

#### **HOW BROAD ARE STATE SALES TAX BASES?**

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#### **ABSTRACT**

This chartbook compares the breadth of general sales and excise tax bases across the states. It categorizes detailed personal consumption expenditures (as measured in the Bureau of Economic Analysis National Income and Products Accounts) by their tax treatment in each state and the District of Columbia. It shows that there is substantial variation across states in the share of the potential tax base covered by state general and selective sales tax, ranging from 36 percent in Vermont to 75 percent in New Mexico and 91 percent in Hawaii. Then, focusing particularly on service expenditures, it shows (1) household expenditures on services are a large and growing share of total personal consumption expenditures and (2) general sales and excise taxes in most states either exclude or exempt most services from tax, but (3) because spending on services is such a large portion of total household expenditures, services nonetheless account for a significant portion of state sales and excise tax bases.

#### INTRODUCTION

Forty-five states and the District of Columbia levy general sales taxes that apply to a wide range of goods and services. All states, including those without a broad sales tax, apply separate excise taxes to specific items such as tobacco, alcohol, and motor fuels.

The combined general sales and excise tax base is not comprehensive in most states. All 45 states that levy a general sales tax include most purchases of tangible personal property in their tax base, but only a handful of states tax a significant number of services. Yet, because expenditures on services are a large share of personal consumption expenditures in every state, they constitute a significant portion of taxable expenditures, even in those states that do not tax most services.

Over time, the US has experienced a shift in household consumption patterns. Starting in the 1960s, spending on services exceeded expenditures on either durable or nondurable goods, and by the 1970s, it exceeded household expenditures on all goods combined. Since then, services have continued to grow as a share of total household spending, except in 2020 when total spending on services declined in response to pandemic-related limitations on many activities. State sales taxes, however, which historically have applied largely to tangible goods while excluding services, have not kept up with the trend in spending behavior.

Section 1 of this chartbook presents information on the composition of household spending over time and across states, using data on personal consumption expenditures (PCE). PCE measures the goods and services purchased by US resident households and nonprofit institutions serving those households (see US Bureau of Economic Analysis 2020, chapter 5). It is classified into the following product categories:

- **Durable goods**: Motor vehicles and parts, furnishings and durable household equipment, recreational goods and vehicles, and other durable goods.
- **Nondurable goods**: Food and beverages purchased for off-premises consumption, clothing and footwear, gasoline and other energy goods, and other nondurable goods.
- **Services**: Housing (measured by rent for tenants and the rental equivalent for homeowners) and utilities, health care, transportation services, recreation services, food services (food and beverages purchased for on-premise consumption) and accommodations, financial services and insurance, and other services.

PCE include expenditures financed by third-party payers on behalf of households, such as employer-provided health insurance and medical care financed through government programs. They also include imputed expenditures, such as the value of the services provided by owner-occupied housing (to treat housing the same way whether it is owned or rented) and the value of financial services furnished without payment (to treat direct and implicit fees equivalently).

Section 2 of this chartbook compares the breadth of sales and excise tax bases across the states by categorizing detailed personal consumption expenditures according to their tax treatment in each state and the District of Columbia.<sup>1</sup> We measure the potential sales tax base as total PCE less final expenditures by nonprofits. We also exclude imputed items, such as the rental equivalent value of services from owner-occupied homes and the value of financial services provided without payment, because a comprehensive sales tax likely would not include these items. Lastly, we exclude expenditures characterized as net foreign travel, which is defined as expenditures by US residents traveling abroad less expenditures in the US by nonresidents. Unlike PCE, which measures expenditures by US residents, a comprehensive sales tax base would not include expenditures by US residents traveling abroad but would include expenditures in the US by nonresidents.

<sup>&</sup>lt;sup>1</sup> For more detail on how we constructed taxable consumption categories, see the appendix.

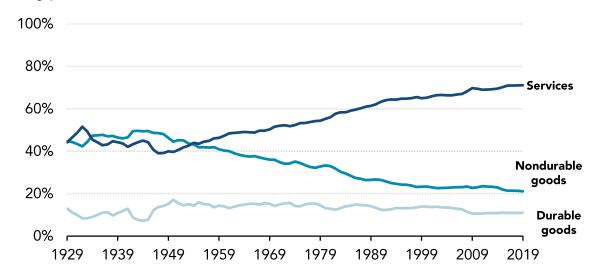
## Americans spend far more on services than on goods

- Household expenditures on services were 70 percent of nationwide personal consumption expenditures in 2019. In contrast, expenditures on nondurable goods, which were once over 40 percent of personal consumption expenditures, were less than 20 percent in 2019. Durable goods, which have maintained a small but consistent share of nationwide personal consumption expenditures, were 11 percent of expenditures in 2019.
- In the 1930s, when many states first introduced sales taxes, expenditures on services were a much smaller portion of total expenditures. Not until after World War II did spending on services begin to outpace spending on tangible goods.

#### FIGURE 1

## Share of Household Spending by Product Type, 1929-2019





**Source**: US Bureau of Economic Analysis, Personal Consumption Expenditures Table 2.4.5. **Note:** Household spending is measured as total personal consumption expenditures less final consumption expenditures by nonprofit institutions serving households.

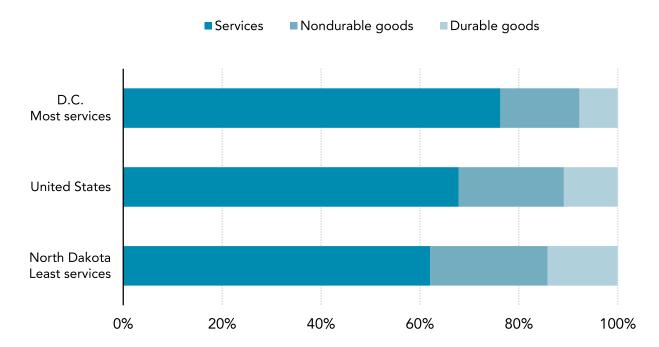
# Spending on services is the largest component of household expenditures in every state

- Spending on services accounts for more than 60 percent of household spending in every state and 70 percent on average nationally.
- In the District of Columbia, spending on services is 76 percent of household expenditures, larger than the share in any of the states; in North Dakota, on the other hand, spending on services is 62 percent of total expenditures, the smallest share.<sup>2</sup>

#### FIGURE 2

## Share of Household Spending by Product Type for Selected States and the US, 2018





**Source**: Bureau of Economic Analysis, Regional Economic Accounts, Table SAEXP1 and Bureau of Economic Analysis, National Income and Product Accounts Table 2.4.5U.

