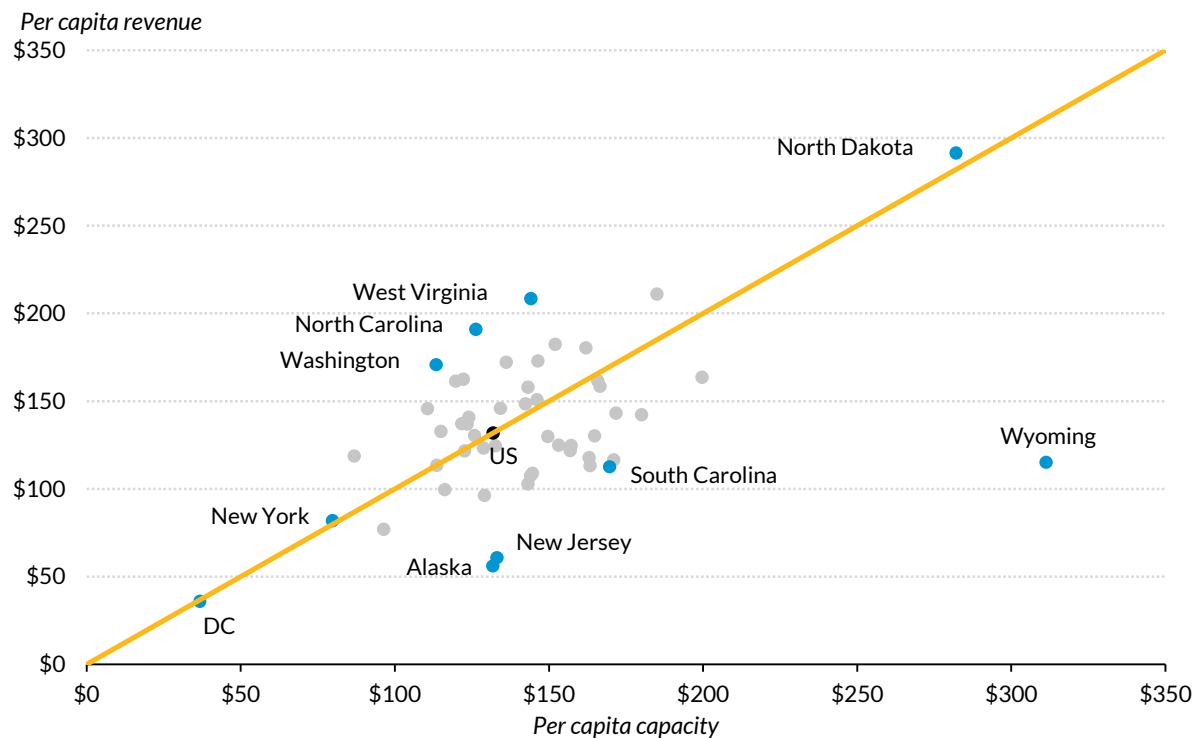
All 50 states and DC levied motor fuel taxes in 2012. These included taxes on gasoline, diesel, and gasohol (a mix of ethanol and unleaded gasoline). Most states taxed motor fuel on a per-gallon basis, but some states based rates at least in part on the price of gas. The latter group of states (California, Connecticut, Georgia, Kentucky, Nebraska, New York, North Carolina, Vermont, and West Virginia) typically had higher tax rates in 2012 because the price of gas was relatively high that year.

Gas tax rates in 2012 (all rates measured per gallon) ranged from 8 cents in Alaska to 43 cents in California.³³ For our purposes, the tax base is the amount of motor fuel purchased within the state.

Applying the RRS approach, we found that most states had per capita revenue roughly equal to capacity in 2012 (figure 12).

FIGURE 12

Motor Fuel Taxes



CASE STUDIES: NORTH CAROLINA AND NEW JERSEY

North Carolina and New Jersey taxed roughly the same amount of motor fuel (5 million gallons) in 2012. Thus, the two states had similar per capita motor fuel tax capacity (\$126 in North Carolina and \$133 in New Jersey). However, North Carolina's per capita revenue (\$191) was more than three-times higher than New Jersey's (\$61) because North Carolina's gas tax rate (37.5 cents per gallon) was more than three-times higher than New Jersey's (10.5 cents). States similar to North Carolina in terms of high revenue relative to capacity included California, Pennsylvania, Washington, and West Virginia; states similar to New Jersey (low revenue, high capacity) were Alaska, Georgia, Oklahoma, South Carolina, and Wyoming.

OUTLIERS: DC, NORTH DAKOTA, AND WYOMING

DC and North Dakota had similar gas tax rates in 2012 (23.5 cents and 23 cents), and both had per capita tax revenue nearly equal to capacity. However, North Dakota had high capacity relative to its population because so many trucks drive in this oil-rich state.³⁴ DC and New York had low capacity, reflecting their lower motor fuel consumption, relatively heavy use of public transportation, and, possibly, the proximity of other nearby states with lower gasoline tax rates, which could have resulted in lower in-state purchases.

Wyoming had a tax capacity similar to North Dakota's. The state has a small population but because of truck traffic it was able to tax more gallons of special fuels than the average state. However, Wyoming's tax rate (14 cents) was among the lowest in the nation in 2012.³⁵ Thus, Wyoming had the highest per capita motor fuels tax capacity (\$311) but relatively low revenue collections (\$115).

Cigarette Taxes

All 50 states and DC taxed cigarettes in 2012. Tax rates ranged from \$0.17 per pack in Missouri to \$4.35 per pack in New York. Local governments in Alabama, Illinois, Missouri, New York, Tennessee, and Virginia also levied additional cigarette taxes. In addition to cigarettes, states taxed other tobacco products (such as chewing tobacco and smokeless tobacco), but consumption of these products and resulting revenue were very small.³⁶

For our purposes, the cigarette tax base was the number of cigarette packs purchased within the state. We found that per capita revenue and capacity varied widely among states (figure 13). Interestingly, higher capacity was related to *lower* revenue. Again, this relationship may stem from the inverse relationship between actual consumption and tax rates.

CASE STUDIES: NEW YORK, MISSOURI, NEW HAMPSHIRE AND DELAWARE

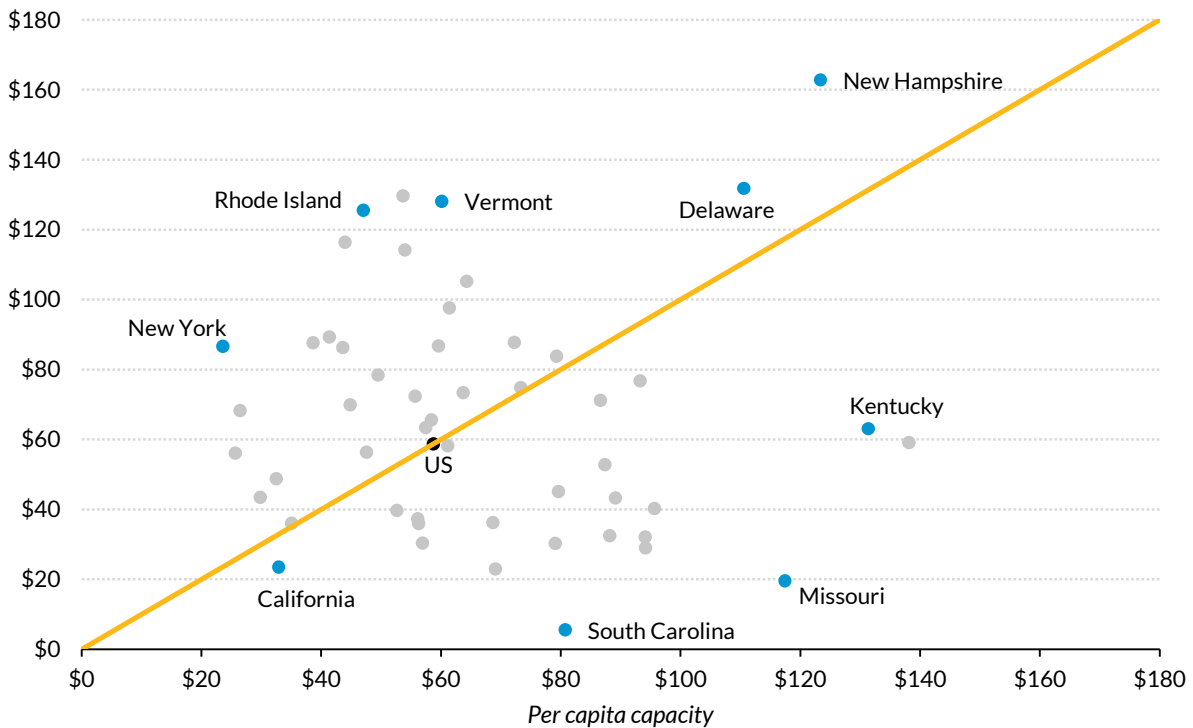
New York had the highest state cigarette tax in the country (\$4.35 per pack, plus another \$1.50 in New York City) but sold relatively few cigarettes. New York's per capita revenue (\$87) was well above its capacity (\$24) because of its higher rate. Similar to New York in 2012 were DC, Hawaii, and Washington. States like Connecticut, Rhode Island, and Vermont also had high per capita revenue compared with capacity but sold more cigarettes (at least compared with New York).

In contrast, Missouri had the lowest state cigarette tax in the country (17 cents per pack) but sold many cigarettes. Thus, Missouri's per capita revenue (\$20) was well below its capacity (\$117). Similar to Missouri in 2012 were: Georgia, Kentucky, South Carolina, and West Virginia.

FIGURE 13

Cigarette Taxes

Per capita revenue



New Hampshire and Delaware were the only states with both high per capita revenue and capacity. (There were a few low-revenue, low-capacity states, such as California.) Both states had modest state cigarette taxes (\$1.68 and \$1.60 per pack, respectively) but they did not have general sales taxes. As a result, it is likely that smokers in neighboring states crossed into these states to purchase lower-tax cigarettes. The inverse relationship between taxes and capacity most likely in part creates the high-tax, low-consumption states and vice-versa.

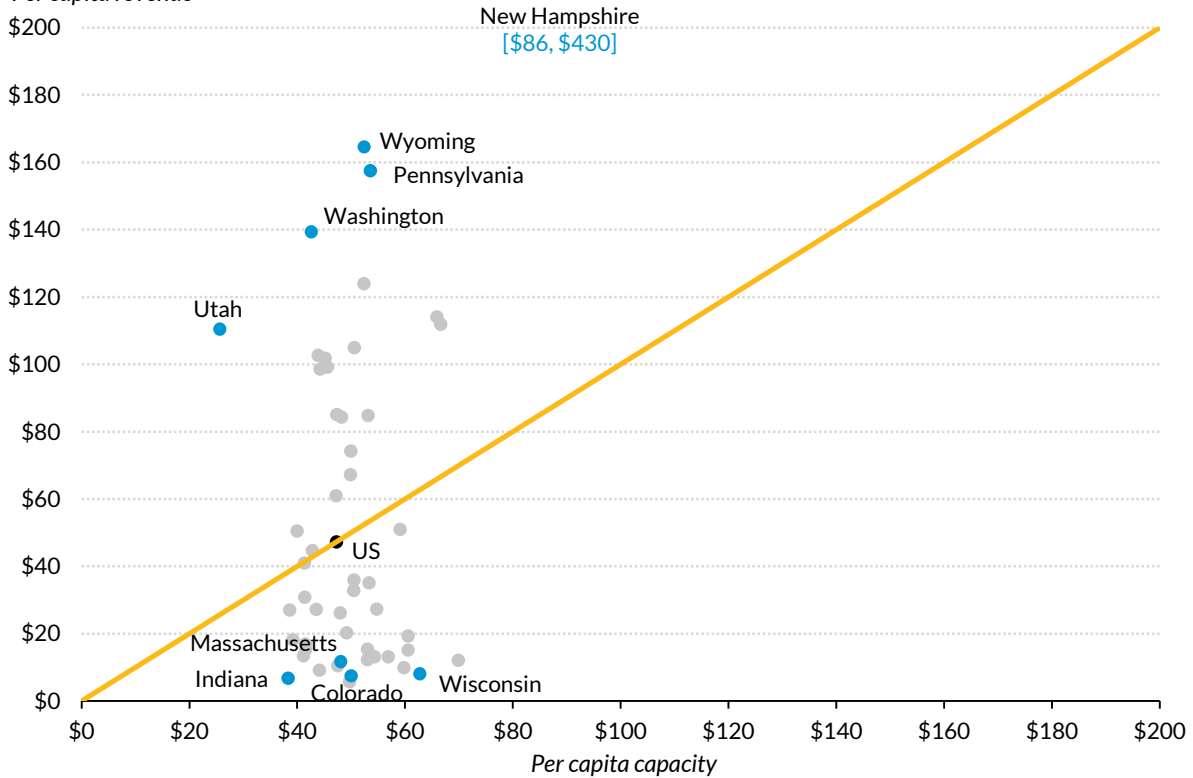
Alcohol Taxes

All 50 states and DC taxed alcohol, with most states having different tax rates for different types of alcohol.³⁷ Per gallon tax rates on beer ranged from \$0.02 in Wyoming to \$1.07 in Alaska, and the per gallon tax rate on liquor ranged from zero in New Hampshire (Vermont was next-lowest at \$0.32) to \$26.70 in Washington. For our purposes, the tax base for alcohol taxes is the volume of alcohol (beer, wine, and distilled spirits) purchased within the state. Per capita capacity (alcohol sales) did not vary much across states but revenue collections did (figure 14).

FIGURE 14

Alcohol Taxes

Per capita revenue



CASE STUDIES: PENNSYLVANIA AND WISCONSIN

Pennsylvania and Wisconsin had roughly the same amount of per capita alcohol tax capacity (\$54 and \$60, respectively), but Pennsylvania's per capita revenue (\$158) was nearly 16 times higher than Wisconsin's (\$10). Alcohol revenue was high in Pennsylvania because the state controls the sale of alcohol, and generates revenue through various taxes, fees, price mark-ups, and net profits.³⁸ States

similar to Pennsylvania (Utah, Washington, and Wyoming) also had government control of at least hard liquor sales.

In contrast, Wisconsin (and similar states such as Colorado, Indiana, and Massachusetts) had no liquor store revenue and low alcohol taxes. For example, Wisconsin's per-gallon tax on beer was \$0.06, and the per-gallon tax on liquor was \$3.25.

OUTLIER: NEW HAMPSHIRE

New Hampshire's per capita capacity (\$86) was the highest in the country in 2012 and its per capita revenue (\$430) far exceeded that of all other states. Both rankings reflected its tax laws and location. New Hampshire did not tax liquor or wine and did not have a general sales tax.³⁹ However, the state drew customers from neighboring states, thus increasing its tax capacity.⁴⁰ As a state with government-controlled alcohol sales, it also collected liquor store revenue. Utah, a state with similar laws, also collected more revenues than its capacity but the state sold far less alcohol than New Hampshire.

Insurance Taxes

All 50 states and DC taxed premiums on life, property and casualty insurance. The tax base is the sum of direct written premiums (or premium receipts) for life, property, and casualty insurance within a state. In 2012, national per capita insurance tax revenue was \$56. Per capita revenue ranged from \$25 in Nebraska to \$100 in Delaware, and capacity ranged from \$38 in New Mexico to \$573 in Delaware.

Severance Taxes

Severance taxes are taxes on the extraction of natural resources (including oil and natural gas). These taxes constitute only a small percentage of national general revenue—national per capita severance tax revenue was only \$55 in 2012—but a substantial share of revenue in a few, natural resource-rich states (notably, Alaska, North Dakota, and Wyoming) (figure 15). We used data on the value of oil, coal, natural gas, and nonfuel minerals production in each state for the tax base.

CASE STUDIES: ALASKA, NORTH DAKOTA, AND WYOMING

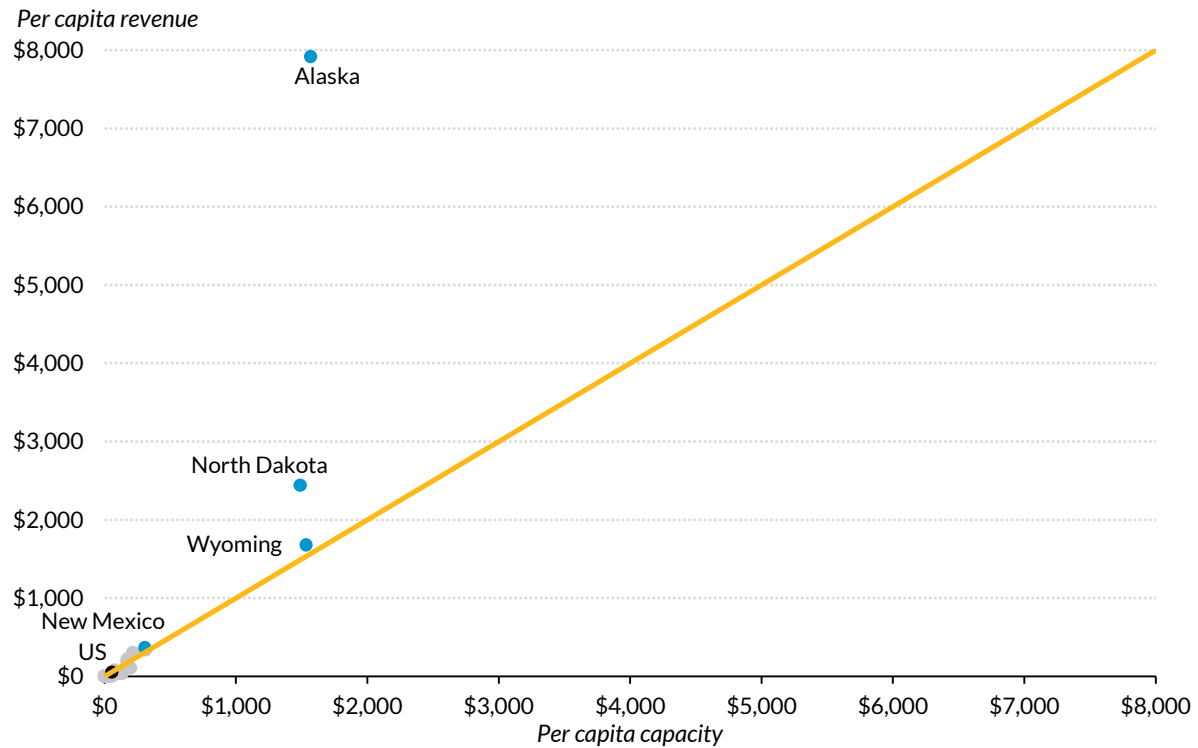
Alaska, North Dakota, and Wyoming collected 49 percent of all severance tax revenue in 2012. They also all had relatively small populations. As a result, per capita capacity and revenue from severance taxes were five times larger in these states compared to the next highest group of states. Alaska was an

outlier even among these three states. Although its per capita capacity (\$1,568) was roughly equal to the other two states, its per capita revenue (\$7,919) was far higher than North Dakota's (\$2,442) and Wyoming's (\$1,679).

However, it is important to remember the volatility of severance tax revenue.⁴¹ Oil prices were particularly high in 2012, but by 2014 production and prices began precipitously dropping. As a result, Alaska's per capita severance tax revenue was \$3,334 in 2014, or roughly half of its 2012 total.⁴²

FIGURE 15

Severance Taxes



Most states had very little (if any) per capita severance tax capacity and revenue, although in some states, such as California, which has no severance tax, the base was large on an aggregate rather than a per capita basis. A handful of states (e.g., Montana, New Mexico, and West Virginia) collected hundreds of dollars in per capita severance tax revenue.

Estate, Inheritance, and Gift Taxes

Estate and inheritance taxes are taxes on the transfer of property after death. Gift taxes are a tax on property transfer during life to other persons or organizations. The gift tax prevents people from

avoiding the estate tax by transferring wealth before death. The tax base is the value of all transferred property and assets.⁴³

Before 2001, all 50 states and DC had estate taxes because the federal estate tax provided a credit for state taxes. Every state and DC had estate taxes directly linked to the credit. Essentially, states collected a share of the taxpayer's federal tax payment without increasing taxes on residents. However, federal tax changes in 2001 phased out the credit in 2005. In response to the federal change some states decoupled from the credit and created their own estate tax, some states repealed the tax, and others did nothing (effectively ending the tax).

In 2012, DC and 21 states (Connecticut, Delaware, Kentucky, Hawaii, Illinois, Indiana, Iowa, Maine, Maryland, Massachusetts, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, Tennessee, Vermont, and Washington) had an estate tax or inheritance tax.⁴⁴ Some states without an estate tax still collected revenue in 2012 from payments due on taxes levied before the tax was repealed. Still, in part because so many states do not have an estate tax, national per capita revenue from this source was only \$16 in 2012 (figure 16).

CASE STUDIES: NEW JERSEY AND NEVADA

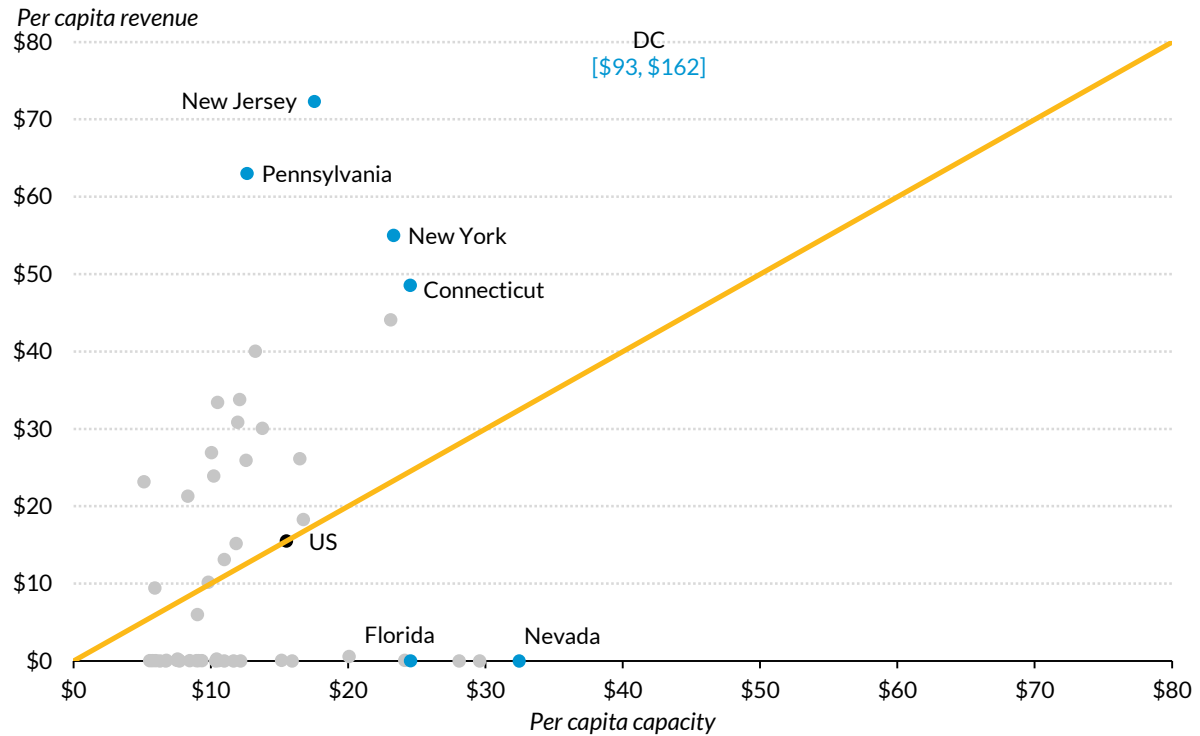
New Jersey's estate tax used the same threshold and tax rates as the pre-reform federal estate tax. In fact, its threshold for paying the tax (\$675,000) was well below the new, post-2001 federal threshold in 2012 (\$5.12 million). Its \$72 per capita revenue from the estate tax was therefore the highest of any state even though it had only modest per capita capacity (\$18). Other states with high per capita tax revenue included Connecticut, New York, and Pennsylvania. In contrast, Florida had relatively high capacity (\$32) but no revenue because it did not have an estate tax.

OUTLIER: DC

DC's \$162 in per capita estate tax revenue was far higher than any other state. However, this high revenue did not reflect policy choices (its tax threshold and rates were similar to most states with the tax) as much as how one or a handful of wealthy estates can greatly affect revenue. For example, DC's per capita estate tax revenues were \$65 in 2010, \$141 in 2011, \$162 in 2012, and \$61 in 2013 even though DC's law did not change during this four-year period.

FIGURE 16

Estate, Inheritance, and Gift Taxes



Lotteries

State lotteries are legal gambling games (number games, instant scratch-off games, and electronic games) in which a percentage of the sales goes to the state as revenue. Seven states (Alabama, Alaska, Hawaii, Mississippi, Nevada, Utah, and Wyoming) did not have a lottery in 2012.⁴⁵

States with lotteries decided what percentage of sales went to prizes, retail commissions, administration expenses (including advertising), and state revenue. The base for our purposes was the gross sale of lottery tickets in a state.⁴⁶ National per capita lottery revenue in 2012 was \$71 (figure 17).

CASE STUDIES: WEST VIRGINIA AND MASSACHUSETTS

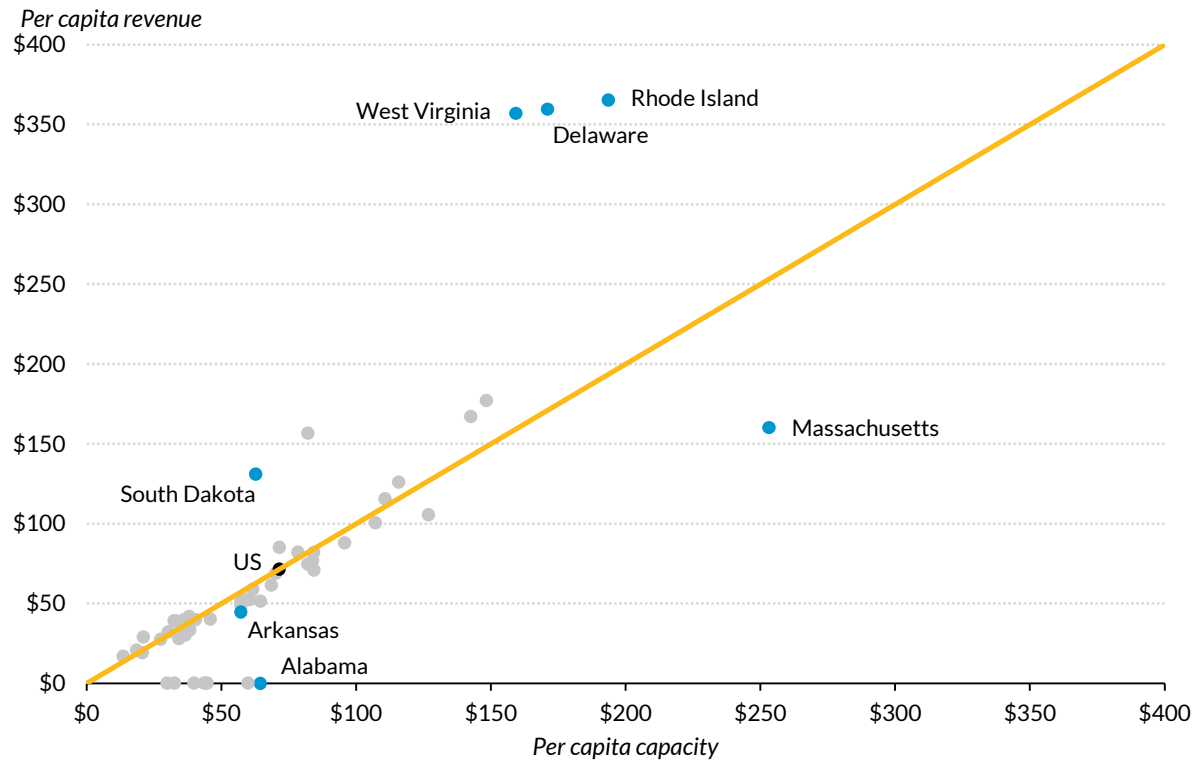
The most important distinction for comparing state lottery revenue capacity versus collections is the percentage of lottery sales dedicated to revenue as opposed to prizes.

Among states with a lottery, an average of 38 percent of sales went to revenue. In West Virginia 85 percent of sales became revenue and as a result the state’s per capita revenue (\$357) was far higher than its capacity (\$159). Other states where a large percentage of sales went to revenue included

Delaware, Rhode Island, and South Dakota. In contrast, only 24 percent of Massachusetts' lottery sales went to revenue. Thus, its per capita revenue (\$160) was below capacity (\$253). Other states with less revenue than capacity included Arkansas and Missouri.

FIGURE 17

Lotteries



Licenses

License fees are government requirements for the exercise of a business or nonbusiness privilege. In this study we analyzed four types of license: corporation, fishing and hunting, motor vehicle registrations, and motor vehicle operators. With a few exceptions, all states levied fees on all four types of license.

CORPORATION LICENSES

States require incorporated businesses to pay a flat fee for a license to operate within the state. The tax base is the total number of corporation licenses granted in the state. National per capita revenue from this source was \$36 in 2012, but among the states it ranged from zero (Alaska and North Dakota are the

only states that do not charge a tax for corporation licenses) to \$862 in Delaware. Per capita capacity did not vary considerably among the 50 states and DC.

FISHING AND HUNTING LICENSES

States charge a fee for a license to hunt and fish within the state. The tax base is the total number of hunting and fishing licenses granted in the state. All 50 states had hunting and fishing licenses in 2012, but per capita capacity was relatively higher in states such as Alaska, Montana, and Wyoming, where hunting and fishing are more prominent. DC issued fishing licenses but not hunting licenses. Other states with little capacity or revenue included Connecticut, Florida, Hawaii, and Massachusetts. National per capita revenue was \$5 on average in 2012, and more than \$30 in Alaska, Montana, South Dakota, and Wyoming.

MOTOR VEHICLE REGISTRATION LICENSES

States and DC charge a fee for registering a vehicle. The tax base is the sum of private and commercial motor vehicle registrations in the state. National per capita revenue was \$78 in 2012, but revenue ranged from \$2 in West Virginia to \$269 in Hawaii. Per capita capacity did not vary widely by state.

MOTOR VEHICLE OPERATORS LICENSES

States and DC charge a fee for obtaining and renewing a driver's license. The tax base is therefore the number of driver's licenses in each state. National per capita revenue was \$8, and all states had per capita capacity between \$7 and \$10. Most states also had similarly low per capita revenue with the exception of two states: West Virginia (\$56) and Indiana (\$34).

All Other Taxes

For this category we combined all state and local taxes not included in previous categories.⁴⁷ The tax base was the personal income in each state. The national per capita revenue was \$370. Per capita capacity reflected personal income.

