

OPTIONS FOR RAISING STATE GOVERNMENT REVENUE IN ARIZONA

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SUMMARY

This paper examines a number of possible sources of additional state government revenue. By revenue source, it compares Arizona's combined state and local government finances to the nation and to other states, examines changes over time in state government finances, rates Arizona's fiscal system relative to a set of fiscal system guiding principles, and reviews the recommendations made by an Arizona citizens' group in 2003.

Public revenue and spending in Arizona in recent years has been substantially below both the national average and the state's historical norm. The comparisons are based on revenue/spending per \$1,000 of personal income; the state's shortfalls relative to the nation are much larger on a per capita basis.

State government tax revenue in fiscal year (FY) 2017 in Arizona could have been \$3.5 billion higher without exceeding the historical norm or the national average for state and local governments. Even if all of this additional revenue had been deposited to the general fund, revenue in the general fund still would have been close to \$1 billion below the historical norm.

Nontax revenue of state and local governments in Arizona was about \$2.7 billion below the national average. Only about \$0.4 billion of this revenue could have been deposited in the state's general fund without exceeding the historical average.

Thus, approximately \$4 billion in additional state government general fund revenue could have been raised and spent without exceeding any of the norms. This represents a substantial increase over the \$10 billion actually collected in fiscal year 2017 in Arizona. Even with an additional \$4 billion in expenditures, the total still would have been about \$900 million below the state's expenditure limitation.

The amount of potential revenue is so large because the Arizona Legislature since fiscal year 1992 has made numerous changes to the tax code that have eliminated certain taxes, reduced the tax rates of other taxes, and introduced numerous tax exemptions and credits. The estimated effect of these changes is a reduction in revenue to the state government's general fund of \$4.41 billion in FY 2017. Thus, substantial amounts of additional revenue could be realized simply by rolling back a portion of the tax cuts that have been put into effect over the last 25 years.

In terms of dollar value, 93 percent of the tax reductions passed by the Arizona Legislature since fiscal year 1992 affected four taxes:

- Individual income tax. The reduction in revenue in FY 2017 was nearly \$2.3 billion and collections in FY 2015 were \$2.6 billion less than the national average. Moreover, the individual income tax compares favorably relative to the guiding principles.
- Corporate income tax. The reduction in revenue in FY 2017 was approximately \$750 million and the corporate income tax burden is considerably less than the national average.
- Sales tax (transaction privilege tax): The reduction in revenue in FY 2017 was approximately \$575 million. Despite this reduction, the sales tax burden in Arizona is far above the national average. Moreover, the sales tax compares poorly relative to the guiding principles.

- Property tax. The reduction in revenue in FY 2017 was nearly \$500 million and state and local government collections in FY 2015 were \$1.4 billion less than the national average.

There are other options for raising state government revenue. However, for some sources, collections in Arizona already are relatively high. For other sources, revenue generally is deposited in a specialized fund instead of the general fund. For many sources, the amount of revenue that could reasonably be realized is relatively small.

An increase in taxes of less than \$3.5 billion would have only a small negative effect on the economy. However, the positive effect from a spending increase would more than offset the negative effect from the tax increase. The net economic impact does not vary much by tax source, but a tax increase that affects businesses would result in the least positive net effect.

INTRODUCTION

The purpose of this paper is to identify potential sources of additional revenue for Arizona's state government. While the focus specifically is state government revenue, in order to make comparisons to other states, state and local government revenue must be combined since the level of government responsible for a particular government function varies by state between state and local governments. Further, when looking at tax burdens on individuals and businesses, state and local government taxes must be combined.

In this report, Arizona's public revenues and expenditures are compared to other states over time. In addition, Arizona state government revenues and expenditures are examined over time.

Comparisons of Government Finance Data

Tax rates sometimes are compared across states. However, tax rates provide limited information regarding the tax burden since the tax base also varies across states. Exemptions, credits, and deductions are among the factors affecting the tax base. Thus, a comparison of the dollar value of revenue is more meaningful than a comparison of tax rates. In this paper, Arizona is compared to the national average, to the 51 "states" (including the District of Columbia), and to nine other western states: California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah, and Washington.

When government revenues and expenditures are compared either over time or across states, an adjustment must be made for differences in state size. For comparisons of revenues, total expenditures, and expenditures on programs that serve the entire population, the adjustment can be made in either of two ways:

- Divide the finance data by population, putting the figures on a per person (per capita) basis.
 - For comparisons over time, inflation also must be considered. Generally, the gross domestic product (GDP) implicit price deflator is used as the inflation measure.
 - For comparisons across states, interstate differences in the cost of living should be considered. The U.S. Bureau of Economic Analysis (BEA) produces cost-of-living estimates called "regional price parities" for states and metropolitan areas.
- Divide the finance data by personal income; the result generally is expressed per \$1,000 of personal income. Personal income estimates incorporate size and inflation. Occasionally, gross domestic product is used instead of personal income.¹

Generally, the personal income adjustment is preferred for revenue data — both comparisons over time and across states — since personal income reflects the ability of residents to pay taxes and user fees. The change in expenditures over time also typically uses the personal income adjustment.

However, for comparisons of expenditures across geographic areas for a given year, the per person adjustment may be preferred, assuming that an adjustment for the cost of living also is made. After adjusting for the cost of living, the cost of providing a public service to an individual

¹ The U.S. Department of Commerce, Bureau of Economic Analysis is the source of the GDP deflator, regional price parities, personal income, and gross domestic product (<https://bea.gov/>). Population estimates made by the Census Bureau also are available from the BEA.

is similar across states. If the ability to pay were considered, then a low-income state like Arizona would spend less than average, thereby either providing an inferior public service or limiting the number of people served. For public programs such as education and infrastructure, an inferior or limited service has a negative effect on economic development.

When a comparison of expenditures is made of programs that serve only a portion of the population — such as elementary and secondary (K-12) school students or inmates in the correctional system — then the preferred method is to adjust by the caseload (the number of people served) instead of the total population. If the caseload is used, comparisons over time must adjust for inflation and geographic comparisons should consider the cost of living. If desired, expenditures per person served can reflect the ability to pay by dividing by per capita personal income.

The choice of whether to use population or personal income to adjust the government finance data can make a large difference in the interpretation of the data. Per capita personal income (PCPI) differs substantially across geographic areas, and can vary significantly over time in a particular geographic area relative to the national average. For example, Arizona's PCPI in the last several years was 18 percent below the national average, but the differential in the early 1970s was less than 4 percent. Chart 1 displays Arizona's per capita personal income as a percentage of the national average since World War II. The percentage has varied over time, with the figures in recent years the lowest of the 70-year period.

The variation seen in Chart 1 in Arizona's PCPI as a percentage of the national average in part reflects the economic cycle — typically, Arizona's percentage of the U.S. average falls during economic recessions and rises during economic expansions. However, in the current expansion, little improvement has occurred since the last recession.

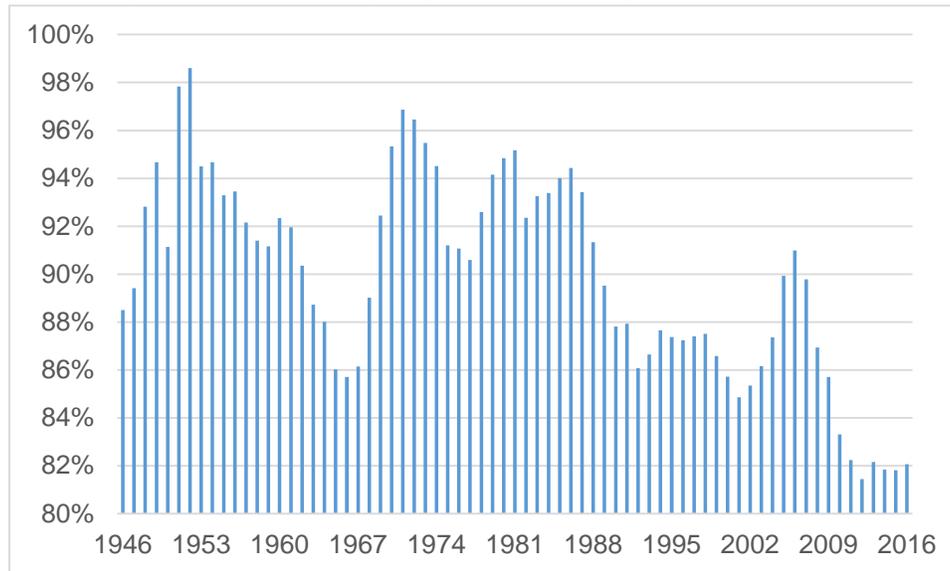
Cost-of-living data from the BEA are available only for 2008 through 2015. Examining these estimates and earlier estimates made by various parties, the relative cost of living has not changed much across the country in recent decades. However, in some places — including Arizona — the relative cost of living rises and falls somewhat with the economic cycle. Adjusting for the cost of living does not have a significant impact on Arizona's government finance data since the difference from the national average has been small, ranging from 0.6 percent above average in 2008 to 3.8 percent below average in 2014 and 2015.

Sources of Government Finance Data

The primary source of government finance data by state is the U.S. Census Bureau.² It annually reports the amount of revenues by type of tax, user fee, and other revenue sources and the amount of expenditures by category, using consistent definitions across all states. Data from each state and a sample of local governments are collected annually; every five years (ending in 2 and 7) a census is taken of all local governments. The Census Bureau reports by state the data for the state government, the data for local governments, and the sum of state and local governments. Its latest data are for fiscal year (FY) 2015 (which ran from July 1, 2014 through June 30, 2015). Government finance data from the Census Bureau are available back to FY 1964, but the amount

² <https://www.census.gov/govs/local/>.

CHART 1
PER CAPITA PERSONAL INCOME, ARIZONA
AS A PERCENTAGE OF THE NATIONAL AVERAGE



Source: U.S. Department of Commerce, Bureau of Economic Analysis.

of detail provided by the Census Bureau expanded over time.³ The current level of detail began in FY 1993.

The Arizona Joint Legislative Budget Committee (JLBC) provides more detail on state government revenues and expenditures.⁴ The JLBC’s data cannot be compared to state government data from other states, due to differing accounting systems used across states and differing definitions of the general fund. For example, education is not included in Utah’s general fund. The JLBC provides a complete accounting of state government expenditures, with the expenditure data divided into three categories: the general fund, the combination of all other state funds, and not-appropriated funding, such as federal government funding provided to the state. In contrast, complete revenue data are provided only for the general fund.

The JLBC’s datasets begin in fiscal year 1971 for general fund revenues, in FY 1979 for general fund expenditures, and in FY 1989 for other expenditures.⁵ The latest revenue data are for FY 2017. Expenditure data for FY 2018 are the figures presented in the budget that was passed in the spring of 2017.

³ The Census Bureau did not produce estimates for 2001 or 2003. In this report, charts of the Census Bureau’s data use interpolations for the two missing years.

⁴ <https://www.azleg.gov/jlbc.htm>.

⁵ The revenue and expenditure data used in this paper are taken from the annual appropriations report (the FY 2018 report is at <https://www.azleg.gov/jlbc/18AR/apprpttoc.pdf>; older reports are available from <https://www.azleg.gov/jlbc/fiscal.htm>). Other JLBC sources, such as the Tax Handbook (available from <https://www.azleg.gov/jlbc/economicanalysis.htm>) and the online time series (available from <https://www.azleg.gov/jlbc/fiscal.htm>), may present preliminary rather than final figures for a specific year.

In this paper, the percent change over time in government revenues and expenditures generally is divided into two periods: FYs 1992 through 2007 and FYs 2007 through 2015. FY 1992 marked a turning point in the Arizona Legislature, with a series of extensive tax reductions starting to be implemented after that. FY 2007 was selected since it preceded the onset of the last recession. However, the calculation of the percent change begins in FY 1993 for the Census Bureau's data since much of the categorical detail is not available until FY 1993.