**Note:** Household spending is measured as total personal consumption expenditures less final consumption expenditures by nonprofit institutions serving households.

<sup>&</sup>lt;sup>2</sup> The entire population of the District of Columbia lives in an urban area. Urban consumers tend to spend slightly more on services and particularly rental housing as a share of total consumption than rural consumers. See Bureau of Labor Statistics, U.S. Department of Labor, *The Economics Daily,* "Urban and rural household spending in 2015," at https://www.bls.gov/opub/ted/2016/urban-and-rural-household-spending-in-2015.htm (visited April 01, 2021).

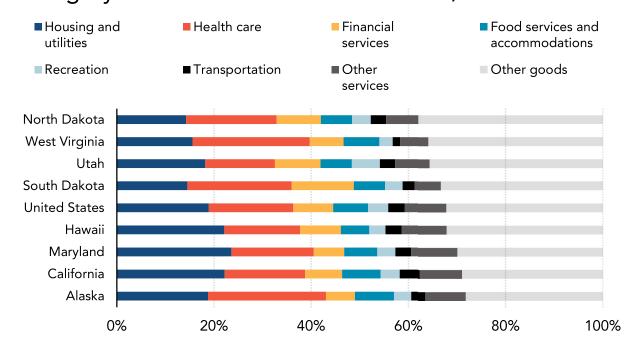
#### More than half of household spending on services is for housing and health care

- Expenditures on housing and health care combined account for 36 percent of total personal consumption expenditures on average and more than half of all spending on services. As noted, housing expenditures in PCE are measured as rent for tenants and the rental equivalent for homeowners and thus are classified as services, and health care expenditures include thirdparty payments by private insurers and government programs.
- Financial services account for 8 percent, and spending on food services and accommodations another 7 percent, of total expenditures.
- The remaining service expenditures are all less than 5 percent of total expenditures. They include spending on recreation, transportation, and other services.
- The relative size of types of service expenditures vary by state. For example, expenditures on health care range from about 14 percent of total expenditures in Utah to 24 percent in Alaska and West Virginia. Spending on housing ranges from 22 percent or more of total expenditures in California, Hawaii, and Maryland to less than 15 percent in North and South Dakota.

#### FIGURE 3

## Share of Household Spending by Service Category for Selected States and the US, 2018





**Source**: Bureau of Economic Analysis, Regional Economic Accounts, Table SAEXP1; and Bureau of Economic Analysis, National Income and Product Accounts Table 2.4.5U. **Note:** Household spending is measured as total personal consumption expenditures less final consumption expenditures by nonprofit institutions serving households.

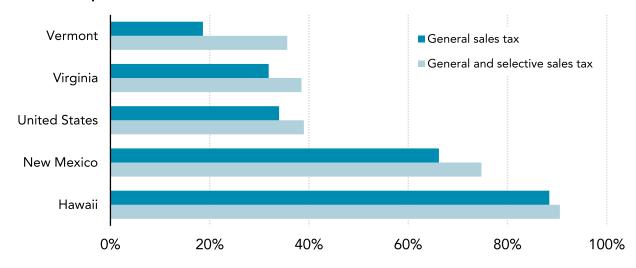
## Most states include less than half of direct household spending in their sales tax base

- Using information about household spending patterns by state as well as state laws specifying the tax base for sales and excise taxes, we can determine the share of household direct spending that is taxable in each state.
- We measure direct household spending by subtracting expenditures by nonprofits and imputed expenditures from personal consumption expenditures.
- The share of the potential tax base covered by state general sales tax ranges from 19 percent in Vermont to 66 percent in New Mexico and 88 percent in Hawaii. If we include both general and selective sales tax, coverage rises to 36 percent in Vermont and to 75 percent in New Mexico and 91 percent in Hawaii.

#### FIGURE 4

## Sales Tax Base as a Percentage of Direct Household Spending for Selected States and the US, 2018





Percentage of direct household spending

**Source**: Bureau of Economic Analysis, Regional Accounts Table SAEXP1; Bureau of Economic Analysis, National Income and Product Accounts Table 2.4.5U; and Bloomberg Sales and Excise Tax Navigators.

**Note:** Direct household spending is measured as personal consumption expenditures less final expenditures by nonprofits serving households and imputed items such as the rental equivalent of owned homes and financial services furnished without payment.

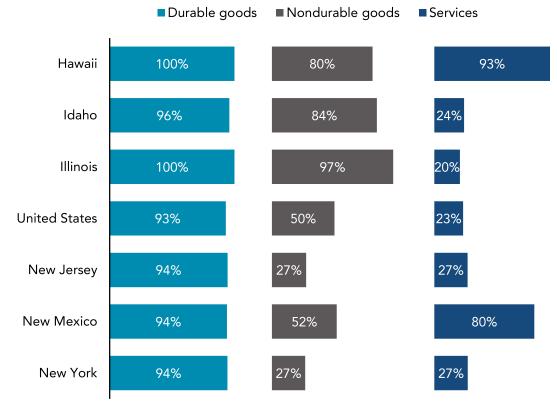
## Most states tax nearly all durable goods, but few tax a significant portion of services

- Almost all expenditures on durables are taxable in most states with a general sales tax. In some states, motor vehicle sales are exempt from general sales tax but are subject to a separate tax.
- Taxation of nondurable goods is far less uniform. Among states with a general sales tax, the percentage of nondurables subject to either the general sales tax or a separate tax ranges from 27 percent in New Jersey and New York to 84 percent in Idaho and 97 percent in Illinois. Three of the largest subcategories of non-durable goods—food at home, prescription drugs, and gasoline—are widely excluded from state general sales taxes, although all states levy a separate excise tax on gasoline.
- The percentage of service expenditures that is taxable ranges from 20 percent or less in many states to 80 percent in New Mexico and 93 percent in Hawaii.
- Alaska, Delaware, Montana, New Hampshire, and Oregon have no statewide general sales tax. However, all tax a small percentage of nondurable goods and (except for Alaska) some services through excise taxes.