Other Nontax Revenue

For this category we combined all nontax state and local revenue not included in previous categories.⁴⁸

The tax base was again the personal income in each state. The national per capita revenue was \$635.

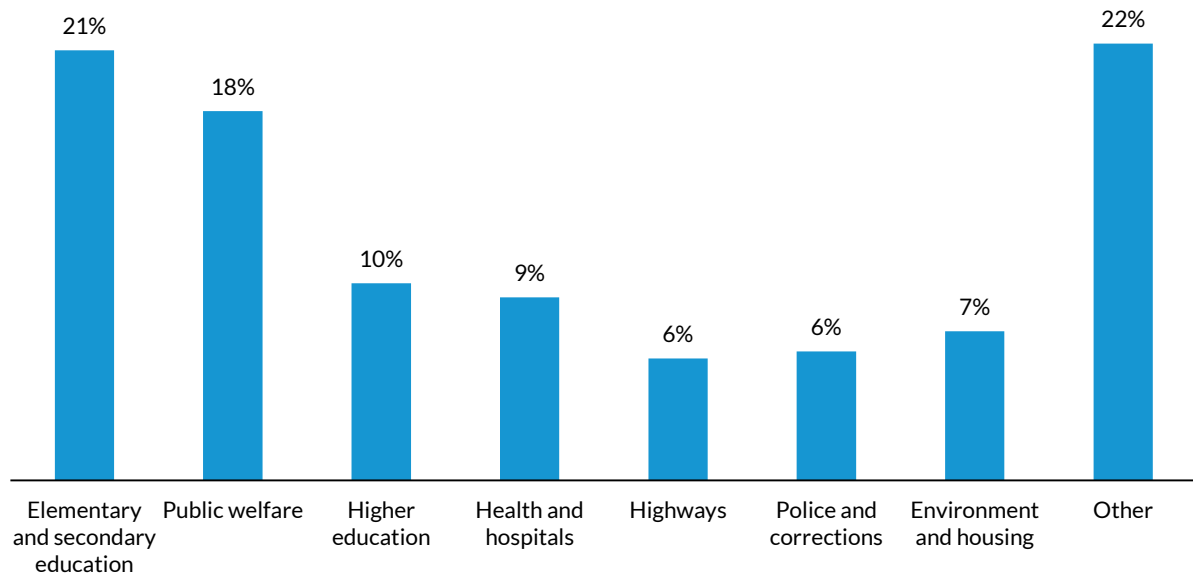
Per capita tax capacity followed personal income.

How Do State and Local Governments Spend Money?

State and local governments spent a combined \$2.65 trillion on direct general expenditures in fiscal year 2012.⁴⁹ They allocated about one-third of this spending to elementary and secondary education and higher education, and another 27 percent to public welfare and health and hospitals—both Census Bureau categories include Medicaid, the joint federal-state health insurance program (figure 18).

FIGURE 18

State and Local Direct General Expenditures



States and localities directed 7 percent of spending to environment and housing, a broad category including housing and community development, parks and recreation, natural resources, sewerage, and solid waste. The next largest categories were highways and police and corrections (both about 6 percent).

Responsibilities for delivering these services vary by level of government. For example, on average, localities undertake the bulk of K-12 education spending, but states provide more support to institutions of higher education. However, there are differences across states in the allocation of spending responsibilities, and that is why we focus on the state and local public sectors together.

How Do Expenditures Differ across States?

Within these broad contours, states vary dramatically in their spending by function (figure 19), such as the following variations in 2012:

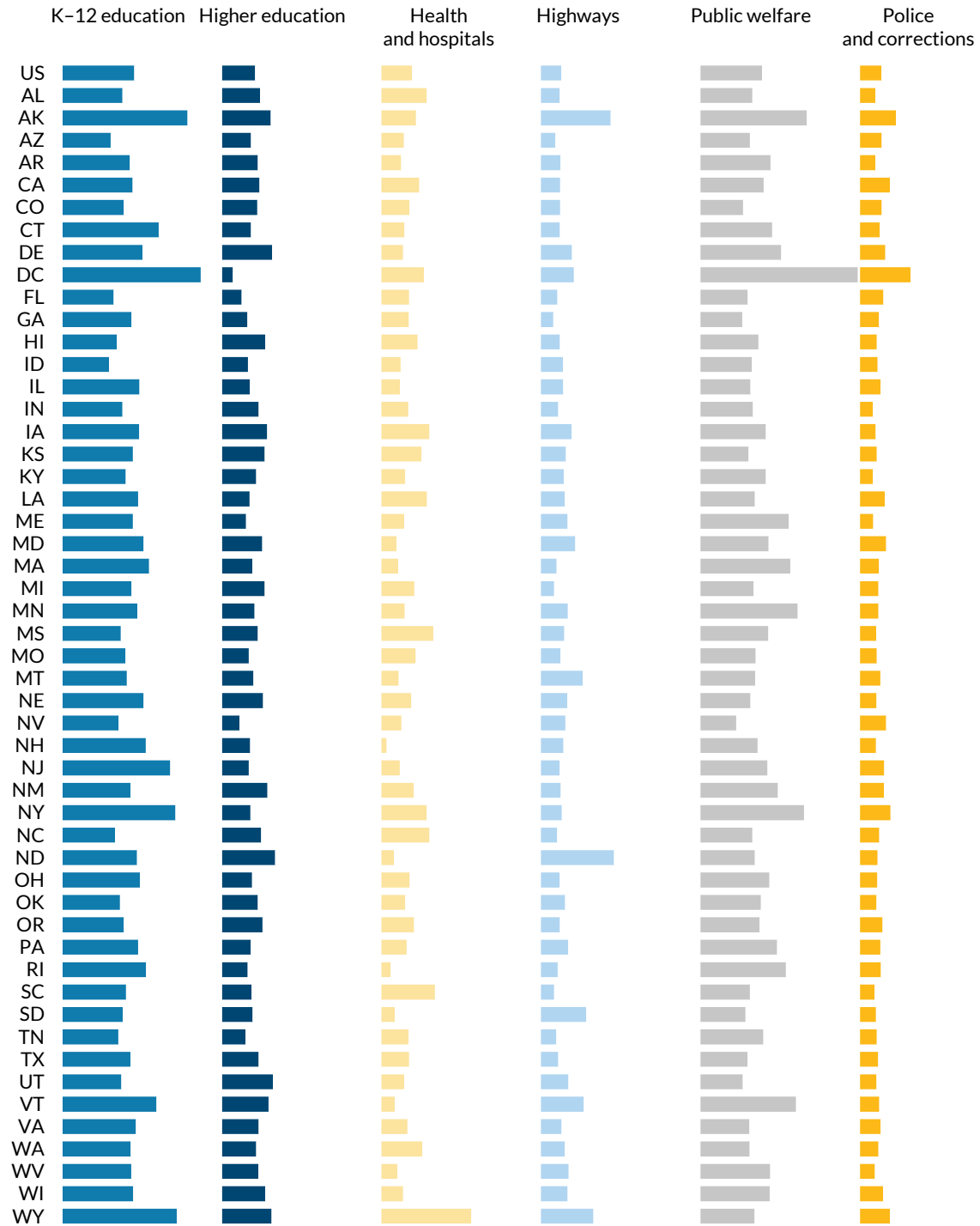
- Five states (Alaska, Connecticut, New Jersey, New York, and Wyoming) and DC spent more than \$2,400 per resident on K-12 education, and six states (Arizona, Florida, Hawaii, Idaho, North Carolina, and Tennessee) spent less than \$1,400 per capita.⁵⁰
- Four states (Colorado, Georgia, Nevada, and Utah) spent less than \$1,100 per capita on public welfare, a broad category including cash assistance, medical vendor payments, and administration. In contrast, DC spent more than \$4,500 per resident. In four states (Alaska, Minnesota, New York, and Vermont), the total was more than \$2,300 per capita.
- Three states (Indiana, Kentucky, and Maine) spent less than \$350 per capita on police and corrections, but four states (Alaska, California, New York, and Wyoming) and DC spent more than double that (at least \$750 per capita).

As noted throughout this report, states can vary in their expenditure patterns for a variety of reasons including history, preferences, and geography as well as economics and demographics. In this section, we explore reasons for state variation in spending based on *workload factors* and *input prices*.⁵¹ Workload factors are demographic or physical features, such as more children to educate or more road miles to pave, which make providing a given level of service more expensive compared to other states. Input prices reflect differences across states in the costs of labor or raw materials.

We start with total expenditures and then consider individual spending categories. For each category, we discuss relevant workload factors (e.g., poverty rate, proportions of elderly or school-aged children in the population) and price indexes used to account for state cost differences. We then compare actual expenditures (from the US Census Bureau) with expenditure need.⁵²

FIGURE 19

State and Local Direct General Expenditures, by Source, Dollars per Capita



Source: US Census.

The categories we analyzed in this study include the following:

- Elementary and secondary education
- Higher education
- Health and hospitals
- Public welfare
- Highways
- Police and corrections

Together, these categories accounted for roughly 71 percent of state and local direct general expenditures in 2012.⁵³ For all other categories combined, we assess individual states against the national average of spending per capita.

Detailed tables with results for all expenditure categories and all states are presented in appendix D.

Representative Expenditure System Results

Total Expenditures

State and local governments spent an average of \$8,443 per person on direct general expenditures (excluding grants to other levels of government) in 2012.⁵⁴ As noted earlier, total state and local spending ranged from about \$6,200 in Idaho to more than \$17,350 per capita in Alaska and even more in DC.⁵⁵

Spending need per capita according to the RES measure ranged from roughly \$7,300 in Hawaii to \$9,400 in Mississippi. Beyond Mississippi, the top five states in expenditure need in 2012 were Alabama, North Dakota, Texas, and New Mexico. States with high spending need were generally lower income and had more kids as well as more kids and elderly living in poverty compared with the national average.

In many states, expenditures were roughly in line with need. However, in some states actual spending levels greatly diverged from need (figure 20). For example, Kansas and Massachusetts had very similar expenditure needs in 2012 (about \$8,250 per capita), but Massachusetts spent about \$2,050 more than Kansas per state resident.

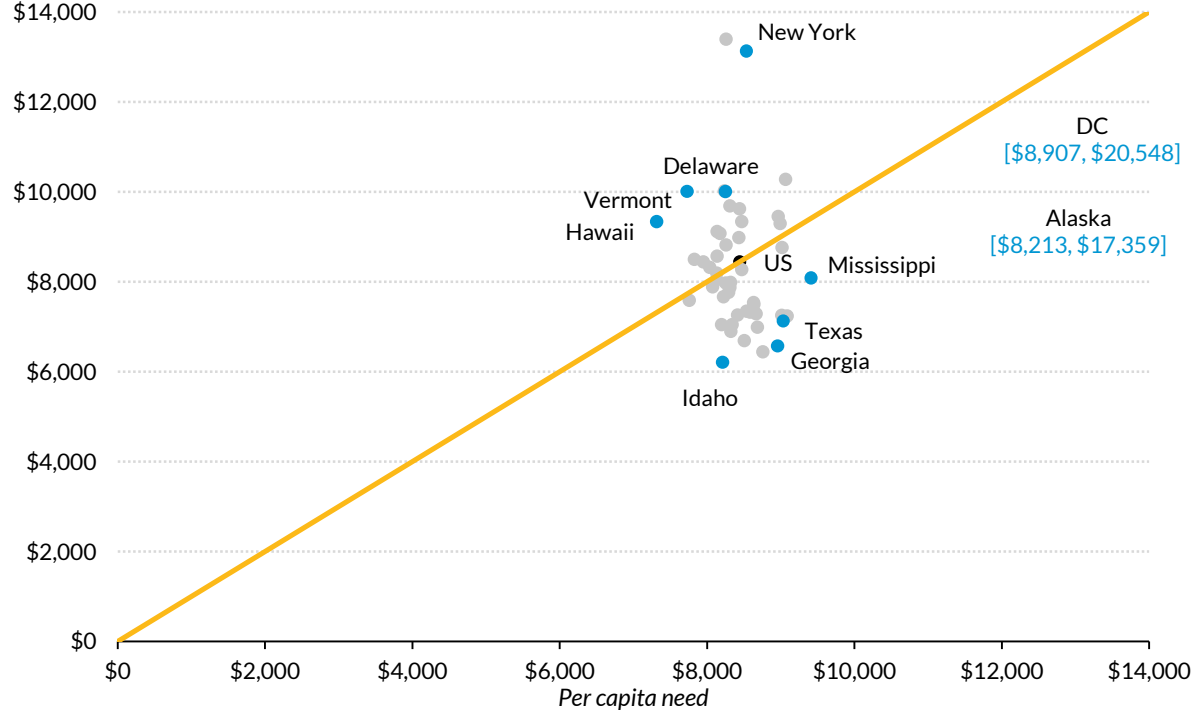
In Alaska, Hawaii, New York, Vermont, and Wyoming, as well as DC, actual spending outstripped need by more than 25 percent. New York’s spending per capita was fourth in the nation in 2012, although its need was in the middle of the pack. Vermont was among the top 10 states in the nation in spending per capita, but it was second from the bottom in spending need. In contrast, actual spending per capita was at least 20 percent less than need as measured by the RES approach in Alabama, Arizona, Georgia, Idaho, Tennessee, and Texas in 2012.

Gaps between actual spending and spending need could reflect differences in public preferences, or what residents of these states expect from government. Alternatively, there may be state attributes that contribute to higher or lower spending, such as weather, the mix of urban versus rural populations, and opportunities for scale economies or other savings that are not adequately captured by our index.

FIGURE 20

Total Expenditures

Per capita expenditure
\$14,000



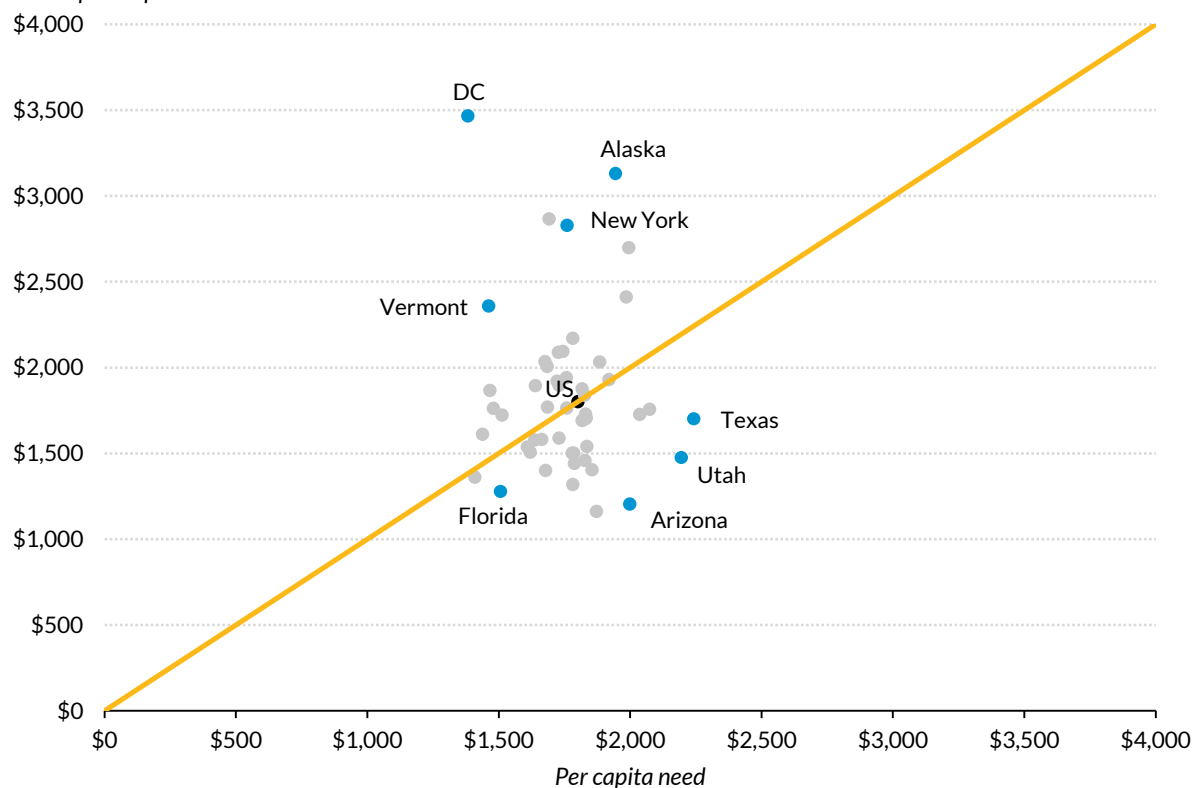
Elementary and Secondary Education

The average state spent \$1,801 per capita on public schools in 2012. As shown in figure 21, some states and DC spent considerably more than that amount, and others spent less. Spending need according to the RES ranged from about \$1,400 per capita in DC and Hawaii to about \$2,250 per capita in Texas.

FIGURE 21

Elementary and Secondary Education

Per capita expenditure



States with the highest K-12 education spending in 2012 need were Texas, Utah, California, Georgia, and Arizona. Those with the lowest need were Maine, North Dakota, Vermont, Montana, and Hawaii. States ranking high in K-12 spending needs generally had younger populations, or were home to more school-age kids. Some states (Arizona, Georgia, and Texas) also had many students living in poverty, a factor that has been shown to increase education costs (see appendix C). Other states (Connecticut, New Jersey, and Maryland) had higher than average spending needs because of input costs, namely higher salaries for college educated workers, whom we took as the appropriate comparison group for teachers and other elementary and secondary education employees (see appendix C).

The jurisdictions that spent the most per resident on elementary and secondary education were not necessarily the ones with the highest expenditure need. Spending exceeded need by more than 60 percent in Alaska, New York, Vermont, and Wyoming as well as DC. At the same time, Arizona, Idaho, Mississippi, Nevada, North Carolina, Texas, and Utah all spent at least 20 percent less than their need according to the RES measure.

Comparing actual expenditures to expenditure need, DC stood apart from other jurisdictions, spending more than twice as much per resident as its RES-based measure would suggest. However, as discussed in appendix C, our workload factors do not take into account students who are English learners or who have special needs. These factors can lead to higher education costs and may be more prevalent in DC's urban population, as well as in New York, where spending exceeded need by more than 60 percent.

For the other three states with large positive differences between actual spending and K-12 education expenditure need (Alaska, Vermont, and Wyoming), spending may be higher than need according to national averages adjusted for workload factors and input costs in these states because of relatively sparse populations and higher transportation costs.

Higher Education

The average state spent \$826 per capita on public colleges and universities in 2012.⁵⁶ States with the highest per capita expenditures (more than \$1,200 in that year) were Alaska, Delaware, North Dakota, Utah, and Wyoming. States with the lowest spending (\$600 per capita or less) were Florida, Maine, Nevada, and Tennessee as well as DC.

Higher education spending need ranged from \$675 in Maine to nearly \$1,000 in California and \$1,300 in DC. Beyond California, states with the highest spending need were North Dakota, Alaska, Maryland, and Virginia. As in K-12 education, the main contributor to high spending need in this area was demographics, or the college-age population of each state together with projected enrollments from nontraditional age groups based on national trends. Some states (e.g., Maryland, Massachusetts, Rhode Island, Virginia) also had high expenditure needs because of high labor costs compared with the national average.

As in elementary and secondary education, states with the highest expenditures were not necessarily those with the highest need (figure 22). Several less populous states (Delaware, New Mexico, North Dakota, Vermont, and Wyoming) spent at least 40 percent more than their expenditure

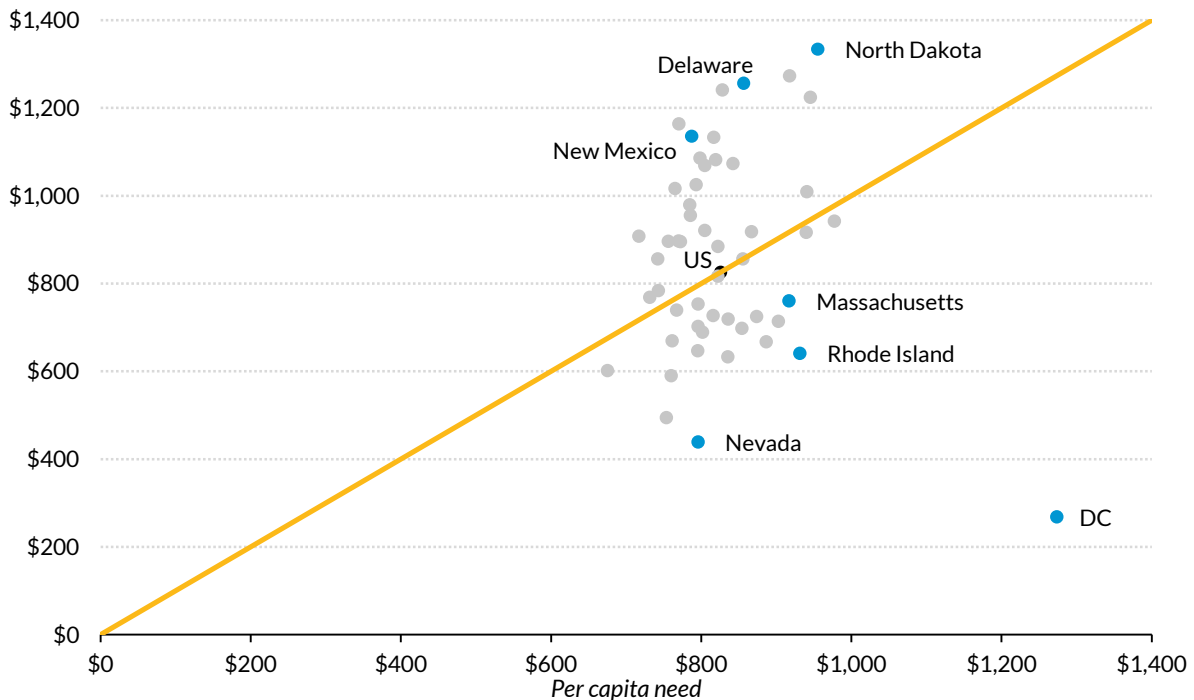
need according to the RES approach. This may be the result of higher fixed costs of running public colleges and universities compared with larger states.

Other states (Florida, Nevada, New Jersey, and Rhode Island) and DC spent at least 25 percent less than their measured expenditure need. This lower actual spending compared with need may reflect higher salaries for all workers holding a graduate or professional degree in DC, New Jersey, and Rhode Island even though those employed by public colleges and universities may not earn these salaries. DC may spend less than expected on higher education because DC students qualify for in-state tuition at public colleges in all 50 states.

FIGURE 22

Higher Education

Per capita expenditure



Health and Hospitals

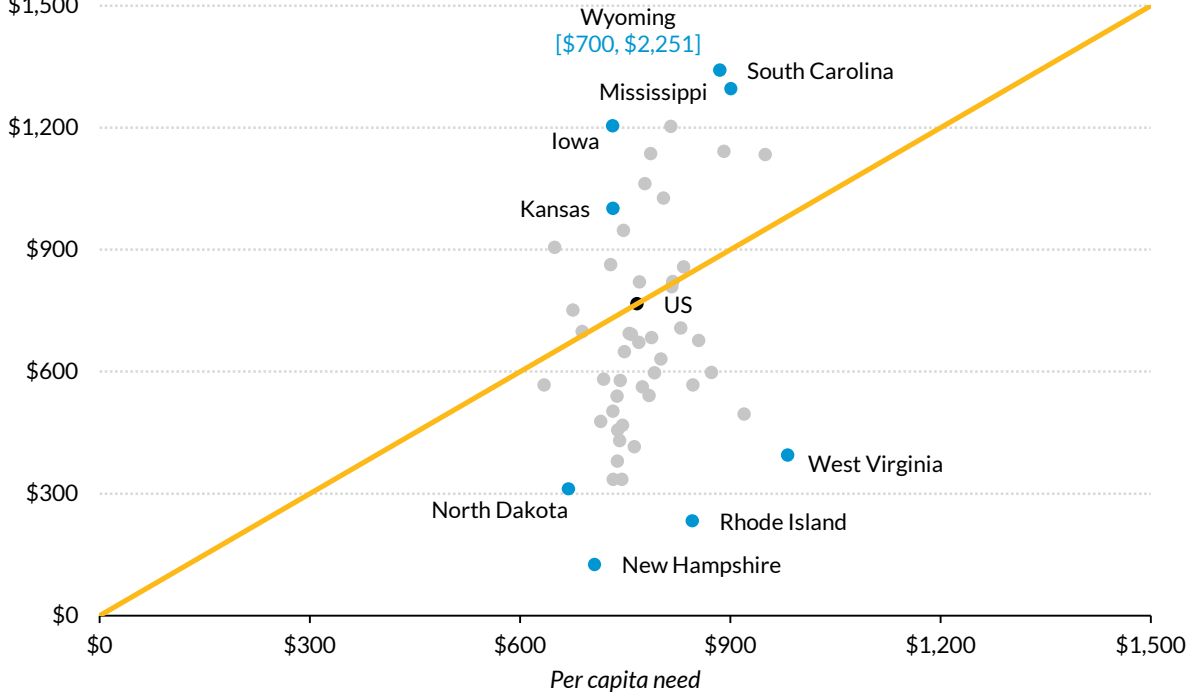
The average state spent \$767 per capita on public hospitals and health programs in 2012. However, spending figures ranged from \$125 per state resident in New Hampshire to more than \$2,250 in Wyoming. Beyond Wyoming, states with the highest spending (more than \$1,200 per capita in 2012) included Iowa, Mississippi, North Carolina, and South Carolina.

States with the highest health and hospitals spending need in 2012 were Alabama, Arkansas, Louisiana, Mississippi, and West Virginia (figure 23). These states all had low median incomes measured as a share of the national total.

FIGURE 23

Health and Hospitals

Per capita expenditure



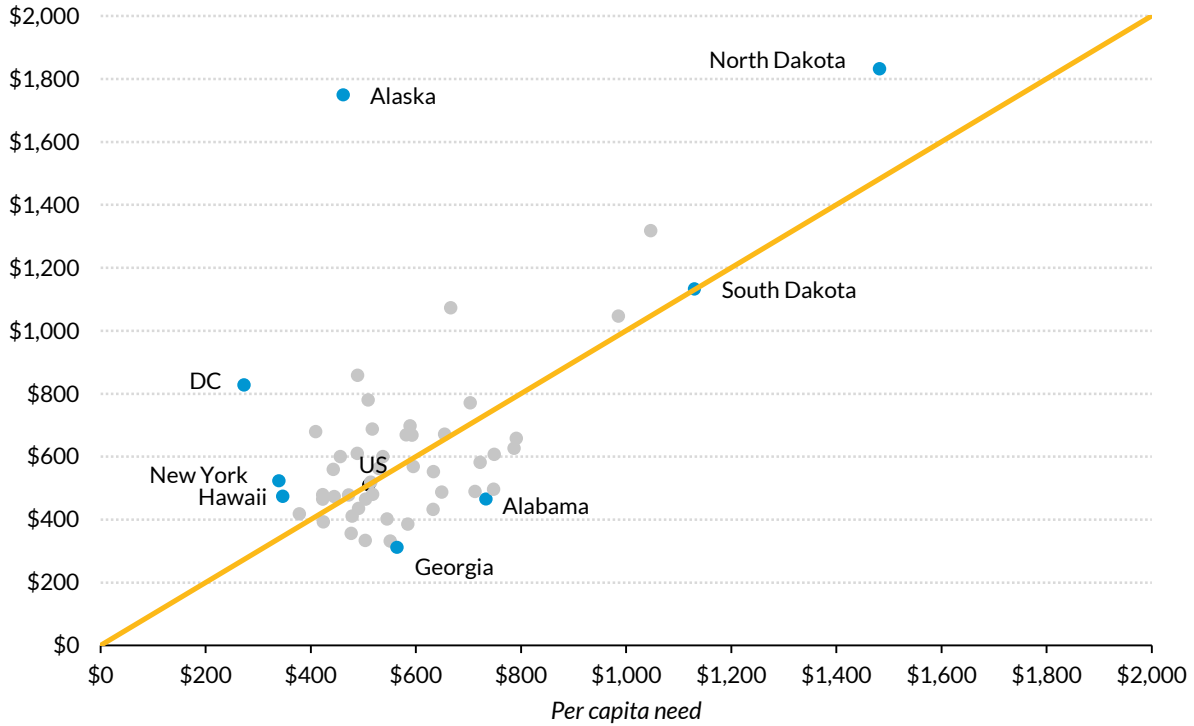
Highways

The average state spent \$510 per capita on highways in 2012, but spending ranged from roughly \$300 in Georgia to more than \$1,000 per capita in Alaska, Montana, North Dakota, South Dakota, Vermont, and Wyoming. Spending need showed a similar range and several states (e.g., Montana and South Dakota) exhibited spending very close to need according to the RES measure, which takes account of both vehicle miles traveled and highway lane miles. As shown in figure 24, Alaska, DC, Delaware, Maryland, New York, Pennsylvania, and Vermont had the highest spending relative to need, whereas Alabama, Georgia, Michigan, New Mexico, South Carolina, and Tennessee all spent at least one third less than estimated need in 2012.

FIGURE 24

Highways

Per capita expenditure



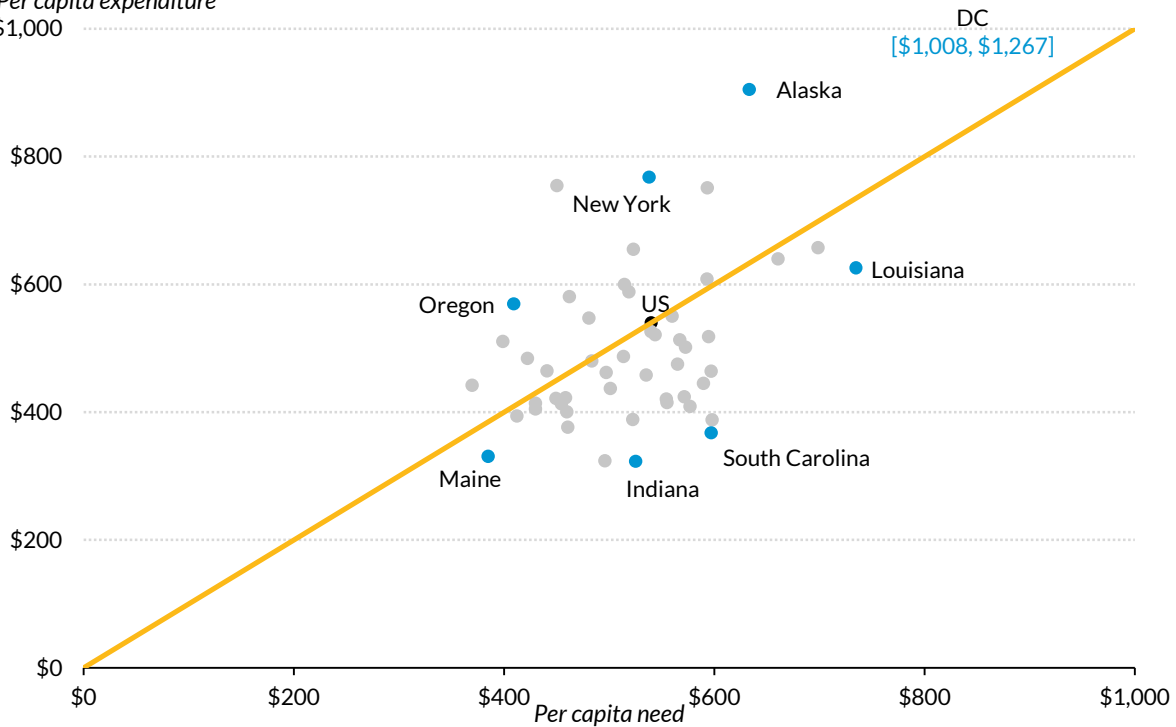
Police and Corrections

In 2012, the average state spent \$540 per capita on police and corrections; however, figures ranged from roughly \$325 in Indiana, Kentucky, and Maine to more than \$750 in Alaska, California, New York, Wyoming, and DC (figure 25). Alaska, Wyoming, and New York also exhibited the largest positive gaps between actual spending and spending need, as proxied by the state total population, population aged 18 to 24, and the state murder rate as need factors. States that spent at least 30 percent less than their calculated need were Alabama, Indiana, Kentucky, and South Carolina.