The Tax Foundation uses the Census Bureau's data as a beginning but makes various adjustments in order to create a better measure of the tax burden. However, its latest data are for 2012 and only the combined state and local government total tax revenue is reported.⁶

Other studies use other methodologies to compare states on tax burden. The government of the District of Columbia annually produces a study for a three-person household in the largest city of each state at various levels of income, ranging from \$25,000 to \$150,000.⁷ Figures are shown for the sales tax, the income tax, the property tax, and for the composite of selected taxes related to automobiles. The latest data are for 2015.

While the District of Columbia estimates household tax burdens, Ernst & Young annually produces a study for the Council on State Taxes that estimates the tax burden on businesses by state.⁸ Estimates are available for each of seven categories of taxes paid by businesses. The latest data are for FY 2016.

The Minnesota Center for Fiscal Excellence provides detailed data by state for both the individual income tax (latest data are for 2014) and the property tax (latest data are for 2016).⁹ The property tax data are separated by property class: residential, commercial, industrial, and apartments.

Another way of comparing states is through the "representative revenue system" and "representative expenditure system" approaches. The most recent example of these approaches is a 2016 study by the Urban Institute, which calculated revenue capacity and fiscal need by category for all states using FY 2012 data.¹⁰ In the representative revenue system, "revenue capacity" (revenue-raising potential) is estimated by establishing a revenue base in each state and then applying a national average tax rate to that base. For example, the property tax base is the value of all property in a state. Measured on a per capita basis, revenue effort is calculated as actual revenue as a percentage of the revenue capacity.

In the representative expenditure system, "fiscal need" is estimated by applying a national average rate of per capita spending to the population of each state. The result is then adjusted for workload factors, demographic features, and differences by state in the costs of labor and other inputs. For example, for K-12 education, the workload is determined by the number of school-

⁶ <https://taxfoundation.org/state-local-tax-burden-rankings-fy-2012/>.

⁷ <https://cfo.dc.gov/node/215912>.

⁸ <http://www.cost.org/state-tax-resources/cost-studies-articles-and-reports/>.

⁹ <https://www.fiscalexcellence.org/>. The Property tax report is produced in conjunction with the Lincoln Institute of Land Policy.

¹⁰ www.urban.org.

age children in a state and the percentage of children living in poverty. Measured on a per capita basis, spending effort is calculated as actual expenditures as a percentage of the fiscal need.

Definitions of Revenue Categories

Public accounting systems vary across states, as do the definitions of terms. In order to compare states, the Census Bureau reorganizes state and local government revenue and expenditure data into one classification system. The Urban Institute's study of representative revenues and expenditures generally uses the Census Bureau's system. This subsection describes the Census Bureau's revenue classifications and compares them to the classifications used by the JLBC.

According to the Census Bureau, general revenue comprises all revenue except that classified as liquor store, utility, or insurance trust revenue. General revenue is not the same as JLBC's general fund revenue. Arizona state government has numerous funds in addition to the general fund; the Census Bureau combines all of Arizona's state funds except those specific to utilities or insurance trusts into its general revenue category.

General revenue as defined by the Census Bureau is divided into four types: intergovernmental revenue (federal funds), taxes, current charges (user fees), and miscellaneous general revenue. The three types other than intergovernmental revenue are referred to as own-source revenue. In most cases, federal funds are not appropriated in Arizona; thus, the general fund and other funds used by state government largely are funded from own-source revenue.

The various categories of own-source revenue that are used by the Census Bureau follow. For those sources of revenue considered to be taxes, the JLBC provides considerable detail in its annual "Tax Handbook."¹¹

Property Taxes

The Census Bureau's definition of property taxes is broad, including three types, all having in common the use of value as a basis for the tax:

- General property taxes, relating to property as a whole, taxed at a single rate or at classified rates according to the class of property. Property refers to real property (e.g., land and structures) as well as personal property, which can be either tangible (e.g., automobiles and boats) or intangible (e.g., bank accounts and stocks and bonds). Arizona divides real property into nine property classes, with varying assessment ratios by class.
- Special property taxes, levied on selected types of property (e.g., oil and gas properties, house trailers, motor vehicles, and intangibles) and subject to rates not directly related to general property tax rates. Arizona levies a "motor vehicle license tax" that is based on value in addition to the general property tax levied on land and buildings.
- Taxes based on income produced by property as a measure of its value on the assessment date.

The Census Bureau reports only one value for the combination of all property taxes.

¹¹ The latest "Tax Handbook" was released in September 2017:
<https://www.azleg.gov/jlbc/17taxbook/17taxbk.pdf>.

Sales and Gross Receipts Taxes

This category includes taxes on goods and services, based on the volume or value of their transfer, upon gross receipts or gross income therefrom, or as an amount per unit sold (gallon, package, etc.). Related taxes based upon use, storage, production, importation, or consumption of goods and services are included, as are license taxes. The Census Bureau presents figures for two major subcategories.

General Sales and Gross Receipts Taxes. The general sales tax — which in Arizona is called a transaction privilege tax (TPT) since the tax is levied on the seller rather than the buyer — is applied to sales of goods and services that are not specifically exempted (e.g., food to be consumed at home, prescription drugs, and many services). The gross receipts tax, which is not levied in Arizona or in most other states, is applied to all business transactions, either at a single rate or at classified rates.

Selective Sales and Gross Receipts Taxes. These are taxes imposed on the sale of particular commodities or services or on gross receipts of particular businesses separately and apart from general sales or gross receipts taxes. The term “selective sales tax” is synonymous with “excise tax.” License taxes measured by sales or gross receipts and producing more than minor amounts of revenue also are included. The Census Bureau groups selective taxes into five subcategories:

- **Motor fuels sales tax:** taxes on gasoline, diesel oil, aviation fuel, “gasohol,” “ethanol,” and any other fuels used in motor vehicles or aircraft. Taxes in Arizona that fit this definition include the motor vehicle fuel tax (on gasoline), the use fuel tax (on diesel fuel), and the jet fuel excise and use tax.
- **Alcoholic beverages sales tax:** taxes on sale of alcoholic beverages, whether collected through government-operated liquor stores or through private outlets.
- **Tobacco products sales tax:** taxes on tobacco products and synthetic cigars and cigarettes, including related products like cigarette tubes and paper. In Arizona, taxes on tobacco products and alcoholic beverages are known as luxury taxes.
- **Public utilities sales tax:** taxes imposed distinctively on public utilities, and measured by gross receipts, gross earnings, or units of service sold, either as a direct tax on consumers or as a percentage of gross receipts of the utility. Payments by utilities in lieu of taxes, which are used in Arizona, are not included.
- **Other selective sales and gross receipts taxes:** taxes on specific commodities, businesses, or services not reported separately in the other four categories. This subcategory includes amusements sales taxes on admission tickets or admission charges and on gross receipts of all or specified types of amusement businesses; the pari-mutuels sales tax that is measured by amounts wagered or bet on horse racing, dog racing, etc.; and the insurance premiums sales tax that is imposed distinctively on insurance companies and measured by gross premiums or adjusted gross premiums. The latter is a relatively large source of revenue in Arizona.

Income Taxes

The Census Bureau divides income taxes into two types. Individual income taxes are taxes on individuals measured by net income and taxes on special types of income (e.g., interest, dividends, income from intangible property, etc.). Corporation net income taxes are taxes on corporations and unincorporated businesses (when taxed separately from individual income),

measured by net income, whether on corporations in general or on specific kinds of corporations, such as financial institutions.

Motor Vehicle License Taxes

Included in this category by the Census Bureau are licenses imposed on owners or operators of motor vehicles for the right to use public highways, such as fees for title registration, license plates, and vehicle inspection; vehicle mileage and weight taxes on motor carriers; highway use taxes; and off-highway fees. While Arizona has a tax of this name, it is included in the property taxes category since it is based on the value of the vehicle.

Other Taxes

Various license taxes are included in this category. These are taxes exacted (either for revenue raising or for regulation) as a condition to the exercise of a business or nonbusiness privilege. They can be levied at a flat rate or by such bases as capital stock or surplus, number of business units, or capacity. Generally, this category includes taxes on property levied on some basis other than assessed value (e.g., on corporate stock or bank deposits). “Fees” related to licensing activities as well as license taxes producing substantial revenues also are included. This category also includes death and gift taxes, which are imposed on the transfer of property at death, in contemplation of death, or as a gift (e.g., inheritance and estate taxes); documentary and stock transfer taxes, which include taxes on the recording, registration, and transfer of documents, such as mortgages, deeds, and securities; and severance taxes, which are taxes imposed distinctively on the removal (severance) of natural resources (e.g., oil, gas, coal, other minerals, timber, fish, etc.) from land or water and measured by the value or quantity of products removed or sold.

Current Charges

The concept of current charges covers amounts received from the public for performance of specific services that benefit the person charged and from the sale of commodities or services other than utilities and liquor stores. Included are fees, maintenance assessments, and other reimbursements for current services; rents and sales derived from commodities or services furnished incident to the performance of particular functions; gross income of commercial enterprises; and the like. Charges are distinguished from license taxes, which are privileges granted by a government or fees collected to finance regulatory activities. Current charges are divided into numerous subcategories — see Table 4.

Miscellaneous Revenue

There are four subcategories:

- Special assessments: compulsory contributions and reimbursements from owners of property who benefit from specific public improvements; and impact fees to fund extension of water, sewer, roads, and other infrastructure facilities in new developments.
- Sale of property: amounts received from sale of real property, buildings, improvements to them, land easements, rights-of-way, and other capital assets (buses, automobiles, etc.), including proceeds from sale of operating and nonoperating property of utilities.
- Interest earnings: amounts from interest on all interest-bearing deposits and accounts; accrued interest on investment securities sold; interest on funds held for construction; and interest related to public debt for private purposes.
- Other: fines, rents, royalties, donations, lottery proceeds, etc.

TOTAL STATE AND LOCAL GOVERNMENT REVENUES AND EXPENDITURES

The Census Bureau collects state and local government revenue and expenditure data of all types, but separates the finance data of public utilities, government-owned liquor stores, and insurance trusts (such as unemployment and workers' compensation) from all other purposes, which are labeled as "general." General revenues and general expenditures are the focus of this analysis, using the combined data for state and local governments. In this paper, the Census Bureau's revenue and expenditure data for Arizona primarily are expressed per \$1,000 of personal income, generally as a percentage of the national average.

Revenues

The revenue data from the Census Bureau includes revenues from all sources. However, the Census Bureau distinguishes between intergovernmental revenue (from the federal government) and "own-source" revenue, which is the revenue directly collected by state and local governments. Own-source revenue includes taxes, "current charges" (user fees), and other revenue sources, such as interest earnings.

The Census Bureau's revenue data generally do not distinguish between revenue received from individuals versus revenue received from businesses. The exception is that the corporate and individual income taxes have been separated since FY 1993. Similarly, the Urban Institute's study of representative revenues does not distinguish between individual and business payments.

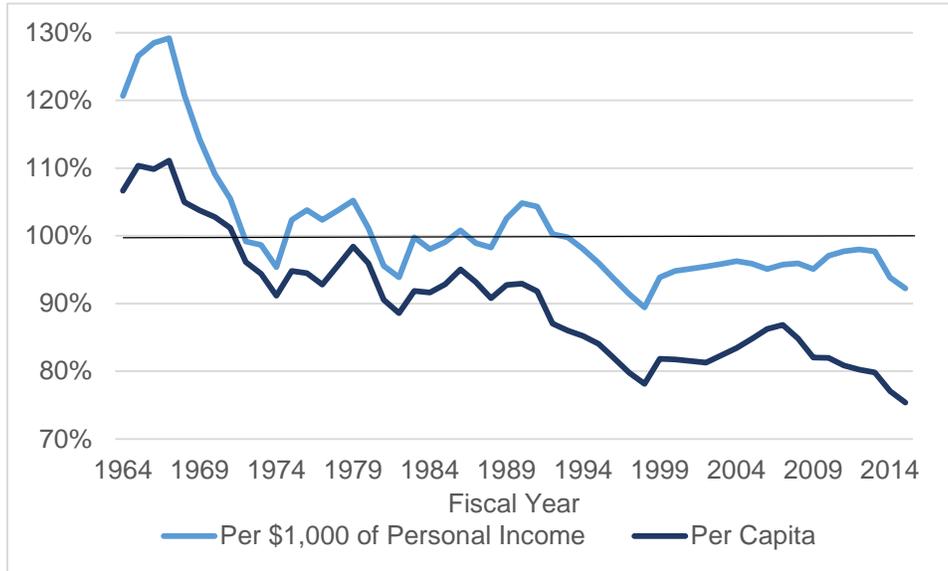
Total Revenues Received From Individuals and Businesses

Measured per \$1,000 of personal income and per capita, the total revenue of state and local governments in Arizona as a percentage of the national average since FY 1964 is provided in Chart 2. Arizona's total revenue relative to the nation follows the same general trends and cycles using the personal income and per capita measures. The difference between the two measures is explained by Arizona's per capita personal income as a percentage of the national average. Since Arizona's PCPI has always been less than the national average since World War II, the shortfall in Arizona's revenue relative to the national average has been consistently less using the personal income measure than the per capita measure.