#### FIGURE 5

## Tax Base Coverage by Expenditure Category, 2018





Percentage of direct household spending

**Source**: Bureau of Economic Analysis, Regional Accounts Table SAEXP1; Bureau of Economic Analysis, National Income and Product Accounts Table 2.4.5U; and Bloomberg Sales and Excise Tax Navigators

**Note:** Direct household spending is measured as personal consumption expenditures less final expenditures by nonprofits serving households and imputed items such as the rental equivalent of owned homes and financial services furnished without payment.

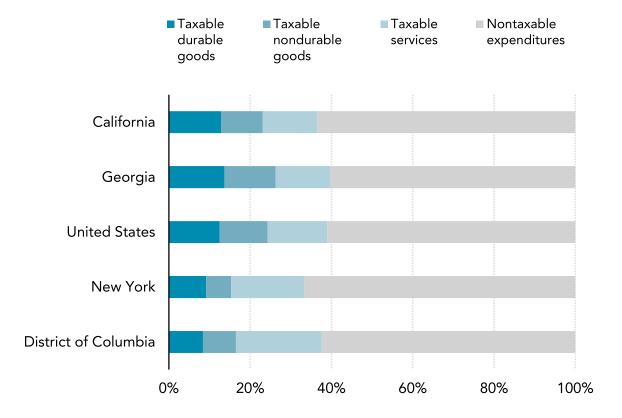
## Services account for a large share of the tax base in every state

- Combining the information on the share of total household expenditures by category and the percentage of each category that is taxable shows the contribution of each major category of spending to the total general and selective sales tax base in a state.
- For the entire US, taxable household expenditures are nearly evenly divided among durable goods, nondurable goods, and services, even though services account for 70 percent of household expenditures, on average.
- The District of Columbia exemplifies the importance of services in the sales tax base despite the tax exclusion for most services. Although only 29 percent of expenditures on services are taxable in the District, because those expenditures are 76 percent of total personal consumption expenditures, taxable services account for 57 percent of taxable spending in DC.

#### FIGURE 6

## Share of Taxable Expenditures by Category, 2018





Percentage of direct household spending

**Source**: Bureau of Economic Analysis, Regional Accounts Table SAEXP1, Bureau of Economic Analysis, National Income and Product Accounts Table 2.4.5U, and Bloomberg Sales and Excise Tax Navigators.

#### CONCLUSION

Although the impact of the pandemic on state revenues has so far been less than expected and the federal government has provided significant financial support, many states still face significant fiscal uncertainty. They may well look to expand their sales tax base to address that concern. Although most states have room to expand their sale tax base, particularly by including additional services, certain caveats are in order. First, it may not be desirable to extend taxation to all services. Spending on health care services, for example, is about one-fifth of total household expenditures on services. Spending on education is a smaller (but not insignificant) share. However, rather than exempting such services, states could provide targeted relief through credit or rebate programs in state income taxes. For example, although most states exempt food and beverages purchased for consumption at home or tax them at a reduced rate, five states (Hawaii, Idaho, Kansas, Oklahoma, and South Dakota) instead provide sales-tax rebates targeted toward lower-income households; this method better serves the equity objective of an exemption (Mikesell and Kioko 2019).

Second, currently about 40 percent of general sales tax revenue comes from taxes paid by businesses. Levying taxes on purchases by businesses causes taxes to cascade and contributes to a lack of tax transparency as inputs are taxed and those taxes become embedded in the price of the final product (Phillips and Ibaid 2019). For example, a computer store may sell to both households and businesses, such as a bookstore whose owner wishes to use the computer to keep track of inventory. If the sales tax applies to all computer sales, then the tax would cascade on purchases from the bookstore: the tax on computers would be passed along in the price of books and magazines and so would be taxed again when those products were sold to consumers. Because businesses consume a significant portion of services, extending the sales tax base to include services may exacerbate the problems caused by taxing business inputs.

#### **METHODOLOGY**

The primary source of household expenditure data is the Bureau of Labor Statistics Consumer Expenditure Survey quarterly interview surveys. The Bureau of Labor Statistics interviews households in five consecutive quarters, with the first interview used to collect some basic information and the second through fifth used to collect expenditure and income data. To create a data file with annual expenditures for each consumer unit, TPC links consumer units across quarters, reweights the data to correct for sample attrition, and aggregates the over 650 detailed income and expenditure variables in the interview survey into 97 categories, 54 of which are household expenditures items (Table A.1).