FIGURE 25

Police and Corrections

Per capita expenditure
\$1,000



Public Welfare

In 2012, the average state spent \$1,546 per capita on public welfare, a broad category that includes cash assistance to individuals, payments to medical providers (Medicaid as well as private hospital providers), and costs for the administration of these activities. However, spending per capita ranged from less than \$900 in Nevada to more than \$2,000 in Alaska, Delaware, Maine, Massachusetts, Minnesota, New York, Rhode Island, and Vermont and more than \$4,000 in DC.

Mississippi, New Mexico, Arkansas, Louisiana, and Kentucky were the top five states in 2012 by per capita spending need. These states also had among the largest percentages of their total and elderly populations who were low-income, which we considered as workload factors because roughly three-quarters of public welfare spending goes toward medical vendor payments, including Medicaid.

Our results suggest that states with the highest expenditures were not always those with the highest need. For example, Alaska’s actual spending per resident in 2012 exceeded its need measure by

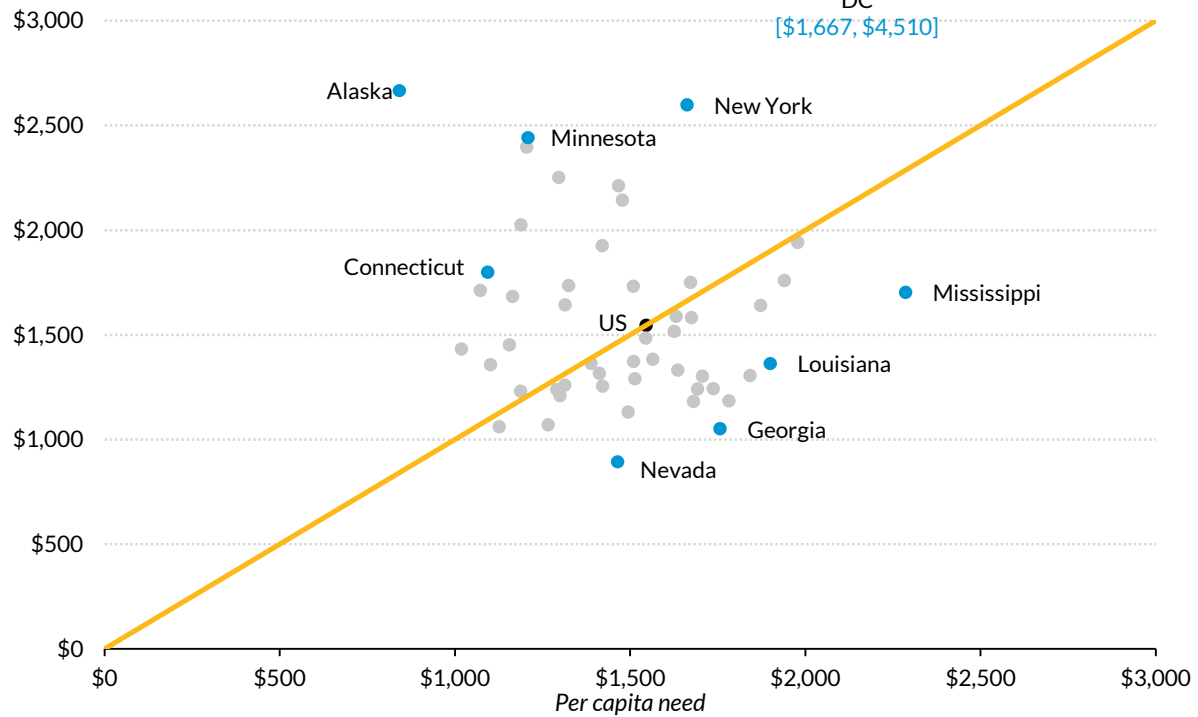
more than threefold. DC, Minnesota, and Vermont also spent about twice as much as their expenditure need as measured by our workload factors and input price index (figure 26).

Those with the greatest negative gaps (more than 25 percent) between spending and need were Alabama, Arizona, Florida, Georgia, Louisiana, Mississippi, Nevada, South Carolina, and Texas. These differences could reflect policy decisions. Notably, Medicaid eligibility rules tend to be less generous in several of these states.⁵⁷

FIGURE 26

Public Welfare

Per capita expenditure



How Do States Differ in Fiscal Capacity?

The United States is a highly decentralized country. For example, state and local governments fund 85 percent of and deliver all public elementary and secondary education (Snyder and Dillow 2015). They undertake three-quarters of all government spending on roads, bridges, water treatment facilities, and other infrastructure (Congressional Budget Office 2015). They incarcerate 90 percent of prison and jail inmates (Carson and Golinelli 2014, appendix table 6). State and local governments help maintain the social safety net through their own public assistance programs and their participation in joint federal-state programs, such as Medicaid and Temporary Assistance for Needy Families (TANF).

This level of decentralization sets the United States apart from most other nations. It also has deep roots, a legacy of the nation's founding as a "league of friendship" or "perpetual union" of states.

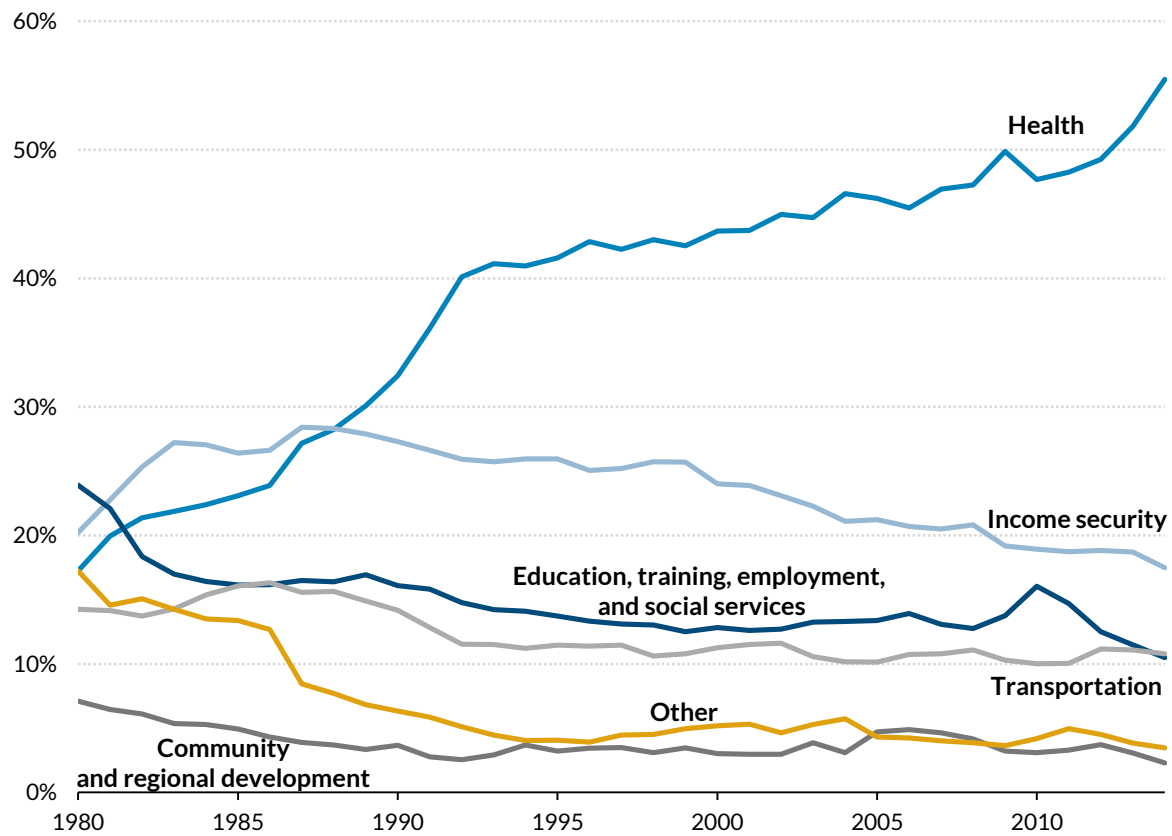
The main argument for decentralization is that states and localities have better information about local preferences and costs and can therefore structure and deliver programs more effectively. Households and businesses can also choose where to live based on taxes and public services, thereby "voting with their feet" so that more people get what they want from government, and overall efficiency increases.

However, decentralization has costs. The federal government may provide some goods and services more cheaply than states and localities because of economies of scale. State and local governments may also fail to take into account spillovers, or effects of their decisions on broader areas or populations. Perhaps most troubling, some jurisdictions may start with fewer resources than others, leaving them unable to provide for their residents a basic set of goods and services that society deems important for a healthy and productive life.

There are various remedies to the downsides of federalism. In particular, the federal government can offer a system of intergovernmental grants. In 2014, the federal government distributed \$577 billion in grants to state and local governments, equivalent to about 17 percent of total federal outlays or 3.3 percent of GDP. The majority (55 percent) of federal grant dollars went to fund health programs, predominantly Medicaid (CBO 2013). This allocation represents a departure from the 1950s and 1960s, when transportation and community development programs represented a greater share of the total (figure 27).⁵⁸

FIGURE 27

Federal Grants by Type



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

Federal grant programs can take several forms and have several purposes. Categorical grants incentivize states and localities to undertake a specific activity, such as the Special Supplemental Nutrition Program for Women, Infants, and Children; or a project, such as building or expanding a specific highway. Matching grants compensate a jurisdiction for undertaking programs that benefit nonresidents. Examples include the interstate highway system as well as major social safety net programs such as Medicaid and TANF.

Unconditional grants are the preferred tool if the concern is equity or fairness. For example, a federal government may provide fiscal equalization grants, or cash transfers based on an objective measure of need such as the number of people in poverty, to a state. Provincial or state governments may do the same for localities. However, unlike other federalist countries such as Australia, Canada, and Switzerland, the United States has never fully embraced fiscal equalization grants. The closest

approximation to these types of grants, General Revenue Sharing, never comprised more than 1.5 percent of federal outlays, and it lasted only from 1972 to 1986 (Sawicky 2001).

There are several reasons that other types of federal grants may mitigate but fail to fully offset fiscal disparities. Matching grants, with the notable exception of Medicaid, are typically capped rather than open-ended. This feature can limit federal budget exposure to cost overruns, but it means jurisdictions are not fully compensated for the national or regional benefits they may be providing.

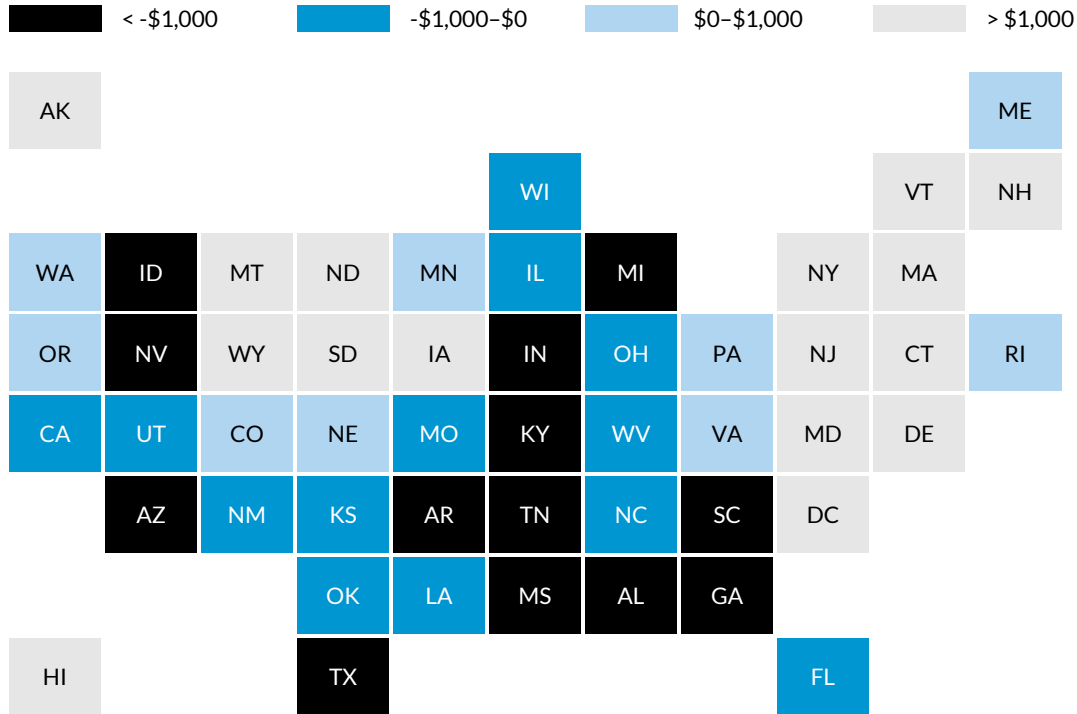
Moreover, matching rates may be based on political factors as well as formulas incorporating workload measures, such as the number of highway lane miles, school-aged children, or low-income families. Grants may also be awarded on a competitive basis that rewards jurisdictions with greater capacity. In addition, federal dollars may come with strings attached, or requirements that states and localities contribute their own funds (matching requirements) or maintain previous spending levels (maintenance of effort requirements) as a condition of receiving federal aid.

Indeed, our results point to large gaps in state revenue capacity versus expenditure need. In some states, fiscal gaps at capacity were large (e.g., more than -\$4,600 per capita in Mississippi). Federal dollars were sufficient to make up these differences in 24 states and DC, but 26 states continued to see a gap between how much revenue they could raise and how much they would need to spend to replicate national averages given their demographics and economic conditions (figure 28).

(Detailed tables with fiscal gap at capacity and grants for each state, DC, and the nation are presented in appendix D.)

FIGURE 28

Fiscal Gap at Capacity after Federal Transfers



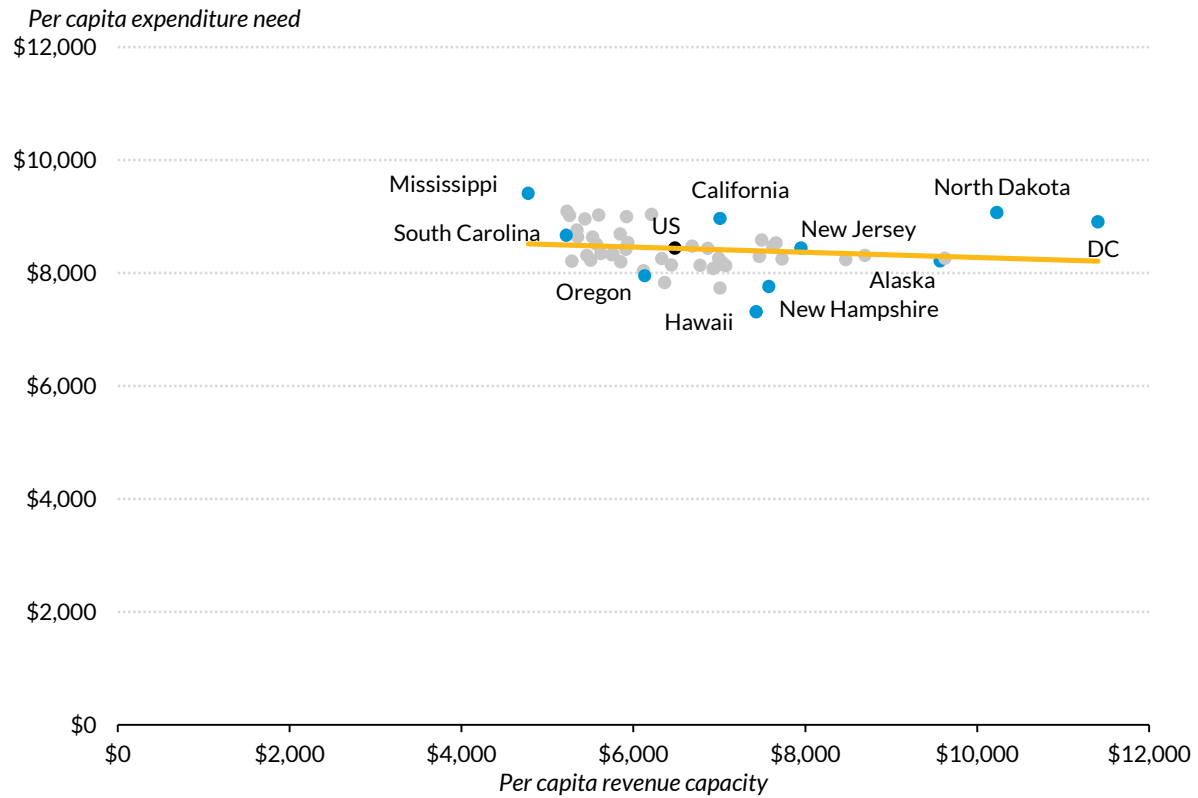
Source: Urban Institute calculations.

Note: Gap at capacity after transfers equals a state's revenue capacity plus federal transfers minus expenditure need.

Moreover, low revenue capacity and high expenditure need often exist in the same states (figure 29). Put another way, some states will never be able to replicate national average spending levels given their underlying populations and economies even if they collected taxes and fees in line with the country as a whole.

FIGURE 29

Revenue Capacity versus Expenditure Need



These findings suggest the federal government ought to pay greater attention to fiscal capacity when designing formulas for intergovernmental grants. This recommendation has been the basis of several Government Accountability Office (GAO) reports, including reports issued after the financial crisis that suggested establishing a permanent federal program to aid states and localities in an economic downturn (GAO 2011). For example, GAO has noted that the current basis for federal Medicaid reimbursements to states, per capita income, often bears little relation to the poverty rate or the proportion of elderly and disabled residents who can be expected to cost more to treat.

As noted earlier, the United States has limited experience with fiscal equalization, much less using states as agents of antirecessionary fiscal policy. In the 1970s, the federal government had experimented with state and local assistance through the Local Public Works Capital Development and Investment Act of 1976, extensions to the Comprehensive Employment and Training Act of 1973, and the Antirecession Fiscal Assistance program under Title II of the Public Works Employment Act of 1976 and extended in 1977.

Evaluations from the Congressional Budget Office, GAO, Treasury Department, congressional committees, and think tanks often found fault with these programs. In particular, aid was often poorly

targeted and slow to arrive. There were also controversies about how much discretion recipients should have over funds (ACIR 1987). After the 1970s, the federal government largely avoided countercyclical state and local aid, although it did increase job training and transportation funds in the 1980s and 1990s.

This pattern changed with the 2001 recession. The Jobs and Growth Tax Relief Reconciliation Act of 2003 provided one-time, population-based grants plus a temporary increase in the federal matching rate for Medicaid. The rationale was that demands on Medicaid were higher in economic downturns, but states were still obliged to balance their budgets. Moreover, Medicaid constituted such a large share of state budgets that increasing federal funds would free up state resources for other purposes. However, the act drew criticism. In a 2004 study, GAO found that aid payments did not even start until 19 months after the 2001 recession was over. Also, payments to states on a per capita basis, with a floor to ensure a minimum for small states, bore little relation to current economic conditions or underlying fiscal capacity (US General Accounting Office 2004).

Evaluations of the 2009 Recovery Act have been similarly mixed (Cogan and Taylor 2011; Wilson 2012). Although states and localities did not always use federal dollars as intended, they increased spending and avoided taxes more than they would have without aid. In addition, any shortcomings in their responses were entirely consistent with previous experience under other federal grant programs (Gramlich 1991; Gramlich and Galper 1973). Targeting was found to have improved since prior antirecessionary relief.⁵⁹

In any event, federal, state, and local governments will likely have to pull together again, whether to combat a recession or address slow-moving fiscal challenges like aging populations and rising health care costs. Doing so will require a clear understanding of what states and localities are capable of raising in revenue and their needs for spending on goods and services without federal dollars. Metrics like those presented here can be the building blocks for restructuring federal assistance as well as establishing a benchmark for the federal government and other interested parties to know how grant funds are spent and to what effect.

Appendix A. Background on the Representative Revenue System- Representative Expenditure System Approach

Researchers have developed several methods to measure state fiscal capacity. The first such measure was the representative tax system introduced by the Advisory Commission on Intergovernmental Relations in 1962 and updated periodically until the commission terminated in 1996.

For any revenue source, the representative tax system applies an average US tax rate to each state's tax base. The result is a measure of revenue capacity, or what states hypothetically could collect from that source. Comparing a state's total revenue capacity with actual collections yields a measure of revenue effort.

Previously, analysts had looked to state per capita income and gross state product as proxies for fiscal capacity. However, these measures suffer from well-known limitations. In particular, state personal income captures all income received by residents of a state, whereas gross state product refers to all income produced there.

In a closed economy, with no imports or exports, income and product measures will be equivalent. However, states are far from closed economies. Individuals cross state borders every day to work, shop, or travel. Indeed, a state's ability to export taxes, or shift tax burdens to nonresidents, is part of its revenue capacity.

By the same token, income produced in a state may flow to other states. Residents of New York may own shares in an oil company located in Texas or Alaska. Athletes may earn income at games played in other states. A comprehensive fiscal capacity measure should also consider these potential revenue streams.

The concept of total taxable resources was designed to address shortcomings in personal income and gross state product concepts. It sums all income flows produced in a state, adds income from out of state (such as dividends or federal transfer payments), and subtracts certain indirect federal taxes and contributions to social insurance programs.

Table A.1 shows how state GDP, personal income, and total taxable resources measures can differ from one another. States such as Delaware and Louisiana score higher on state GDP because considerable income is produced in-state but then flows out of state. New Hampshire and Maine rank higher on personal income because of income flows into the state, such as income to resident retirees.

Although personal income, state GDP, and total taxable resources are all used in some federal grant programs, they are not themselves measures of fiscal capacity. To understand a state's overall tax capacity versus effort, one needs more detailed information about a state's overall tax system, including tax rates or levies by source. The representative tax system allows this more in-depth understanding.

In the 1990s, researchers expanded and updated the representative tax system to include fees and charges. These revenues had come to represent a growing share of state and local budgets in the wake of the property tax limitation movement of the 1970s, and ignoring them would have understated a state's fiscal capacity. The resulting tax-, fee-, and charge-inclusive representative revenue system was the basis for several reports (Tannenwald 1998, 1999; Tannenwald and Turner 2006; Yilmaz et al. 2006).

Another issue was how to account for differences in a jurisdiction's ability to provide a given level of services. Similar to state school finance formulas that took account of school district characteristics, such as the poverty rate, in the 1970s, Musgrave and Polinsky (1970) and Reischauer (1974) began experimenting with alternatives to population as a proxy for fiscal need. Soon after, Rafuse (1986, 1990) proposed the representative expenditure system.

As discussed in the text of this report, the representative expenditure system applies a national average rate of spending per capita to the population of each state. The method then adjusts these hypothetical spending levels for workload factors, or demographic features that may contribute to higher costs for a given service or function in that state compared to the United States overall. In addition to workload factors, this method accounts for state differences in the costs of labor and other inputs.

TABLE A.1

State GDP, Personal Income, and Total Taxable Resources (TTR), Per Capita, 2012

State	GDP	Rank	Personal Income	Rank	TTR	Rank
District of Columbia	\$173,862	1	\$76,083	1	\$113,234	1
Alaska	\$79,214	2	\$49,828	10	\$85,616	2
Wyoming	\$70,916	3	\$52,489	8	\$84,381	3
North Dakota	\$70,477	4	\$56,449	4	\$77,820	5
Connecticut	\$66,812	5	\$60,247	2	\$82,367	4
New York	\$66,556	6	\$54,115	6	\$74,663	6
Massachusetts	\$64,451	7	\$56,706	3	\$73,830	8
Delaware	\$64,447	8	\$44,029	23	\$74,624	7
New Jersey	\$59,030	9	\$54,952	5	\$73,115	9
Washington	\$56,639	10	\$47,043	14	\$64,137	12
Maryland	\$56,167	11	\$53,662	7	\$71,709	10
California	\$55,864	12	\$47,453	12	\$61,915	15
Texas	\$55,617	13	\$43,274	26	\$61,556	18
Nebraska	\$55,415	14	\$45,910	18	\$62,347	14
Illinois	\$55,172	15	\$45,984	17	\$61,559	17
Minnesota	\$54,975	16	\$47,381	13	\$61,334	19
Louisiana	\$54,475	17	\$40,619	30	\$58,289	23
Virginia	\$54,315	18	\$48,720	11	\$64,390	11
Colorado	\$53,361	19	\$46,332	15	\$60,686	20
Hawaii	\$52,182	20	\$44,507	21	\$57,898	24
Oregon	\$52,150	21	\$39,262	34	\$59,409	21
Iowa	\$51,936	22	\$44,027	24	\$57,475	25
South Dakota	\$51,811	23	\$45,714	19	\$61,613	16
New Hampshire	\$50,344	24	\$50,091	9	\$62,725	13
Rhode Island	\$48,887	25	\$46,258	16	\$59,010	22
Kansas	\$48,664	26	\$43,372	25	\$56,674	26
Pennsylvania	\$48,530	27	\$45,581	20	\$56,499	27
Wisconsin	\$47,690	28	\$42,461	27	\$53,696	29
Ohio	\$46,958	29	\$40,261	31	\$52,440	32
Indiana	\$45,937	30	\$38,139	40	\$52,603	31
North Carolina	\$45,705	31	\$38,523	39	\$50,710	36
Nevada	\$45,285	32	\$39,164	35	\$54,137	28
Vermont	\$45,284	33	\$44,439	22	\$53,537	30
Utah	\$44,847	34	\$35,886	45	\$51,472	33
Oklahoma	\$44,392	35	\$41,410	28	\$51,182	34
Missouri	\$44,283	36	\$39,950	32	\$50,910	35
Georgia	\$44,234	37	\$37,213	41	\$48,861	38
Tennessee	\$43,395	38	\$38,994	37	\$48,201	40
New Mexico	\$42,297	39	\$35,771	47	\$47,391	41
Michigan	\$42,004	40	\$38,581	38	\$47,226	42
Montana	\$41,726	41	\$39,156	36	\$48,573	39
Arizona	\$40,818	42	\$36,612	42	\$46,407	45
Kentucky	\$40,791	43	\$35,851	46	\$45,680	46
Maine	\$40,009	44	\$39,842	33	\$46,520	43
Florida	\$39,666	45	\$41,048	29	\$50,000	37
Alabama	\$38,772	46	\$35,908	44	\$44,774	47
Arkansas	\$38,686	47	\$36,432	43	\$46,480	44
South Carolina	\$37,326	48	\$35,345	48	\$43,244	49
West Virginia	\$37,039	49	\$35,164	49	\$43,393	48

TABLE A.1 CONTINUED

State	GDP	Rank	Personal Income	Rank	TTR	Rank
Idaho	\$36,568	50	\$35,139	50	\$42,541	50
Mississippi	\$34,645	51	\$33,463	51	\$39,764	51
United States	\$51,163	0	\$44,194	0	\$58,274	0

Sources: US Department of the Treasury, “Total Taxable Resources, 9/18/2014,” 2014; US Department of Commerce “SA1 Personal Income Summary, Personal Income, Population, per Capita Personal Income,” and “Gross domestic product (GDP) by state (millions of current dollars)” Bureau of Economic Analysis; and US Census, Table 1. Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2014 (NST-EST2014-01), 2014.

Appendix B. Representative Revenue System Methods and Sources

The representative revenue system (RSS) estimates a state's revenue capacity (or revenue raising potential) by establishing a revenue base (i.e., what could be taxed) in each state and then applying a national average tax rate to that base. For every revenue source, the national average rate is total tax collections or user charges from that source divided by the national revenue base.

For example, national general sales tax revenue in 2012 was \$314.1 billion. Our chosen base, personal consumption expenditures (PCE), was \$11.0 trillion. Thus, the national average tax rate was 2.84 percent. Applying this rate to a given state's base and dividing by the state's population yields the per capita capacity. For example, in 2012, Alabama's PCE was \$140.1 billion and its population was 4.8 million people, so the state's per capita revenue capacity was \$827.

The total per capita revenue capacity for each state is the sum of per capita revenue capacity estimates for all taxes and user charges. Detailed results for each revenue source are in appendix D. The remainder of this appendix details data sources used to calculate specific revenue bases and rates as well as any adjustments made to obtain our results.

State and Local General Revenue

All revenue data in this report come from the 2012 Census of Governments Annual Survey of State and Local Government Finances: http://www.census.gov//govs/local/historical_data_2012.html.

These data are also available from the Urban Institute's Data Query System (<http://sfdqs.taxpolicycenter.org/>), which contains detailed revenue, expenditure, and debt variables for the United States, each of the 50 states, and the District of Columbia for 1977–2013. The data are available by type of government: state, local, state and local totals, and local government detail.

General Sales Tax

An ideal general sales tax base would include all household consumption of goods and services and exclude business-to-business transactions to avoid pyramiding, or taxing the same good or service multiple times. Personal consumption expenditure (PCE) data available from the US Bureau of Economic Analysis (BEA) come closest to approximating this ideal tax base.

Previous RRS Studies Relied on the US Economic Census. For example, Yilmaz et al. (2006) summed the following Economic Census categories: retail trade, accommodations, food service, personal services, motion pictures, and arts and entertainment. They then subtracted gas, alcohol, and gambling receipts because some states levy selective instead of general sales taxes on these purchases. That study also subtracted estimated online purchases because these transactions often go untaxed.