As was shown in Chart 1, PCPI in Arizona was close to the national average in the early 1970s, explaining the closeness of the two lines in Chart 2 at that time. Before the early 1970s and increasingly after that time, the shortfall in Arizona's PCPI relative to the nation was larger. Due to the decline in Arizona's PCPI relative to the U.S. average since the early 1970s, Arizona's revenue relative to personal income displays less of a decline versus the national average than per capita revenue.

Revenue per \$1,000 of personal income in Arizona as a percentage of the national average is shown in Chart 3 for the Census Bureau's major categories. Total and own-source revenues per \$1,000 of personal income in Arizona were greater than the national average during the 1960s, close to the national average during the 1970s and 1980s, and below average from the early 1990s through FY 2015. The own-source figure relative to the national average was the lowest on record in FY 2015 at 15 percent below average. Relative to personal income, intergovernmental revenue from the federal government received in Arizona has fluctuated from above the national average during the 1960s to below average during the 1970s and 1980s to

CHART 2
TOTAL REVENUE, STATE AND LOCAL GOVERNMENTS IN ARIZONA
AS A PERCENTAGE OF THE NATIONAL AVERAGE



Source: Calculated from U.S. Department of Commerce, Census Bureau (revenues and population) and Bureau of Economic Analysis (personal income).

above average since the early 2000s. In FY 2015, federal monies accounted for nearly 29 percent of the total general revenue in Arizona.

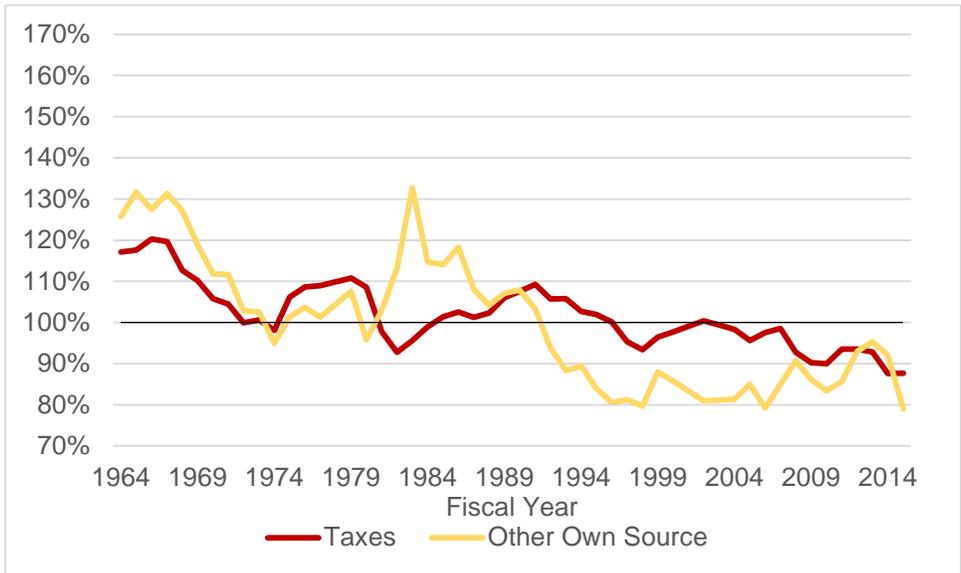
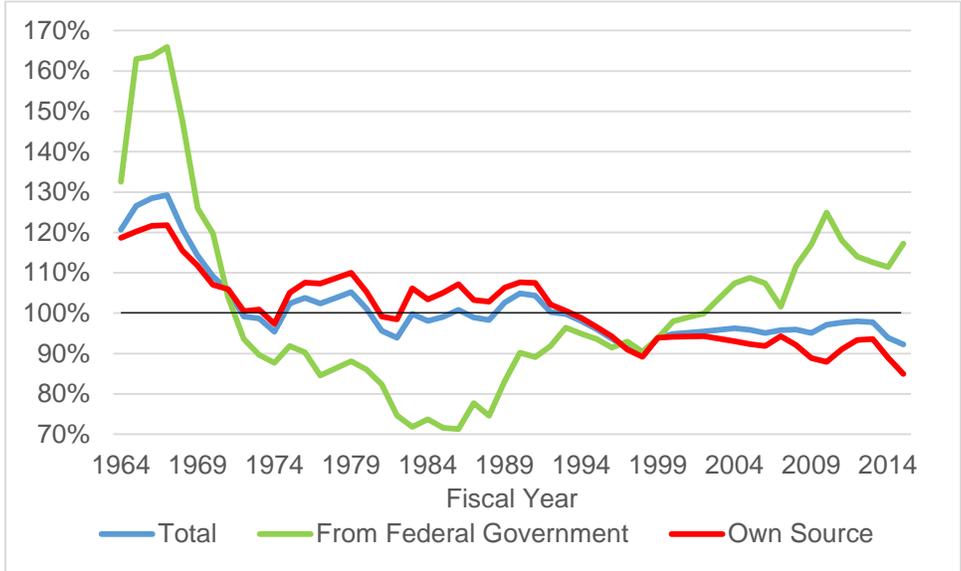
Own-source revenue consists primarily of taxes (71 percent of the total in Arizona in FY 2015). Tax revenue per \$1,000 of personal income in Arizona generally was equal to or a little greater than the national average from the 1970s into the early 1990s. Since then, tax revenue relative to personal income has been increasingly further below the national average in Arizona, by 12.4 percent in FY 2015. Arizona nontax revenue relative to the national average has fluctuated more over time but generally has followed the same pattern, dropping considerably relative to personal income since the 1960s. The FY 2015 figure was 21 percent below average.

The Tax Foundation provides a comparison of the total state and local government tax burden by state from 1977 through 2012. The Tax Foundation’s measure of tax burden is defined to answer the question “How much are the residents of a state paying to state and local governments, regardless of the state in which the government is located?” To answer this question, tax burdens are shifted as necessary from the state of collection to the state of residence of the taxpayer. In addition to the geographic shifting of the tax burden, the Tax Foundation measure is different from the Census Bureau measure in the way in which both taxes and income are defined.

In 2012 — during which Arizona’s tax burden was unusually high due to a temporary increase in the sales tax rate¹² — the total amount of state and local government taxes collected in Arizona

¹² In May 2010, voters approved a temporary increase in the state’s sales tax rate from 5.6-to-6.6 percent. The higher tax rate was in effect from June 2010 through May 2013.

CHART 3
REVENUE PER \$1,000 OF PERSONAL INCOME, STATE AND LOCAL GOVERNMENTS IN ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



Source: Calculated from U.S. Department of Commerce, Census Bureau (revenues) and Bureau of Economic Analysis (personal income).

was 8.8 percent of per capita income, 11 percent less than the national average of 9.9 percent, according to the Tax Foundation’s estimate. Arizona’s figure was 15th lowest among the 50 states. Three of the western states had a lower figure: Texas, Nevada, and New Mexico. The historical comparison of Arizona to the nation is shown in Chart 4. Arizona’s tax burden has been less than the national average since the early 1990s; before then, Arizona’s tax burden was similar to, or less than, the U.S. average.

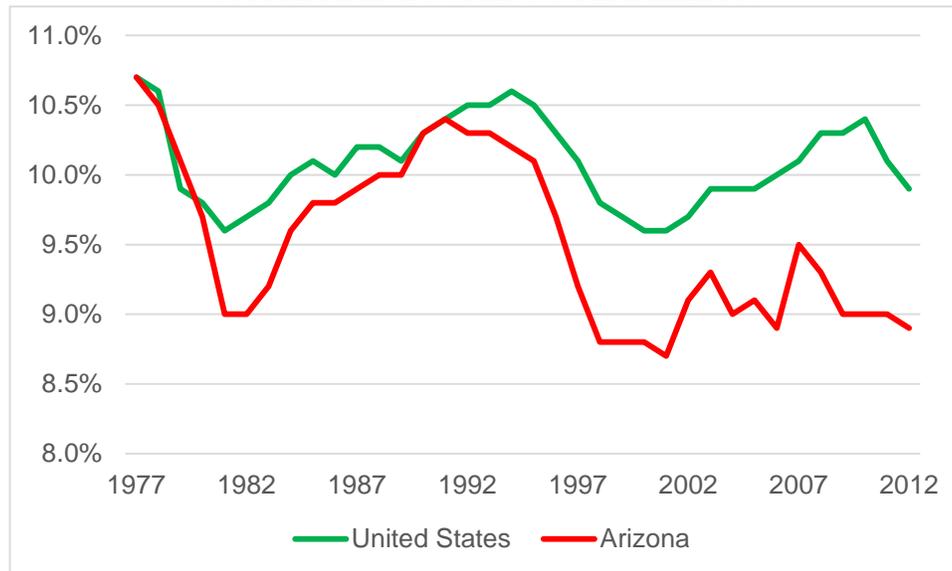
Taxes Paid by Individuals

In the District of Columbia study, the overall tax burden in Phoenix in 2015 was above the average of the largest city in each state for the hypothetical household earning \$25,000: Arizona ranked 20th with a tax burden 5.8 percent above average. In contrast, the tax burden in Phoenix was below average at each of the income levels of \$50,000 or more. For those earning \$50,000, Arizona ranked 28th at 2.8 percent below average. The differential grew with income to 9.3 percent at \$150,000; the rank fell to 37th. As a percentage of income, the tax burden was highest for those earning \$25,000 at 11.7 percent. The tax burden was between 8.4-and-8.6 percent at each of the other income levels.

Taxes Paid by Businesses

Businesses technically pay the various taxes levied upon them, but the actual burden of business taxes may fall on a number of parties, including the business (paid out of business income), consumers (higher prices of goods and services), workers (lower wages), and owners of land (lower land values and rents). It is difficult to ascertain the final burden in all cases. In this paper,

**CHART 4
TAX BURDEN AS A PERCENTAGE OF INCOME,
STATE AND LOCAL GOVERNMENTS**



Source: Tax Foundation, State-Local Tax Burden Rankings, <http://taxfoundation.org/article/state-local-tax-burden-rankings-fy-2012>.

a “business tax” refers to any tax whose initial incidence rests with business owners, even though the ultimate burden of the tax may fall on other entities.¹³

Taxes are just one of many business expenses that play a role in determining the price of a good or service. Many companies that sell goods and services to Arizona residents have a “captive” market — for example, a resident of Phoenix is not going to travel to New Mexico to buy their groceries. Further, companies that sell primarily to local residents are all subject to the same state tax code. Under these conditions, a company generally is able to pass the expense of taxes to the consumer in the form of a higher price for their good or service.

In contrast, businesses that drive the state’s economy — those that primarily sell to customers outside the state — have difficulty recovering their local expenses (including tax payments) in higher prices because they are subject to international competition. If local business taxes are high, this may suppress the number of business facilities located in the area, which in turn may hold down land prices and/or wages. If lower costs in wages or rents are not sufficient to offset a high business tax burden, an exporter may simply choose not to locate in an area.

The most compelling reason to tax businesses is provided by the “benefits principle” of public finance. Businesses should be taxed to pay for the public services provided to them. Having entities pay for the services they receive obviously meets standards of tax equity. But economic efficiency is also enhanced. When firms that use government services are taxed commensurately, the prices of the goods they produce more accurately reflect the full costs of production, enabling consumers to make better economic choices.