**TABLE A.1** 

TPC Consumption Categories

Number	Туре	Description	Number	Type	Description	Number	Type	Description
20	Ν	Food at home	46	S	Household operations: other	67	D	Recreation durables
21	S	Food away from home			expenses	68	S	Fees, admissions, pet
22	S	Meals as pay	47	S	Maintenance, repairs,			services
23	Ν	Tobacco			insurance, other expenses	69	S	Lotteries/pari-mutuel
27	Ν	Alcohol off premise	48	Ν	Prescription drugs			net losses
28	S	Alcohol on premise	49	D	Medical supplies	70	S	College tuition
29	Ν	Apparel and Services	50	S	Medical services	71	S	Elementary/HS Tuition
30	S	Other apparel products and	51	S	Health insurance	72	S	Edu services, expenses
		services	52	S	Accounting and Legal Fees	73	S	Taxable cash
31	Ν	Personal products	53	S	Miscellaneous			contributions
33	S	Social, recreation, health	54	S	Life and other personal			
		club membership			insurance			
34	S	Rental housing (excluding	55	D	Vehicle purchase			
		related services)	56	S	Vehicle rental			
36	S	Other Lodging	57	D	Vehicle repair			
37	D	Household furnishings	58	S	Vehicle maintenance and			
38	Ν	Housekeeping supplies			repair services			
39	S	Electricity	59	Ν	Gasoline			
40	S	Water and other public	60	Ν	Motor Oil			
		services	61	S	Tolls			
41	S	Trash and garbage	62	S	Vehicle insurance			
		collection	63	S	Public Transit, excluding			
42	Ν	Fuel oils and other fuels			airlines			
43	S	Gas (utility)	64	S	Airline Fares			
44	S	Telephone services	65	D	Books, Encyclopedias, E-			
45	S	Household operations:			readers			
		personal services	66	N	Magazines, newspapers			

**Note:** D = durable goods, N = nondurable goods, and S = services.

We classified the tax treatment of each of these 54 analytical categories in each state using Bloomberg's Sales Tax Navigator and Excise Tax Navigator. Items were classified as Taxable – General Sales Tax Only, Taxable – General and Selective Sales Tax, Taxable – Selective Sales Tax Only, and Nontaxable. We included the following selective sales taxes: motor vehicle, alcohol and cigarettes, hospitality and amusements, motor vehicle fuels and special fuels, and utilities. We omitted excise taxes on insurance services and on lotteries and parimutuel betting.

We then mapped the 54 expenditure categories to the equivalent level 4, 5, and 6 categories in the Bureau of Economic Analysis National Income and Product Accounts tabulation of Personal Consumption Expenditures (NIPA Table 2.4.5U).<sup>3</sup> These 54 categories cover roughly 95 percent of PCE as measured by the BEA. The categories of PCE not covered are net expenditures abroad by US residents, financial services furnished without payment, net foreign travel, and final consumption expenditures of nonprofit institutions serving households.

Finally, we converted the national estimates from Table 2.4.5U to state-by-state personal consumption expenditures using data from NIPA Table SAEXP1 to compute state adjustment factors. Because BEA reports state level data disaggregated only to level 3 categories, we assumed that within level 3 categories, such as "Motor vehicles and parts," state consumption of level 4, 5, and 6 subcategories (such as "New motor vehicles" and "Motor vehicle parts and accessories") are proportional to the distribution at the national level.

<sup>&</sup>lt;sup>3</sup> For more information, see an Excel file created by Taylor J. Wilson, "Summary Comparison of Aggregate Consumer Expenditures (CE) and Personal Consumption Expenditures (PCE), Based on 2007 Benchmark and Restricted to the Most Comparable Categories on the Basis of Concepts Involved and Comprehensiveness, 2010-2017 (Preliminary)," accessible at "Comparing Expenditures from the Consumer Expenditure Survey with the Personal Consumer Expenditures: Results of the CE/PCE Concordance," Bureau of Labor Statistics, last modified March 19, 2019, https://www.bls.gov/cex/cepceconcordance.htm

TABLE A.2: Share of total household spending by major category and state, 2018

	Durable goods	Nondurable goods	Services		Durable goods	Nondurable goods	Services
Alabama	12%	26%	63%	Montana	15%	23%	62%
Alaska	9%	19%	72%	Nebraska	12%	23%	65%
Arizona	12%	22%	66%	Nevada	12%	21%	68%
Arkansas	12%	25%	63%	New Hampshire	10%	21%	69%
California	10%	19%	71%	New Jersey	11%	20%	69%
Colorado	11%	20%	69%	New Mexico	11%	22%	66%
Connecticut	10%	20%	70%	New York	8%	21%	71%
Delaware	12%	20%	68%	North Carolina	12%	24%	63%
District of Columbia	8%	16%	76%	North Dakota	14%	24%	62%
Florida	12%	20%	67%	Ohio	10%	21%	69%
Georgia	12%	23%	65%	Oklahoma	12%	24%	64%
Hawaii	11%	21%	68%	Oregon	11%	21%	67%
Idaho	13%	23%	64%	Pennsylvania	10%	21%	69%
Illinois	10%	20%	70%	Rhode Island	9%	22%	70%
Indiana	11%	23%	66%	South Carolina	11%	25%	64%
lowa	12%	25%	64%	South Dakota	13%	21%	67%
Kansas	12%	23%	66%	Tennessee	12%	24%	64%
Kentucky	11%	26%	63%	Texas	12%	23%	65%
Louisiana	12%	24%	64%	Utah	14%	22%	64%
Maine	11%	26%	63%	Vermont	11%	24%	66%
Maryland	10%	20%	70%	Virginia	10%	20%	70%
Massachusetts	10%	20%	70%	Washington	12%	19%	69%
Michigan	11%	23%	66%	West Virginia	10%	25%	64%
Minnesota	12%	20%	68%	Wisconsin	11%	22%	66%
Mississippi	11%	26%	63%	Wyoming	10%	23%	67%
Missouri	11%	23%	66%	United States	11%	21%	68%

**Source:** Bureau of Economic Analysis, Regional Economic Accounts, Table SAEXP1.

**Note:** Household spending is measured as personal consumption expenditures less final consumption expenditures of nonprofit institutions serving households.