We determined that PCE were preferable to modified Economic Census data described above because the Economic Census data were both too narrow (excluding most services) and too broad (including some business inputs and government purchases). However, the PCE data also have some flaws. They include health care services paid for by Medicare and Medicaid as well as services from owner-occupied housing (known as imputed rent).

In addition, state PCE data do not include purchases from nonresidents. For example, Maryland's PCE represent purchases by Maryland residents and not all purchases made in Maryland. This omission could lead to problems in states that "export" their sales taxes, or shift the tax burden to nonresidents. However, in a comparison of per capita purchases according to the two data sources, we did not detect a significant difference in states that rely on tourism (e.g., Florida, Hawaii, and Nevada) (table B.1).⁶⁰

Apart from DC (where nonresidents contribute substantially to economic activity), the largest difference was in New York, where per capita Economic Census purchases exceeded per capita PCE by \$466. However, the totals were within \$100 in 24 states. Seven states were among the top 10 in both counts and seven states were among the bottom 10 in both counts.

TABLE B.1

General Sales Tax Capacity Comparison: BEA vs. Economic Census

	BEA	Rank	Census	Rank
DC	\$1,485	1	\$3,362	1
Massachusetts	\$1,289	2	\$1,487	3
New Hampshire	\$1,242	3	\$1,018	16
Alaska	\$1,239	4	\$996	17
North Dakota	\$1,235	5	\$1,166	7
Connecticut	\$1,228	6	\$1,451	4
New Jersey	\$1,227	7	\$1,206	6
Vermont	\$1,183	8	\$832	33
New York	\$1,152	9	\$1,618	2
Delaware	\$1,128	10	\$1,312	5
Hawaii	\$1,094	14	\$909	23
Florida	\$978	26	\$933	20
Nevada	\$937	33	\$928	21
Georgia	\$877	42	\$887	28
South Carolina	\$876	43	\$679	46
Idaho	\$875	44	\$645	49
Oklahoma	\$871	45	\$756	43
Kentucky	\$870	46	\$713	44
Utah	\$861	47	\$860	31
North Carolina	\$858	48	\$804	37
Alabama	\$827	49	\$712	45
Arkansas	\$798	50	\$653	48
Mississippi	\$792	51	\$596	51

Source

Bureau of Economic Analysis, "Personal Consumption Expenditures by State,"
<http://www.bea.gov/regional/index.htm>.

Property Tax

The property tax base is the value of all property in a state. We built our tax base by summing four individual components: residential, corporate, farm, and utility.⁶¹ For residential property, the base was the combined aggregate gross rent and aggregate gross value of owner-occupied housing. For corporate property, the base was federal corporate assets minus utilities, allocated based on state-level annual corporate payroll. For farm property, the base was the estimated value of the land and buildings of farms. For utilities, we further broke the base into four categories: electric power, gas and electric, natural gas, and water and sewage. Each base was used to apportion utility property data at the national level from the IRS. Electric power property was distributed based on Nameplate Electrical Generating

Capacity. Gas and electric property was distributed based on the number of retail customers in a state. Natural gas property was distributed based on natural gas deliveries by state. Water and sewage property was distributed based on state population.

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Individual Income Tax

For our tax base, we used all the income produced in a state plus the out-of-state income minus federal taxes and social insurance payments, available from the US Department of the Treasury's measure of

total taxable resources.⁶² Previous reports used IRS data on adjusted gross income (AGI) by state, modified for federal adjustment amounts and residency adjustments.

Previous reports also subtracted a “standard exemption” from the tax base. For example, Yilmaz et al. (2006) calculated a tax receipt weighted average exemption level multiplied by number of exemptions in each state and summed for each state, based on actual and imputed data from calendar years 2001 and 2002. We did not make any similar adjustments because determinations about standard versus nonstandard individual income tax exemptions involve policy decisions.

Source

US Department of the Treasury, 2012 Total Taxable Resources Estimates-09/28/2012.

<https://www.treasury.gov/resource-center/economic-policy/taxable-resources/Pages/Total-Taxable-Resources.aspx>.

Corporate Income Tax

The corporate income tax base is corporate profits in a state. Because comprehensive state-level data are unavailable, we allocated national profits to states using a three-factor formula based on corporate sales, payroll, and property. This three-factor formula mirrors the equations most states use to allocate income to their state for the purpose of taxation from multi-state corporations.⁶³ However, because property ownership by state is also generally not available, as in previous reports we used payroll from the Economic Census as a proxy for property holdings. Results did not vary dramatically when we experimented with other possible formulas for establishing the tax base (table B.2).

TABLE B.2

Corporate Income Tax Base Rankings with Variable Calculations

	Three-factor formula with receipts and doubled payroll	Two-factor formula with payroll and receipts	One-factor formula with receipts
California	1	1	1
Texas	2	2	2
New York	3	3	3
Illinois	4	4	4
Florida	5	5	5
New Jersey	6	6	7
Pennsylvania	7	7	6
Ohio	8	8	8
Michigan	9	9	9
Massachusetts	10	11	13
Hawaii	42	42	42
Maine	43	43	46
Idaho	44	44	45
Alaska	45	45	44
Rhode Island	46	47	47
North Dakota	47	46	43
South Dakota	48	48	48
Montana	49	49	50
Wyoming	50	50	49
Vermont	51	51	51

Sources

Bureau of Economic Analysis, Table 6.17D. Corporate Profits before Tax by Industry.
<http://www.bea.gov/national/>.

US Census Bureau, Number of Firms, Number of Establishments, Employment, Annual Payroll, and Estimated Receipts by Enterprise Employment Size for the United States and States, Totals: 2012.
<http://www.census.gov/econ/subb/>.

General Charges

The multiple charges included in the Census revenue category “general charges” are so varied—ranging from college tuition to parking fees—that collecting individual bases was not feasible. Instead, as in previous reports, we used a state’s personal income (from BEA) as the tax base.

Source

Bureau of Economic Analysis, SA4 Personal Income and Employment by Major Component.
<http://www.bea.gov/regional/index.htm>.

Motor Fuel Taxes

The motor fuel tax base is the net total volume of taxed motor fuel sold in each state.

Source

Federal Highway Administration, Motor-Fuel Volume Taxes-2012.
<https://www.fhwa.dot.gov/policyinformation/statistics/2012/mf2.cfm>.

Cigarette Taxes

The cigarette tax base is the number of taxed cigarette packs sold in each state. The data were produced by the consulting firm Orzechowski and Walker (2012).

As noted in the text, for all selective sales taxes, tax rates may affect consumption and hence our measures of hypothetical tax base. One possible solution to this problem is creating estimates of consumption by state using federal cigarette tax data and Centers for Disease Control and Prevention surveys of smoking habits by state. Studies using this method have demonstrated substantial tax evasion and avoidance. However, actual cigarette purchases were ultimately the most accessible and transparent measure for this study.

Source

Orzechowski and Walker. 2012. "The Tax Burden on Tobacco; Historical Compilation Volume 47, 2012." Table 10: State Tax-Paid Cigarette Sales. http://www2.taxadmin.org/fta/tobacco/papers/tax_burden_2012.pdf.

Alcohol Taxes

The alcohol tax base is the volume of beer, wine, and spirits purchased in each state. Again, the same problems with the cigarette tax base are apparent in our alcohol tax base. However, as with cigarettes, we decided actual purchases were the most accessible and transparent measure for this study.

Sources

National Institute on Alcohol Abuse and Alcoholism, Table 2. Apparent alcohol consumption for States, census regions, and the United States, 2012. http://pubs.niaaa.nih.gov/publications/surveillance98/tab2_12.htm.

US Census Bureau, 2012 Annual Survey of State and Local Government Finances, Government Finances, Volume 4, and Census of Governments. http://www.census.gov//govs/local/historical_data_2012.html.

Our total alcohol tax revenue number combined alcoholic beverage tax receipts and Census public liquor store revenue. In 2012, 22 states collected public liquor store revenue. In states that directly control the sale of alcohol, revenue is often raised from store profits rather than taxes. For example, New Hampshire did not tax liquor or wine sales (it did tax beer). As a result, the state collected only \$10 million in alcohol beverage taxes but \$558 million in liquor store revenue.

Insurance Taxes

The tax base is the monetary value of direct premiums written for property and casualty insurance plus direct premium receipts of life insurance.

Sources

Insurance Information Institute, Direct Premiums Written, P/C Insurance by State, 2012. <http://www.iii.org/table-archive/20763>.

American Council of Life Insurers, "2013 Life Insurers Fact Book," Direct Premium Receipts of Life Insurers, by State, 2012. https://www.acli.com/Tools/Industry%20Facts/Life%20Insurers%20Fact%20Book/Documents/Life_Insurers_Fact_Book_2013_All.pdf.

Severance Taxes

Our severance tax base is the value of coal, crude oil, natural gas, and nonfuel mineral production.

Sources

US Energy Information Administration, Annual Coal Report, Table 1. Coal Production and Number of Mines by State and Mine Type, 2013 and 2012, Table 28. Average Sales Price of Coal by State and Mine Type, 2013 and 2012. <http://www.eia.gov/coal/annual/>.

—, Domestic Crude Oil First Purchase Prices by Area, Crude Oil Production. <https://www.eia.gov/petroleum/data.cfm#crude>.

—, Natural Gas Gross Withdrawals and Production. http://www.eia.gov/dnav/ng/ng_prod_sum_a_EPG0_VGM_mmcfa.htm.

—, Henry Hub Natural Gas Spot Price. <http://www.eia.gov/dnav/ng/hist/rngwhhdA.htm>.

US Department of the Interior, Mineral Commodity Summaries 2013, Table 3. Value of Nonfuel Mineral Production in the United States and Principal Nonfuel Minerals Produced in 2012. <http://minerals.usgs.gov/minerals/pubs/mcs/2013/mcs2013.pdf>.

The US Department of the Interior provided the value of nonfuel mineral production. For coal, crude oil, and natural gas we multiplied the price by production from the sources above for the value. Among states with coal production, coal prices were not available for Alaska, Arizona, Arkansas, Louisiana, Mississippi, and Missouri. For these states, we imputed values based on the average price for their Census region.

Estate and Gift Taxes

The estate and gift tax base is the value of all estates transferred at death. We used IRS data on federal estate tax returns filed in 2012.

When all 50 states and DC had an estate tax, and used the same tax threshold as the federal government, IRS data perfectly captured each state's tax base. However, after federal tax changes in the 2000s many states stopped taxing estates or broke with the federal threshold.⁶⁴ The IRS tax data for 2012 only includes taxable estates above the federal threshold that year (\$5.12 million) and therefore does not capture taxable estates in states with thresholds below that (e.g., New Jersey's taxable threshold was \$675,000 in 2012). However, the IRS data are still the most comprehensive

state-level data on estate values. Furthermore, the data include the larger estates that provide the overwhelming majority of state tax revenue.

Source

Internal Revenue Service, SOI Tax Stats - Estate Tax Statistics Filing Year Table 2. <https://www.irs.gov/uac/SOI-Tax-Stats-Estate-Tax-Statistics-Filing-Year-Table-2>.

Lotteries

We used Census data on state lottery sales for the tax base. This is not a perfect representation of demand for lottery sales because a lottery's size (number of games, number of prizes, etc.) is in part a policy decision. But lottery sales are an accessible and transparent count of lottery participation.

Seven states did not have a lottery in 2012: Alabama, Alaska, Hawaii, Mississippi, Nevada, Utah, and Wyoming. For these states we calculated a base by dividing lottery sales by personal income (BEA) for every state and then finding an average percentage for each Census region (omitting the no-lottery states). We then multiplied the appropriate average by personal income in each of the seven states.

Lottery revenue equaled sales minus prizes.

Source

US Census Bureau, 2012 Annual Survey of State Government Finances Lottery Table. https://www.census.gov/govs/state/historical_data_2012.html.

Corporation Licenses

Corporation licenses for C and other corporations, S corporations, and partnerships are the tax base in each state.

Source

Internal Revenue Service, Number of Returns Filed, by Type of Return and State and Fiscal Year - IRS Data Book Table 3. <https://www.irs.gov/uac/SOI-Tax-Stats-Number-of>Returns-Filed,-by-Type-of-Return-and-State-and-Fiscal-Year-IRS-Data-Book-Table-3>.

Fishing and Hunting Licenses

The number of hunting and fishing licenses is the revenue base in each state.

Source

US Fish and Wildlife Service, Historical License Data Index.
<http://wsfrprograms.fws.gov/Subpages/LicenseInfo/LicenseIndex.htm>.

Data for DC fishing and hunting license revenue in 2012 were not available from the Census finance data. We therefore took DC's revenue from DC's fiscal year 2013 budget.

Motor Vehicle Registration Licenses

Private and commercial motor vehicle registrations are the base.

Source

US Department of Transportation, Federal Highway Administration, Office of Highway Policy Information. Highways Statistics 2012: Table MV-1 State Motor-Vehicle Registrations - 2012.
<https://www.fhwa.dot.gov/policyinformation/statistics/2012/mv1.cfm>.

Motor Vehicle Operators Licenses

The tax base is the total number of licensed drivers in each state.

Source

US Department of Transportation, Federal Highway Administration, Office of Highway Policy Information.
Highways Statistics 2012: Table DL-22 Licensed Total Drivers, by Age 2012.
<https://www.fhwa.dot.gov/policyinformation/statistics/2012/dl22.cfm>.

All Other Taxes

Personal income is the revenue base for this category, which includes the following Census categories: amusement taxes, documentary and stock transfer taxes, parimutuel taxes, public utilities sales taxes, other licenses, other selective sales taxes, and taxes “not elsewhere classified.”

Source

Bureau of Economic Analysis, SA4 Personal Income and Employment by Major Component.
<http://www.bea.gov/regional/index.htm>.

Other Nontax Revenue

Personal income is the revenue base.

Source

Bureau of Economic Analysis, SA4 Personal Income and Employment by Major Component.
<http://www.bea.gov/regional/index.htm>.

Appendix C. Representative Expenditure System Methods and Sources

In this section, we discuss data sources and methods used to arrive at Representative Expenditure System estimates for each state and the sensitivity of our results to these assumptions.

As noted throughout the report, the RES method captures two main sources of state spending variation: workload factors and input prices.⁶⁵ Workload factors are demographic or physical features, such as more children to educate or more road miles to pave, which make providing a given level of service more expensive compared to other states. Input prices reflect differences across states in the costs of labor or raw materials.

Workload Factors

For workload factors, we look to academic literature and policy practice to identify what state characteristics might affect the need for services and by how much. We then calculate an average cost per need measure for the nation as a whole, analogous to the nationally representative tax rate in the previous section. Applying each state's observed need measure to this national cost per need measure gives us workload factor adjusted state expenditure. Equivalently, for each state, we could calculate a workload factor, or the ratio between state and national need measures, then multiply this ratio by national expenditures.⁶⁶

For example, in elementary and secondary education, our workload factors were based on a weighted average (using a formula described below) of a state's population of school-aged children and children living below the poverty line. Younger states with higher rates of child poverty compared with the national average, such as California, Texas, and Florida, thus accounted for more of the nation's total K-12 education workload in 2012 (California's share was 12.8 percent, Texas' 9.8 percent, and Florida's 5.5 percent) compared with states like Alaska and Wyoming (each with 0.2 percent of the nation's workload factor in this functional category).

Table C.2 provides a summary of workload factors for all functional categories and all states. We describe how we arrived at workload factors for each functional category in greater detail below.

Input Costs

To address input costs, we focus on labor costs. Although many inputs and raw materials (e.g., public buildings, energy, and so forth) have prices that vary by state, comprehensive data for inputs other than labor are generally not available. Moreover, wages and salaries are the largest component of public sector costs overall and for many functional categories (table C.3).

To abstract from policy choices about what to pay public sector workers, we consider what all employers in a state must pay to attract and retain workers of a given education level (less than high school, high school graduate, some college, college graduate, and professional or graduate degree) (table C.4). We match different expenditure functions to different education groups. For example, the reference group for K-12 employees is college graduates, whereas for higher education employees it is workers with professional or graduate degrees. For all other categories except public welfare, the reference group is workers with some college or an associate's degree. For public welfare, college graduates are the reference group.

Obviously, matching a functional category with an education level is imprecise. Colleges and universities employ professors and administrative staff, and transit agencies employ engineers and bus drivers. However, our results do not change dramatically if we use an index for all workers in a state regardless of their education level as the reference group for each functional category.

To avoid conflating costs with policy choices about how much labor to use (e.g., public school class sizes or police and fire staffing ratios), we impose the additional requirement that, for each functional category, labor constitutes the same share of total expenditures as at the national level.⁶⁷ There are problems with this assumption. Some states may deviate from national averages for structural rather than policy reasons. For example, governments in rural states may need to employ more public sector workers to reach their populations. However, in other states staffing ratios are clearly a policy choice, and one that voters respond to as indicated by popular support for smaller class sizes, more police on the street, and so forth

We obtain payroll data by state from the Census of Governments Annual Survey of Public Employment and Payroll. We then increase salaries and wages by a fixed proportion (one quarter) in

each state to reflect nonwage compensation, such as pensions and retiree health care. Although the share of total compensation from fringe benefits may vary by functional category, systematic information is unavailable. However, our 25 percent assumption is borne out for one functional area where we were able to obtain detailed data, K-12 education.⁶⁸

Putting these pieces together, our state input cost index is labor compensation as a share of total spending in each functional category multiplied by the relevant labor cost index for that category plus nonlabor costs based on national averages.⁶⁹ Our calculations show that Alaska and the DC are consistently the most expensive states in terms of labor costs and Idaho, South Dakota, Missouri, and Montana are among the least expensive (table C.5).

The remainder of this appendix describes how we calculated workload factors for each category of public spending. All expenditure data come from the 2012 Census of Governments Annual Survey of State and Local Government Finances: http://www.census.gov//govs/local/historical_data_2012.html.

Specifically, we relied on Table LGF001: State and Local Government Finances by Level of Government and by State: 2012 obtained from the American FactFinder website.

These data are also available from the Urban Institute's Data Query System (DQS): <http://slfdqs.taxpolicycenter.org/>.

The DQS contains detailed revenue, expenditure, and debt variables for the United States, each of the 50 states, and the District of Columbia for 1977-2013. The data are available by type of government: state, local, state and local totals, and local government detail.

The categories we examine are as discussed below.

Elementary and Secondary Education: Includes expenditures associated with the operation, maintenance, and construction of public schools and facilities for elementary and secondary education (kindergarten through high school), vocational-technical education, and other educational institutions except those for higher education, whether operated by independent governments (school districts) or as integral agencies of state, county, municipal, or township governments; and financial support of public elementary and secondary schools.⁷⁰

Higher Education: Includes current, capital, and construction spending on higher education auxiliary enterprises and other higher education.⁷¹ The higher education auxiliary enterprises category includes largely self-supporting activities related to higher education, like cafeterias, bookstores, and athletic facilities. Other higher education includes all degree-granting institutions run by state and local

governments beyond high school. This is inclusive of associate, bachelor, master, doctorate, and other degree-granting institutions.

Health and Hospitals: Includes current, capital, and construction spending on the provision of health services and for the support of both government and private run hospitals.⁷³ The “health” category encompasses most general health activities (such as inspections, water regulations, ambulance, and emergency medical services). The “hospital” category includes all government-run hospital expenditures and payments to private hospitals.

Highways: Includes expenditures associated with the maintenance, operation, repair, and construction of toll and nontoll highways, streets, roads, alleys, sidewalks, bridges, tunnels, ferry boats, viaducts, and related structures.⁷⁷

Police and Corrections: Includes spending on police protection, and corrections.⁷⁴ Police protection includes all expenditures associated with the preservation of law and order, protection of persons and property from illegal acts, and the prevention, control, investigation, and reduction of crime. This category excludes inspectors for environmental and health services, legal offices, and traffic control. Corrections include all expenditures associated with institutions or facilities for the confinement, correction, and rehabilitation of convicted adults or juveniles adjudicated delinquent or in need of supervision, and for the detention of adults and juveniles charged with a crime and awaiting trial. It also includes nonresidential correction-related duties (such as probation officers).

Public Welfare: Includes federal and local cash assistance payments such as Supplemental Security Income and Temporary Assistance for Needy Families (TANF), intergovernmental aid under the federal Medicaid program and cash payments made directly to individuals, contingent upon their need. It also includes vendor payments under public welfare programs made directly to private vendors for medical assistance and hospital or health care, including Medicaid (Title XIX), on behalf of low-income or other medically needy persons unable to purchase such care. Provision, construction, and maintenance of nursing homes and welfare institutions owned and operated by a government for the benefit of veterans or needy persons and expenditures for welfare activities not classified elsewhere are also accounted for in this category.⁷²

Environment and housing: Includes expenditures associated with the development and conservation of natural resources, parks and recreation, housing and community development, and the provision, maintenance and operation of sanitation services.⁷⁵

Government administration: Includes expenditures associated with the provision, maintenance and operation of government finances, judicial, legal and legislative institutions, and other staff services.⁷⁶

Interest on general debt: Includes amounts paid for use of borrowed monies, excluding utility debt, paid by all funds of the government.

For the purposes of this report, we focus on the first six categories, which account for 71 percent of state and local government direct general expenditure and 60 percent of total expenditure.

Elementary and Secondary Education

Data Sources

For the workload factor calculation, we obtain population estimates by single year of age from the Census Bureau, from the table Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States, States, and Puerto Rico Commonwealth: April 1, 2010 to July 1, 2012. We assumed the age range for elementary school students is 5–13 years old, and the range for secondary students is 14–18 years old. The data on private school students comes from the US Census' American Community Survey (ACS). The data on children below the poverty line also comes from the ACS.⁷⁸

US Census: American Community Survey, via American FactFinder: B14002: Sex by School Enrollment by Level of School by Type of School for the Population 3 Years and Over - Universe: Population 3 years and over. 2012. <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

US Census: American Community Survey, via American FactFinder: B17001: Poverty Status in the Past 12 Months by Sex by Age - Universe: Population for whom poverty status is determined. 2012. <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

US Census, via American FactFinder: PEPSYA SEX: Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States, States, and Puerto Rico Commonwealth: April 1, 2010 to July 1, 2012. <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

Methods

The workload factor for the K–12 expenditure area is calculated based on the number of elementary and secondary students and the percentage of children in poverty in the state. Following numerous academic studies as well as state and federal funding formulas, we assumed that the cost of educating a

child in poverty is 50 percent more than the average cost per pupil, and that the cost of educating an elementary school student is 15 percent less than a secondary student poverty (Augenblick and Myers, Inc. 2001; Duncombe and Yinger 2005; Gronberg et al. 2004). More specifically, see the following equation:

$$\text{Education cost index} = (1 + 0.5 * \text{Percent of children in poverty}) * (0.85 * \text{Elementary students} + \text{Secondary students})$$

The state share of the national educational cost index is the workload factor. However, the literature has produced a range of estimates of the increased cost of a low-income student (table C.1). Studies using a “cost function” approach suggest that it can cost anywhere from 31 to 167 percent more to educate a child in poverty. However, “professional judgment panels” convened to identify factors to include in state funding formulas often produce lower estimates (ranging from 22 percent to 44 percent in Kansas, and up to 139 percent in Maryland).

Weights actually used in funding formulas are often lower, ranging from 5 to 24 percent in a sample of urban school districts in 2010, for example (Education Resource Strategies 2010). Additional sources of cost variation that we considered but did not incorporate include the costs of students who are English Language Learners (ELL) or have special needs or disabilities (Duncombe and Yinger 2005; Gronberg et al. 2004). We also do not take into account geographic dispersion or rurality of a state’s education population, both of which may raise costs.

TABLE C.1
Additional Cost to Educate a Student in Poverty

Authors	Year	Publication	Method	Region	Additional cost
Duncombe and Yinger	2005	<i>Economics of Education Review</i>	Cost Function	New York	122–167%
Duncombe, Lukemeyer and Yinger	2003	National Center for Education Statistics	Cost Function	New York	94–110%
Reschovsky and Imazeki	1997	<i>Developments in School Finance</i>	Cost Function	Wisconsin	159%
Gronberg et al.	2004	Texas A&M University	Cost Function	Texas	31–32%
Augenblick et al.	2002	Augenblick & Myers, Inc.	Professional Judgment	Kansas	22–44%
Augenblick and Myers	2001	Augenblick & Myers, Inc.	Professional Judgment	Maryland	139% ^a
Education Resource Strategies	2010	Fair Student Funding Summit	Current School Funding Formulas	Nine urban school districts	5–24%

^a Authors believe this estimate is too high.

Higher Education

Data Sources

For the workload factor calculation, we use data on population by age to determine potential higher education students as well as national enrollment data by age group. We obtain the former from the Census Bureau's single-year age estimates (see above), and the latter from the National Center for Education Statistics (NCES) 2013 Digest of Education Statistics. We do not exclude any age group, but by the nature of higher education some groups (18-24 year olds) make up the majority of national enrollees.

NCES Digest of Education Statistics Table 303.40: Total fall enrollment in degree-granting postsecondary institutions, by attendance status, sex, and age: Selected years, 1970 through 2023.
https://nces.ed.gov/programs/digest/d13/tables/dt13_303.40.asp.

Methods

The workload factor for the higher education expenditure area is based on state population and national enrollments by age group. Using national data, we calculate the percent of the population enrolled in higher education institutions by age group, with three part-time students as equivalent to one full-time student.⁷⁹ We then apply these national enrollment percentages to the state population numbers in their respective age groups. Taking the sum of these estimated state college populations by age group, we obtain each state's total population that would be in college if they enrolled at the same rate as the nation as a whole. The state's potential enrollment as a share of the national college population is the workload factor.

Other measures of cost variation that we could have included include the share of population attending two year versus four year public and private institutions, mix of graduate and undergraduate degrees awarded, and level of research activity and disciplinary focus (e.g., sciences versus nonsciences and the presence of a medical school) (Agasisti and Johnes 2015). However, we determined that these differences were more akin to policy choices about the level or intensity of service than background conditions affecting the cost of services to state and local governments.

Health and Hospitals

Data Sources

For the workload factor calculation, we rely on state total population data as well as on national and state median household incomes and state disabled populations. State total population and median income data come from US Census data from the 2012 ACS. Disabled population data come from the US Census's Current Population Survey (CPS).

US Census, Current Population Survey, Annual Social and Economic Supplement, 2012. Population on Work Disability. <https://www.census.gov/cps/data/cpstablecreator.html>.

US Census: American Community Survey, via American FactFinder: S0101: Age and Sex. 2012. <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

US Census: American Community Survey, via American FactFinder: B19013: Median Household Income in the past 12 Months (In 2012 Inflation-Adjusted Dollars) – Universe: Households. 2012. <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

Methods

The workload factor for the health and hospital expenditure area is calculated based on state total population, median income, and the disabled population data. First, we take the state's share of total population. Second, we estimate the state's share of low-income households by dividing national median income by state median income and multiplying by the previously calculated share of national population. Third, we take the state share of the total disabled population. The average of these three terms is the workload factor.

$$\text{Poverty measure} = \text{Share of National Population} * \frac{\text{National Median Income}}{\text{State Median Income}}$$
$$\text{Workload Factor} = \frac{\text{Share of National Population} + \text{Poverty measure} + \text{Share of Disabled Population}}{3}$$

Medical care utilization and practice patterns may also affect state costs. However, we were unable to disentangle these factors from policy decisions or market conditions (Cooper et al. 2015).

Highways

Data Sources

For the workload factor calculations, we used data on highway infrastructure; we gathered data on vehicle miles traveled and vehicle lane miles from the Federal Highway Administration.

US Department of Transportation: Federal Highway Administration, Office of Highway Policy Information. Highways Statistics 2012: Table 5.4.1. Vehicle-miles of travel, by functional system. <https://www.fhwa.dot.gov/policyinformation/statistics/2012/>.

US Department of Transportation: Federal Highway Administration, Office of Highway Policy Information. Highways Statistics 2012: Table 4.4.1.2. Length by functional system. <https://www.fhwa.dot.gov/policyinformation/statistics/2012/>.

Methods

The workload factor for highways is based on vehicle miles traveled (VMT) and vehicle lane miles. We weight each according to the following formula:

$$\text{Workload Factor} = \text{Share of VMT} * 0.825 + \text{Share of Vehicle Lane Miles Provided} * 0.175$$

Both VMT and lane miles feature prominently in formulas used to allocate federal interstate highway funds to states and are correlated with the need for repairs (US General Accounting Office 1986). However, other factors that we could have considered include pavement roughness and vehicle mix (Kahn and Levinson 2011).⁸⁰ State contributions to the federal Highway Trust Fund could also proxy for vehicle mix because it accounts for differences in fuel consumption. However, these contributions also reflect tax rates and therefore policy choices.

Police and Corrections

Data Sources

For the workload factor calculation, we obtain data on state total population, as well as counts of the state's population between ages 18 and 24 and the number of murders in that state. State population by

state and age both come from US Census data (see previous categories). Data on the number of murders comes from the Federal Bureau of Investigations (FBI) crime data.

FBI Crime in the United States 2012: Table 4: Crime in the United States by Region, Geographic Division and State, 2011-2012. <https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2012/crime-in-the-u.s.-2012>.

Methods

As in previous reports, we considered the state share of total population, the state share of population ages 18 to 24 and the state share of murders as need factors, with equal weights for all three factors.

$$\text{Workload Factor} = \frac{\text{Share of National Population} + \text{Share of Population 18 to 24} + \text{Share of Murders}}{3}$$

Public Welfare

Data Sources

For the workload factor calculation, we rely on data on state total population as well population below the poverty line by age. State population by state and age both come from US Census data (see previous categories). Data on poverty by state and age comes from the ACS.

US Census: American Community Survey, via American FactFinder: B17001: Poverty Status in the Last 12 Months by Sex by Age – Universe: Population for whom poverty status is determined (2012). <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>.

Methods

The workload factor for public welfare is based on the state share of the total population in poverty and the state share of the elderly population in poverty. We calculate the share of population below the poverty line, and the share of ages 75-and-over population in poverty for a state and then weight the two factors as follows:

$$\text{Workload Factor} = \text{Share of population below the poverty line} * 0.75 + \text{Share of population over 75 in poverty} * 0.25$$

This weighting is based on the observation that the largest component of what the US Census Bureau terms public welfare (about three-quarters of the total) is payments to medical vendors.⁸¹

We noted that in fiscal 2011, the latest year for which comprehensive data are available, Medicaid spending on the elderly represented about a fifth of the total.⁸² We therefore experimented with revising estimates downward for the weight on the elderly population to 16 percent, with the remaining 84 percent going to the workload factor of population living in poverty. However, this adjustment made virtually no difference in our final calculations.⁸³

We also considered other adjustments based on a series of reports from the US Government Accountability Office (GAO) suggesting improvements to Medicaid funding formulas (GAO 2011; US General Accounting Office 1983, 1995, 2003). Specifically, the GAO has recommended that the federal government take into account regional differences in health care costs and costs of living that affect federal poverty measures. However, because our input cost index considers regional price variation, we did not add other measures.