Communities that tax businesses in excess of the cost of the services provided to them create a disincentive for businesses to relocate or remain there, causing a loss of jobs and incomes for residents. These losses outweigh the benefits residents receive from having businesses subsidize their public services.

In contrast, if a community subsidizes businesses by taxing them less than the cost of the public services provided, the cost in terms of foregone tax revenues or higher public service costs to households outweighs the benefits of the jobs and wages that might be attracted to the community by the low business taxes.

Empirical studies have found a universal tendency for business taxes levied by state and local jurisdictions to exceed the value of public services provided to businesses. When businesses pay for more public services than they consume, households do not directly pay for as much of the public services that they use. This prevents households from accurately assessing the true cost of the services they receive from their state and local governments.

The Ernst & Young study estimates the ratio of business taxes to government expenditures benefiting businesses. A number of assumptions must be made in pursuing such an analysis. The

¹³ Arizona’s sales tax is technically a transaction privilege tax that is paid by businesses. However, only that portion of the sales tax that was paid by businesses while making company purchases is considered to be a business tax in this paper.

business share of tax payments is disproportionately high throughout the nation, with Arizona only marginally higher than the national average in FY 2016.

In contrast to the generally low overall tax burden of individuals in Arizona, the Ernst & Young study indicates that the overall tax burden of businesses in Arizona was above average in FY 2016. At 6.4 percent above the national average, Arizona had the 16th-highest tax burden. However, as discussed in the next section, Ernst & Young appear to overstate property taxes paid by businesses in Arizona. If so, the overall business tax burden in Arizona may be less than the national average.

As a share of total tax collections by state and local governments, businesses paid 49.6 percent in Arizona, compared to 43.9 percent nationally. This results more from the low tax burden on individuals than the slightly high burden on businesses. The business share was not much above average for state government, but was far above average for local governments.

Expenditures

The Census Bureau's expenditure data include expenditures of all types, regardless of the source of the revenue. Expenditures made from intergovernmental revenue are included; there is no counterpart to own-source revenue. The Census Bureau differentiates between capital outlays and other expenditures, but this distinction is not available for all categories of spending.¹⁴

Using the personal income measure, expenditures in Arizona as a percentage of the national average are expressed in the top graph of Chart 5 for the major categories. Total and noncapital expenditures per \$1,000 of personal income in Arizona were greater than the national average during the 1960s and again around 1990. The lower graph in Chart 5 provides a close-up of the noncapital expenditures per \$1,000 of personal income. Since the early 1990s, noncapital expenditures in Arizona have been below average; the shortfall was 6.7 percent in FY 2015.

Capital outlays in Arizona relative to the nation per \$1,000 of personal income have fluctuated greatly over time; they were higher than the national average until the last several years. In FY 2015, capital outlays in Arizona relative to personal income were 23.7 percent below the U.S. average and accounted for only 8.2 percent of total expenditures in Arizona.

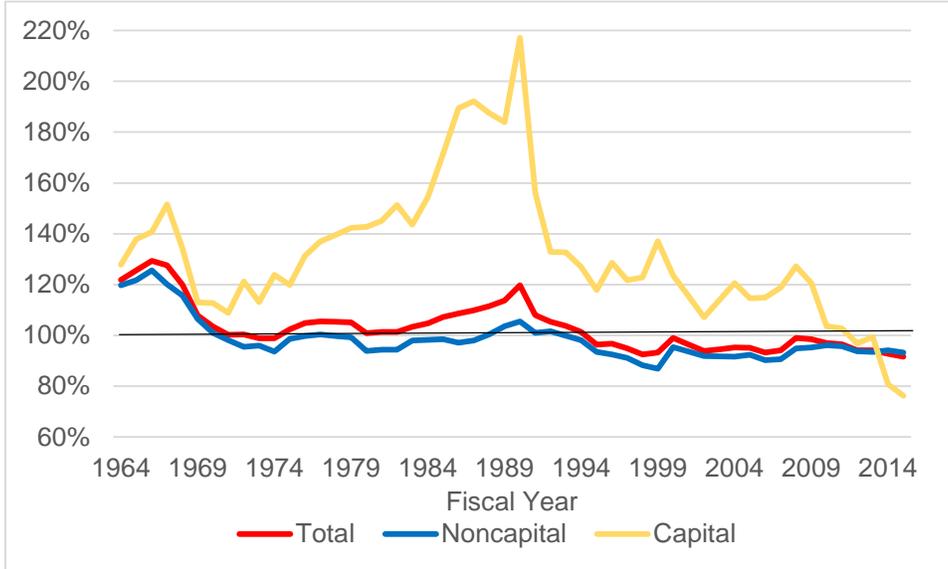
Total noncapital expenditures per capita adjusted for the cost of living are shown in Table 1 by state for fiscal year 2015 as a percentage of the national average. Arizona's figure was 20.7 percent less than the national average. Only Idaho had a lower figure.

Representative Revenues and Expenditures

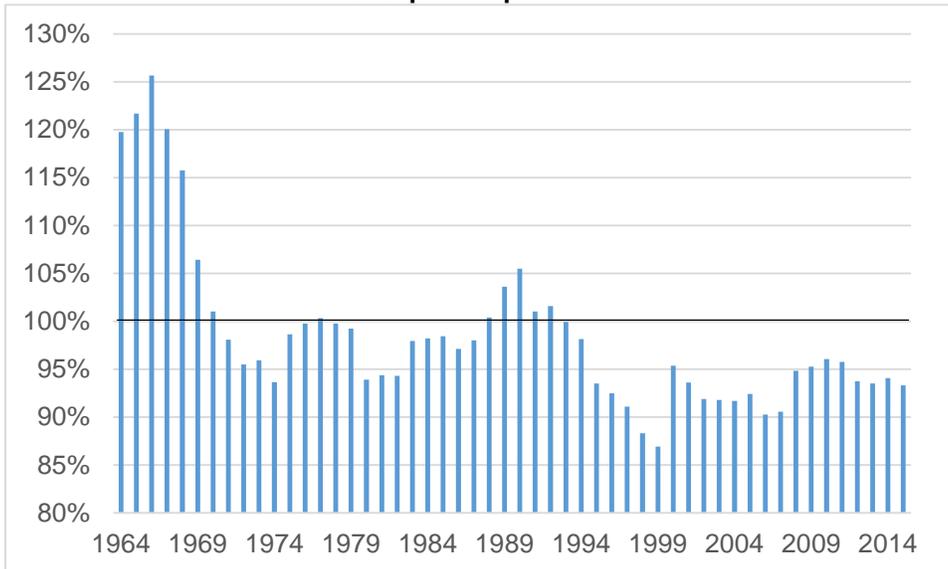
According to the Urban Institute's study, the overall revenue capacity in Arizona in FY 2012 was only 82.4 percent of the national average, ranking 46th among the 51 "states" and ninth among 10 western states. The low capacity is due to a number of factors, but the low incomes present in the state are a primary cause. Actual per capita revenue collected was even lower at 75.9 percent of the national average, ranking 49th and ninth respectively. Thus, the revenue effort was below average at 92.1 percent of the national average, ranking tied for 39th nationally and eighth in the

¹⁴ Capital outlays are funds spent for the acquisition or construction of a long-term asset, such as a building or a highway.

CHART 5
EXPENDITURES PER \$1,000 OF PERSONAL INCOME, STATE AND LOCAL GOVERNMENTS IN ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



Noncapital Expenditures



Source: Calculated from U.S. Department of Commerce, Census Bureau (expenditures) and Bureau of Economic Analysis (personal income).

West. In other words, despite the low capacity, the state could have raised additional revenue without its revenue effort reaching the national average.

In contrast to the low overall revenue capacity estimated in the Urban Institute’s study, Arizona’s overall fiscal need in FY 2012 was 3.7 percent greater than the national average, 11th highest in the nation and fourth highest in the West. This too is due to a number of factors, including the state’s high poverty rate. Actual spending per capita in FY 2012 was only 76.3 percent of the national average — second lowest in the nation and in the West. Thus, the spending effort in Arizona also was far below average at 73.5 percent of the national average, with only one nonwestern state having a lower figure.

TABLE 1
NONCAPITAL EXPENDITURES PER CAPITA ADJUSTED FOR THE COST OF
LIVING IN FISCAL YEAR 2015 AS A PERCENTAGE OF THE NATIONAL AVERAGE,
STATE AND LOCAL GOVERNMENTS

Alaska	195.3%	North Dakota	124.9%	Maine	99.1%
Hawaii	88.6	South Dakota	90.4	Vermont	126.4
Washington	98.4	Nebraska	104.8	New Hampshire	86.7
Oregon	108.2	Kansas	101.5	Massachusetts	113.0
California	107.2	Minnesota	110.2	Connecticut	108.8
Idaho	78.3	Iowa	114.7	Rhode Island	112.7
Montana	98.0	Missouri	92.0	New York	128.4
Wyoming	153.6	Wisconsin	106.3	New Jersey	101.6
Utah	84.1	Illinois	99.5	Pennsylvania	102.2
Colorado	94.7	Indiana	92.5	Delaware	116.3
Nevada	80.4	Michigan	100.2	Maryland	101.4
Arizona	79.3	Ohio	103.2	District of Columbia	173.0
New Mexico	117.7	West Virginia	106.2	Virginia	89.7
Oklahoma	89.5	Kentucky	106.3	North Carolina	93.3
Texas	86.0	Tennessee	84.9	South Carolina	101.4
Arkansas	101.5	Mississippi	108.6	Georgia	80.4
Louisiana	106.2	Alabama	98.9	Florida	80.6

Source: Calculated from U.S. Department of Commerce, Census Bureau (expenditures and population) and Bureau of Economic Analysis (cost of living).

STATE AND LOCAL GOVERNMENT EXPENDITURES BY CATEGORY

State and local government expenditures by category in Arizona as reported by the Census Bureau are displayed in Table 2. The expenditure data for the latest year (FY 2015) are reported in three ways: total dollars, per capita dollars adjusted for the cost of living, and per \$1,000 of personal income. In addition, the percent change over time relative to personal income is presented for two time periods: FYs 1993 through 2007 and FYs 2007 through 2015.¹⁵

More than one-third of state and local government expenditures in Arizona in FY 2015 were for education, including K-12 education and higher education (community colleges and universities). The other major expenditure category was public welfare, which includes the Arizona Health Care Cost Containment System (AHCCCS, Arizona's alternative to Medicaid).

Measured per capita adjusted for the cost of living, total state and local government expenditures in Arizona in FY 2015 were 22 percent below the national average, second lowest in the country. Education expenditures were 19 percent below average, fifth lowest in the nation, and public welfare spending was 18 percent below average, 15th lowest.

Measured per \$1,000 of personal income, total state and local government expenditures in Arizona in FY 2015 were 8 percent below average, ranked 39th. Education expenditures were 5 percent below average, ranked 38th, and public welfare spending was 3 percent below average, ranked 26th.

Relative to personal income, total state and local government expenditures in Arizona fell 6 percent between FYs 1993 and 2007 and an additional 6 percent between FYs 2007 and 2015. Education expenditures fell 14 percent in the first period and an additional 3 percent in the latter period. In contrast, public welfare expenditures were flat in the first period and rose 27 percent in the second period. Among the larger expenditure categories, highways stands out as experiencing a 34 percent reduction in the latter period after a 7 percent drop in the former period.

K-12 Education

Rather than measuring education expenditures on either a per capita basis or relative to personal income, it is more meaningful to measure expenditures per student. Using a specialized Census Bureau dataset, this was the focus of a recent paper from the Office of the University Economist.¹⁶ After adjusting for the cost of living, K-12 expenditures per student in Arizona in FY 2015 were 34.2 percent below the national average overall, third lowest in the nation (Idaho and Utah were lower). Looking only at current operations spending, the shortfall was 32.3 percent, again third lowest. Arizona was last on instructional spending at 40.4 percent below average and was substantially below average on every other expenditure category. Of particular note, Arizona was 49.3 percent below average (rank of 45th) on general (school district) administration and 41.1 percent below average (last) in school administration.