TABLE A.3: Share of total household spending by category of service and state, 2018

Alaska         18%         23%         3%         3%         8%         6%         8%         279           Arizona         20%         16%         4%         4%         8%         6%         7%         333           Arkansas         16%         18%         2%         3%         6%         9%         6%         369           California         22%         16%         4%         4%         8%         7%         8%         288           Colorado         20%         15%         4%         5%         8%         6%         9%         309           Connecticut         20%         15%         4%         4%         5%         10%         10%         299           Delaware         18%         20%         2%         3%         7%         7%         8%         309           Delaware         18%         20%         2%         3%         7%         7%         8%         309           Delaware         18%         10%         3%         3%         7%         7%         20%         233           Florida         19%         17%         3%         3%         8%         9% <td< th=""><th></th><th>Housing and utilities</th><th>Health care</th><th>Transportation services</th><th>Recreation services</th><th>Food services and accommodations</th><th>Financial services and insurance</th><th>Other services</th><th>Other goods</th></td<>		Housing and utilities	Health care	Transportation services	Recreation services	Food services and accommodations	Financial services and insurance	Other services	Other goods
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Delaware         18%         20%         2%         3%         7%         7%         8%         30%           District of Columbia         18%         16%         3%         3%         7%         7%         20%         23%           Florida         19%         17%         3%         3%         8%         9%         8%         33           Georgia         18%         17%         3%         4%         7%         7%         10%         349           Hawaii         21%         15%         3%         3%         6%         8%         9%         319           Idaho         18%         17%         3%         4%         7%         9%         5%         369           Illinois         18%         17%         4%         4%         7%         9%         5%         369           Illinois         18%         17%         4%         4%         7%         8%         10%         29%           Indiana         16%         21%         3%         4%         6%         6%         7%         339           Iowa         16%         17%         3%         3%         6%         9%         8	Colorado	20%	15%	4%	5%	8%	6%	9%	30%
District of Columbia         18%         16%         3%         3%         7%         7%         20%         23%           Florida         19%         17%         3%         3%         8%         9%         8%         33%           Georgia         18%         17%         3%         4%         7%         7%         10%         349           Hawaii         21%         15%         3%         3%         6%         8%         9%         319           Idaho         18%         17%         3%         4%         7%         9%         5%         369           Illinois         18%         17%         4%         4%         7%         8%         10%         299           Indiana         16%         21%         3%         4%         6%         6%         7%         339           Iowa         16%         17%         3%         4%         6%         8%         7%         359           Kansas         18%         17%         3%         4%         6%         8%         7%         359           Kentucky         16%         19%         2%         4%         7%         7%         6%	Connecticut	20%	15%	4%	4%	5%	10%	10%	29%
Florida 19% 17% 3% 3% 8% 9% 8% 339 Georgia 18% 17% 3% 4% 7% 7% 10% 349 Hawaii 21% 15% 3% 3% 4% 7% 9% 5% 369 Illinois 18% 17% 3% 4% 7% 9% 5% 369 Illinois 18% 17% 4% 4% 7% 8% 10% 229 Indiana 16% 21% 3% 4% 6% 6% 8% 7% 339 Iowa 16% 17% 3% 4% 6% 6% 8% 7% 359 Kansas 18% 17% 3% 3% 4% 6% 8% 7% 359 Kansas 18% 17% 3% 3% 6% 9% 8% 339 Kentucky 16% 19% 2% 4% 7% 7% 7% 6% 369 Louisiana 17% 18% 2% 4% 8% 7% 6% 359 Maine 16% 17% 2% 4% 7% 7% 6% 359 Maryland 23% 16% 3% 4% 7% 7% 7% 7% 7% 359 Maryland 23% 16% 3% 4% 7% 7% 7% 6% 359 Maryland 23% 16% 3% 4% 7% 7% 7% 7% 10% 299 Massachusetts 19% 17% 17% 5% 5% 5% 6% 7% 7% 7% 10% 299 Michigan 17% 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 339 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 7% 329 Michigan 17% 17% 5% 5% 5% 6% 7% 7% 7% 7% 7% 329 Michigan 17% 17% 17% 17% 17% 17% 17% 17% 17% 17%	Delaware	18%	20%	2%	3%	7%	7%	8%	30%
Georgia         18%         17%         3%         4%         7%         7%         10%         349           Hawaii         21%         15%         3%         3%         6%         8%         9%         319           Idaho         18%         17%         3%         4%         7%         9%         5%         369           Illinois         18%         17%         4%         4%         7%         8%         10%         299           Indiana         16%         21%         3%         4%         6%         6%         7%         3339           Iowa         16%         17%         3%         4%         6%         8%         7%         359           Kansas         18%         17%         3%         4%         6%         8%         7%         359           Kentucky         16%         19%         2%         4%         7%         7%         6%         369           Louisiana         17%         18%         2%         4%         7%         7%         6%         359           Maryland         23%         16%         3%         4%         7%         7%         6%	District of Columbia	18%	16%	3%	3%	7%	7%	20%	23%
Hawaii         21%         15%         3%         3%         6%         8%         9%         319           Idaho         18%         17%         3%         4%         7%         9%         5%         369           Illinois         18%         17%         4%         4%         7%         8%         10%         29%           Indiana         16%         21%         3%         4%         6%         6%         7%         339           Iowa         16%         17%         3%         4%         6%         8%         7%         359           Kansas         18%         17%         3%         3%         6%         9%         8%         339           Kentucky         16%         19%         2%         4%         7%         7%         6%         369           Louisiana         17%         18%         2%         4%         7%         7%         6%         359           Maine         16%         17%         2%         4%         7%         7%         7%         359           Maryland         23%         16%         3%         4%         7%         6%         9%	Florida	19%	17%	3%	3%	8%	9%	8%	33%