Other Categories

Methods

The workload factors for these categories are simply each state’s share of the US population in 2012.

TABLE C.2A

RES Workload Factor Summary

State share of national workload factors (percent)

State	Elementary/secondary			
	Public welfare	education	Higher education	Health and hospitals
United States	100	100	100	100
Alabama	1.8	1.5	1.5	1.9
Alaska	0.1	0.2	0.3	0.2
Arizona	2.3	2.3	2.1	2.1
Arkansas	1.2	1.0	0.9	1.2
California	12.7	12.8	12.7	11.1
Colorado	1.4	1.7	1.7	1.5
Connecticut	0.8	1.1	1.1	1.0
Delaware	0.2	0.3	0.3	0.3
District of Columbia	0.2	0.1	0.3	0.2
Florida	7.2	5.5	5.8	6.4

TABLE C.2A CONTINUED

State	Public welfare	Elementary/secondary education	Higher education	Health and hospitals
Georgia	3.6	3.5	3.2	3.2
Hawaii	0.3	0.4	0.4	0.4
Idaho	0.5	0.6	0.5	0.5
Illinois	3.7	4.1	4.1	3.8
Indiana	1.9	2.1	2.1	2.1
Iowa	0.8	1.0	1.0	0.9
Kansas	0.8	0.9	0.9	0.9
Kentucky	1.7	1.4	1.4	1.7
Louisiana	1.8	1.4	1.5	1.7
Maine	0.4	0.4	0.4	0.5
Maryland	1.3	1.7	1.8	1.6
Massachusetts	1.8	1.9	2.2	2.0
Michigan	3.3	3.2	3.1	3.3
Minnesota	1.3	1.6	1.7	1.6
Mississippi	1.4	1.0	1.0	1.2
Missouri	2.0	1.9	1.9	2.2
Montana	0.3	0.3	0.3	0.3
Nebraska	0.5	0.6	0.6	0.5
Nevada	0.8	0.9	0.8	0.8
New Hampshire	0.3	0.4	0.4	0.4
New Jersey	2.1	2.7	2.6	2.4
New Mexico	0.9	0.7	0.7	0.7
New York	6.7	5.7	6.4	6.1
North Carolina	3.4	3.2	3.1	3.4
North Dakota	0.2	0.2	0.3	0.2
Ohio	3.6	3.6	3.5	4.0
Oklahoma	1.3	1.3	1.2	1.3
Oregon	1.2	1.2	1.2	1.3
Pennsylvania	3.7	3.6	4.0	4.2
Rhode Island	0.3	0.3	0.4	0.4
South Carolina	1.7	1.5	1.5	1.8
South Dakota	0.3	0.3	0.3	0.3
Tennessee	2.2	2.0	2.0	2.4
Texas	9.0	9.8	8.5	7.9
Utah	0.7	1.2	1.0	0.8
Vermont	0.2	0.2	0.2	0.2
Virginia	2.0	2.4	2.6	2.4
Washington	1.8	2.1	2.2	2.2
West Virginia	0.6	0.5	0.6	0.8
Wisconsin	1.6	1.7	1.8	1.8
Wyoming	0.1	0.2	0.2	0.2

Source: Urban Institute calculations.

TABLE C.2B

RES Workload Factor Summary*State share of national workload factors (percent)*

State	Highways	Police and corrections	Environment and housing
United States	100	100	100
Alabama	2.2	1.8	1.5
Alaska	0.2	0.2	0.2
Arizona	2.0	2.2	2.1
Arkansas	1.3	1.0	0.9
California	9.9	12.5	12.1
Colorado	1.7	1.5	1.7
Connecticut	1.0	1.1	1.1
Delaware	0.3	0.3	0.3
District of Columbia	0.1	0.4	0.2
Florida	5.9	6.2	6.2
Georgia	3.5	3.4	3.2
Hawaii	0.3	0.4	0.4
Idaho	0.7	0.4	0.5
Illinois	3.5	4.4	4.1
Indiana	2.6	2.1	2.1
Iowa	1.4	0.8	1.0
Kansas	1.4	0.8	0.9
Kentucky	1.7	1.4	1.4
Louisiana	1.6	2.1	1.5
Maine	0.5	0.3	0.4
Maryland	1.7	2.1	1.9
Massachusetts	1.7	1.7	2.1
Michigan	3.1	3.7	3.1
Minnesota	2.2	1.3	1.7
Mississippi	1.4	1.2	1.0
Missouri	2.5	2.1	1.9
Montana	0.6	0.3	0.3
Nebraska	0.9	0.5	0.6
Nevada	0.8	0.8	0.9
New Hampshire	0.4	0.3	0.4
New Jersey	2.2	2.7	2.8
New Mexico	1.0	0.7	0.7
New York	4.1	5.7	6.2
North Carolina	3.4	3.1	3.1
North Dakota	0.6	0.2	0.2
Ohio	3.7	3.5	3.7
Oklahoma	1.8	1.3	1.2
Oregon	1.2	1.0	1.2
Pennsylvania	3.3	4.2	4.1
Rhode Island	0.2	0.3	0.3
South Carolina	1.6	1.7	1.5
South Dakota	0.6	0.2	0.3
Tennessee	2.4	2.2	2.1
Texas	8.0	8.2	8.3
Utah	0.9	0.8	0.9
Vermont	0.3	0.2	0.2
Virginia	2.6	2.5	2.6

TABLE C.2B CONTINUED

State	Highways	Police and corrections	Environment and housing
Washington	1.9	1.9	2.2
West Virginia	0.7	0.5	0.6
Wisconsin	2.1	1.6	1.8
Wyoming	0.4	0.2	0.2

Source: Urban Institute calculations.

TABLE C.2C

State	Government administration	Interest on general debt	Other
United States	100	100	100
Alabama	1.5	1.5	1.5
Alaska	0.2	0.2	0.2
Arizona	2.1	2.1	2.1
Arkansas	0.9	0.9	0.9
California	12.1	12.1	12.1
Colorado	1.7	1.7	1.7
Connecticut	1.1	1.1	1.1
Delaware	0.3	0.3	0.3
District of Columbia	0.2	0.2	0.2
Florida	6.2	6.2	6.2
Georgia	3.2	3.2	3.2
Hawaii	0.4	0.4	0.4
Idaho	0.5	0.5	0.5
Illinois	4.1	4.1	4.1
Indiana	2.1	2.1	2.1
Iowa	1.0	1.0	1.0
Kansas	0.9	0.9	0.9
Kentucky	1.4	1.4	1.4
Louisiana	1.5	1.5	1.5
Maine	0.4	0.4	0.4
Maryland	1.9	1.9	1.9
Massachusetts	2.1	2.1	2.1
Michigan	3.1	3.1	3.1
Minnesota	1.7	1.7	1.7
Mississippi	1.0	1.0	1.0
Missouri	1.9	1.9	1.9
Montana	0.3	0.3	0.3
Nebraska	0.6	0.6	0.6
Nevada	0.9	0.9	0.9
New Hampshire	0.4	0.4	0.4
New Jersey	2.8	2.8	2.8
New Mexico	0.7	0.7	0.7
New York	6.2	6.2	6.2
North Carolina	3.1	3.1	3.1
North Dakota	0.2	0.2	0.2
Ohio	3.7	3.7	3.7
Oklahoma	1.2	1.2	1.2
Oregon	1.2	1.2	1.2

TABLE C.2C CONTINUED

State	Government administration	Interest on general debt	Other
Pennsylvania	4.1	4.1	4.1
Rhode Island	0.3	0.3	0.3
South Carolina	1.5	1.5	1.5
South Dakota	0.3	0.3	0.3
Tennessee	2.1	2.1	2.1
Texas	8.3	8.3	8.3
Utah	0.9	0.9	0.9
Vermont	0.2	0.2	0.2
Virginia	2.6	2.6	2.6
Washington	2.2	2.2	2.2
West Virginia	0.6	0.6	0.6
Wisconsin	1.8	1.8	1.8
Wyoming	0.2	0.2	0.2

Source: Urban Institute calculations.

TABLE C.3A

Payroll as Share of Spending by Category

Percent of total

State	Total direct general expenditure	Elementary/secondary education	Higher education
United States	32.1	46.3	39.0
Alabama	34.3	42.9	37.8
Alaska	26.5	39.6	35.6
Arizona	32.5	47.7	42.4
Arkansas	32.6	44.6	42.4
California	33.4	46.7	38.8
Colorado	35.2	46.1	45.3
Connecticut	33.6	52.0	39.9
Delaware	27.8	39.6	35.9
District of Columbia	24.3	19.8	26.6
Florida	30.4	44.5	44.8
Georgia	33.8	47.1	44.6
Hawaii	28.8	51.5	33.2
Idaho	32.9	48.7	40.2
Illinois	33.3	48.3	44.7
Indiana	31.3	47.4	39.9
Iowa	31.7	44.6	42.5
Kansas	36.5	51.8	43.0
Kentucky	30.8	48.1	43.2
Louisiana	26.9	35.6	38.6
Maine	27.8	50.8	37.8
Maryland	32.0	52.6	35.1
Massachusetts	28.9	49.2	29.9
Michigan	32.2	41.1	43.0
Minnesota	32.9	54.4	45.8
Mississippi	30.4	46.5	40.9
Missouri	30.5	46.0	36.6
Montana	30.6	47.1	38.7

TABLE C.3A CONTINUED

State	Total direct general expenditure	Elementary/secondary education	Higher education
Nebraska	37.5	45.1	33.7
Nevada	33.5	48.2	41.3
New Hampshire	34.1	48.8	35.5
New Jersey	37.5	50.7	45.6
New Mexico	30.8	41.7	43.2
New York	29.7	42.5	29.9
North Carolina	35.1	52.0	40.5
North Dakota	28.1	43.8	42.8
Ohio	31.9	41.6	40.1
Oklahoma	31.9	48.4	35.3
Oregon	31.9	41.0	42.4
Pennsylvania	28.3	44.0	38.9
Rhode Island	32.2	47.3	41.5
South Carolina	31.8	44.1	38.6
South Dakota	31.0	47.9	42.8
Tennessee	31.8	44.4	36.9
Texas	34.7	51.3	36.1
Utah	30.2	44.0	33.0
Vermont	32.3	52.3	39.3
Virginia	33.5	48.5	37.3
Washington	32.9	41.8	35.9
West Virginia	28.7	45.8	36.4
Wisconsin	30.2	45.2	36.8
Wyoming	32.4	43.3	35.5

Source: Urban Institute calculations.

TABLE C.3B

State	Public welfare	Health and hospitals	Highways	Police and corrections
United States	4.8	32.8	15.9	56.9
Alabama	3.1	33.7	15.0	42.4
Alaska	5.5	17.7	18.1	34.5
Arizona	3.1	11.8	12.4	44.4
Arkansas	2.9	31.9	15.4	46.5
California	6.6	30.1	15.5	45.1
Colorado	7.2	28.3	14.8	48.7
Connecticut	6.8	31.9	17.7	56.5
Delaware	3.5	30.3	9.4	43.8
District of Columbia	4.9	19.3	8.2	46.7
Florida	2.5	29.1	9.1	41.7
Georgia	3.5	20.8	12.7	37.9
Hawaii	1.2	25.9	11.1	57.4
Idaho	3.5	33.8	13.5	43.2
Illinois	5.0	25.6	11.5	61.3
Indiana	2.5	29.1	10.8	47.1
Iowa	3.8	26.3	13.8	44.1
Kansas	3.1	28.8	14.7	47.3
Kentucky	3.3	29.1	9.6	43.8
Louisiana	4.0	28.1	12.3	39.0

TABLE C.3B CONTINUED

State	Public welfare	Health and hospitals	Highways	Police and corrections
Maine	4.4	14.5	15.4	47.0
Maryland	5.3	29.6	7.9	45.0
Massachusetts	3.5	30.3	16.5	60.4
Michigan	5.6	22.0	14.6	44.6
Minnesota	5.5	26.5	15.0	43.3
Mississippi	2.6	32.9	12.1	34.5
Missouri	3.6	24.3	12.8	44.3
Montana	6.3	30.5	13.0	35.2
Nebraska	6.3	26.6	15.1	49.8
Nevada	5.2	28.5	8.1	46.0
New Hampshire	9.0	43.0	17.4	50.5
New Jersey	7.3	33.7	17.0	61.9
New Mexico	2.4	27.9	13.6	38.5
New York	5.1	28.5	17.3	62.2
North Carolina	5.0	33.0	13.7	39.6
North Dakota	6.1	45.1	7.1	36.4
Ohio	4.9	25.7	16.1	48.3
Oklahoma	3.4	31.0	10.8	41.4
Oregon	6.4	24.5	18.0	40.5
Pennsylvania	5.1	9.3	11.4	50.2
Rhode Island	3.9	40.2	16.8	52.3
South Carolina	2.8	25.1	14.0	46.2
South Dakota	8.3	30.8	8.6	36.5
Tennessee	3.6	33.6	12.8	40.8
Texas	3.2	30.4	10.6	46.0
Utah	4.6	31.7	6.5	37.6
Vermont	4.3	15.4	13.9	38.6
Virginia	5.3	21.7	11.1	42.5
Washington	7.0	23.8	17.4	48.6
West Virginia	3.3	25.7	14.4	33.2
Wisconsin	6.9	15.0	11.8	41.3
Wyoming	5.7	30.8	13.7	38.4

Source: Urban Institute calculations.

TABLE C.3C

State	Environment and housing	Government administration	Other
United States	18.6	54.2	27.0
Alabama	23.7	43.2	31.4
Alaska	24.0	36.2	13.8
Arizona	15.8	50.6	31.4
Arkansas	22.3	35.0	27.9
California	15.5	40.2	26.6
Colorado	18.2	44.9	25.6
Connecticut	13.0	41.1	15.8
Delaware	12.5	36.0	18.0
District of Columbia	13.5	75.7	28.7
Florida	13.2	45.5	22.9
Georgia	15.2	41.1	21.7

TABLE C.3 CONTINUED

State	Environment and housing	Government administration	Other
Hawaii	15.7	51.1	15.2
Idaho	20.1	47.8	24.2
Illinois	16.8	44.6	17.5
Indiana	10.5	38.3	23.1
Iowa	12.3	48.8	23.1
Kansas	17.6	45.8	28.5
Kentucky	16.2	37.5	26.2
Louisiana	10.8	38.6	15.6
Maine	13.4	48.7	16.6
Maryland	15.8	39.8	19.2
Massachusetts	11.3	58.5	15.7
Michigan	10.8	51.6	21.7
Minnesota	16.4	55.4	26.7
Mississippi	14.3	41.3	18.5
Missouri	14.1	53.2	21.1
Montana	17.5	37.0	19.8
Nebraska	18.4	48.7	51.2
Nevada	16.0	49.7	24.4
New Hampshire	13.9	40.1	20.6
New Jersey	19.3	70.6	15.9
New Mexico	17.9	39.7	25.5
New York	16.2	46.8	18.2
North Carolina	15.2	48.2	26.9
North Dakota	11.4	47.3	15.7
Ohio	15.1	40.1	30.0
Oklahoma	15.8	40.6	31.4
Oregon	15.4	42.4	26.7
Pennsylvania	15.7	41.1	21.3
Rhode Island	16.8	47.4	26.1
South Carolina	17.5	41.2	25.6
South Dakota	15.1	43.4	21.3
Tennessee	18.1	57.2	28.0
Texas	16.4	46.7	25.1
Utah	14.3	40.3	19.8
Vermont	14.4	57.4	24.2
Virginia	18.7	47.2	23.0
Washington	16.8	54.9	31.8
West Virginia	18.3	34.3	17.2
Wisconsin	14.5	49.2	22.1
Wyoming	16.2	33.1	17.1

Source: Urban Institute calculations.

TABLE C.4

Labor Cost Index*Percent of US median wage, by highest educational attainment*

State	All workers	Less than high school	High school	Some college	College	Graduate school
United States	100	100	100	100	100	100
Alabama	89	92	92	93	97	91
Alaska	118	114	111	125	111	112
Arizona	93	88	94	98	101	99
Arkansas	86	103	91	87	91	88
California	103	93	97	108	114	125
Colorado	105	104	103	101	103	99
Connecticut	123	107	115	118	124	123
Delaware	109	103	104	113	107	106
District of Columbia	150	102	108	109	130	134
Florida	88	87	89	93	90	93
Georgia	92	92	92	95	105	99
Hawaii	103	108	108	104	97	98
Idaho	83	102	82	82	83	97
Illinois	105	102	98	105	110	109
Indiana	92	96	100	95	95	95
Iowa	98	109	101	98	97	97
Kansas	96	107	95	95	92	92
Kentucky	89	92	93	93	91	85
Louisiana	91	93	98	93	99	89
Maine	90	104	96	93	87	83
Maryland	130	116	119	124	125	131
Massachusetts	122	111	114	114	118	116
Michigan	92	86	91	94	101	106
Minnesota	109	104	105	108	108	106
Mississippi	84	87	87	84	88	84
Missouri	90	87	95	93	91	87
Montana	85	89	88	83	77	84
Nebraska	96	107	98	96	90	93
Nevada	92	112	99	102	97	100
New Hampshire	115	124	115	112	109	103
New Jersey	128	107	116	123	128	132
New Mexico	88	85	92	87	90	92
New York	113	96	107	111	113	113
North Carolina	90	86	92	92	94	92
North Dakota	105	115	110	108	90	98
Ohio	95	97	98	96	102	100
Oklahoma	90	98	95	94	90	84
Oregon	91	91	97	91	91	92
Pennsylvania	103	103	103	101	104	106
Rhode Island	107	111	105	108	113	108
South Carolina	89	86	92	93	93	85
South Dakota	90	106	97	95	84	79
Tennessee	89	88	92	93	92	89

TABLE C.4 CONTINUED

State	All workers	Less than high school	High school	Some college	College	Graduate school
Texas	96	94	96	101	109	105
Utah	97	104	101	94	91	101
Vermont	98	104	103	100	88	84
Virginia	115	102	101	109	113	124
Washington	108	104	110	108	111	109
West Virginia	88	92	95	90	87	86
Wisconsin	100	101	103	98	100	99
Wyoming	102	110	115	99	90	98

Source: Urban Institute calculations.

TABLE C.5A

Input Cost Index

Relative to US average

State	Total direct general expenditure	Elementary/secondary education	Higher education
United States	100	100	100
Alabama	95	98	95
Alaska	108	107	106
Arizona	97	100	99
Arkansas	94	95	94
California	101	109	113
Colorado	102	102	100
Connecticut	110	115	112
Delaware	104	104	103
District of Columbia	122	118	118
Florida	95	94	97
Georgia	97	103	99
Hawaii	101	98	99
Idaho	93	90	98
Illinois	102	106	105
Indiana	96	97	98
Iowa	99	98	98
Kansas	98	95	96
Kentucky	95	95	92
Louisiana	96	100	94
Maine	96	92	91
Maryland	113	115	116
Massachusetts	109	111	108
Michigan	97	100	103
Minnesota	104	105	103
Mississippi	93	92	92
Missouri	96	94	93
Montana	94	86	92

TABLE C.5A CONTINUED

State	Total direct general expenditure	Elementary/secondary education	Higher education
Nebraska	98	94	96
Nevada	96	98	100
New Hampshire	106	106	102
New Jersey	112	118	117
New Mexico	95	94	96
New York	106	108	107
North Carolina	95	97	96
North Dakota	102	94	99
Ohio	98	101	100
Oklahoma	96	94	92
Oregon	96	95	96
Pennsylvania	101	102	103
Rhode Island	103	108	104
South Carolina	95	96	92
South Dakota	96	90	89
Tennessee	95	95	94
Texas	98	106	102
Utah	99	95	100
Vermont	99	92	92
Virginia	106	108	113
Washington	103	107	105
West Virginia	95	92	93
Wisconsin	100	100	99
Wyoming	101	94	99

Source: Urban Institute calculations.

TABLE C.5B

State	Public welfare	Health and hospitals	Highways
United States	100	100	100
Alabama	100	99	99
Alaska	101	105	105
Arizona	100	100	100
Arkansas	99	96	97
California	101	106	102
Colorado	100	101	100
Connecticut	102	111	104
Delaware	100	103	103
District of Columbia	102	113	102
Florida	99	96	99
Georgia	100	102	99
Hawaii	100	99	101
Idaho	99	93	96
Illinois	101	104	101
Indiana	100	98	99
Iowa	100	99	100

TABLE C.5B CONTINUED

State	Public welfare	Health and hospitals	Highways
Kansas	100	97	99
Kentucky	99	96	99
Louisiana	100	100	99
Maine	99	94	98
Maryland	102	111	105
Massachusetts	101	108	103
Michigan	100	100	99
Minnesota	101	103	102
Mississippi	99	95	97
Missouri	99	96	99
Montana	99	90	96
Nebraska	99	96	99
Nevada	100	99	100
New Hampshire	101	104	103
New Jersey	102	112	105
New Mexico	99	95	97
New York	101	106	102
North Carolina	100	98	98
North Dakota	99	95	102
Ohio	100	101	99
Oklahoma	99	96	99
Oregon	99	96	98
Pennsylvania	100	102	100
Rhode Island	101	106	102
South Carolina	100	97	99
South Dakota	99	93	99
Tennessee	99	96	99
Texas	101	104	100
Utah	99	96	99
Vermont	99	95	100
Virginia	101	106	102
Washington	101	105	102
West Virginia	99	94	98
Wisconsin	100	100	100
Wyoming	99	96	100

Source: Urban Institute calculations.

TABLE C.5C

State	Police and corrections	Environment and housing	Government administration
United States	100	100	100
Alabama	95	98	95
Alaska	119	106	118
Arizona	99	100	99
Arkansas	90	97	91
California	106	102	106
Colorado	101	100	101
Connecticut	113	104	113
Delaware	110	103	110

State	Police and corrections	Environment and housing	Government administration
District of Columbia	107	102	106
Florida	95	98	95
Georgia	96	99	96
Hawaii	103	101	103
Idaho	87	96	87
Illinois	104	101	103
Indiana	97	99	97
Iowa	98	100	99
Kansas	96	99	96
Kentucky	95	98	95
Louisiana	95	98	95
Maine	94	98	95
Maryland	118	106	117
Massachusetts	111	104	110
Michigan	95	98	95
Minnesota	106	102	105
Mississippi	88	96	88
Missouri	95	98	95
Montana	87	96	88
Nebraska	97	99	97
Nevada	101	100	101
New Hampshire	109	103	109
New Jersey	117	106	116
New Mexico	90	97	90
New York	108	103	108
North Carolina	94	98	94
North Dakota	106	102	106
Ohio	97	99	97
Oklahoma	96	99	96
Oregon	93	98	94
Pennsylvania	101	100	101
Rhode Island	106	102	106
South Carolina	95	98	95
South Dakota	96	99	97
Tennessee	95	98	95
Texas	101	100	101
Utah	95	98	95
Vermont	100	100	100
Virginia	107	102	107
Washington	106	102	106
West Virginia	93	98	93
Wisconsin	99	100	99
Wyoming	99	100	99

Source: Urban Institute calculations.

Appendix D. Detailed Results Tables

TABLE D.1

Actual Fiscal Gap (Revenue Minus Expenditure) and Federal Transfers, Per Capita

State	Actual fiscal gap	Transfers	Actual fiscal gap after transfers
United States	-\$1,960	\$1,863	-\$97
Alabama	-\$2,110	\$1,906	-\$204
Alaska	\$1,835	\$4,325	\$6,160
Arizona	-\$1,522	\$1,732	\$210
Arkansas	-\$2,143	\$2,126	-\$17
California	-\$2,378	\$1,725	-\$653
Colorado	-\$1,476	\$1,473	-\$3
Connecticut	-\$1,311	\$1,780	\$469
Delaware	-\$2,195	\$5,471	\$3,276
District of Columbia	-\$8,255	\$2,062	-\$6,193
Florida	-\$1,441	\$1,408	-\$33
Georgia	-\$1,633	\$1,534	-\$99
Hawaii	-\$1,955	\$1,904	-\$51
Idaho	-\$1,492	\$1,676	\$184
Illinois	-\$1,519	\$1,482	-\$37
Indiana	-\$1,393	\$1,700	\$307
Iowa	-\$2,136	\$2,192	\$56
Kansas	-\$1,261	\$1,501	\$240
Kentucky	-\$2,340	\$1,963	-\$377
Louisiana	-\$3,393	\$2,632	-\$761
Maine	-\$2,316	\$2,299	-\$17
Maryland	-\$2,316	\$1,952	-\$364
Massachusetts	-\$2,377	\$2,185	-\$192
Michigan	-\$1,789	\$2,006	\$217
Minnesota	-\$1,843	\$1,975	\$132
Mississippi	-\$2,781	\$2,768	-\$13
Missouri	-\$2,088	\$1,891	-\$197
Montana	-\$2,774	\$2,458	-\$316
Nebraska	-\$1,606	\$1,907	\$301
Nevada	-\$1,504	\$1,237	-\$267
New Hampshire	-\$1,768	\$1,398	-\$370
New Jersey	-\$1,627	\$1,628	\$1
New Mexico	-\$2,736	\$2,690	-\$46
New York	-\$2,805	\$2,820	\$15
North Carolina	-\$1,750	\$1,805	\$55
North Dakota	-\$351	\$2,819	\$2,468

TABLE D.1 CONTINUED

State	Actual fiscal gap	Transfers	Actual fiscal gap after transfers
Ohio	-\$1,912	\$2,011	\$99
Oklahoma	-\$1,525	\$2,052	\$527
Oregon	-\$2,180	\$2,287	\$107
Pennsylvania	-\$2,213	\$1,837	-\$376
Rhode Island	-\$1,577	\$2,373	\$796
South Carolina	-\$1,604	\$1,553	-\$51
South Dakota	-\$2,040	\$2,178	\$138
Tennessee	-\$1,953	\$1,861	-\$92
Texas	-\$1,598	\$1,597	-\$1
Utah	-\$2,203	\$1,805	-\$398
Vermont	-\$3,044	\$3,183	\$139
Virginia	-\$1,526	\$1,342	-\$184
Washington	-\$2,275	\$1,683	-\$592
West Virginia	-\$1,419	\$2,434	\$1,015
Wisconsin	-\$1,791	\$1,663	-\$128
Wyoming	-\$2,570	\$4,053	\$1,483

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.2

Fiscal Gap at Capacity (Revenue Capacity minus Expenditure Need) and Transfers, Per Capita

State	Fiscal gap at capacity	Transfers	Fiscal gap at capacity after transfers
United States	-\$1,960	\$1,863	-\$97
Alabama	-\$3,863	\$1,906	-\$1,957
Alaska	\$1,354	\$4,325	\$5,679
Arizona	-\$3,415	\$1,732	-\$1,683
Arkansas	-\$3,758	\$2,126	-\$1,632
California	-\$1,960	\$1,725	-\$235
Colorado	-\$1,147	\$1,473	\$326
Connecticut	\$383	\$1,780	\$2,163
Delaware	-\$517	\$5,471	\$4,954
District of Columbia	\$2,497	\$2,062	\$4,559
Florida	-\$2,344	\$1,408	-\$936
Georgia	-\$3,520	\$1,534	-\$1,986
Hawaii	\$112	\$1,904	\$2,016
Idaho	-\$2,923	\$1,676	-\$1,247
Illinois	-\$1,787	\$1,482	-\$305
Indiana	-\$2,718	\$1,700	-\$1,018
Iowa	-\$1,149	\$2,192	\$1,043
Kansas	-\$1,922	\$1,501	-\$421
Kentucky	-\$3,287	\$1,963	-\$1,324

TABLE D.2 CONTINUED

State	Fiscal gap at capacity	Transfers	Fiscal gap at capacity after transfers
Louisiana	-\$3,071	\$2,632	-\$439
Maine	-\$1,463	\$2,299	\$836
Maryland	-\$846	\$1,952	\$1,106
Massachusetts	\$234	\$2,185	\$2,419
Michigan	-\$3,105	\$2,006	-\$1,099
Minnesota	-\$1,141	\$1,975	\$834
Mississippi	-\$4,635	\$2,768	-\$1,867
Missouri	-\$2,499	\$1,891	-\$608
Montana	-\$1,353	\$2,458	\$1,105
Nebraska	-\$1,050	\$1,907	\$857
Nevada	-\$2,559	\$1,237	-\$1,322
New Hampshire	-\$186	\$1,398	\$1,212
New Jersey	-\$491	\$1,628	\$1,137
New Mexico	-\$3,422	\$2,690	-\$732
New York	-\$874	\$2,820	\$1,946
North Carolina	-\$2,598	\$1,805	-\$793
North Dakota	\$1,159	\$2,819	\$3,978
Ohio	-\$2,571	\$2,011	-\$560
Oklahoma	-\$2,840	\$2,052	-\$788
Oregon	-\$1,822	\$2,287	\$465
Pennsylvania	-\$1,696	\$1,837	\$141
Rhode Island	-\$1,569	\$2,373	\$804
South Carolina	-\$3,451	\$1,553	-\$1,898
South Dakota	-\$1,089	\$2,178	\$1,089
Tennessee	-\$2,939	\$1,861	-\$1,078
Texas	-\$2,821	\$1,597	-\$1,224
Utah	-\$2,717	\$1,805	-\$912
Vermont	-\$721	\$3,183	\$2,462
Virginia	-\$827	\$1,342	\$515
Washington	-\$1,266	\$1,683	\$417
West Virginia	-\$2,850	\$2,434	-\$416
Wisconsin	-\$1,919	\$1,663	-\$256
Wyoming	\$1,367	\$4,053	\$5,420

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.3

Fiscal Gap after Transfers vs. Fiscal Gap at Capacity after Transfers, Per Capita

State	Actual fiscal gap after transfers	Fiscal gap at capacity after transfers
United States	-\$97	-\$97
Alabama	-\$204	-\$1,957
Alaska	\$6,160	\$5,679
Arizona	\$210	-\$1,683