¹⁵ Generally in this paper, the period of analysis begins in FY 1992, but the amount of detail presented by the Census Bureau was less in FY 1992 than in subsequent years.

¹⁶ "The Financing of Public Education in Arizona: Update," August 2017, <https://wpcarey.asu.edu/sites/default/files/edfund08-17.pdf>.

**TABLE 2
EXPENDITURES BY CATEGORY, STATE AND LOCAL GOVERNMENTS IN ARIZONA**

	Fiscal Year 2015		Fiscal Year 2015			Fiscal Year 2015			Percent Change	
			Per Capita Adjusted			Per \$1,000 of Personal			Per \$1,000 of	
	Dollars in	Share of	Ratio	U.S.	West	Ratio	U.S.	West	FYs	FYs
	Thousands	Total	to U.S.	Rank*	Rank**	to U.S.	Rank*	Rank**	to	to
									2007	2015
TOTAL EXPENDITURES	\$44,999,217		78%	50	9	92%	39	6	-6%	-6%
Education	15,364,198	34.14%	81	47	8	95	38	6	-14	-3
Higher Education***	5,467,525	12.15	98	33	8	115	23	5	-11	15
Elementary & Secondary Education	7,732,726	17.18	62	50	10	73	50	10	-16	-25
Other Education	2,163,947	4.81	203	3	1	239	2	1	12	231
Libraries	165,437	0.37	71	42	8	83	41	8	-36	-27
Public Welfare	10,194,775	22.66	82	37	5	97	26	4	0	27
Hospitals	941,703	2.09	27	43	10	32	41	10	11	-24
Health	2,635,831	5.86	139	9	3	164	4	1	16	34
Employment Security	96,683	0.21	115	28	4	136	24	4	-56	50
Veterans' Services	15,654	0.03	79	9	2	93	7	2	55	136
Highways	2,180,052	4.84	64	51	10	75	48	9	-7	-34
Air Transportation	424,349	0.94	93	21	6	109	12	4	14	-39
Parking Facilities	15,105	0.03	38	39	7	45	35	5	-86	152
Police Protection	2,122,748	4.72	99	21	5	117	8	3	16	-14
Fire Protection	1,086,296	2.41	116	12	5	137	6	2	34	4
Corrections	1,707,717	3.79	109	16	4	129	6	4	6	-9
Protective Inspection & Regulation	217,286	0.48	78	30	7	92	18	7	25	-46
Natural Resources	509,529	1.13	87	31	9	102	28	8	-26	-33
Parks & Recreation	620,043	1.38	77	35	8	91	31	8	38	-50
Housing & Community Development	520,519	1.16	51	44	8	60	43	8	0	-10
Sewerage	792,103	1.76	74	45	7	87	29	7	73	-46
Solid Waste Management	373,345	0.83	78	38	6	92	28	5	-7	-15
Financial Administration	585,866	1.30	69	47	8	81	45	8	-36	-26
Judicial and Legal	1,013,880	2.25	113	14	5	133	7	3	-6	-8
General Public Buildings	204,897	0.46	68	40	8	80	37	7	0	-26
Other Administration	504,181	1.12	83	43	8	97	36	8	24	-32

(continued)

TABLE 2 (continued)
EXPENDITURES BY CATEGORY, STATE AND LOCAL GOVERNMENTS IN ARIZONA

	Fiscal Year 2015		Fiscal Year 2015			Fiscal Year 2015			Percent Change	
			Per Capita Adjusted for Cost of Living			Per \$1,000 of Personal Income			Per \$1,000 of Personal Income	
	Dollars in Thousands	Share of Total	Ratio to U.S.	U.S. Rank*	West Rank**	Ratio to U.S.	U.S. Rank*	West Rank**	FYs 1993 to 2007	FYs 2007 to 2015
Interest on Debt	\$1,396,857	3.10%	65%	39	8	76%	34	8	-50%	-14%
Miscellaneous Commercial Activities	11,307	0.03	8	41	9	9	39	9		111
Other	1,298,856	2.89	48	47	9	57	43	7	7	-19
Total Capital Outlays	3,697,331	8.22	65	50	10	76	47	10	1	-52
Total Noncapital	41,301,886	91.78	79	50	9	93	36	6	-7	3

* Among 50 states and the District of Columbia, where a rank of 1 indicates the highest expenditure.

** Among 10 western states, where a rank of 1 indicates the highest expenditure.

*** Higher education includes community colleges and universities.

- The expenditure in the first year of the period was zero.

Source: Calculated from U.S. Department of Commerce, Census Bureau, State and Local Government Finance (expenditures); U.S. Department of Commerce, Census Bureau (population); and U.S. Department of Commerce, Bureau of Economic Analysis (personal income and cost of living).

In the recent paper, expenditures per student also were examined over time. Arizona already was substantially below average in FY 1992 on current operations spending per pupil, ranking 42nd at 21.5 percent below the national average (not adjusted for the cost of living). The FY 2015 figure was 35 percent below average, ranked 49th. Adjusted for the cost of living, Arizona fell from 27 percent below average in FY 2008 to 32 percent below average in FY 2015.

In the same paper, educational revenues also were examined. Adjusted for the cost of living, own-source state and local government revenue per student for K-12 education was 36 percent below the U.S. average in FY 2015, ranking 49th. Also adjusting for per capita personal income, Arizona was 21.6 percent below average, ranking 45th.

Higher Education

The same recent paper also looked at FY 2016 revenue per full-time-equivalent (FTE) student at institutions of higher education (universities and community colleges combined). The data came from the State Higher Education Executive Officers Association (SHEEO). In FY 2016 after adjusting for the cost of living, state and local government support for higher education in Arizona per FTE student was 25.4 percent below the national average, ranking 43rd. Considering per capita personal income as well, Arizona was 8 percent below average and ranked 33rd. Between FY 2008 and FY 2016, Arizona's state and local government higher education revenue per FTE student fell 36 percent after adjusting for inflation and the change in the cost of living. The decrease relative to the national average was 25.4 percent. Arizona's rank fell from 20th to 43rd.

Expenditures for higher education were not examined in the recent paper. The Census Bureau's expenditure figures include revenues from all sources, including state and local government appropriations, tuition, federal research grants, etc. On a per FTE student basis, Arizona's expenditures for higher education were 9.9 percent below average after adjusting for the cost of living in FY 2015, ranking 40th.

Representative Expenditures

According to the Urban Institute's study, the fiscal need by category of spending in Arizona ranged from somewhat above the national average to somewhat below average in FY 2012 (see Table 3). Actual spending was below the need in every category, but the spending effort was close to average in the police and corrections category. In contrast, the effort was the lowest in the nation for K-12 education. The fiscal need for K-12 education was high, fifth highest in the nation, while actual spending was very low, second lowest in the nation. Arizona also ranked very low on both actual spending and spending relative to the need in the highways, public welfare, and environment and housing categories.

TABLE 3
REPRESENTATIVE EXPENDITURES IN ARIZONA, FISCAL YEAR 2012

	Per Capita Actual Spending	Percentage of the National Per Capita Average		Spending Effort**	Rank, Fiscal Need*		Rank, Actual Spending*		Rank, Spending Effort*	
		Fiscal Need	Actual Spending		U.S.	West	U.S.	West	U.S.	West
Total Expenditures	\$6,442	103.7%	76.3%	73.5%	11	4	50	9	50	10
Elementary & Secondary Education	1,205	111.0	66.9	60.3	5	4	50	9	51	10
Higher Education	727	98.8	88.0	89.1	25	6	35	8	34	8
Highways	356	93.5	69.8	74.6	38	7	48	10	42	9
Police and Corrections	540	103.7	101.9	98.2	18	2	15	5	18	7
Health and Hospitals	562	101.0	73.3	72.5	23	2	35	8	34	8
Public Welfare	1,241	109.5	80.3	73.3	11	2	41	5	44	8
Environment and Housing	453	99.5	72.5	72.8	24	6	45	9	46	9
Government Administration	307	98.9	88.0	89.0	24	6	36	9	33t	8
Other	788	99.3	69.5	70.0	24	6	36	8	37	8

* Rank among the 50 states and the District of Columbia and rank among 10 western states. A rank of 1 indicates the highest expenditures.

** Actual expenditures as a percentage of fiscal need.

t: tie

Source: Calculated from Urban Institute, *Assessing Fiscal Capacities of States: A Representative Revenue System-Representative Expenditure System Approach, Fiscal Year 2012*.

STATE AND LOCAL GOVERNMENT REVENUE BY SOURCE

State and local government revenue by source as reported by the Census Bureau is displayed in Table 4 for Arizona. The revenue data for the latest year (FY 2015) are reported both as total dollars and per \$1,000 of personal income. In addition, the percent change over time relative to personal income is presented for two time periods: FYs 1993 through 2007 and FYs 2007 through 2015.

Measured per \$1,000 of personal income, total state and local government own-source revenue in Arizona in FY 2015 was 15 percent below average, ranked 48th nationally and last among the western states. Tax revenue was 12 percent below average, ranked 40th. The general sales tax and the property tax were the primary sources of revenue raised by state and local governments in Arizona in FY 2015, followed by the individual income tax. Of the three major taxes, general sales tax revenue per \$1,000 of personal income was 46 percent above average and ranked eighth, but property tax revenue was 16 percent below average, ranked 34th, and individual income tax revenue was 41 percent below average and ranked 41st.

Relative to personal income, total state and local government own-source revenue in Arizona slipped 2 percent between FYs 1993 and 2007 and an additional 16 percent between FYs 2007 and 2015. Revenue fell in both periods from the property tax and the individual income tax, and dropped in the latter period from the general sales tax.

All taxes paid by businesses are included in the annual study produced by Ernst & Young for the Council on State Taxation. The study identifies seven categories of business taxes: property, sales, excise (such as the motor fuel tax), corporate income, individual income (when used for pass-through income by S corps), unemployment insurance, and license and other taxes (such as severance taxes). The amount of taxes paid by businesses during fiscal year 2016 was determined through a combination of detailed data collection and modeling. To compare states, the total amount of business taxes paid is divided by private-sector gross domestic product.

The District of Columbia study does not attempt to measure all of the taxes paid by individuals. Instead, it focuses on the major categories.

General Sales Tax

The current permanent transaction privilege (sales) tax rate at the state level is 5.0 percent in Arizona. Of the revenue collected from this tax, 77.5 percent (\$4.5 billion in FY 2017) is deposited in the state government's general fund, with the remainder shared with cities and counties.

From mid-2001 through mid-2021, Arizona state government's sales tax rate includes an additional 0.6 percent dedicated to education that does not enter the general fund and is not shared with cities and counties. Revenue from the 0.6 percent tax totaled \$671 million in FY 2017.

In addition to the state's sales tax rate, local governments may levy a sales tax. The rate varies by locality, but the average overall state and local government rate is about 8.2 percent in Arizona.