Idaho         18%         17%         3%         4%         7%         9%         5%         369           Illinois         18%         17%         4%         4%         7%         8%         10%         299           Indiana         16%         21%         3%         4%         6%         6%         6%         7%         339           Iowa         16%         17%         3%         4%         6%         8%         7%         359           Kansas         18%         17%         3%         3%         6%         9%         8%         339           Kentucky         16%         19%         2%         4%         7%         7%         6%         369           Louisiana         17%         18%         2%         4%         8%         7%         6%         359           Maine         16%         17%         2%         4%         7%         7%         7%         359           Massachusetts         19%         17%         3%         5%         7%         7%         10%         299           Michigan         17%         17%         5%         5%         6%         7%	Georgia	18%	17%	3%	4%	7%	7%	10%	34%
Illinois         18%         17%         4%         4%         7%         8%         10%         29%           Indiana         16%         21%         3%         4%         6%         6%         7%         33%           Iowa         16%         17%         3%         4%         6%         8%         7%         35%           Kansas         18%         17%         3%         3%         6%         9%         8%         33%           Kentucky         16%         19%         2%         4%         7%         7%         6%         36%           Louisiana         17%         18%         2%         4%         8%         7%         6%         35%           Maine         16%         17%         2%         4%         7%         7%         7%         35%           Maryland         23%         16%         3%         4%         7%         6%         9%         29%           Massachusetts         19%         17%         3%         5%         7%         7%         10%         29%           Michigan         17%         17%         5%         5%         6%         7%         7% <td>Hawaii</td> <td>21%</td> <td>15%</td> <td>3%</td> <td>3%</td> <td>6%</td> <td>8%</td> <td>9%</td> <td>31%</td>	Hawaii	21%	15%	3%	3%	6%	8%	9%	31%
Indiana         16%         21%         3%         4%         6%         6%         7%         339           Iowa         16%         17%         3%         4%         6%         8%         7%         359           Kansas         18%         17%         3%         3%         6%         9%         8%         339           Kentucky         16%         19%         2%         4%         7%         7%         6%         369           Louisiana         17%         18%         2%         4%         8%         7%         6%         359           Maine         16%         17%         2%         4%         7%         7%         7%         359           Maryland         23%         16%         3%         4%         7%         6%         9%         299           Massachusetts         19%         17%         3%         5%         7%         7%         10%         299           Michigan         17%         17%         5%         5%         6%         7%         7%         329	Idaho	18%	17%	3%	4%	7%	9%	5%	36%
lowa         16%         17%         3%         4%         6%         8%         7%         35%           Kansas         18%         17%         3%         3%         6%         9%         8%         33%           Kentucky         16%         19%         2%         4%         7%         7%         6%         36%           Louisiana         17%         18%         2%         4%         8%         7%         6%         35%           Maine         16%         17%         2%         4%         7%         7%         7%         35%           Maryland         23%         16%         3%         4%         7%         6%         9%         29%           Massachusetts         19%         17%         3%         5%         7%         7%         10%         29%           Michigan         17%         17%         5%         5%         6%         7%         7%         32%	Illinois	18%	17%	4%	4%	7%	8%	10%	29%
Kansas         18%         17%         3%         3%         6%         9%         8%         339           Kentucky         16%         19%         2%         4%         7%         7%         6%         369           Louisiana         17%         18%         2%         4%         8%         7%         6%         359           Maine         16%         17%         2%         4%         7%         7%         7%         359           Maryland         23%         16%         3%         4%         7%         6%         9%         299           Massachusetts         19%         17%         3%         5%         7%         7%         10%         299           Michigan         17%         17%         5%         5%         6%         7%         7%         329	Indiana	16%	21%	3%	4%	6%	6%	7%	33%
Kentucky         16%         19%         2%         4%         7%         7%         6%         36%           Louisiana         17%         18%         2%         4%         8%         7%         6%         35%           Maine         16%         17%         2%         4%         7%         7%         7%         35%           Maryland         23%         16%         3%         4%         7%         6%         9%         29%           Massachusetts         19%         17%         3%         5%         7%         7%         10%         29%           Michigan         17%         17%         5%         5%         6%         7%         7%         32%	lowa	16%	17%	3%	4%	6%	8%	7%	35%
Louisiana         17%         18%         2%         4%         8%         7%         6%         35%           Maine         16%         17%         2%         4%         7%         7%         7%         35%           Maryland         23%         16%         3%         4%         7%         6%         9%         29%           Massachusetts         19%         17%         3%         5%         7%         7%         10%         29%           Michigan         17%         17%         5%         5%         6%         7%         7%         32%	Kansas	18%	17%	3%	3%	6%	9%	8%	33%
Maine         16%         17%         2%         4%         7%         7%         7%         359           Maryland         23%         16%         3%         4%         7%         6%         9%         29%           Massachusetts         19%         17%         3%         5%         7%         7%         10%         29%           Michigan         17%         17%         5%         5%         6%         7%         7%         32%	Kentucky	16%	19%	2%	4%	7%	7%	6%	36%
Maryland         23%         16%         3%         4%         7%         6%         9%         29%           Massachusetts         19%         17%         3%         5%         7%         7%         10%         29%           Michigan         17%         17%         5%         5%         6%         7%         7%         32%	Louisiana	17%	18%	2%	4%	8%	7%	6%	35%
Massachusetts         19%         17%         3%         5%         7%         7%         10%         29%           Michigan         17%         17%         5%         5%         6%         7%         7%         32%	Maine	16%	17%	2%	4%	7%	7%	7%	35%
Michigan 17% 17% 5% 5% 6% 7% 7% 32%	Maryland	23%	16%	3%	4%	7%	6%	9%	29%
	Massachusetts	19%	17%	3%	5%	7%	7%	10%	29%
M: . 470/ 400/ 20/ E0/ /0/ 70/ 20/ 240	Michigan	17%	17%	5%	5%	6%	7%	7%	32%
Minnesota 1/% 18% 3% 5% 6% /% 8% 317	Minnesota	17%	18%	3%	5%	6%	7%	8%	31%
Mississippi 17% 20% 2% 2% 7% 8% 5% 36%	Mississippi	17%	20%	2%	2%	7%	8%	5%	36%