TABLE D.3 CONTINUED

State	Actual fiscal gap after transfers	Fiscal gap at capacity after transfers
Arkansas	-\$17	-\$1,632
California	-\$653	-\$235
Colorado	-\$3	\$326
Connecticut	\$469	\$2,163
Delaware	\$3,276	\$4,954
District of Columbia	-\$6,193	\$4,559
Florida	-\$33	-\$936
Georgia	-\$99	-\$1,986
Hawaii	-\$51	\$2,016
Idaho	\$184	-\$1,247
Illinois	-\$37	-\$305
Indiana	\$307	-\$1,018
Iowa	\$56	\$1,043
Kansas	\$240	-\$421
Kentucky	-\$377	-\$1,324
Louisiana	-\$761	-\$439
Maine	-\$17	\$836
Maryland	-\$364	\$1,106
Massachusetts	-\$192	\$2,419
Michigan	\$217	-\$1,099
Minnesota	\$132	\$834
Mississippi	-\$13	-\$1,867
Missouri	-\$197	-\$608
Montana	-\$316	\$1,105
Nebraska	\$301	\$857
Nevada	-\$267	-\$1,322
New Hampshire	-\$370	\$1,212
New Jersey	\$1	\$1,137
New Mexico	-\$46	-\$732
New York	\$15	\$1,946
North Carolina	\$55	-\$793
North Dakota	\$2,468	\$3,978
Ohio	\$99	-\$560
Oklahoma	\$527	-\$788
Oregon	\$107	\$465
Pennsylvania	-\$376	\$141
Rhode Island	\$796	\$804
South Carolina	-\$51	-\$1,898
South Dakota	\$138	\$1,089
Tennessee	-\$92	-\$1,078
Texas	-\$1	-\$1,224
Utah	-\$398	-\$912
Vermont	\$139	\$2,462
Virginia	-\$184	\$515
Washington	-\$592	\$417
West Virginia	\$1,015	-\$416
Wisconsin	-\$128	-\$256
Wyoming	\$1,483	\$5,420

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.4

Capacity versus Need, Per Capita

State	Revenue capacity	Expenditure need	Fiscal gap at capacity
United States	\$6,483	\$8,443	-\$1,960
Alabama	\$5,229	\$9,092	-\$3,863
Alaska	\$9,567	\$8,213	\$1,354
Arizona	\$5,344	\$8,759	-\$3,415
Arkansas	\$5,259	\$9,017	-\$3,758
California	\$7,007	\$8,967	-\$1,960
Colorado	\$6,930	\$8,077	-\$1,147
Connecticut	\$8,694	\$8,311	\$383
Delaware	\$7,731	\$8,248	-\$517
District of Columbia	\$11,404	\$8,907	\$2,497
Florida	\$5,854	\$8,198	-\$2,344
Georgia	\$5,437	\$8,957	-\$3,520
Hawaii	\$7,427	\$7,315	\$112
Idaho	\$5,287	\$8,210	-\$2,923
Illinois	\$6,685	\$8,472	-\$1,787
Indiana	\$5,624	\$8,342	-\$2,718
Iowa	\$6,990	\$8,139	-\$1,149
Kansas	\$6,332	\$8,254	-\$1,922
Kentucky	\$5,353	\$8,640	-\$3,287
Louisiana	\$5,922	\$8,993	-\$3,071
Maine	\$6,366	\$7,829	-\$1,463
Maryland	\$7,625	\$8,471	-\$846
Massachusetts	\$8,472	\$8,238	\$234
Michigan	\$5,527	\$8,632	-\$3,105
Minnesota	\$7,038	\$8,179	-\$1,141
Mississippi	\$4,776	\$9,411	-\$4,635
Missouri	\$5,916	\$8,415	-\$2,499
Montana	\$6,780	\$8,133	-\$1,353
Nebraska	\$7,078	\$8,128	-\$1,050
Nevada	\$5,767	\$8,326	-\$2,559
New Hampshire	\$7,575	\$7,761	-\$186
New Jersey	\$7,950	\$8,441	-\$491
New Mexico	\$5,599	\$9,021	-\$3,422
New York	\$7,659	\$8,533	-\$874
North Carolina	\$5,938	\$8,536	-\$2,598
North Dakota	\$10,229	\$9,070	\$1,159
Ohio	\$5,751	\$8,322	-\$2,571
Oklahoma	\$5,847	\$8,687	-\$2,840
Oregon	\$6,131	\$7,953	-\$1,822
Pennsylvania	\$6,442	\$8,138	-\$1,696
Rhode Island	\$6,866	\$8,435	-\$1,569
South Carolina	\$5,218	\$8,669	-\$3,451
South Dakota	\$7,495	\$8,584	-\$1,089
Tennessee	\$5,571	\$8,510	-\$2,939
Texas	\$6,213	\$9,034	-\$2,821
Utah	\$5,506	\$8,223	-\$2,717
Vermont	\$7,008	\$7,729	-\$721
Virginia	\$7,467	\$8,294	-\$827
Washington	\$6,994	\$8,260	-\$1,266

TABLE D.4 CONTINUED

State	Revenue capacity	Expenditure need	Fiscal gap at capacity
West Virginia	\$5,461	\$8,311	-\$2,850
Wisconsin	\$6,121	\$8,040	-\$1,919
Wyoming	\$9,628	\$8,261	\$1,367

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.5

Total Revenue

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$6,483		\$6,483	
Alabama	\$5,229	49	\$5,127	46
Alaska	\$9,567	4	\$19,194	1
Arizona	\$5,344	46	\$4,920	49
Arkansas	\$5,259	48	\$5,107	47
California	\$7,007	18	\$7,071	13
Colorado	\$6,930	21	\$6,407	23
Connecticut	\$8,694	5	\$8,374	6
Delaware	\$7,731	8	\$7,816	8
District of Columbia	\$11,404	1	\$12,293	2
Florida	\$5,854	34	\$5,605	35
Georgia	\$5,437	44	\$4,942	48
Hawaii	\$7,427	14	\$7,384	11
Idaho	\$5,287	47	\$4,721	51
Illinois	\$6,685	24	\$6,753	17
Indiana	\$5,624	38	\$5,651	34
Iowa	\$6,990	20	\$6,981	15
Kansas	\$6,332	27	\$6,709	18
Kentucky	\$5,353	45	\$5,156	45
Louisiana	\$5,922	32	\$5,903	30
Maine	\$6,366	26	\$6,179	27
Maryland	\$7,625	10	\$7,022	14
Massachusetts	\$8,472	6	\$7,647	9
Michigan	\$5,527	41	\$5,748	32
Minnesota	\$7,038	16	\$7,229	12
Mississippi	\$4,776	51	\$5,308	42
Missouri	\$5,916	33	\$5,173	44
Montana	\$6,780	23	\$5,417	40
Nebraska	\$7,078	15	\$6,436	22
Nevada	\$5,767	36	\$5,394	41
New Hampshire	\$7,575	11	\$5,819	31
New Jersey	\$7,950	7	\$7,997	7
New Mexico	\$5,599	39	\$6,024	29
New York	\$7,659	9	\$10,329	4
North Carolina	\$5,938	31	\$5,596	36
North Dakota	\$10,229	2	\$9,928	5
Ohio	\$5,751	37	\$6,070	28
Oklahoma	\$5,847	35	\$5,463	38
Oregon	\$6,131	29	\$6,258	25
Pennsylvania	\$6,442	25	\$6,354	24

TABLE D.5 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Rhode Island	\$6,866	22	\$7,401	10
South Carolina	\$5,218	50	\$5,687	33
South Dakota	\$7,495	12	\$5,283	43
Tennessee	\$5,571	40	\$4,739	50
Texas	\$6,213	28	\$5,534	37
Utah	\$5,506	42	\$5,460	39
Vermont	\$7,008	17	\$6,970	16
Virginia	\$7,467	13	\$6,238	26
Washington	\$6,994	19	\$6,542	19
West Virginia	\$5,461	43	\$6,453	21
Wisconsin	\$6,121	30	\$6,527	20
Wyoming	\$9,628	3	\$10,823	3

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.6

General Sales Tax

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$1,000		\$1,000	
Alabama	\$827	49	\$862	32
Alaska	\$1,239	4	\$276	47
Arizona	\$917	37	\$1,309	10
Arkansas	\$798	50	\$1,269	13
California	\$1,036	21	\$1,076	18
Colorado	\$1,048	19	\$1,044	21
Connecticut	\$1,228	6	\$1,053	19
Delaware	\$1,128	10	\$0	48
District of Columbia	\$1,485	1	\$1,750	4
Florida	\$978	26	\$1,097	17
Georgia	\$877	42	\$923	26
Hawaii	\$1,094	14	\$2,074	1
Idaho	\$875	44	\$768	38
Illinois	\$1,033	22	\$749	40
Indiana	\$919	35	\$1,013	24
Iowa	\$953	31	\$1,045	20
Kansas	\$929	34	\$1,287	11
Kentucky	\$870	46	\$696	42
Louisiana	\$887	39	\$1,446	6
Maine	\$1,105	12	\$801	36
Maryland	\$1,125	11	\$692	43
Massachusetts	\$1,289	2	\$763	39
Michigan	\$970	29	\$904	28
Minnesota	\$1,095	13	\$941	25
Mississippi	\$792	51	\$1,029	22
Missouri	\$959	30	\$866	31
Montana	\$1,018	23	\$0	48
Nebraska	\$992	25	\$1,017	23
Nevada	\$937	33	\$1,364	9

TABLE D.6 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
New Hampshire	\$1,242	3	\$0	48
New Jersey	\$1,227	7	\$913	27
New Mexico	\$910	38	\$1,405	7
New York	\$1,152	9	\$1,272	12
North Carolina	\$858	48	\$802	35
North Dakota	\$1,235	5	\$1,827	3
Ohio	\$950	32	\$874	30
Oklahoma	\$871	45	\$1,129	16
Oregon	\$977	27	\$0	48
Pennsylvania	\$1,043	20	\$769	37
Rhode Island	\$1,071	16	\$806	34
South Carolina	\$876	43	\$699	41
South Dakota	\$998	24	\$1,369	8
Tennessee	\$878	40	\$1,230	14
Texas	\$918	36	\$1,171	15
Utah	\$861	47	\$875	29
Vermont	\$1,183	8	\$561	46
Virginia	\$1,058	17	\$568	45
Washington	\$1,077	15	\$1,906	2
West Virginia	\$877	41	\$688	44
Wisconsin	\$976	28	\$808	33
Wyoming	\$1,050	18	\$1,715	5

Sources: Bureau Economic Analysis Personal Consumption Expenditures; US Census of Governments.

TABLE D.7

Property Taxes

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$1,423		\$1,423	
Alabama	\$1,004	49	\$530	51
Alaska	\$1,838	13	\$2,083	9
Arizona	\$1,091	39	\$1,044	33
Arkansas	\$1,021	47	\$661	49
California	\$1,783	17	\$1,355	22
Colorado	\$1,639	22	\$1,333	26
Connecticut	\$1,942	8	\$2,623	3
Delaware	\$1,516	25	\$759	46
District of Columbia	\$3,399	1	\$2,957	1
Florida	\$1,167	34	\$1,272	28
Georgia	\$1,040	43	\$1,045	32
Hawaii	\$2,453	2	\$941	38
Idaho	\$1,237	31	\$873	41
Illinois	\$1,463	26	\$1,984	11
Indiana	\$1,117	36	\$994	36
Iowa	\$1,971	6	\$1,475	17
Kansas	\$1,368	28	\$1,360	21
Kentucky	\$1,024	45	\$714	47
Louisiana	\$1,033	44	\$790	44
Maine	\$1,722	19	\$1,789	12

TABLE D.7 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Maryland	\$1,811	14	\$1,522	16
Massachusetts	\$2,035	5	\$2,055	10
Michigan	\$1,016	48	\$1,343	23
Minnesota	\$1,666	21	\$1,461	18
Mississippi	\$871	51	\$868	42
Missouri	\$1,207	32	\$955	37
Montana	\$1,939	9	\$1,372	20
Nebraska	\$1,871	12	\$1,592	14
Nevada	\$1,023	46	\$1,022	35
New Hampshire	\$1,799	15	\$2,593	4
New Jersey	\$1,791	16	\$2,921	2
New Mexico	\$1,157	35	\$684	48
New York	\$1,708	20	\$2,427	5
North Carolina	\$1,540	24	\$912	40
North Dakota	\$2,314	3	\$1,121	31
Ohio	\$1,072	40	\$1,174	30
Oklahoma	\$1,063	41	\$601	50
Oregon	\$1,432	27	\$1,291	27
Pennsylvania	\$1,267	30	\$1,337	25
Rhode Island	\$1,636	23	\$2,229	7
South Carolina	\$1,045	42	\$1,034	34
South Dakota	\$2,284	4	\$1,208	29
Tennessee	\$1,116	37	\$799	43
Texas	\$1,098	38	\$1,545	15
Utah	\$1,205	33	\$938	39
Vermont	\$1,886	11	\$2,196	8
Virginia	\$1,955	7	\$1,384	19
Washington	\$1,762	18	\$1,338	24
West Virginia	\$898	50	\$773	45
Wisconsin	\$1,326	29	\$1,756	13
Wyoming	\$1,910	10	\$2,289	6

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.8

Individual Income Taxes

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$978		\$978	
Alabama	\$753	47	\$647	37
Alaska	\$1,439	2	\$0	45
Arizona	\$779	45	\$472	42
Arkansas	\$781	44	\$814	32
California	\$1,039	15	\$1,446	8
Colorado	\$1,018	20	\$939	26
Connecticut	\$1,382	4	\$2,051	3
Delaware	\$1,254	6	\$1,289	9
District of Columbia	\$1,894	1	\$2,347	2
Florida	\$838	37	\$0	45

TABLE D.8 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Georgia	\$821	38	\$821	31
Hawaii	\$972	24	\$1,106	16
Idaho	\$715	50	\$760	33
Illinois	\$1,034	16	\$1,205	12
Indiana	\$884	31	\$933	27
Iowa	\$965	25	\$1,016	20
Kansas	\$952	26	\$1,003	22
Kentucky	\$767	46	\$1,058	19
Louisiana	\$978	23	\$537	40
Maine	\$782	43	\$1,085	17
Maryland	\$1,203	10	\$1,948	4
Massachusetts	\$1,238	8	\$1,796	5
Michigan	\$793	42	\$743	34
Minnesota	\$1,030	19	\$1,485	7
Mississippi	\$668	51	\$503	41
Missouri	\$855	35	\$905	28
Montana	\$816	39	\$896	29
Nebraska	\$1,047	14	\$991	23
Nevada	\$911	28	\$0	45
New Hampshire	\$1,053	13	\$62	43
New Jersey	\$1,226	9	\$1,254	10
New Mexico	\$796	41	\$552	39
New York	\$1,252	7	\$2,422	1
North Carolina	\$852	36	\$1,065	18
North Dakota	\$1,303	5	\$616	38
Ohio	\$880	32	\$1,163	14
Oklahoma	\$859	34	\$727	35
Oregon	\$998	21	\$1,494	6
Pennsylvania	\$948	27	\$1,121	15
Rhode Island	\$989	22	\$1,015	21
South Carolina	\$727	49	\$656	36
South Dakota	\$1,033	17	\$0	45
Tennessee	\$810	40	\$28	44
Texas	\$1,033	18	\$0	45
Utah	\$865	33	\$864	30
Vermont	\$899	30	\$956	24
Virginia	\$1,081	11	\$1,247	11
Washington	\$1,077	12	\$0	45
West Virginia	\$728	48	\$946	25
Wisconsin	\$902	29	\$1,181	13
Wyoming	\$1,416	3	\$0	45

Sources: US Treasury Department Total Taxable Resources; US Census of Governments.

TABLE D.9

Corporate Income Taxes

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$156		\$156	
Alabama	\$122	35	\$86	39
Alaska	\$181	10	\$907	1
Arizona	\$118	40	\$99	36
Arkansas	\$122	36	\$137	21
California	\$165	16	\$209	10
Colorado	\$160	18	\$95	37
Connecticut	\$239	2	\$175	12
Delaware	\$230	3	\$292	7
District of Columbia	\$387	1	\$734	2
Florida	\$116	43	\$104	34
Georgia	\$147	25	\$60	44
Hawaii	\$122	37	\$58	45
Idaho	\$85	51	\$118	30
Illinois	\$184	8	\$271	8
Indiana	\$136	31	\$122	29
Iowa	\$166	15	\$138	20
Kansas	\$172	12	\$110	32
Kentucky	\$133	32	\$157	17
Louisiana	\$162	17	\$63	42
Maine	\$102	47	\$175	13
Maryland	\$140	29	\$149	19
Massachusetts	\$210	4	\$301	6
Michigan	\$151	21	\$81	40
Minnesota	\$182	9	\$198	11
Mississippi	\$97	48	\$133	23
Missouri	\$147	26	\$63	43
Montana	\$86	50	\$132	24
Nebraska	\$167	14	\$126	26
Nevada	\$117	42	\$0	48
New Hampshire	\$142	28	\$395	4
New Jersey	\$205	5	\$217	9
New Mexico	\$94	49	\$135	22
New York	\$179	11	\$537	3
North Carolina	\$132	33	\$125	27
North Dakota	\$188	6	\$307	5
Ohio	\$155	19	\$30	47
Oklahoma	\$139	30	\$117	31
Oregon	\$120	38	\$124	28
Pennsylvania	\$147	24	\$168	15
Rhode Island	\$119	39	\$130	25
South Carolina	\$109	45	\$54	46
South Dakota	\$117	41	\$72	41
Tennessee	\$146	27	\$173	14
Texas	\$185	7	\$0	48
Utah	\$126	34	\$91	38
Vermont	\$111	44	\$154	18
Virginia	\$170	13	\$102	35

TABLE D.9 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Washington	\$154	20	\$0	48
West Virginia	\$103	46	\$104	33
Wisconsin	\$148	23	\$163	16
Wyoming	\$150	22	\$0	48

Sources: US Census Bureau (receipts and payroll); US Census of Governments.

TABLE D.10

General Charges

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$1,358		\$1,358	
Alabama	\$1,105	44	\$1,733	5
Alaska	\$1,603	8	\$1,886	4
Arizona	\$1,128	42	\$1,065	43
Arkansas	\$1,113	43	\$1,066	42
California	\$1,460	12	\$1,595	12
Colorado	\$1,423	15	\$1,605	10
Connecticut	\$1,924	2	\$824	51
Delaware	\$1,372	21	\$1,568	14
District of Columbia	\$2,115	1	\$1,027	46
Florida	\$1,265	29	\$1,500	17
Georgia	\$1,142	41	\$1,175	31
Hawaii	\$1,365	22	\$1,600	11
Idaho	\$1,069	50	\$1,179	30
Illinois	\$1,413	17	\$942	49
Indiana	\$1,165	40	\$1,369	23
Iowa	\$1,333	26	\$1,939	3
Kansas	\$1,341	24	\$1,664	8
Kentucky	\$1,098	46	\$1,170	33
Louisiana	\$1,243	30	\$1,394	22
Maine	\$1,214	33	\$979	48
Maryland	\$1,628	7	\$1,058	44
Massachusetts	\$1,740	3	\$1,134	37
Michigan	\$1,185	39	\$1,434	20
Minnesota	\$1,450	14	\$1,307	25
Mississippi	\$1,016	51	\$1,705	6
Missouri	\$1,224	32	\$1,147	35
Montana	\$1,199	36	\$1,095	41
Nebraska	\$1,398	19	\$1,463	19
Nevada	\$1,209	34	\$1,102	39
New Hampshire	\$1,550	10	\$993	47
New Jersey	\$1,691	5	\$1,164	34
New Mexico	\$1,091	47	\$1,101	40
New York	\$1,643	6	\$1,399	21
North Carolina	\$1,185	38	\$1,562	15
North Dakota	\$1,699	4	\$1,581	13
Ohio	\$1,237	31	\$1,345	24
Oklahoma	\$1,274	28	\$1,270	28

TABLE D.10 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Oregon	\$1,199	37	\$1,660	9
Pennsylvania	\$1,404	18	\$1,280	26
Rhode Island	\$1,413	16	\$1,047	45
South Carolina	\$1,088	48	\$1,980	2
South Dakota	\$1,374	20	\$930	50
Tennessee	\$1,200	35	\$1,131	38
Texas	\$1,334	25	\$1,142	36
Utah	\$1,104	45	\$1,559	16
Vermont	\$1,358	23	\$1,174	32
Virginia	\$1,513	11	\$1,463	18
Washington	\$1,452	13	\$1,698	7
West Virginia	\$1,085	49	\$1,232	29
Wisconsin	\$1,302	27	\$1,273	27
Wyoming	\$1,599	9	\$2,560	1

Sources: Bureau of Economic Analysis Personal Income; US Census of Governments.

TABLE D.11

Motor Fuel Taxes

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$132		\$132	
Alabama	\$165	11	\$130	27
Alaska	\$132	32	\$56	50
Arizona	\$124	38	\$137	24
Arkansas	\$167	9	\$158	14
California	\$111	47	\$146	19
Colorado	\$123	39	\$121	34
Connecticut	\$115	44	\$133	25
Delaware	\$129	34	\$123	32
District of Columbia	\$37	51	\$36	51
Florida	\$120	42	\$161	13
Georgia	\$143	25	\$103	44
Hawaii	\$87	49	\$119	35
Idaho	\$142	27	\$148	17
Illinois	\$114	45	\$113	39
Indiana	\$157	15	\$125	30
Iowa	\$172	6	\$143	20
Kansas	\$146	21	\$151	16
Kentucky	\$162	14	\$180	6
Louisiana	\$153	17	\$125	29
Maine	\$152	18	\$182	5
Maryland	\$133	31	\$124	31
Massachusetts	\$116	43	\$99	45
Michigan	\$129	33	\$96	46
Minnesota	\$143	26	\$158	15
Mississippi	\$180	5	\$142	21
Missouri	\$163	13	\$118	36
Montana	\$185	4	\$211	2

TABLE D.11 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Nebraska	\$166	10	\$162	12
Nevada	\$122	41	\$137	23
New Hampshire	\$145	22	\$109	42
New Jersey	\$133	30	\$61	49
New Mexico	\$163	12	\$113	40
New York	\$80	50	\$82	47
North Carolina	\$126	35	\$191	4
North Dakota	\$282	2	\$292	1
Ohio	\$134	29	\$146	18
Oklahoma	\$171	7	\$116	37
Oregon	\$124	37	\$141	22
Pennsylvania	\$122	40	\$162	11
Rhode Island	\$96	48	\$77	48
South Carolina	\$170	8	\$113	41
South Dakota	\$200	3	\$163	10
Tennessee	\$150	19	\$130	28
Texas	\$157	16	\$122	33
Utah	\$126	36	\$130	26
Vermont	\$146	20	\$173	7
Virginia	\$144	24	\$107	43
Washington	\$113	46	\$171	9
West Virginia	\$144	23	\$208	3
Wisconsin	\$136	28	\$172	8
Wyoming	\$311	1	\$115	38

Sources: Federal Highway Administration; US Census of Governments.

TABLE D.12

Cigarette Taxes

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$59		\$59	
Alabama	\$88	11	\$32	43
Alaska	\$54	35	\$130	3
Arizona	\$33	47	\$49	33
Arkansas	\$79	16	\$84	16
California	\$33	46	\$24	48
Colorado	\$53	36	\$40	38
Connecticut	\$44	41	\$116	6
Delaware	\$111	5	\$132	2
District of Columbia	\$26	50	\$56	31
Florida	\$57	29	\$63	26
Georgia	\$69	20	\$23	49
Hawaii	\$39	44	\$88	12
Idaho	\$57	30	\$30	45
Illinois	\$61	25	\$58	29
Indiana	\$87	13	\$71	22
Iowa	\$64	23	\$73	20
Kansas	\$56	31	\$36	42

TABLE D.12 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Kentucky	\$131	2	\$63	27
Louisiana	\$94	7	\$29	47
Maine	\$64	22	\$105	8
Maryland	\$45	40	\$70	23
Massachusetts	\$44	42	\$86	15
Michigan	\$61	24	\$98	9
Minnesota	\$50	37	\$78	17
Mississippi	\$87	12	\$53	32
Missouri	\$117	4	\$20	50
Montana	\$60	27	\$87	13
Nebraska	\$69	21	\$36	40
Nevada	\$56	32	\$37	39
New Hampshire	\$123	3	\$163	1
New Jersey	\$41	43	\$89	10
New Mexico	\$35	45	\$36	41
New York	\$24	51	\$87	14
North Carolina	\$79	17	\$30	46
North Dakota	\$96	6	\$40	37
Ohio	\$73	18	\$75	19
Oklahoma	\$93	9	\$77	18
Oregon	\$58	28	\$66	25
Pennsylvania	\$72	19	\$88	11
Rhode Island	\$47	39	\$126	5
South Carolina	\$81	14	\$6	51
South Dakota	\$56	33	\$72	21
Tennessee	\$89	10	\$43	36
Texas	\$48	38	\$56	30
Utah	\$30	48	\$43	35
Vermont	\$60	26	\$128	4
Virginia	\$94	8	\$32	44
Washington	\$26	49	\$68	24
West Virginia	\$138	1	\$59	28
Wisconsin	\$54	34	\$114	7
Wyoming	\$80	15	\$45	34

Sources: Orzechowski and Walker (2012); US Census of Governments.

TABLE D.13

Alcohol Taxes

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$47		\$47	
Alabama	\$46	34	\$99	12
Alaska	\$50	25	\$67	18
Arizona	\$48	31	\$10	45
Arkansas	\$39	48	\$18	34
California	\$44	37	\$9	47
Colorado	\$50	23	\$7	49
Connecticut	\$42	43	\$17	35

TABLE D.13 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Delaware	\$61	7	\$19	33
District of Columbia	\$63	5	\$8	48
Florida	\$55	11	\$27	28
Georgia	\$41	44	\$31	27
Hawaii	\$53	14	\$35	25
Idaho	\$47	32	\$85	14
Illinois	\$48	30	\$26	31
Indiana	\$38	50	\$7	50
Iowa	\$53	15	\$85	15
Kansas	\$41	45	\$41	23
Kentucky	\$39	49	\$27	30
Louisiana	\$54	12	\$13	40
Maine	\$57	10	\$13	41
Maryland	\$40	47	\$50	21
Massachusetts	\$48	29	\$12	44
Michigan	\$45	35	\$102	11
Minnesota	\$50	24	\$74	17
Mississippi	\$51	20	\$105	9
Missouri	\$50	26	\$6	51
Montana	\$67	3	\$112	7
Nebraska	\$53	17	\$15	36
Nevada	\$61	6	\$15	38
New Hampshire	\$86	1	\$430	1
New Jersey	\$42	42	\$15	37
New Mexico	\$49	27	\$20	32
New York	\$41	46	\$13	39
North Carolina	\$44	38	\$103	10
North Dakota	\$70	2	\$12	43
Ohio	\$48	28	\$84	16
Oklahoma	\$44	39	\$27	29
Oregon	\$52	19	\$124	5
Pennsylvania	\$54	13	\$158	3
Rhode Island	\$53	16	\$12	42
South Carolina	\$51	22	\$33	26
South Dakota	\$59	9	\$51	20
Tennessee	\$43	40	\$45	22
Texas	\$51	21	\$36	24
Utah	\$26	51	\$110	8
Vermont	\$66	4	\$114	6
Virginia	\$44	36	\$99	13
Washington	\$43	41	\$139	4
West Virginia	\$47	33	\$61	19
Wisconsin	\$60	8	\$10	46
Wyoming	\$52	18	\$165	2

Sources: National Institute on Alcohol Abuse and Alcoholism; US Census of Governments.

TABLE D.14

Insurance Taxes

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$56		\$56	
Alabama	\$40	48	\$58	29
Alaska	\$56	19	\$84	9
Arizona	\$42	42	\$65	19
Arkansas	\$39	49	\$53	33
California	\$42	43	\$63	20
Colorado	\$55	21	\$38	41
Connecticut	\$99	3	\$62	22
Delaware	\$573	1	\$100	2
District of Columbia	\$89	4	\$140	1
Florida	\$59	17	\$38	42
Georgia	\$46	37	\$73	14
Hawaii	\$53	25	\$88	6
Idaho	\$38	50	\$44	39
Illinois	\$52	26	\$29	48
Indiana	\$50	28	\$31	45
Iowa	\$103	2	\$33	44
Kansas	\$65	13	\$58	30
Kentucky	\$45	39	\$87	7
Louisiana	\$54	23	\$78	13
Maine	\$50	30	\$82	10
Maryland	\$54	24	\$73	15
Massachusetts	\$68	8	\$51	34
Michigan	\$65	12	\$29	47
Minnesota	\$60	15	\$67	18
Mississippi	\$42	44	\$63	21
Missouri	\$55	20	\$45	38
Montana	\$48	31	\$70	16
Nebraska	\$65	11	\$25	51
Nevada	\$40	47	\$86	8
New Hampshire	\$55	22	\$56	32
New Jersey	\$71	7	\$60	27
New Mexico	\$38	51	\$57	31
New York	\$83	5	\$68	17
North Carolina	\$47	32	\$49	35
North Dakota	\$76	6	\$61	25
Ohio	\$52	27	\$41	40
Oklahoma	\$46	35	\$60	26
Oregon	\$43	41	\$26	50
Pennsylvania	\$66	9	\$62	24
Rhode Island	\$60	16	\$89	5
South Carolina	\$45	40	\$31	46
South Dakota	\$66	10	\$80	11
Tennessee	\$46	36	\$99	3
Texas	\$46	38	\$58	28
Utah	\$40	46	\$37	43
Vermont	\$61	14	\$94	4
Virginia	\$47	33	\$48	36

TABLE D.14 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Washington	\$40	45	\$62	23
West Virginia	\$47	34	\$78	12
Wisconsin	\$56	18	\$29	49
Wyoming	\$50	29	\$45	37

Sources: American Council of Life Insurers, Insurance Information Institute; US Census of Governments.

TABLE D.15

Severance Taxes

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$55		\$55	
Alabama	\$47	19	\$25	17
Alaska	\$1,568	1	\$7,919	1
Arizona	\$61	16	\$6	23
Arkansas	\$75	15	\$28	16
California	\$32	22	\$1	29
Colorado	\$112	12	\$37	15
Connecticut	\$2	46	\$0	34
Delaware	\$1	50	\$0	36
District of Columbia	\$0	51	\$0	36
Florida	\$10	32	\$3	27
Georgia	\$7	35	\$0	36
Hawaii	\$4	43	\$0	36
Idaho	\$22	23	\$5	24
Illinois	\$17	27	\$0	36
Indiana	\$22	24	\$0	32
Iowa	\$12	31	\$0	36
Kansas	\$99	13	\$46	12
Kentucky	\$79	14	\$79	11
Louisiana	\$172	10	\$192	8
Maine	\$5	39	\$0	36
Maryland	\$3	44	\$0	36
Massachusetts	\$2	49	\$0	36
Michigan	\$16	28	\$6	22
Minnesota	\$41	20	\$9	19
Mississippi	\$50	17	\$39	13
Missouri	\$22	26	\$0	35
Montana	\$217	6	\$304	6
Nebraska	\$15	29	\$3	26
Nevada	\$198	7	\$110	10
New Hampshire	\$6	36	\$0	36
New Jersey	\$2	48	\$0	36
New Mexico	\$307	5	\$368	4
New York	\$3	45	\$0	36
North Carolina	\$5	41	\$0	33
North Dakota	\$1,489	3	\$2,442	2
Ohio	\$13	30	\$1	30
Oklahoma	\$175	8	\$222	7

TABLE D.15 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Oregon	\$4	42	\$4	25
Pennsylvania	\$47	18	\$0	36
Rhode Island	\$2	47	\$0	36
South Carolina	\$5	38	\$0	36
South Dakota	\$33	21	\$16	18
Tennessee	\$9	34	\$1	28
Texas	\$172	9	\$140	9
Utah	\$136	11	\$38	14
Vermont	\$9	33	\$0	36
Virginia	\$22	25	\$7	20
Washington	\$5	40	\$7	21
West Virginia	\$313	4	\$338	5
Wisconsin	\$6	37	\$1	31
Wyoming	\$1,534	2	\$1,679	3

Sources: US Energy Information Administration, US Department of Interior; US Census of Governments.