**TABLE 4
REVENUE BY SOURCE, STATE AND LOCAL GOVERNMENTS IN ARIZONA**

	Fiscal Year 2015		Fiscal Year 2015 Per \$1,000 of Personal Income			Percent Change Per \$1,000 of Personal Income	
			Ratio to U.S.	U.S. Rank*	West Rank**	FYs 1993 to 2007	FYs 2007 to 2015
	Dollars in Thousands	Share of Total					
TOTAL REVENUE	\$46,598,204		92%	39	8	1%	-7%
From Federal Government	13,337,326	28.62%	117	18	3	16	26
Total Own Source	33,260,878	71.38	85	48	10	-2	-16
Taxes	23,761,491	50.99	88	40	9	-5	-16
Property	7,076,779	15.19	84	34	6	-23	-7
General Sales	9,279,253	19.91	146	8	4	16	-18
Selective Sales:	2,068,611	4.44	68	47	10	-23	-12
Motor Fuel	753,814	1.62	99	30	7	-32	-19
Alcoholic Beverage	71,270	0.15	59	33	6	-47	-7
Tobacco	314,239	0.67	100	30	3	127	-28
Public Utilities	212,318	0.46	44	38	8	-63	-13
Other	716,970	1.54	52	47	9	0	9
Individual Income	3,760,883	8.07	59	41	7	-8	-17
Corporate Income	690,960	1.48	70	36	6	37	-42
Motor Vehicle License	210,011	0.45	46	48	10	-62	-27
Other	674,994	1.45	47	49	10	41	-34
Nontax Revenue	9,499,387	20.39	79	44	10	6	-14
Current Charges	6,538,517	14.03	79	41	10	6	7
Education	2,739,291	5.88	128	19	4	-6	22
Higher Education	2,503,390	5.37	134	18	4	-8	30
School Lunch Sales	84,562	0.18	87	36	5	-21	-41
Other	151,339	0.32	88	23	4	47	-17
Hospitals	711,534	1.53	28	38	10	42	-15
Highways	21,759	0.05	7	40	10	180	-3
Airports	494,176	1.06	130	10	3	8	-13
Parking Facilities	9,095	0.02	17	43	8	-51	87
Natural Resources	130,280	0.28	147	10	5	-20	2
Parks and Recreation	141,220	0.30	76	38	8	-19	-13
Housing & Development	35,109	0.08	31	50	10	-11	25
Sewerage	921,009	1.98	98	24	6	13	21
Solid Waste Management	466,817	1.00	157	10	4	-3	1
Other	868,227	1.86	72	32	8	33	-3
Miscellaneous Revenue	2,960,870	6.35	79	44	8	6	-40
Interest Earned	768,479	1.65	92	29	6	-19	-60
Special Assessments	47,928	0.10	34	28	10	-17	-68
Sale of Property	164,105	0.35	248	6	3	121	-51
Other	1,980,358	4.25	73	47	9	30	-22

* Among 50 states and the District of Columbia, where a rank of 1 indicates the highest revenue.

** Among 10 western states, where a rank of 1 indicates the highest revenue.

Source: Calculated from U.S. Department of Commerce, Census Bureau, State and Local Government Finance (revenue) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

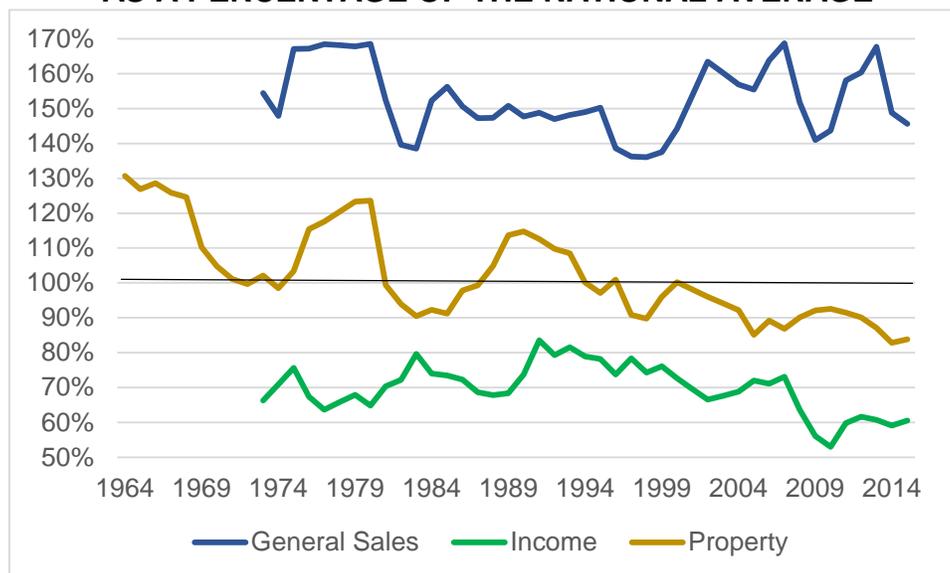
The state government’s tax rate of 5.6 percent in Arizona ranks a bit below the middle of all states and ranks seventh among the 10 western states, with Colorado, New Mexico, and Oregon (which does not levy a sales tax) having a lower rate. However, when the average combined state and local government sales tax rate is compared, Arizona is above the national average, ranking 11th. Among the 10 western states, only Washington has a higher rate.

Arizona’s sales tax largely is limited to goods, with certain goods — particularly food to be consumed at home and prescription drugs — exempted. Most states have a similarly narrow tax base, though neighboring New Mexico is one of the states that tax a range of services.

According to the Census Bureau, state and local governments in Arizona raised nearly \$9.3 billion from the general sales tax: 19.9 percent of all revenues and 27.9 percent of own-source revenues. Expressed per \$1,000 of personal income, the tax burden was 46 percent above average in Arizona, eighth highest in the nation. As seen in Chart 6, the general sales tax burden in Arizona relative to the national average has fluctuated since the 1970s, but has shown no trend.

The District of Columbia’s study indicates that the sales tax burden in Arizona is high for households (see Table 5). At each income level, Phoenix ranked between sixth and 10th highest of the 51 cities, at 33-to-38 percent above average in 2015.

CHART 6
REVENUE PER \$1,000 OF PERSONAL INCOME FROM MAJOR TAX SOURCES,
STATE AND LOCAL GOVERNMENTS IN ARIZONA
AS A PERCENTAGE OF THE NATIONAL AVERAGE



Note: The income tax combines the individual and corporate income taxes.

Source: Calculated from U.S. Department of Commerce, Census Bureau (revenue) and Bureau of Economic Analysis (personal income).

**TABLE 5
TAXES PAID BY HOUSEHOLDS IN PHOENIX IN 2015**

Tax Payment as a Percentage of the Average of 51 Cities and the Rank Among 51 Cities Nationwide/10 Cities in Western States*

Household Income	Income Tax		Property Tax		Sales Tax		Automotive Taxes		Total	
	%	Rank	%	Rank	%	Rank	%	Rank	%	Rank
\$25,000	-% [^]	20/2	86.6%	31/8	132.6%	10/1	87.7%	32/8	105.8%	20/3
\$50,000	44.7	38/6	102.3	18/4	135.0	8/1	100.0	22/5	97.2	28/4
\$75,000	46.4	39/6	99.4	21/4	134.7	7/1	97.3	22/4	93.9	33/4
\$100,000	46.6	40/6	97.9	20/4	138.1	6/1	97.6	23/4	91.6	36/6
\$150,000	48.3	41/7	96.4	21/4	136.0	6t/1	132.4	15/2	90.7	37/6

* A rank of 1 indicates the highest tax payments.

[^] The average is negative.

t: tie

Source: Calculated from Government of the District of Columbia, *Tax Rates and Tax Burdens in the District of Columbia — A Nationwide Comparison, 2015*, January 2017.

Ernst & Young’s study also concurs on the high sales tax burden in Arizona (see Table 6). It places the amount paid by businesses as a share of private-sector GDP at 65 percent above average, seventh highest in the country.

Individual Income Tax

Seven states do not levy an individual income tax and two others tax only interest and dividend income. Eight states have a single tax rate. The other 33 states and the District of Columbia have a graduated rate structure, with the tax rate increasing with income. This graduated structure helps to make the individual income tax progressive — the relative tax burden rises with income. Most taxes, especially the sales tax, are regressive — the proportion of income paid in taxes is highest for those with the lowest incomes, with the percentage falling with rising income. Thus, use of a progressive income tax helps to make the overall tax burden more equitable across income levels.

The number of income brackets, the low and high incomes associated with each bracket, and the tax rates all vary widely across the states that use a graduated rate structure. In several of these states, the top marginal rate is applied at such a low income that the tax structure resembles a single rate.

Arizona uses a graduated income tax with five brackets. The tax rates and the incomes (for tax year 2017) for a single filer follow:¹⁷

- 2.59 percent for incomes less than \$10,347
- 2.88 percent for incomes from \$10,347 through \$25,861
- 3.36 percent for incomes from \$25,862 through \$51,721
- 4.24 percent for incomes from \$51,722 through \$155,159
- 4.54 percent at incomes of at least \$155,160

¹⁷ The bracket amounts are adjusted annually for inflation.

TABLE 6
TAXES PAID BY BUSINESSES IN ARIZONA IN FISCAL YEAR 2016

Tax	Share of Business Taxes		Business Taxes as a Share of Private-Sector Gross Domestic Product		
	United States	Arizona	Ratio to U.S. Average	National Rank*	West Rank**
TOTAL	100%	100%	106%	16	4
Property	38	42	116	17	2
Sales	21	33	165	7	4
Excise	12	10	83	33	8
Corporate Income	9	5	59	33	6
Unemployment Insurance	6	4	72	38	8
Individual Income	6	2	46	40	7
License/Other	8	4	56	46	10

* Rank among 51 states, where a rank of 1 indicates the highest tax payments.

** Rank among 10 western states, where a rank of 1 indicates the highest tax payments.

Source: Calculated from Ernst & Young, *Total State and Local Business Taxes: State-by-State Estimates for Fiscal Year 2016*, August 2017.

Given the many variations in the design of the income tax from state to state, it is a challenge to compare states based on the tax rate. One means of doing so is to compare the maximum marginal tax rate used in each state. Other than the states that do not levy this tax, the maximum rate is less than in Arizona in only four states. Another possible comparison is to examine the marginal tax rate at particular income levels. For example, at \$50,000, only three states apply a lower rate than Arizona.

Three of the western states — Nevada, Texas, and Washington — do not levy an individual income tax. Of the remaining seven western states, Arizona’s maximum tax rate is the lowest.

According to the Census Bureau, Arizona raised \$3.76 billion from the individual income tax in FY 2015 — 8.1 percent of total state and local government revenue and 11.3 percent of own-source revenue. Relative to personal income, the individual income tax burden was 41 percent below average; Arizona ranked 41st. Collections per \$1,000 of personal income in Arizona dropped 8 percent between FYs 1993 and 2007 and an additional 17 percent between FYs 2007 and 2015.

Arizona’s income tax burden — individual and corporate combined — has been considerably below the national average since the earliest data in the 1970s (see Chart 6). The two income taxes are differentiated in Chart 7. Individual income tax collections per \$1,000 of personal income fell sharply in FYs 2008 and 2009 due to a tax reduction implemented in FYs 2007 and 2008 and because of the economic recession that began during FY 2008.

The District of Columbia’s study also indicates that the individual income tax burden in Arizona is far below average (see Table 5). In most states, hardly any tax is paid by the hypothetical

CHART 7
REVENUE PER \$1,000 OF PERSONAL INCOME FROM THE INCOME TAX, STATE AND LOCAL GOVERNMENTS IN ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



Source: Calculated from U.S. Department of Commerce, Census Bureau (revenue) and Bureau of Economic Analysis (personal income).

household earning \$25,000. At each higher income level, Phoenix ranked among the lowest of the states that levy this tax and in the bottom 14 states overall in 2015. At each income amount from \$50,000 to \$150,000, the tax burden in Phoenix was less than one-half of the national average in 2015.

The Minnesota Center for Fiscal Excellence provides more detail on the individual income tax, calculating the tax at up to nine income levels for a single person, a married couple filing jointly, a head of household, a senior single, and a senior couple. The results for a married couple filing jointly are shown in Table 7; results are similar for other types of filers. The individual income tax burden in Arizona in 2014 was not quite as far below the national average as in the District of Columbia’s study, but the differential still was 30 percent or more at incomes of at least \$50,000. At incomes of \$50,000 or more, Arizona ranked below the middle of the 42 states that levy the tax on all income (and below the middle of the 51 “states”) in 2014.