**TABLE A.3 (continued)** 

	Housing and utilities	Health care	Transportation services	Recreation services	Food services and accommodations	Financial services and insurance	Other services	Other goods
Missouri	16%	18%	3%	5%	7%	8%	7%	33%
Montana	16%	18%	3%	4%	7%	7%	6%	37%
Nebraska	16%	18%	3%	4%	6%	10%	7%	34%
Nevada	18%	14%	3%	4%	4%	17%	6%	31%
New Hampshire	19%	17%	3%	4%	6%	8%	8%	30%
New Jersey	20%	14%	4%	4%	5%	7%	10%	29%
New Mexico	18%	18%	3%	4%	7%	8%	6%	33%
New York	18%	16%	5%	4%	7%	8%	11%	27%
North Carolina	17%	18%	2%	4%	7%	7%	7%	36%
North Dakota	14%	18%	3%	4%	6%	9%	6%	37%
Ohio	16%	19%	3%	4%	6%	10%	7%	30%
Oklahoma	16%	18%	2%	4%	7%	9%	7%	35%
Oregon	20%	17%	3%	5%	7%	6%	6%	32%
Pennsylvania	16%	18%	3%	5%	6%	9%	9%	29%
Rhode Island	20%	17%	3%	4%	8%	7%	8%	29%
South Carolina	17%	17%	2%	4%	8%	7%	7%	36%
South Dakota	14%	21%	2%	4%	6%	12%	5%	32%
Tennessee	17%	18%	2%	4%	8%	8%	7%	35%
Texas	17%	16%	3%	4%	7%	9%	8%	34%
Utah	18%	14%	3%	6%	6%	9%	7%	35%
Vermont	18%	18%	2%	4%	7%	6%	7%	32%
Virginia	21%	15%	3%	4%	7%	10%	11%	29%
Washington	20%	17%	4%	5%	7%	7%	8%	30%
West Virginia	15%	23%	1%	3%	7%	7%	6%	34%
Wisconsin	17%	19%	3%	4%	6%	8%	7%	32%
Wyoming	18%	16%	3%	3%	8%	12%	6%	32%
United States	18%	17%	3%	4%	<b>7</b> %	8%	<b>7</b> %	35%

**Source:** Bureau of Economic Analysis, Regional Economic Accounts, Table SAEXP1.

Note: Household spending is measured as personal consumption expenditures less final consumption expenditures of nonprofit institutions serving households.

TABLE A.4: Tax base coverage under general sales tax

Total and major expenditure categories by state, 2018

	Overall household spending	Durable goods	Nondurable goods	Services		Overall household spending	Durable goods	Nondurable goods	Services
Alabama	41%	96%	67%	15%	Montana	0%	0%	0%	0%
Alaska	0%	0%	0%	0%	Nebraska	34%	96%	34%	19%
Arizona	41%	95%	39%	29%	Nevada	28%	93%	39%	8%
Arkansas	42%	63%	63%	26%	New Hampshire	0%	0%	0%	0%
California	32%	100%	48%	14%	New Jersey	34%	94%	19%	27%
Colorado	32%	95%	39%	17%	New Mexico	66%	63%	35%	80%
Connecticut	36%	96%	45%	21%	New York	31%	94%	27%	23%
Delaware	0%	0%	0%	0%	North Carolina	34%	66%	38%	24%
District of Columbia	28%	69%	36%	21%	North Dakota	29%	65%	32%	18%
Florida	37%	97%	35%	23%	Ohio	40%	96%	34%	30%
Georgia	33%	65%	39%	22%	Oklahoma	43%	96%	58%	22%
Hawaii	88%	100%	80%	89%	Oregon	0%	0%	0%	0%
Idaho	44%	96%	70%	18%	Pennsylvania	27%	95%	20%	17%
Illinois	40%	100%	87%	11%	Rhode Island	28%	95%	20%	20%
Indiana	32%	96%	37%	16%	South Carolina	32%	70%	35%	21%
lowa	34%	64%	52%	18%	South Dakota	47%	63%	64%	37%
Kansas	42%	96%	64%	20%	Tennessee	44%	96%	65%	23%
Kentucky	31%	67%	35%	21%	Texas	30%	62%	36%	19%
Louisiana	40%	96%	38%	27%	Utah	48%	96%	69%	26%
Maine	36%	96%	48%	16%	Vermont	19%	65%	21%	8%
Maryland	30%	66%	40%	19%	Virginia	32%	66%	68%	13%
Massachusetts	28%	95%	20%	19%	Washington	37%	96%	38%	23%
Michigan	36%	94%	47%	19%	West Virginia	35%	63%	36%	29%
Minnesota	27%	67%	18%	22%	Wisconsin	36%	97%	32%	24%
Mississippi	45%	100%	65%	22%	Wyoming	35%	96%	29%	25%
Missouri	41%	96%	63%	20%	<b>United States</b>	34%	85%	41%	20%

TABLE A.5: Tax base coverage under general and selective sales taxes

Total and major expenditure categories by state, 2018

	Overall household spending	Durable goods	Nondurable goods	Services		Overall household spending	Durable goods	Nondurable goods	Services
Alabama	48%	96%	79%	23%	Montana	11%	0%	25%	9%
Alaska	5%	0%	14%	2%	Nebraska	40%	96%	52%	21%
Arizona	41%	95%	50%	29%	Nevada	35%	93%	49%	12%
Arkansas	46%	63%	77%	26%	New Hampshire	9%	0%	21%	6%
California	36%	100%	48%	20%	New Jersey	37%	94%	27%	27%
Colorado	34%	95%	48%	17%	New Mexico	74%	94%	52%	80%
Connecticut	38%	96%	45%	21%	New York	36%	94%	27%	27%
Delaware	5%	0%	15%	2%	North Carolina	40%	96%	49%	24%
District of Columbia	43%	93%	45%	29%	North Dakota	35%	96%	54%	18%
Florida	40%	97%	44%	27%	Ohio	47%	96%	47%	32%
Georgia	39%	95%	50%	22%	Oklahoma	45%	96%	78%	22%
Hawaii	91%	100%	80%	93%	Oregon	7%	0%	18%	4%
Idaho	48%	96%	84%	24%	Pennsylvania	34%	95%	31%	20%
Illinois	50%	100%	97%	20%	Rhode Island	32%	95%	33%	20%
Indiana	37%	96%	51%	18%	South Carolina	37%	100%	48%	21%
lowa	43%	96%	68%	21%	South Dakota	61%	95%	84%	42%
Kansas	48%	96%	81%	24%	Tennessee	45%	96%	76%	23%
Kentucky	39%	96%	47%	22%	Texas	38%	96%	49%	23%
Louisiana	42%	96%	50%	27%	Utah	47%	96%	81%	26%
Maine	36%	96%	48%	19%	Vermont	36%	97%	36%	25%
Maryland	38%	96%	50%	22%	Virginia	44%	95%	78%	20%
Massachusetts	33%	95%	28%	21%	Washington	44%	96%	46%	31%
Michigan	37%	94%	47%	19%	West Virginia	48%	96%	49%	31%
Minnesota	35%	93%	32%	23%	Wisconsin	41%	97%	46%	25%
Mississippi	48%	100%	78%	22%	Wyoming	41%	96%	53%	27%
Missouri	46%	96%	78%	22%	<b>United States</b>	<b>39</b> %	93%	50%	23%