TABLE D.16

Estate, Inheritance, and Gift Taxes

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$16		\$16	
Alabama	\$8	41	\$0	28
Alaska	\$12	20	\$0	43
Arizona	\$11	27	\$0	33
Arkansas	\$12	24	\$0	43
California	\$28	4	\$0	43
Colorado	\$7	44	\$0	30
Connecticut	\$25	6	\$49	5
Delaware	\$11	25	\$13	20
District of Columbia	\$93	1	\$162	1
Florida	\$25	5	\$0	36
Georgia	\$9	34	\$0	40
Hawaii	\$10	33	\$10	21
Idaho	\$6	47	\$0	37
Illinois	\$17	12	\$18	18
Indiana	\$10	32	\$27	12
Iowa	\$13	19	\$26	14
Kansas	\$10	29	\$0	25
Kentucky	\$6	48	\$9	22
Louisiana	\$8	42	\$0	26
Maine	\$12	21	\$34	8
Maryland	\$11	28	\$33	9
Massachusetts	\$23	9	\$44	6
Michigan	\$9	37	\$0	35
Minnesota	\$12	22	\$31	10
Mississippi	\$6	50	\$0	39
Missouri	\$9	35	\$0	34
Montana	\$8	40	\$0	42

TABLE D.16 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Nebraska	\$14	16	\$30	11
Nevada	\$32	2	\$0	43
New Hampshire	\$16	14	\$0	43
New Jersey	\$18	11	\$72	2
New Mexico	\$7	45	\$0	43
New York	\$23	8	\$55	4
North Carolina	\$9	36	\$6	23
North Dakota	\$30	3	\$0	41
Ohio	\$10	31	\$24	15
Oklahoma	\$8	38	\$0	32
Oregon	\$16	13	\$26	13
Pennsylvania	\$13	18	\$63	3
Rhode Island	\$13	17	\$40	7
South Carolina	\$8	43	\$0	31
South Dakota	\$11	26	\$0	43
Tennessee	\$5	51	\$23	16
Texas	\$10	30	\$0	43
Utah	\$6	46	\$0	43
Vermont	\$8	39	\$21	17
Virginia	\$20	10	\$1	24
Washington	\$12	23	\$15	19
West Virginia	\$6	49	\$0	38
Wisconsin	\$15	15	\$0	29
Wyoming	\$24	7	\$0	27

Sources: IRS Statistics of Income; US Census of Governments.

TABLE D.17

Lotteries

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$71		\$71	
Alabama	\$64	22	\$0	45
Alaska	\$45	32	\$0	45
Arizona	\$35	40	\$31	37
Arkansas	\$57	30	\$45	28
California	\$40	34	\$40	31
Colorado	\$37	38	\$30	38
Connecticut	\$107	10	\$100	12
Delaware	\$171	3	\$360	2
District of Columbia	\$148	5	\$177	4
Florida	\$82	16	\$75	18
Georgia	\$127	7	\$105	11
Hawaii	\$40	35	\$0	45
Idaho	\$38	36	\$33	35
Illinois	\$79	17	\$82	15
Indiana	\$46	31	\$40	30
Iowa	\$38	37	\$42	29
Kansas	\$30	45	\$32	36

TABLE D.17 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Kentucky	\$62	24	\$59	22
Louisiana	\$33	42	\$39	34
Maine	\$61	25	\$52	24
Maryland	\$116	8	\$126	9
Massachusetts	\$253	1	\$160	6
Michigan	\$84	13	\$82	16
Minnesota	\$34	41	\$28	40
Mississippi	\$60	26	\$0	45
Missouri	\$65	21	\$51	25
Montana	\$19	50	\$21	42
Nebraska	\$33	44	\$39	33
Nevada	\$33	43	\$0	45
New Hampshire	\$69	20	\$61	21
New Jersey	\$111	9	\$116	10
New Mexico	\$21	49	\$19	43
New York	\$143	6	\$167	5
North Carolina	\$57	27	\$54	23
North Dakota	\$14	51	\$17	44
Ohio	\$84	14	\$77	17
Oklahoma	\$21	48	\$29	39
Oregon	\$82	15	\$157	7
Pennsylvania	\$96	11	\$88	13
Rhode Island	\$194	2	\$365	1
South Carolina	\$84	12	\$71	19
South Dakota	\$63	23	\$131	8
Tennessee	\$72	18	\$85	14
Texas	\$57	28	\$51	26
Utah	\$30	46	\$0	45
Vermont	\$57	29	\$49	27
Virginia	\$70	19	\$69	20
Washington	\$27	47	\$28	41
West Virginia	\$159	4	\$357	3
Wisconsin	\$36	39	\$40	32
Wyoming	\$44	33	\$0	45

Source: US Census of Governments.

TABLE D.18

Corporation Licenses

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$36		\$36	
Alabama	\$26	47	\$27	10
Alaska	\$29	43	\$0	50
Arizona	\$33	27	\$2	43
Arkansas	\$30	38	\$8	25
California	\$32	33	\$1	44
Colorado	\$52	5	\$3	39
Connecticut	\$37	19	\$8	26
Delaware	\$47	8	\$862	1

TABLE D.18 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
District of Columbia	\$45	9	\$48	8
Florida	\$56	3	\$14	19
Georgia	\$35	22	\$4	32
Hawaii	\$31	37	\$1	47
Idaho	\$41	11	\$1	46
Illinois	\$38	17	\$25	12
Indiana	\$28	44	\$1	48
Iowa	\$34	25	\$11	22
Kansas	\$32	32	\$7	27
Kentucky	\$27	46	\$25	11
Louisiana	\$33	29	\$23	15
Maine	\$35	21	\$6	29
Maryland	\$36	20	\$16	18
Massachusetts	\$35	23	\$4	35
Michigan	\$32	31	\$2	42
Minnesota	\$39	16	\$1	45
Mississippi	\$24	49	\$49	7
Missouri	\$30	40	\$11	23
Montana	\$56	2	\$3	38
Nebraska	\$39	15	\$14	20
Nevada	\$47	7	\$24	13
New Hampshire	\$32	36	\$28	9
New Jersey	\$44	10	\$24	14
New Mexico	\$26	48	\$10	24
New York	\$51	6	\$3	40
North Carolina	\$32	35	\$54	5
North Dakota	\$40	13	\$0	50
Ohio	\$28	45	\$146	3
Oklahoma	\$33	28	\$13	21
Oregon	\$34	24	\$5	31
Pennsylvania	\$30	41	\$51	6
Rhode Island	\$37	18	\$4	33
South Carolina	\$30	39	\$21	17
South Dakota	\$41	12	\$5	30
Tennessee	\$22	50	\$114	4
Texas	\$32	34	\$174	2
Utah	\$53	4	\$0	49
Vermont	\$40	14	\$3	37
Virginia	\$33	30	\$7	28
Washington	\$34	26	\$4	34
West Virginia	\$19	51	\$2	41
Wisconsin	\$29	42	\$3	36
Wyoming	\$58	1	\$22	16

Sources: IRS Statistics of Income; US Census of Governments.

TABLE D.19

Hunting and Fishing Licenses

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$5		\$5	
Alabama	\$8	15	\$4	31
Alaska	\$24	1	\$37	3
Arizona	\$3	38	\$4	30
Arkansas	\$12	10	\$7	19
California	\$2	46	\$3	42
Colorado	\$6	25	\$13	7
Connecticut	\$2	45	\$1	47
Delaware	\$4	34	\$3	38
District of Columbia	\$0	50	\$0	51
Florida	\$3	42	\$1	49
Georgia	\$3	40	\$2	43
Hawaii	\$0	51	\$0	50
Idaho	\$15	6	\$21	5
Illinois	\$3	41	\$3	37
Indiana	\$4	33	\$3	40
Iowa	\$8	18	\$10	15
Kansas	\$6	27	\$8	16
Kentucky	\$7	22	\$6	22
Louisiana	\$8	19	\$6	21
Maine	\$12	9	\$12	10
Maryland	\$2	44	\$3	41
Massachusetts	\$1	47	\$1	48
Michigan	\$7	23	\$5	29
Minnesota	\$13	7	\$10	13
Mississippi	\$7	24	\$5	27
Missouri	\$7	20	\$5	26
Montana	\$22	3	\$44	2
Nebraska	\$7	21	\$8	17
Nevada	\$2	43	\$4	34
New Hampshire	\$5	29	\$8	18
New Jersey	\$1	49	\$1	46
New Mexico	\$5	31	\$12	8
New York	\$3	39	\$3	39
North Carolina	\$6	28	\$2	44
North Dakota	\$16	5	\$19	6
Ohio	\$4	36	\$3	35
Oklahoma	\$10	12	\$6	24
Oregon	\$8	16	\$12	11
Pennsylvania	\$5	30	\$6	25
Rhode Island	\$1	48	\$2	45
South Carolina	\$6	26	\$4	33
South Dakota	\$18	4	\$35	4
Tennessee	\$8	14	\$5	28
Texas	\$3	37	\$4	32
Utah	\$8	17	\$10	14
Vermont	\$12	11	\$10	12
Virginia	\$4	35	\$3	36

TABLE D.19 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Washington	\$4	32	\$6	23
West Virginia	\$9	13	\$6	20
Wisconsin	\$13	8	\$12	9
Wyoming	\$22	2	\$62	1

Sources: US Department of Interior; US Census of Governments.

TABLE D.20

Motor Vehicle Registration Licenses

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$78		\$78	
Alabama	\$97	10	\$46	46
Alaska	\$103	6	\$99	13
Arizona	\$76	38	\$26	50
Arkansas	\$82	29	\$52	44
California	\$71	46	\$94	14
Colorado	\$85	22	\$99	12
Connecticut	\$73	44	\$58	38
Delaware	\$100	8	\$54	42
District of Columbia	\$49	51	\$58	37
Florida	\$78	35	\$67	30
Georgia	\$75	43	\$31	48
Hawaii	\$86	21	\$269	1
Idaho	\$100	7	\$85	18
Illinois	\$76	39	\$129	8
Indiana	\$89	15	\$59	35
Iowa	\$111	5	\$176	3
Kansas	\$82	26	\$71	26
Kentucky	\$81	30	\$53	43
Louisiana	\$82	28	\$29	49
Maine	\$86	20	\$75	23
Maryland	\$66	49	\$75	22
Massachusetts	\$72	45	\$57	40
Michigan	\$76	37	\$92	15
Minnesota	\$92	13	\$118	9
Mississippi	\$67	48	\$45	47
Missouri	\$91	14	\$47	45
Montana	\$144	1	\$148	5
Nebraska	\$99	9	\$113	10
Nevada	\$75	42	\$58	36
New Hampshire	\$96	11	\$71	27
New Jersey	\$86	19	\$68	29
New Mexico	\$84	25	\$88	17
New York	\$52	50	\$80	21
North Carolina	\$77	36	\$64	33
North Dakota	\$112	4	\$151	4
Ohio	\$85	23	\$71	28
Oklahoma	\$87	18	\$176	2

TABLE D.20 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Oregon	\$88	17	\$134	7
Pennsylvania	\$79	33	\$66	32
Rhode Island	\$79	34	\$62	34
South Carolina	\$80	32	\$57	39
South Dakota	\$117	3	\$92	16
Tennessee	\$81	31	\$66	31
Texas	\$75	41	\$82	19
Utah	\$67	47	\$55	41
Vermont	\$94	12	\$103	11
Virginia	\$84	24	\$73	25
Washington	\$82	27	\$73	24
West Virginia	\$76	40	\$2	51
Wisconsin	\$88	16	\$81	20
Wyoming	\$134	2	\$143	6

Sources: Federal Highway Administration; US Census of Governments.

TABLE D.21

Motor Vehicle Operators Licenses

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$8		\$8	
Alabama	\$10	4	\$5	38
Alaska	\$9	16	\$0	51
Arizona	\$9	19	\$5	36
Arkansas	\$9	9	\$6	27
California	\$8	43	\$8	15
Colorado	\$9	11	\$6	28
Connecticut	\$9	31	\$12	8
Delaware	\$10	5	\$6	29
District of Columbia	\$8	45	\$9	11
Florida	\$9	17	\$18	3
Georgia	\$8	39	\$5	35
Hawaii	\$8	40	\$4	40
Idaho	\$8	34	\$7	24
Illinois	\$8	42	\$8	14
Indiana	\$10	2	\$34	2
Iowa	\$9	15	\$3	48
Kansas	\$9	27	\$7	19
Kentucky	\$8	35	\$4	44
Louisiana	\$8	44	\$3	47
Maine	\$9	6	\$8	16
Maryland	\$9	28	\$4	39
Massachusetts	\$9	22	\$15	4
Michigan	\$9	24	\$6	31
Minnesota	\$8	49	\$9	13
Mississippi	\$8	41	\$14	5
Missouri	\$9	21	\$3	45
Montana	\$9	8	\$9	12
Nebraska	\$9	10	\$3	46

TABLE D.21 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Nevada	\$8	47	\$8	17
New Hampshire	\$10	3	\$10	10
New Jersey	\$8	36	\$6	30
New Mexico	\$8	32	\$2	50
New York	\$7	51	\$7	26
North Carolina	\$8	33	\$13	7
North Dakota	\$9	18	\$7	21
Ohio	\$9	29	\$7	25
Oklahoma	\$8	46	\$4	41
Oregon	\$9	23	\$8	18
Pennsylvania	\$9	30	\$5	34
Rhode Island	\$9	20	\$4	42
South Carolina	\$9	12	\$2	49
South Dakota	\$9	14	\$5	37
Tennessee	\$9	26	\$7	23
Texas	\$7	50	\$5	33
Utah	\$8	48	\$5	32
Vermont	\$10	1	\$13	6
Virginia	\$8	37	\$7	20
Washington	\$9	7	\$10	9
West Virginia	\$8	38	\$56	1
Wisconsin	\$9	25	\$7	22
Wyoming	\$9	13	\$4	43

Sources: Federal Highway Administration; US Census of Governments.

TABLE D.22

All Other Taxes

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$370		\$370	
Alabama	\$301	44	\$411	17
Alaska	\$437	8	\$212	38
Arizona	\$308	42	\$149	45
Arkansas	\$303	43	\$227	35
California	\$398	12	\$392	18
Colorado	\$388	15	\$291	28
Connecticut	\$525	2	\$587	6
Delaware	\$374	21	\$851	3
District of Columbia	\$577	1	\$1,080	1
Florida	\$345	29	\$517	11
Georgia	\$311	41	\$136	47
Hawaii	\$372	22	\$554	8
Idaho	\$291	50	\$96	49
Illinois	\$385	17	\$544	9
Indiana	\$318	40	\$332	25
Iowa	\$363	26	\$175	41
Kansas	\$366	24	\$148	46
Kentucky	\$299	46	\$270	31

TABLE D.22 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Louisiana	\$339	30	\$347	22
Maine	\$331	33	\$253	32
Maryland	\$444	7	\$519	10
Massachusetts	\$474	3	\$285	30
Michigan	\$323	39	\$157	43
Minnesota	\$395	14	\$585	7
Mississippi	\$277	51	\$205	39
Missouri	\$334	32	\$339	24
Montana	\$327	36	\$215	37
Nebraska	\$381	19	\$244	33
Nevada	\$330	34	\$979	2
New Hampshire	\$423	10	\$74	50
New Jersey	\$461	5	\$370	20
New Mexico	\$298	47	\$174	42
New York	\$448	6	\$685	4
North Carolina	\$323	38	\$117	48
North Dakota	\$463	4	\$425	14
Ohio	\$337	31	\$215	36
Oklahoma	\$347	28	\$200	40
Oregon	\$327	37	\$344	23
Pennsylvania	\$383	18	\$411	15
Rhode Island	\$385	16	\$411	16
South Carolina	\$296	48	\$319	26
South Dakota	\$374	20	\$301	27
Tennessee	\$327	35	\$241	34
Texas	\$364	25	\$353	21
Utah	\$301	45	\$150	44
Vermont	\$370	23	\$603	5
Virginia	\$412	11	\$377	19
Washington	\$396	13	\$467	13
West Virginia	\$296	49	\$482	12
Wisconsin	\$355	27	\$290	29
Wyoming	\$436	9	\$24	51

Sources: Bureau of Economic Analysis Personal Income; US Census of Governments

TABLE D. 23

All Other Nontax Revenue

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
United States	\$635		\$635	
Alabama	\$517	44	\$431	49
Alaska	\$750	8	\$5,436	1
Arizona	\$528	42	\$447	45
Arkansas	\$521	43	\$472	43
California	\$683	12	\$610	24
Colorado	\$666	15	\$705	14
Connecticut	\$900	2	\$505	40
Delaware	\$642	21	\$1,385	4
District of Columbia	\$989	1	\$1,704	3

TABLE D.23 CONTINUED

State	Per capita capacity	Capacity rank	Per capita revenue	Revenue rank
Florida	\$592	29	\$647	19
Georgia	\$534	41	\$404	50
Hawaii	\$638	22	\$438	48
Idaho	\$500	50	\$466	44
Illinois	\$661	17	\$565	32
Indiana	\$545	40	\$490	42
Iowa	\$623	26	\$591	29
Kansas	\$627	24	\$679	17
Kentucky	\$514	46	\$498	41
Louisiana	\$581	30	\$789	10
Maine	\$568	33	\$527	37
Maryland	\$761	7	\$558	33
Massachusetts	\$814	3	\$784	11
Michigan	\$554	39	\$567	31
Minnesota	\$678	14	\$670	18
Mississippi	\$475	51	\$351	51
Missouri	\$572	32	\$593	28
Montana	\$561	36	\$698	15
Nebraska	\$654	19	\$555	34
Nevada	\$566	34	\$447	46
New Hampshire	\$725	10	\$767	12
New Jersey	\$791	5	\$645	20
New Mexico	\$510	47	\$1,248	5
New York	\$768	6	\$1,025	7
North Carolina	\$554	38	\$447	47
North Dakota	\$794	4	\$1,009	8
Ohio	\$578	31	\$595	27
Oklahoma	\$596	28	\$689	16
Oregon	\$561	37	\$644	22
Pennsylvania	\$657	18	\$521	38
Rhode Island	\$661	16	\$983	9
South Carolina	\$509	48	\$609	25
South Dakota	\$642	20	\$752	13
Tennessee	\$561	35	\$518	39
Texas	\$624	25	\$596	26
Utah	\$516	45	\$554	35
Vermont	\$635	23	\$617	23
Virginia	\$707	11	\$645	21
Washington	\$679	13	\$548	36
West Virginia	\$507	49	\$1,060	6
Wisconsin	\$609	27	\$586	30
Wyoming	\$748	9	\$1,956	2

Sources: Bureau of Economic Analysis Personal Income; US Census of Governments.

TABLE D.24

Total General Expenditure

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
United States	\$8,443		\$8,443	
Alabama	\$9,092	2	\$7,237	42
Alaska	\$8,213	37	\$17,359	2
Arizona	\$8,759	11	\$6,442	50
Arkansas	\$9,017	6	\$7,250	41
California	\$8,967	8	\$9,449	11
Colorado	\$8,077	45	\$7,883	30
Connecticut	\$8,311	28	\$9,685	9
Delaware	\$8,248	34	\$10,011	8
District of Columbia	\$8,907	10	\$20,548	1
Florida	\$8,198	39	\$7,046	44
Georgia	\$8,957	9	\$6,575	49
Hawaii	\$7,315	51	\$9,339	12
Idaho	\$8,210	38	\$6,213	51
Illinois	\$8,472	20	\$8,272	24
Indiana	\$8,342	25	\$7,044	45
Iowa	\$8,139	41	\$9,117	15
Kansas	\$8,254	33	\$7,970	29
Kentucky	\$8,640	14	\$7,496	36
Louisiana	\$8,993	7	\$9,296	14
Maine	\$7,829	48	\$8,495	21
Maryland	\$8,471	21	\$9,338	13
Massachusetts	\$8,238	35	\$10,024	6
Michigan	\$8,632	15	\$7,537	35
Minnesota	\$8,179	40	\$9,072	16
Mississippi	\$9,411	1	\$8,089	26
Missouri	\$8,415	24	\$7,261	40
Montana	\$8,133	43	\$8,191	25
Nebraska	\$8,128	44	\$8,042	27
Nevada	\$8,326	26	\$6,898	47
New Hampshire	\$7,761	49	\$7,587	34
New Jersey	\$8,441	22	\$9,624	10
New Mexico	\$9,021	5	\$8,760	19
New York	\$8,533	18	\$13,134	4
North Carolina	\$8,536	17	\$7,346	37
North Dakota	\$9,070	3	\$10,279	5
Ohio	\$8,322	27	\$7,982	28
Oklahoma	\$8,687	12	\$6,988	46
Oregon	\$7,953	47	\$8,438	22
Pennsylvania	\$8,138	42	\$8,567	20
Rhode Island	\$8,435	23	\$8,978	17
South Carolina	\$8,669	13	\$7,291	39
South Dakota	\$8,584	16	\$7,323	38

TABLE D.24 CONTINUED

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
Tennessee	\$8,510	19	\$6,692	48
Texas	\$9,034	4	\$7,132	43
Utah	\$8,223	36	\$7,663	33
Vermont	\$7,729	50	\$10,014	7
Virginia	\$8,294	30	\$7,764	32
Washington	\$8,260	32	\$8,817	18
West Virginia	\$8,311	28	\$7,872	31
Wisconsin	\$8,040	46	\$8,318	23
Wyoming	\$8,261	31	\$13,393	3

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.25

Elementary and Secondary Education

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
United States	\$1,801		\$1,801	
Alabama	\$1,787	22	\$1,500	41
Alaska	\$1,944	8	\$3,131	2
Arizona	\$1,999	5	\$1,205	50
Arkansas	\$1,818	20	\$1,690	32
California	\$2,074	3	\$1,756	25
Colorado	\$1,836	13	\$1,539	37
Connecticut	\$1,986	7	\$2,411	6
Delaware	\$1,686	36	\$2,006	13
District of Columbia	\$1,383	51	\$3,466	1
Florida	\$1,507	45	\$1,278	49
Georgia	\$2,037	4	\$1,726	27
Hawaii	\$1,410	50	\$1,361	47
Idaho	\$1,872	11	\$1,161	51
Illinois	\$1,920	9	\$1,930	15
Indiana	\$1,780	25	\$1,501	40
Iowa	\$1,722	33	\$1,920	16
Kansas	\$1,759	27	\$1,763	23
Kentucky	\$1,664	39	\$1,581	35
Louisiana	\$1,730	31	\$1,896	17
Maine	\$1,481	46	\$1,762	24
Maryland	\$1,885	10	\$2,032	12
Massachusetts	\$1,783	23	\$2,171	8
Michigan	\$1,832	15	\$1,728	26
Minnesota	\$1,818	19	\$1,875	19
Mississippi	\$1,829	17	\$1,457	43
Missouri	\$1,637	41	\$1,577	36
Montana	\$1,439	49	\$1,610	33
Nebraska	\$1,677	38	\$2,033	11
Nevada	\$1,855	12	\$1,404	45
New Hampshire	\$1,728	32	\$2,088	10
New Jersey	\$1,995	6	\$2,697	5

TABLE D.25 CONTINUED

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
New Mexico	\$1,830	16	\$1,700	31
New York	\$1,760	26	\$2,829	4
North Carolina	\$1,783	24	\$1,317	48
North Dakota	\$1,467	47	\$1,866	20
Ohio	\$1,758	28	\$1,941	14
Oklahoma	\$1,788	21	\$1,440	44
Oregon	\$1,610	43	\$1,535	38
Pennsylvania	\$1,640	40	\$1,893	18
Rhode Island	\$1,744	29	\$2,093	9
South Carolina	\$1,731	30	\$1,588	34
South Dakota	\$1,621	42	\$1,507	39
Tennessee	\$1,679	37	\$1,399	46
Texas	\$2,242	1	\$1,702	30
Utah	\$2,195	2	\$1,476	42
Vermont	\$1,462	48	\$2,359	7
Virginia	\$1,828	18	\$1,838	21
Washington	\$1,834	14	\$1,705	29
West Virginia	\$1,513	44	\$1,723	28
Wisconsin	\$1,686	35	\$1,770	22
Wyoming	\$1,693	34	\$2,865	3

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.26

Higher Education

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
United States	\$826		\$826	
Alabama	\$786	36	\$955	17
Alaska	\$946	4	\$1,224	5
Arizona	\$816	25	\$727	35
Arkansas	\$757	45	\$896	24
California	\$977	2	\$942	18
Colorado	\$823	21	\$884	26
Connecticut	\$874	12	\$725	36
Delaware	\$857	14	\$1,256	3
District of Columbia	\$1,273	1	\$268	51
Florida	\$754	46	\$494	49
Georgia	\$836	19	\$633	46
Hawaii	\$820	23	\$1,082	10
Idaho	\$796	33	\$647	44
Illinois	\$855	16	\$697	40
Indiana	\$805	26	\$921	19
Iowa	\$817	24	\$1,133	8
Kansas	\$805	27	\$1,068	12
Kentucky	\$742	48	\$856	27
Louisiana	\$802	28	\$689	41
Maine	\$675	51	\$601	47
Maryland	\$941	5	\$1,009	15

TABLE D.26 CONTINUED

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
Massachusetts	\$917	9	\$760	32
Michigan	\$842	17	\$1,073	11
Minnesota	\$822	22	\$816	29
Mississippi	\$773	38	\$895	25
Missouri	\$762	43	\$669	42
Montana	\$743	47	\$784	30
Nebraska	\$794	34	\$1,025	13
Nevada	\$796	32	\$439	50
New Hampshire	\$796	30	\$702	39
New Jersey	\$887	11	\$667	43
New Mexico	\$787	35	\$1,136	7
New York	\$903	10	\$713	38
North Carolina	\$785	37	\$979	16
North Dakota	\$955	3	\$1,334	1
Ohio	\$796	31	\$753	33
Oklahoma	\$770	40	\$896	23
Oregon	\$765	42	\$1,016	14
Pennsylvania	\$836	18	\$719	37
Rhode Island	\$931	7	\$641	45
South Carolina	\$767	41	\$739	34
South Dakota	\$732	49	\$768	31
Tennessee	\$760	44	\$590	48
Texas	\$867	13	\$918	20
Utah	\$918	8	\$1,273	2
Vermont	\$770	39	\$1,163	6
Virginia	\$940	6	\$917	21
Washington	\$856	15	\$856	28
West Virginia	\$717	50	\$908	22
Wisconsin	\$799	29	\$1,085	9
Wyoming	\$828	20	\$1,240	4

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.27

Highways

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
United States	\$510		\$510	
Alabama	\$733	9	\$466	38
Alaska	\$462	40	\$1,750	2
Arizona	\$477	38	\$356	48
Arkansas	\$713	11	\$489	31
California	\$423	46	\$478	34
Colorado	\$518	28	\$479	33
Connecticut	\$445	42	\$473	37
Delaware	\$509	31	\$779	9
District of Columbia	\$273	51	\$828	8
Florida	\$479	37	\$411	44
Georgia	\$564	23	\$312	51
Hawaii	\$347	49	\$474	36

TABLE D.27 CONTINUED

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
Idaho	\$634	16	\$552	27
Illinois	\$443	43	\$559	26
Indiana	\$633	17	\$432	42
Iowa	\$703	12	\$771	10
Kansas	\$787	6	\$626	18
Kentucky	\$595	18	\$568	24
Louisiana	\$538	26	\$600	22
Maine	\$582	22	\$669	15
Maryland	\$489	35	\$858	7
Massachusetts	\$425	44	\$392	46
Michigan	\$504	33	\$333	49
Minnesota	\$655	14	\$671	14
Mississippi	\$723	10	\$582	23
Missouri	\$649	15	\$487	32
Montana	\$986	4	\$1,046	6
Nebraska	\$791	5	\$657	17
Nevada	\$489	36	\$610	19
New Hampshire	\$530	27	\$562	25
New Jersey	\$423	45	\$465	40
New Mexico	\$748	8	\$496	30
New York	\$339	50	\$524	28
North Carolina	\$545	25	\$402	45
North Dakota	\$1,482	1	\$1,833	1
Ohio	\$505	32	\$465	39
Oklahoma	\$749	7	\$607	20
Oregon	\$472	39	\$477	35
Pennsylvania	\$410	47	\$679	13
Rhode Island	\$379	48	\$418	43
South Carolina	\$551	24	\$332	50
South Dakota	\$1,130	2	\$1,133	4
Tennessee	\$585	21	\$385	47
Texas	\$491	34	\$435	41
Utah	\$517	29	\$687	12
Vermont	\$667	13	\$1,073	5
Virginia	\$515	30	\$518	29
Washington	\$457	41	\$600	21
West Virginia	\$589	20	\$697	11
Wisconsin	\$593	19	\$668	16
Wyoming	\$1,047	3	\$1,317	3

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.28

Police and Corrections

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
United States	\$540		\$540	
Alabama	\$598	6	\$388	46
Alaska	\$633	5	\$905	2
Arizona	\$560	18	\$550	15