Corporate Income Tax

Arizona’s corporate income tax rate has been reduced in recent years and is now 4.9 percent. Of the 35 states that apply a single rate, only three have a lower rate than Arizona. Five states do not levy a corporate income tax, but four of these states apply a gross receipts tax (such as the “franchise tax” in Texas) instead. Among the states using a graduated corporate income tax rate structure, most apply the highest tax rate at a relatively low income. Using the highest marginal tax rate in each state, only nine of the 51 “states” (including those that do not levy this tax) have a lower rate than Arizona. However, among the 10 western states, Arizona’s rate ranks fifth highest. Nevada, Texas, and Washington do not levy a corporate income tax — but each applies

**TABLE 7
INDIVIDUAL INCOME TAXES PAYABLE IN ARIZONA IN 2014,
MARRIED COUPLE FILING JOINTLY**

Income	Tax Due	Tax as Percent of U.S. Average*	National Rank*	West Rank**	Tax as Percent of Income
\$20,000	\$-100	***	24	4	-0.5%
\$35,000	334	124.6%	19	2	1.0
\$50,000	717	58.5	31	4	1.4
\$75,000	1,428	55.4	39	6	1.9
\$100,000	1,986	55.6	39	6	2.0
\$150,000	3,524	55.9	41	7	2.3
\$250,000	6,902	59.9	41	7	2.8
\$500,000	18,043	69.0	39	7	3.6
\$1,000,000	40,656	70.0	36	7	4.1

* Among 42 states that levy the tax on all income, where a rank of 1 indicates the highest tax payments.

** Among seven western states that levy the tax, where a rank of 1 indicates the highest tax payments.

*** The U.S. average also is negative.

Source: Calculated from Minnesota Center for Fiscal Excellence, *Comparison of Individual Income Tax Burdens by State, 2017 Edition*, April 2017.

a gross receipts tax. Colorado's tax rate is a little lower at 4.63 percent and New Mexico's rate is slightly lower at 4.8 percent up to an income of \$500,000 but is 6.2 percent above that level.

According to the Census Bureau, corporate income tax collections relative to personal income were 30 percent less than the national average in Arizona in FY 2015. Arizona ranked 36th nationally and sixth among the western states. Corporate income tax collections per \$1,000 of personal income in Arizona rose between FYs 1993 and 2007 but fell between FYs 2007 and 2015. As seen in Chart 7, corporate income tax collections are erratic from year to year but have trended down relative to personal income since the mid-1990s.

Property Tax

In most states, multiple government jurisdictions (for example, county, city, school district, special district) levy a property tax, so the overall tax rate can vary even within a given city, much less across a state. Thus, it is difficult to compare states based on the tax rate. Some studies estimate an average tax rate across jurisdictions, while others use representative values, for example of the largest school district within the largest city. Moreover, the property tax burden in a specific place relative to other places may vary substantially by the nature of the property: for example, residential, commercial, or industrial.

According to the Census Bureau, Arizona raised \$7.08 billion from the property tax in FY 2015, 15.2 percent of total state and local government revenues and 21.3 percent of own-source revenues. This figure includes tax collections from all types of properties. In particular, Arizona's "motor vehicle license tax," which is based on value, is classified by the Census Bureau as a property tax.

Relative to personal income, the property tax burden in Arizona in FY 2015 was 16 percent below average and the state ranked 34th nationally and sixth among 10 western states. Collections per \$1,000 of personal income dropped 23 percent between FYs 1993 and 2007 and an additional 7 percent between FYs 2007 and 2015. As seen in Chart 6, the property tax burden relative to personal income has been variable in Arizona versus the nation, but has trended down since the 1960s.

Residential Property Tax

Two studies, one by the Tax Foundation and the other published in *USA Today*, estimated the average effective residential property tax rate.¹⁸ The results from the two sources are reasonably similar though the studies were conducted two years apart. Arizona's average effective residential property tax rate ranked 40th in the report by *USA Today* and 36th in the Tax Foundation's study. Among the 10 western states, Arizona ranked seventh and sixth respectively. The report by *USA Today* also calculated the dollar amount of the tax based on the average effective tax rate and the average home value. On this measure, Arizona ranked 36th nationally and ninth in the West.

In the District of Columbia's study (Table 5), residential property tax payments in Phoenix generally were similar to the national average in 2015. They were below average at the \$25,000 income level; people at this income are assumed to be renters, paying property taxes as part of their rent. At the other income levels, the levy was within a few percentage points of the average, with Phoenix ranking a little above the middle of the cities.

Property taxes also are examined in a study done by the Minnesota Center for Fiscal Excellence and the Lincoln Institute of Land Policy. In about half of the cities examined in the study — but not Arizona cities — the residential tax rate varies with value. Thus, the comparison of the Arizona cities to the entire sample differs by value of the property.

In the Minnesota/Lincoln study, the average residential property tax rate in 53 large cities was calculated for properties valued at \$150,000 and \$300,000 in 2016.¹⁹ In addition, the tax rate at the median home value in each city was calculated, both without assessment limits and with assessment limits in those states that have limits.²⁰ In Table 8, the residential property tax rate in Phoenix is compared to the average of the 53 cities. The rate in Phoenix was significantly below average at each value, though the rank of Phoenix was not as much below the middle of the 53 cities; Phoenix ranked in the middle of the cities in the 10 western states. Since the median

¹⁸ The Tax Foundation study, from August 2015, is at <https://taxfoundation.org/how-high-are-property-taxes-your-state/>. The *USA Today* study, from April 2017, is at <https://www.usatoday.com/story/money/personalfinance/2017/04/16/comparing-average-property-taxes-all-50-states-and-dc/100314754/>.

¹⁹ The 53 cities consist of the largest city in each state, the District of Columbia, and the second-largest city in two states in which the property taxes in the largest city are not representative of the rest of the state.

²⁰ A number of states have adopted property tax limits. Limits on tax rates and levies are implicitly included in the Minnesota/Lincoln study, but limits on assessed values are handled separately. Arizona has a limit in assessed values, but it differs from the most common form of assessment limit used by states, which benefits homeowners for as long as they own their home, but upon the sales of the home, the new owner faces a higher levy.

**TABLE 8
RESIDENTIAL PROPERTY TAX RATES IN 2016**

Category and Value	Ratio to Mean*	Phoenix National Rank*	West Rank**	Ratio to Mean^	Safford National Rank^	West Rank^^
Median Value:						
Without Assessment Limits	0.789	29	4	0.564	34	7
With Assessment Limits	0.666	37	5			
\$150,000	0.807	29	4	0.547	40	9
\$300,000	0.772	33	4	0.530	40	9

* The largest city in each state, the District of Columbia, plus two additional large cities.

** The largest city in each of 10 western states.

^ One rural municipality in each state.

^^ One rural municipality in each of 10 western states.

Category and Value	Phoenix		Tucson	
	Ratio to Mean*	National Rank*	Ratio to Mean*	National Rank*
Median Value:				
Without Assessment Limits	0.822	31	0.876	42
With Assessment Limits	0.734	36	0.956	40
\$150,000	0.847	27	0.903	24
\$300,000	0.806	31	0.859	24

* 50 largest U.S. cities.

Note: A rank of 1 indicates the highest tax payments.

Source: Calculated from Minnesota Center for Fiscal Excellence and the Lincoln Institute of Land Policy, *50-State Property Tax Comparison Study*, May 2017.

property value varies by city, the ratio to the average city and the ranks among the cities are not the same for the average tax bill as for the average rate. Based on the amount, Phoenix was 21 percent below average for the median value without considering assessment limits, ranking 26th nationally and seventh among the western cities. Considering assessment limits, Phoenix was 33 percent below average for the median value, ranking 35th nationally and ninth among the western cities.

The Minnesota/Lincoln study also compares one rural municipality from each state. Safford was selected for Arizona. The residential tax rate in Safford was far below the average of the small cities and the rank also was low relative to all 50 small cities and to the 10 western rural municipalities.

In addition, The Minnesota/Lincoln study compares the 50 largest cities in the country, which include Phoenix and Tucson. The residential property tax rates in Phoenix and Tucson were considerably less than the average of the 50 cities based on the median value and values of \$150,000 and \$300,000. Since the median home value in Phoenix and Tucson was less than the average of the 50 largest cities, the tax bill was further below the average of the cities: without

considering assessment limits, the tax bill was 29 percent below average in Phoenix and 47 percent below average in Tucson.

A direct comparison of Tucson to Phoenix indicates that the effective tax rate on residences was 6.6 percent higher in Tucson but the median home value in 2015 was 30.6 percent lower (according to the American Community Survey). Thus, in Table 8, the amount of tax paid in Tucson was a little higher than in Phoenix at the fixed values of \$150,000 and \$300,000, but was lower at the median value.

Business Property Tax

In Arizona, the assessment ratio used for business properties is considerably higher than for residential properties, though the ratios for nonresidential properties recently were reduced. The assessment ratio is 10 percent for residential property, regardless of whether it is the primary or secondary residence of the owner or whether the property is leased. The ratio is 18 percent for most commercial property.²¹

The assessment ratio is not the only way in which residential properties in Arizona receive a tax break relative to business-owned properties. Residential property tax bills are lowered due to the “homeowner’s rebate” and because the tax bill of residential properties is limited to 1 percent of the property value.²²

The Minnesota/Lincoln study calculated the effective tax rate by property type for the sample of 53 cities. The ratio in Phoenix of commercial properties relative to residential properties was 2.2, ninth highest among the 53 cities and second highest among 10 western cities. The average of the cities was 1.7, with 20 of the cities having a ratio of less than 1.1. The Arizona Tax Research Association (ATRA) also calculates effective tax rates by property tax class in Arizona. In 2016, the effective tax rate of class 1 properties — commercial properties with an assessment ratio of 18 percent — had an effective tax rate of 2.03 percent, compared to 0.88 percent for class 3 properties — primary residences. The state’s ratio of 2.3 is similar to that of Phoenix in the Minnesota/Lincoln study.

According to Ernst & Young’s study, property taxes paid by businesses in Arizona as a share of private-sector GDP were 16 percent higher than the national average in FY 2016, 17th highest in the nation. However, Ernst & Young’s estimate of the amount of property tax paid by businesses in Arizona (\$5.2 billion) is considerably higher than figures derived from ATRA’s estimates of the amount of property tax paid by property class (a maximum of \$4.3 billion).²³

While it might be tempting to substitute ATRA’s lower figure for business property taxes into the Ernst & Young’s study, it is not known if Ernst & Young’s estimates of property tax payments for other states might also be too high. If the substitution is made, the business

²¹ The property tax bill is calculated as the value of the property times the tax rate times the assessment ratio.

²² In 2016, the homeowner’s rebate amounted to 47.19 percent of the tax levied by school districts, up to a maximum of \$600.

²³ The \$4.3 billion figure was the amount paid by all classifications other than primary residence. However, the definition of property taxes paid by businesses could be more narrow; for example, should the taxes paid by owners of leased residences be included as a business payment?

property tax burden in Arizona in FY 2016 was below the national average, with the overall business tax burden also slipping to a little below average.²⁴

The property tax study by the Minnesota Center for Fiscal Excellence and the Lincoln Institute of Land Policy examined taxes for commercial and industrial properties and for apartment complexes. Unlike the residential property tax, the commercial and industrial property tax rates vary with value in Arizona but do not vary in about 80 percent of the cities examined. Thus, the tax burden in Phoenix relative to the average of the cities examined varies substantially with value; commercial and industrial property taxes were examined for values (land plus buildings) of \$100,000, \$1 million, and \$25 million in the Minnesota/Lincoln study.

For commercial properties, the property tax rate in Phoenix relative to the average of 53 large cities was above average in 2016, ranging from 6 percent higher at a value of \$100,000 to 24 percent higher at a value of \$25 million (see Table 9). The tax rate was particularly high relative to the cities in the 10 western states.²⁵

Industrial property tax rates were calculated under two conditions: with personal property accounting for 50 percent of the total value and for 60 percent of the total value. In each case, the industrial property tax rate in Phoenix ranged from below average at a value of \$100,000 to substantially above average at higher values. At the higher values, the rate in Phoenix was among the highest in the country.

The property tax rate for an apartment building valued at \$600,000 was far below the average of the cities in Phoenix. However, Phoenix ranked in the middle of the western cities.

Business property taxes in Safford compared more favorably to its group of 50 small cities. However, the industrial tax rate was a little above average at high values.

The results for Phoenix and Tucson relative to the 50 largest cities in the country (see the bottom portion of Table 9) are similar to those of Phoenix relative to the 53 cities: commercial and industrial property tax rates in 2016 were relatively high except for industrial properties valued at \$100,000. A direct comparison of Phoenix and Tucson indicates that taxes were a little higher in Phoenix for commercial and industrial properties, but a little lower for apartment buildings.