TABLE A.6: Share of total household spending by tax treatment major category, and state, 2018

Alaska       0%         Arizona       14%         Arkansas       9%         California       13%         Colorado       13%         Connecticut       12%         Delaware       0%         District of Columbia       8%         Florida       15%         Georgia       14%         Hawaii       14%         Idaho       15%         Illinois       13%         Indiana       13%	22% 3% 12% 21% 10% 11% 10% 3% 8%	13% 2% 18% 15% 13% 11% 13% 1%	50% 96% 56% 54% 64% 66% 64%	Montana Nebraska Nevada New Hampshire New Jersey New Mexico New York North Carolina	0% 14% 14% 0% 12% 13% 9%	6% 13% 12% 5% 6% 13%	5% 13% 8% 4% 17% 49%	89% 60% 67% 91% 64% 25% 67%
Arizona 14% Arkansas 9% California 13% Colorado 13% Connecticut 12% Delaware 0% District of Columbia 8% Florida 15% Georgia 14% Hawaii 14% Idaho 15% Illinois 13% Indiana 13%	12% 21% 10% 11% 10% 3%	18% 15% 13% 11% 13% 1%	56% 54% 64% 66% 64%	Nevada New Hampshire New Jersey New Mexico New York	14% 0% 12% 13% 9%	12% 5% 6% 13% 6%	8% 4% 17% 49%	67% 91% 64% 25%
Arkansas       9%         California       13%         Colorado       13%         Connecticut       12%         Delaware       0%         District of Columbia       8%         Florida       15%         Georgia       14%         Hawaii       14%         Idaho       15%         Illinois       13%         Indiana       13%	21% 10% 11% 10% 3%	15% 13% 11% 13% 1%	54% 64% 66% 64%	New Hampshire New Jersey New Mexico New York	0% 12% 13% 9%	5% 6% 13% 6%	4% 17% 49%	91% 64% 25%
California 13% Colorado 13% Connecticut 12% Delaware 0% District of Columbia 8% Florida 15% Georgia 14% Hawaii 14% Idaho 15% Illinois 13% Indiana 13%	10% 11% 10% 3%	13% 11% 13% 1%	64% 66% 64%	New Jersey New Mexico New York	12% 13% 9%	6% 13% 6%	17% 49%	64% 25%
Colorado 13% Connecticut 12% Delaware 0% District of Columbia 8% Florida 15% Georgia 14% Hawaii 14% Idaho 15% Illinois 13% Indiana 13%	11% 10% 3%	11% 13% 1%	66% 64%	New Mexico New York	13% 9%	13% 6%	49%	25%
Connecticut 12% Delaware 0% District of Columbia 8% Florida 15% Georgia 14% Hawaii 14% Idaho 15% Illinois 13% Indiana 13%	10% 3%	13% 1%	64%	New York	9%	6%		
Delaware 0% District of Columbia 8% Florida 15% Georgia 14% Hawaii 14% Idaho 15% Illinois 13% Indiana 13%	3%	1%					18%	67%
District of Columbia 8% Florida 15% Georgia 14% Hawaii 14% Idaho 15% Illinois 13% Indiana 13%			95%	North Carolina				
Florida 15% Georgia 14% Hawaii 14% Idaho 15% Illinois 13% Indiana 13%	8%	21%		1401til Calolilla	15%	13%	14%	58%
Georgia 14% Hawaii 14% Idaho 15% Illinois 13% Indiana 13%			62%	North Dakota	16%	14%	10%	60%
Hawaii 14% Idaho 15% Illinois 13% Indiana 13%	10%	17%	59%	Ohio	12%	11%	21%	56%
Idaho 15% Illinois 13% Indiana 13%	13%	13%	60%	Oklahoma	14%	20%	13%	52%
Illinois 13% Indiana 13%	20%	57%	9%	Oregon	0%	4%	2%	93%
Indiana 13%	22%	14%	49%	Pennsylvania	12%	7%	13%	68%
	22%	13%	52%	Rhode Island	11%	8%	13%	69%
lowa 14%	13%	11%	63%	South Carolina	14%	13%	13%	60%
	18%	12%	56%	South Dakota	14%	19%	26%	41%
Kansas 14%	20%	14%	51%	Tennessee	14%	20%	13%	53%
Kentucky 13%	13%	13%	61%	Texas	14%	12%	14%	60%
Louisiana 14%	13%	16%	57%	Utah	16%	20%	15%	49%
Maine 13%	13%	11%	62%	Vermont	13%	9%	15%	63%
Maryland 12%	11%	14%	62%	Virginia	12%	18%	13%	57%
Massachusetts 12%	6%	13%	69%	Washington	14%	10%	20%	56%
Michigan 12%	12%	12%	64%	West Virginia	12%	13%	18%	56%
Minnesota 13%	7%	15%	66%	Wisconsin	13%	11%	15%	60%
Mississippi 14%	22%	12%	51%	Wyoming	12%	14%	17%	58%
Missouri 13%	20%	14%	54%	<b>United States</b>	13%	12%	15%	61%

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