TABLE D.28 CONTINUED

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
Arkansas	\$523	27	\$388	45
California	\$594	10	\$751	5
Colorado	\$481	35	\$547	16
Connecticut	\$573	14	\$501	22
Delaware	\$661	4	\$640	8
District of Columbia	\$1,008	1	\$1,267	1
Florida	\$519	28	\$588	12
Georgia	\$565	17	\$475	26
Hawaii	\$449	42	\$421	36
Idaho	\$370	51	\$442	32
Illinois	\$595	9	\$518	19
Indiana	\$525	25	\$323	51
Iowa	\$413	47	\$394	44
Kansas	\$459	39	\$422	35
Kentucky	\$496	33	\$324	50
Louisiana	\$735	2	\$626	9
Maine	\$385	50	\$331	49
Maryland	\$699	3	\$657	6
Massachusetts	\$484	34	\$480	25
Michigan	\$597	7	\$464	28
Minnesota	\$441	43	\$465	27
Mississippi	\$577	13	\$409	41
Missouri	\$572	15	\$424	34
Montana	\$399	49	\$510	21
Nebraska	\$455	40	\$413	40
Nevada	\$523	26	\$655	7
New Hampshire	\$430	45	\$405	42
New Jersey	\$593	11	\$608	10
New Mexico	\$515	29	\$600	11
New York	\$538	23	\$768	3
North Carolina	\$514	30	\$487	23
North Dakota	\$590	12	\$445	31
Ohio	\$501	31	\$437	33
Oklahoma	\$555	19	\$415	38
Oregon	\$409	48	\$570	14
Pennsylvania	\$567	16	\$513	20
Rhode Island	\$540	22	\$526	17
South Carolina	\$597	8	\$368	48
South Dakota	\$460	38	\$400	43
Tennessee	\$555	20	\$420	37
Texas	\$536	24	\$458	30
Utah	\$430	44	\$414	39
Vermont	\$422	46	\$484	24
Virginia	\$544	21	\$521	18
Washington	\$497	32	\$462	29
West Virginia	\$461	37	\$376	47
Wisconsin	\$462	36	\$581	13
Wyoming	\$451	41	\$754	4

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.29

Health and Hospitals

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
United States	\$767		\$767	
Alabama	\$950	2	\$1,133	8
Alaska	\$730	42	\$863	14
Arizona	\$775	23	\$562	35
Arkansas	\$920	3	\$495	39
California	\$748	30	\$947	12
Colorado	\$689	47	\$698	21
Connecticut	\$743	33	\$578	32
Delaware	\$785	21	\$541	36
District of Columbia	\$778	22	\$1,062	9
Florida	\$760	27	\$691	23
Georgia	\$788	19	\$683	24
Hawaii	\$650	50	\$905	13
Idaho	\$715	44	\$477	40
Illinois	\$747	31	\$468	41
Indiana	\$770	25	\$671	26
Iowa	\$732	41	\$1,205	4
Kansas	\$732	40	\$1,002	11
Kentucky	\$873	7	\$598	29
Louisiana	\$891	5	\$1,141	6
Maine	\$847	9	\$567	34
Maryland	\$739	36	\$379	46
Massachusetts	\$763	26	\$415	44
Michigan	\$818	13	\$821	16
Minnesota	\$719	43	\$581	31
Mississippi	\$901	4	\$1,296	3
Missouri	\$834	11	\$857	15
Montana	\$742	34	\$430	43
Nebraska	\$676	48	\$751	19
Nevada	\$733	39	\$502	38
New Hampshire	\$706	45	\$126	51
New Jersey	\$740	35	\$456	42
New Mexico	\$817	14	\$808	18
New York	\$787	20	\$1,136	7
North Carolina	\$815	15	\$1,203	5
North Dakota	\$669	49	\$312	49
Ohio	\$830	12	\$707	20
Oklahoma	\$792	18	\$597	30
Oregon	\$771	24	\$820	17
Pennsylvania	\$801	17	\$630	28
Rhode Island	\$846	10	\$233	50
South Carolina	\$885	6	\$1,342	2
South Dakota	\$733	38	\$334	48
Tennessee	\$855	8	\$676	25
Texas	\$756	28	\$693	22
Utah	\$635	51	\$567	33
Vermont	\$746	32	\$335	47
Virginia	\$749	29	\$648	27
Washington	\$805	16	\$1,026	10

TABLE D.29 CONTINUED

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
West Virginia	\$982	1	\$395	45
Wisconsin	\$739	37	\$539	37
Wyoming	\$700	46	\$2,251	1

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.30

Public Welfare

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
United States	\$1,546		\$1,546	
Alabama	\$1,843	6	\$1,304	35
Alaska	\$841	51	\$2,667	2
Arizona	\$1,693	11	\$1,241	41
Arkansas	\$1,940	3	\$1,759	13
California	\$1,631	18	\$1,588	22
Colorado	\$1,267	39	\$1,070	48
Connecticut	\$1,093	48	\$1,799	12
Delaware	\$1,189	42	\$2,025	9
District of Columbia	\$1,667	15	\$4,510	1
Florida	\$1,783	7	\$1,183	45
Georgia	\$1,757	8	\$1,051	50
Hawaii	\$1,156	45	\$1,451	26
Idaho	\$1,514	22	\$1,289	37
Illinois	\$1,422	29	\$1,255	39
Indiana	\$1,413	31	\$1,315	34
Iowa	\$1,315	34	\$1,642	20
Kansas	\$1,301	36	\$1,208	44
Kentucky	\$1,873	5	\$1,639	21
Louisiana	\$1,900	4	\$1,363	30
Maine	\$1,467	27	\$2,211	7
Maryland	\$1,072	49	\$1,710	17
Massachusetts	\$1,297	37	\$2,251	6
Michigan	\$1,637	17	\$1,331	33
Minnesota	\$1,209	40	\$2,442	4
Mississippi	\$2,286	1	\$1,702	18
Missouri	\$1,566	20	\$1,383	28
Montana	\$1,511	23	\$1,372	29
Nebraska	\$1,314	35	\$1,258	38
Nevada	\$1,464	28	\$893	51
New Hampshire	\$1,019	50	\$1,432	27
New Jersey	\$1,165	44	\$1,682	19
New Mexico	\$1,979	2	\$1,940	10
New York	\$1,662	16	\$2,598	3
North Carolina	\$1,707	10	\$1,301	36
North Dakota	\$1,389	32	\$1,362	31
Ohio	\$1,509	24	\$1,731	16
Oklahoma	\$1,627	19	\$1,515	24
Oregon	\$1,545	21	\$1,483	25
Pennsylvania	\$1,421	30	\$1,925	11

TABLE D.30

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
Rhode Island	\$1,478	26	\$2,142	8
South Carolina	\$1,738	9	\$1,243	40
South Dakota	\$1,494	25	\$1,130	47
Tennessee	\$1,676	13	\$1,581	23
Texas	\$1,681	12	\$1,180	46
Utah	\$1,127	46	\$1,059	49
Vermont	\$1,205	41	\$2,396	5
Virginia	\$1,188	43	\$1,230	43
Washington	\$1,292	38	\$1,237	42
West Virginia	\$1,673	14	\$1,749	14
Wisconsin	\$1,325	33	\$1,733	15
Wyoming	\$1,102	47	\$1,357	32

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.31

Environment and Housing

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
United States	\$625		\$625	
Alabama	\$614	42	\$371	51
Alaska	\$663	1	\$1,298	2
Arizona	\$622	24	\$453	45
Arkansas	\$604	47	\$399	50
California	\$637	12	\$784	9
Colorado	\$626	19	\$659	19
Connecticut	\$652	4	\$654	22
Delaware	\$645	6	\$657	20
District of Columbia	\$638	10	\$2,194	1
Florida	\$614	39	\$756	12
Georgia	\$617	31	\$461	43
Hawaii	\$630	17	\$813	8
Idaho	\$597	51	\$530	34
Illinois	\$632	16	\$624	24
Indiana	\$618	29	\$559	30
Iowa	\$621	26	\$702	16
Kansas	\$616	32	\$470	41
Kentucky	\$614	40	\$473	40
Louisiana	\$614	38	\$968	5
Maine	\$613	43	\$717	14
Maryland	\$661	2	\$770	11
Massachusetts	\$647	5	\$782	10
Michigan	\$615	35	\$495	37
Minnesota	\$636	15	\$694	17
Mississippi	\$600	49	\$491	38
Missouri	\$614	41	\$452	46
Montana	\$598	50	\$667	18
Nebraska	\$619	28	\$587	27
Nevada	\$627	18	\$625	23

TABLE D.31 CONTINUED

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
New Hampshire	\$643	7	\$469	42
New Jersey	\$660	3	\$603	25
New Mexico	\$604	48	\$564	29
New York	\$642	8	\$849	7
North Carolina	\$612	44	\$547	33
North Dakota	\$637	13	\$1,112	4
Ohio	\$619	27	\$559	31
Oklahoma	\$616	33	\$438	47
Oregon	\$611	45	\$710	15
Pennsylvania	\$626	20	\$566	28
Rhode Island	\$637	14	\$551	32
South Carolina	\$614	37	\$436	48
South Dakota	\$617	30	\$718	13
Tennessee	\$614	36	\$455	44
Texas	\$626	21	\$413	49
Utah	\$615	34	\$591	26
Vermont	\$625	22	\$655	21
Virginia	\$639	9	\$521	36
Washington	\$637	11	\$850	6
West Virginia	\$610	46	\$481	39
Wisconsin	\$622	25	\$523	35
Wyoming	\$622	23	\$1,239	3

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.32

Government Administration

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
United States	\$349		\$349	
Alabama	\$331	42	\$277	42
Alaska	\$412	1	\$1,173	1
Arizona	\$345	24	\$307	36
Arkansas	\$316	47	\$332	28
California	\$370	12	\$504	5
Colorado	\$352	19	\$410	12
Connecticut	\$393	4	\$458	7
Delaware	\$383	6	\$543	4
District of Columbia	\$371	10	\$607	3
Florida	\$332	39	\$315	31
Georgia	\$336	31	\$299	37
Hawaii	\$358	17	\$393	17
Idaho	\$304	51	\$328	29
Illinois	\$361	16	\$326	30
Indiana	\$338	29	\$268	45
Iowa	\$344	26	\$291	39
Kansas	\$336	32	\$336	26
Kentucky	\$331	40	\$314	32
Louisiana	\$332	38	\$411	11

TABLE D.32 CONTINUED

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
Maine	\$330	43	\$310	34
Maryland	\$408	2	\$408	13
Massachusetts	\$385	5	\$314	33
Michigan	\$333	35	\$267	46
Minnesota	\$368	15	\$343	24
Mississippi	\$309	49	\$267	47
Missouri	\$331	41	\$221	51
Montana	\$306	50	\$483	6
Nebraska	\$339	28	\$276	43
Nevada	\$353	18	\$361	20
New Hampshire	\$380	7	\$337	25
New Jersey	\$406	3	\$333	27
New Mexico	\$316	48	\$437	10
New York	\$377	8	\$442	9
North Carolina	\$329	44	\$227	50
North Dakota	\$369	13	\$358	21
Ohio	\$340	27	\$399	15
Oklahoma	\$334	33	\$286	41
Oregon	\$327	45	\$451	8
Pennsylvania	\$352	20	\$368	19
Rhode Island	\$369	14	\$398	16
South Carolina	\$333	37	\$268	44
South Dakota	\$337	30	\$349	22
Tennessee	\$333	36	\$256	48
Texas	\$351	21	\$229	49
Utah	\$333	34	\$373	18
Vermont	\$350	22	\$347	23
Virginia	\$373	9	\$298	38
Washington	\$370	11	\$310	35
West Virginia	\$325	46	\$402	14
Wisconsin	\$344	25	\$288	40
Wyoming	\$345	23	\$735	2

Sources: Urban Institute calculations; US Census of Governments.

TABLE D.33

Other

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
United States	\$1,133		\$1,133	
Alabama	\$1,104	42	\$664	47
Alaska	\$1,235	1	\$3,787	2
Arizona	\$1,125	24	\$788	36
Arkansas	\$1,080	47	\$632	49
California	\$1,166	12	\$1,262	13
Colorado	\$1,137	19	\$1,181	17
Connecticut	\$1,204	4	\$1,555	7
Delaware	\$1,187	6	\$1,206	15
District of Columbia	\$1,168	10	\$5,558	1

TABLE D.33 CONTINUED

State	Per capita need	Need rank	Per capita expenditure	Expenditure rank
Florida	\$1,105	39	\$1,072	20
Georgia	\$1,111	31	\$786	37
Hawaii	\$1,148	17	\$2,053	4
Idaho	\$1,060	51	\$628	50
Illinois	\$1,152	16	\$1,406	10
Indiana	\$1,114	29	\$756	39
Iowa	\$1,124	26	\$849	31
Kansas	\$1,111	32	\$708	44
Kentucky	\$1,104	40	\$707	45
Louisiana	\$1,105	38	\$1,241	14
Maine	\$1,102	43	\$1,058	22
Maryland	\$1,229	2	\$1,203	16
Massachusetts	\$1,191	5	\$1,917	5
Michigan	\$1,107	35	\$744	41
Minnesota	\$1,163	15	\$815	33
Mississippi	\$1,067	49	\$803	35
Missouri	\$1,104	41	\$909	29
Montana	\$1,063	50	\$1,088	18
Nebraska	\$1,117	28	\$857	30
Nevada	\$1,139	18	\$1,057	23
New Hampshire	\$1,182	7	\$1,084	19
New Jersey	\$1,225	3	\$1,718	6
New Mexico	\$1,079	48	\$840	32
New York	\$1,178	8	\$2,689	3
North Carolina	\$1,100	44	\$652	48
North Dakota	\$1,165	13	\$1,418	9
Ohio	\$1,117	27	\$750	40
Oklahoma	\$1,109	33	\$608	51
Oregon	\$1,096	45	\$1,063	21
Pennsylvania	\$1,137	20	\$912	28
Rhode Island	\$1,165	14	\$1,382	12
South Carolina	\$1,106	37	\$693	46
South Dakota	\$1,113	30	\$738	42
Tennessee	\$1,106	36	\$758	38
Texas	\$1,136	21	\$734	43
Utah	\$1,107	34	\$1,019	24
Vermont	\$1,134	22	\$959	26
Virginia	\$1,171	9	\$973	25
Washington	\$1,166	11	\$1,386	11
West Virginia	\$1,094	46	\$952	27
Wisconsin	\$1,124	25	\$806	34
Wyoming	\$1,126	23	\$1,498	8

Sources: Urban Institute calculations; US Census of Governments.

Notes

1. Fiscal years are generally referred to by their concluding year. Thus, fiscal year 2011–12 is referred to as fiscal year 2012.
2. In 2014, the federal government transferred about \$577 billion, or 17 percent of its total outlays, to states and localities (Office of Management and Budget, Historical Tables, 12.2). Federal spending net of state and local grants and national defense represented 15.4 percent of the gross domestic product (GDP) compared to state and local spending's 14.5 percent of GDP. However, these shares have fluctuated considerably over time. On average, since 1960, states and localities have eclipsed the federal government in direct domestic spending on goods and services (spending 13.2 of GDP from their own and federal funds, versus the federal government's 12.3 percent of GDP net of grants and defense). See US Bureau of Economic Analysis, National Income and Product Accounts, Tables 3.3, 5.11, 1.1.5, 3.2, and 3.16 at <http://www.bea.gov/national/>.
3. Throughout this report, except where otherwise noted, we focus on what the Census Bureau terms the "general government sector." This sector includes all activities except utilities, publicly owned liquor stores, and social insurance trusts including employee retirement and workers compensation systems. We also compare states in terms of state and local governments combined. We do so because states have different traditions of allocating tax authority and expenditure responsibility by government level. Ignoring these differences can lead to mistaken inferences. In K–12 education, for example, some states play a greater financing role than other states because of previous school finance equalization court decisions or legislative action.
4. Other policies to address state or local fiscal disparities include reassigning expenditure responsibilities or tax authorities. See Gordon (2012).
5. Although our methodology varies slightly from earlier measures, fiscal capacity measures have been calculated regularly since the Advisory Commission on Intergovernmental Relations produced a representative tax capacity index in 1962. See appendix A for more background. However, it is important not to compare fiscal capacity measures with previous years because of changes in the methods used.
6. The six states without fiscal gaps at capacity were Alaska, Connecticut, Hawaii, Massachusetts, North Dakota, and Wyoming. See appendix D table D.2 for full results.
7. The US Census Bureau released fiscal year 2013 data from its Annual Survey of State and Local Government Finances in October 2015. However, unlike in 2012, these data are based on all states and large localities plus a sample of smaller local governments rather than a census of all state and local governments. US Census State and Local Government Finance data are available at Urban Institute's State and Local Government Finance Data Query System at <http://slfdqs taxpolicycenter.org/>.
8. "Other taxes" in figure 4 is an aggregation of all taxes except for sales, property, individual income and corporate income taxes (e.g., severance and estate taxes as well as deed recordation fees). Some of these taxes are analyzed in this report. There is a separate "other taxes" category, explained below, of smaller taxes we did not analyze individually.
9. In this report, we augment general revenue figures to include revenue from public liquor stores because the RRS method treats these funds as an alternative to taxing alcohol. Thus, our general revenue numbers will be slightly different than those reported in the Census of Governments, which classifies liquor store revenue as outside the general government sector.
10. All five states levied selective sales taxes, though, and some Alaskan localities levied a general sales tax.
11. New Hampshire does not have a broad-based income or sales tax. The state also has a strong tradition of local control, with most total general revenues coming from local governments, where the property tax is dominant.

12. New Hampshire taxes only interest and dividends, and Tennessee taxes only bond interest and stock dividends.
13. For a detailed description of data sources and calculations, please see appendix B.
14. Current budget stress from falling oil prices may result in tax changes. See, for example,, Kirk Johnson, "As Oil Money Melts, Alaska Mulls First Income Tax in 35 Years," *New York Times*, December 25, 2015; Paul Jones, "Alaska Republicans Could Float Statewide Sales Tax Proposal," *State Tax Notes*, January 6, 2016.
15. Federal law prohibits DC from collecting taxes on personal income earned by nonresidents (i.e., commuters).
16. This is the closest approximation to ideal consumption tax base. In practice, states deviate from this standard. All states exempted items, including services, and most states tax (at least some) business inputs in addition to household purchases.
17. The Bureau of Economic Analysis data were adjusted for residency. Thus, Louisiana's total is an estimate of purchases by Louisiana residents and not purchases within Louisiana. By contrast, Economic Census receipt data reflect in-state purchases only but also include government and business purchases—which overinflates the base.
18. For more information on the taxation of services, see the Federation of Tax Administrators: <http://www.taxadmin.org/sales-taxation-of-services>.
19. See "Sales & Use Tax Publications for Specific Industries," Wyoming Department of Revenue, accessed January 19, 2016, <http://revenue.wyo.gov/Excise-Tax-Division/sales-use-tax-publications-for-specific-industries>.
20. Some jurisdictions base value on the last sale price or acquisition value of the property. Others consider the income a property (e.g., hotels) could generate, and some base the assessment solely on the size or physical attributes (e.g., design, location) of the property. The timing of assessments also varies, with some jurisdictions assessing value annually and others less frequently.
21. For a detailed description of the data sources and calculations, please see appendix B.
22. DC's per capita capacity (\$3,399) and revenue (\$2,957) were higher than all the states. However, beyond the District's resemblance to a city rather than a state in terms of its demographics and economic base, it is important to note that DC, like all other US states and localities, is prohibited from taxing federally owned land, which accounts for nearly 30 percent of the property tax base in DC (Yilmaz and Zahradnik 2008).
23. The 41 states with a broad-based income tax mostly followed the federal Internal Revenue Code to define taxable income, but there were some differences. For example, states used different rules for capital gains, pensions, Social Security payments, and unemployment compensation.
24. For example, Yilmaz et al. (2006) used federal adjusted gross income as their income starting point. Following Tannenwald (1998) and other previous studies, they also subtracted from their revenue base an average personal exemption for the nation as a whole. They surmised that states are highly unlikely to remove dependent exemptions in the short run. This supposition may be true, but we concluded that exemptions are a policy choice and thus no different than any other part of a tax system.
25. Although Ohio had a gross receipts tax in 2012, it still collected some corporate income tax revenue, mostly from taxes levied in previous years. Ohio collected revenue from taxes on financial institutions.
26. Despite not having a tax, South Dakota collected corporate income tax revenue because it had special taxes for financial institutions.
27. These states were Delaware, Kentucky, Missouri, New York, Ohio, Oregon, and Pennsylvania. The revenue collected was relatively small in these states except for New York.
28. For an overview, see Francis 2013.

29. We calculated the tax base using the three-factor formula with doubled payroll, a two-factor formula was payroll and receipts, and a one-factor formula with receipts. There was little variation among the three bases (see appendix B).
30. As oil production and prices precipitously dropped in 2015 so did Alaska's corporate income tax revenue.
31. The Census of Governments' measure of general charges includes the following categories: air transportation, education (e.g., school lunches, athletic contest tickets, college tuition), highways and toll-roads, hospitals, housing and community development, natural resources, parking, parks and recreation, sewerage, waste management, water transportation, miscellaneous commerce activity, and all other "not elsewhere classified."
32. For all selective sales taxes, there is the danger that the state tax rate affects consumption and hence our measures of the hypothetical tax base. See, for example, Goolsbee, Lovenheim, and Slemrod (2010). In appendix B we discuss some potential solutions to this challenge.
33. Four states (Hawaii, Illinois, Indiana, and Michigan) levied a general sales tax on gas in addition to the motor fuel tax in 2012. This tax is different from percentage-of-price gas taxes in some states because sales tax revenue goes to the general fund. Levying the general sales tax on motor fuel does not directly affect a state's motor fuel tax rate. However, these four states had relatively low motor fuels tax rates.
34. According to the Federal Highway Administration, in 2012 North Dakota taxed nearly as many gallons of special fuels (e.g., diesel) as gallons of gasoline. Nationwide, special fuels represented only a quarter of the gallons of gasoline taxed.
35. Some states tax gasoline and diesel at different rates but North Dakota and Wyoming used the same rate in 2012.
36. According to the Campaign for Tobacco-Free Kids, Pennsylvania is the only state that does not tax these products.
37. In addition to specific sales taxes on alcohol, 22 states collected revenue from government-run liquor stores. We included this revenue in the state totals to get a more accurate representation of alcohol-related revenue.
38. Pennsylvania governments did not control all beer sales. See Federation of Tax Administrators data, available on "Alcohol Rates 2000–2010, 2013–2015," Tax Policy Center, last modified February 16, 2015, <http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=349>.
39. New Hampshire did tax beer sales.
40. The New Hampshire Liquor Commission estimated half its sales were from nonresidents.
41. See, for example, Steve Bailey and Brenna Erford, "Revenue Volatility Varies Widely by State and Tax Type," Pew Charitable Trusts, January 29, 2015, <http://www.pewtrusts.org/en/research-and-analysis/analysis/2015/01/revenue-volatility-varies-widely-by-state-and-tax-type>.
42. Only state data were available for 2014 at the time of publication, but state severance tax revenue was more than 99 percent of Alaska severance tax revenue in 2012.
43. We used the IRS Statistics of Income estate tax returns filed in 2012 by state of residence. The federal tax data only include taxable estates above the federal threshold (\$5.12 million in 2012).
44. Ohio's tax was repealed effective January 1, 2013.
45. Wyoming legalized a lottery in 2014.
46. In the seven states with no lottery, we estimated a total using the state's personal income and average lottery sales as a percentage of income in the region.
47. "Other taxes" included the following Census revenue categories: amusement selective sales taxes, parimutuel selective sales tax, public utilities selective sales taxes, other selective sales tax, amusement licenses, alcohol

licenses, public utility licenses, occupational and business licenses, other licenses, documentary and stock transfers, and “not elsewhere classified.”

48. “Other nontax revenue” included the following Census revenue categories: property sales from housing and community development, other property sale, interest revenue, fines and forfeits, rents and royalties, private donations, and miscellaneous general revenue not elsewhere classified.
49. In this report we augment direct general expenditure figures to include public transit in “all other expenditures.” Thus, our direct general expenditure numbers will differ from those reported in the Census of Governments (\$2.59 trillion), which classifies public transit as a utility.
50. Spending per pupil is a better measure than spending per capita of resources actually directed to each public school student. However, spending per capita captures by how much each state draws on taxpayers to fund a given service or function.
51. Another choice is what services to provide. Although local governments may be subject to state requirements to provide certain services (e.g., courts, indigent health care), at the state level federal mandates play less of a role so we do not consider expenditure assignment in this analysis.
52. For a detailed description of data sources and calculations, please see appendix C.
53. They accounted for 60 percent of total state and local expenditures, including utilities as well as publicly owned liquor stores and insurance trusts.
54. We use a modified direct general expenditures definition that includes all spending on what the Census Bureau terms the “general government sector,” plus spending on transit systems, which the Bureau classifies as a utility but we viewed as a core government function, not very different from other commercial-type activities, such as airports, toll roads and bridges, housing projects, parking facilities, port facilities, lotteries, and so forth in the general government sector. These figures do not take into account passenger fares and other user fees that effectively reduce state and local government costs of transit. See US Census Bureau 2006.
55. As noted earlier, DC has demographic and economic features that make it more comparable to a city than a state. Alaska also was especially reliant on severance taxes and other oil-related revenues in 2012. Its expenditures include cash payments to Alaskan residents through the state’s Permanent Fund Dividend program (funded through oil industry profits). For more information, see “The Permanent Fund Dividend,” Alaska Permanent Fund Corporation, accessed February 19, 2016, <http://www.apfc.org/home/Content/dividend/dividend.cfm>.
56. These figures do not take into account tuition and other fees that effectively reduce state subsidies to higher education.
57. “Medicaid Income Eligibility Limits for Adults as a Percent of the Federal Poverty Level,” Henry J. Kaiser Family Foundation, last modified January 1, 2016, <http://kff.org/health-reform/state-indicator/medicaid-income-eligibility-limits-for-adults-as-a-percent-of-the-federal-poverty-level/>.
58. Beyond grants, the federal government also subsidizes state and local governments by allowing federal income tax payers to deduct state and local taxes paid and by excluding bond interest from taxable income. The value of these subsidies has been estimated at more than \$130 billion in foregone tax dollars to the US Treasury.
59. See GAO (2011) and Foster, Haleco-Meyer, and Mattoon (2010).
60. For these comparisons, we summed the following Economic Census categories: accommodations and food services; administrative and support and waste management and remediation services; arts, entertainment, and recreation; finance and insurance; health care and social assistance; information; other services; professional, scientific, and technical services; real estate and rental leasing; retail trade; and transportation and warehousing. Economic Census did not provide state-level receipts for finance and insurance, information, and professional services so we allocated national receipts using state payroll.

61. Property tax revenue data are not available by property type so we did not calculate separate effective tax rates for each component of the tax base.
62. Total taxable resources are defined as the unduplicated sum of the income flows produced within a state and the income flows received by its residents which a state can potentially tax. The federal taxes subtracted are federal indirect business taxes: federal indirect business taxes (e.g., excise taxes on gasoline, alcohol, tobacco) and nontax liabilities (e.g., grazing fees, miscellaneous rents and royalties) are argued to not be a part of TTR on the grounds that they are sums paid to the federal government, and thus are not taxable by the states.
63. Many states now double weight sales in this equation or use only sales (a single-sales factor formula) with the goal of attracting businesses to locate in their state. See Francis 2013.
64. See Norton Francis' report for more on the states reaction to federal estate tax changes: Back from the Dead: State Estate Taxes after the Fiscal Cliff," (November 14, 2012)
<http://www.urban.org/research/publication/back-dead-state-estate-taxes-after-fiscal-cliff>.
65. Another potential source of variation is the bundle of public goods and services provided in each state. However, we assume that states are responsible for a relatively uniform set of public goods and services and that any deviation from this package is a policy choice.
66. More precisely, let N denote some measure of need and E expenditures. Subscript n refers to national and s to a given state. Then $E_n/N_n =$ the cost per need measure for the nation as a whole. Multiplying E_n/N_n by N_s yields workload factor adjusted expenditures for that state. Equivalently, we can write $(E_n/N_n) * N_s = (N_s / N_n) * E_n$. The next step is to multiply by an input cost index (ICI) divided by 100. The final representative expenditure calculation for a state is: $N_s / N_n * ICIs / 100 * E_n = RES$.
67. This is analogous to fixed weight indexes of inflation (such as the Consumer Price Index) that focus on a given market basket to avoid conflating price changes with changes in the quantity or quality of goods purchased.
68. In fiscal year 2012, the share of total compensation for public school employees going toward benefits was 27 percent. The minimum share was 13 percent (District of Columbia) and maximum was 41 percent (Alaska) with a standard deviation of 5 percent. There was also very little deviation in these numbers from fiscal 2007–12 (NCES 2015a, 2015b).
69. Specifically, $[(A * B) + (1 - B)] * 100$ where A is labor cost index and B is compensation spending share.
70. Census codes E12, F12, and G12.
71. Census codes E16, F16, G16, E18, F18, and G18.
72. Census codes J67, J68, E74, E75, E77, F77, G77, E79, F79, and G79.
73. Census codes E32, F32, G32, E36, F36, and G36.
74. Census codes E62, F62, G62, E04, F04, G04, E05, F05, and G05.
75. Census codes E50, F50, G50, E59, F59, G59, E61, F61, G61, E80, F80, G80, E81, F81, and G81.
76. Census codes E23, F23, G23, E25, F25, G25, E26, F26, G26, E29, F29, and G29.
77. Census codes E44, F44, G44, E45, F45, and G45.
78. We do not include students who are age 18 in calculating the percent of students in poverty because of the age range groupings of the ACS data on number of children below the poverty level.
79. These age groups are 14–17, 18–24, 25–34, and 35 and over.
80. US Department of Transportation, Federal Highway Administration, *2013 Conditions and Performance*, "Appendix A: Highway Investment Analysis Methodology," accessed June 24, 2015, <http://www.fhwa.dot.gov/policy/2013cpr/appendixa.cfm>.

81. For instance, Yilmaz et al. (2006) noted that, in 2002, 40percent of Medicaid spending went towards elderly program recipients. They concluded that share of population aged 75 and over should affect public welfare costs, and that this factor should receive a weight of roughly 25 percent (i.e., 0.67×0.40 , where 0.67 was that year's share of public welfare spending on medical vendor payments).
82. The Henry J. Kaiser Family Foundation, State Health Facts, "Medicaid Spending by Enrollment Group," accessed June 18, 2015, <http://kff.org/medicaid/state-indicator/medicaid-spending-by-enrollment-group/>.
83. The difference is zero to five decimal points.

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About the Authors

Tracy Gordon is a senior fellow with the Urban-Brookings Tax Policy Center, where she researches and writes about fiscal challenges facing state and local governments, including budget tradeoffs, intergovernmental relations, and long-term sustainability. Before joining Urban, Gordon was a senior economist with the White House Council of Economic Advisers. She was also a member of the District of Columbia Tax Revision Commission, a fellow at the Brookings Institution, an assistant professor at the Maryland School of Public Policy, and a fellow at the Public Policy Institute of California. Gordon currently serves on the board of trustees for the American Tax Policy Institute and is a member of the District of Columbia Infrastructure Task Force.

Richard Auxier is a research associate in the Urban-Brookings Tax Policy Center at the Urban Institute. His work focuses on state and local tax policy, budgets, and other finance issues. Before joining Urban, Auxier was on the staff of the DC Tax Revision Commission and helped write the commission's final report on recommendations for improving the District's tax system. He also was previously a researcher and editor at the Pew Research Center. Auxier attended the University of Maryland for his undergraduate degree and his master's degree in public policy.

John Iselin is a research assistant with the Urban-Brookings Tax Policy Center.

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