²⁴ If the \$4.3 billion figure derived from ATRA's estimates is used, Arizona's business property tax burden in FY 2016 was 4 percent below average, ranking 23rd. The overall business tax burden was 1 percent below average, ranking 28th. If the \$1.4 billion paid by owners of leased residences is excluded from the business property tax calculation, Arizona ranked 48th on the business property tax burden at 35 percent below average and 43rd on the overall business tax burden at 13 percent below average.

²⁵ The school district in Phoenix that was used in the study has a higher tax rate than many other school districts in the Phoenix area. Thus, the relative tax burden for commercial and industrial properties may not be as high elsewhere in the Phoenix area.

**TABLE 9
BUSINESS PROPERTY TAX RATES IN 2016**

Category and Value	Ratio to Mean*	Phoenix National Rank*	West Rank**	Ratio to Mean^	Safford National Rank^	West Rank^^
Commercial:						
\$100,000	1.063	23	4	0.696	35	7
\$1 Million	1.088	22	3	0.724	33	6
\$25 Million	1.241	18	1	0.859	28	3
Industrial, 50% Personal Property:						
\$100,000	0.885	30	4	0.574	45	10
\$1 Million	1.269	12	2	0.906	27	4
\$25 Million	1.386	10	2	1.009	19	3
Industrial, 60% Personal Property:						
\$100,000	0.788	35	6	0.510	47	10
\$1 Million	1.370	9	2	1.010	16	3
\$25 Million	1.470	8	2	1.098	17	3
Apartment:						
\$600,000	0.684	37	5	0.535	42	8

* The largest city in each state, the District of Columbia, plus two additional large cities.

** The largest city in each of 10 western states.

^ One rural municipality in each state.

^^ One rural municipality in each of 10 western states.

Category and Value	Phoenix		Tucson	
	Ratio to Mean*	National Rank*	Ratio to Mean*	National Rank*
Commercial:				
\$100,000	1.120	19	1.075	22
\$1 Million	1.150	18	1.106	20
\$25 Million	1.307	12	1.265	13
Industrial, 50% Personal Property:				
\$100,000	0.852	29	0.818	30
\$1 Million	1.218	14	1.188	16
\$25 Million	1.333	14	1.304	15
Industrial, 60% Personal Property:				
\$100,000	0.730	31	0.700	33
\$1 Million	1.264	13	1.240	14
\$25 Million	1.361	12	1.338	14
Apartment:				
\$600,000	0.744	30	0.793	25

* 50 largest U.S. cities.

Note: A rank of 1 indicates the highest tax payments.

Source: Calculated from Minnesota Center for Fiscal Excellence and the Lincoln Institute of Land Policy, *50-State Property Tax Comparison Study*, May 2017.

Selective Sales Taxes

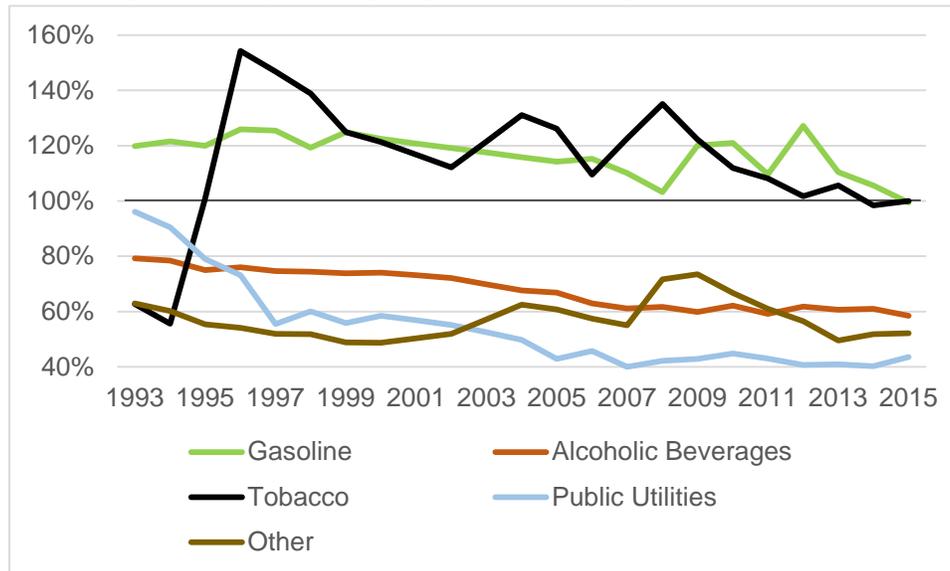
A selective sales tax — also known as an excise tax — is a tax levied on the sale of a particular good or service separate from the general sales tax. The Census Bureau divides selective sales taxes into five categories: motor fuels, alcoholic beverages, tobacco, public utilities, and other. In Chart 8, the historical record of Arizona state and local government tax collections per \$1,000 of personal income as a percentage of the national average is shown for each category of selective sales taxes.

Tax on Motor Fuels

Across the nation, the revenue from taxes and fees related to automobiles generally are deposited into a special transportation fund rather than the state’s general fund. At 19 cents per gallon, Arizona’s gas tax rate is among the bottom 10 in the nation, 34 percent less than the tax rate in the median state.

Despite this low tax rate, collections per \$1,000 of personal income in FY 2015 in Arizona were nearly equal to the national average according to the Census Bureau (see Table 4). Factors such as distance traveled and vehicle fuel efficiency also affect the amount of tax paid. Revenue from the tax on motor fuels has fallen substantially in Arizona relative to personal income, by 32 percent between FYs 1993 and 2007 and by an additional 19 percent between FYs 2007 and 2015. Arizona’s tax rate is expressed per gallon and does not vary with the price of gasoline.

CHART 8
REVENUE PER \$1,000 OF PERSONAL INCOME FROM SELECTIVE SALES TAXES, STATE AND LOCAL GOVERNMENTS IN ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



Source: Calculated from U.S. Department of Commerce, Census Bureau (revenue) and Bureau of Economic Analysis (personal income).

Taxes on Alcoholic Beverages

In most states, taxes on alcoholic beverages are divided into three parts: beer and other malt liquors, wine, and distilled spirits. In a number of states, alcoholic beverages (at least with an alcoholic content above a certain percentage) can only be purchased at state-run stores — a tax rate is not available in these states. Among the states for which a tax rate can be calculated, Arizona's tax rate for distilled spirits is 20 percent below the median state and ranks fifth among seven western states. The tax rate on beer in Arizona also is 20 percent less than the median state; Arizona ranks tied for sixth among 10 western states. For wine, the tax rate in Arizona is 17 percent higher than in the median state; Arizona ranks fourth among nine western states.

According to the Census Bureau, taxes on alcoholic beverages were not a significant source of government revenue in Arizona in FY 2015. Relative to personal income, the amount was 41 percent below average, though Arizona ranked 33rd nationally and sixth among the western states. The amount collected fell sharply relative to personal income between FYs 1993 and 2007 and somewhat further between FYs 2007 and 2015. Chart 8 illustrates the decline over the 22 years.

Taxes on Tobacco

Arizona has one of the higher tax rates on cigarettes, ranking 13th among the states at \$2 per pack. The tax rate is 31 percent higher than the median state. Among the western states, the tax rate is higher in California and Washington. Other forms of tobacco also are taxed, but it is not possible to compare states due to wide variation in the means of calculating the tax.

According to the Census Bureau, collections in Arizona from taxes levied on tobacco relative to personal income were equal to the national average in FY 2015 despite the relatively high tax rate. The amount collected rose sharply relative to personal income between FYs 1993 and 2007 due to a series of voter-approved tax increases but fell between FYs 2007 and 2015 as consumption of tobacco products declined.

Selective Sales Tax on Public Utilities

The collection of taxes on public utilities can come in the form of a direct tax paid by consumers or as a percentage of the gross receipts of a utility. In Arizona, the amount collected in FY 2015 relative to personal income was 56 percent below the national average. Arizona ranked 38th nationally and eighth in the West. The amount collected fell sharply relative to personal income between FYs 1993 and 2007 and dropped further between FYs 2007 and 2015.

Other Selective Sales Taxes

Examples of other selective sales taxes includes a charge on admissions to amusement places, a tax on pari-mutuels (such as horse racing), and an insurance premium tax. The latter accounts for most of the revenue in this category in Arizona.

The collection of other selective sales taxes in Arizona also was far below the national average in FY 2015 relative to personal income. Arizona ranked 47th nationally and ninth in the West. The amount collected relative to personal income was unchanged between FYs 1993 and 2007 and rose between FYs 2007 and 2015.

Other Taxes

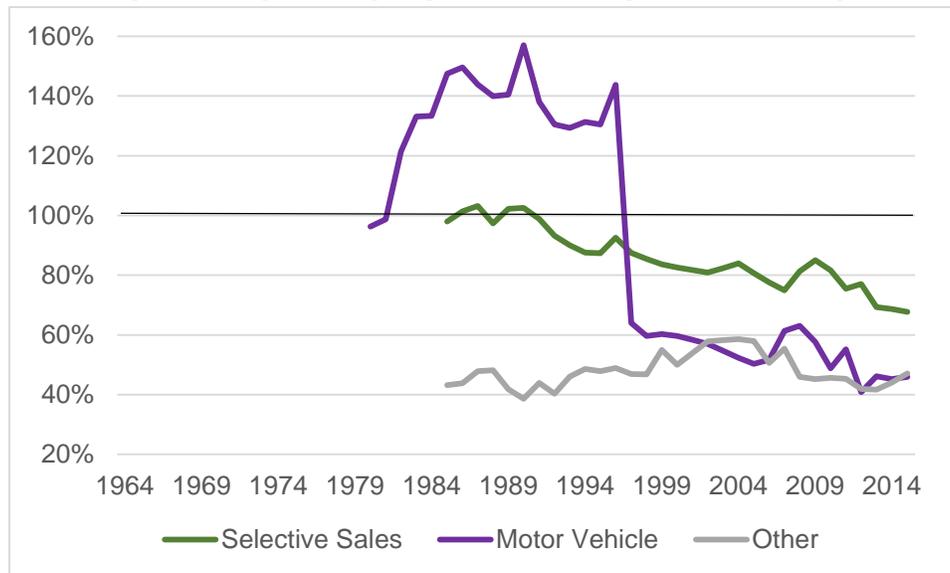
The Census Bureau has a separate category for motor vehicle license taxes. This category includes such items as fees for licenses, title registration, license plates, and vehicle inspection. It does not include Arizona’s “motor vehicle license tax,” which is categorized as a property tax.

According to the Census Bureau, collections from motor vehicle license taxes relative to personal income were very low in Arizona in FY 2015 at 54 percent below the national average, with Arizona ranked 48th nationally and last among the western states. Collections per \$1,000 of personal income plunged between FYs 1993 and 2007 and fell considerably further between FYs 2007 and 2015. As seen in Chart 9, collections during the late 1990s dropped from above to well below the national average.

The District of Columbia’s study combines four automobile-related taxes and fees — gasoline tax, motor vehicle registration fees, excise taxes, and personal property taxes levied on autos — into one category. As seen in Table 5, these taxes in Phoenix were below average in 2015 at the \$25,000 income level, near average at incomes of \$50,000 to \$100,000, and above average at the \$150,000 income level.

A variety of other taxes are applied in at least some states. The Census Bureau’s category for other taxes includes a variety of license taxes, such as hunting and fishing and motor vehicle operators. Other taxes include severance taxes and death and gift taxes. As with the motor vehicle license tax, Arizona’s collections from such taxes were quite low in FY 2015 at 53

CHART 9
REVENUE PER \$1,000 OF PERSONAL INCOME FROM SELECTED TAXES,
STATE AND LOCAL GOVERNMENTS IN ARIZONA
AS A PERCENTAGE OF THE NATIONAL AVERAGE



Source: Calculated from U.S. Department of Commerce, Census Bureau (revenue) and Bureau of Economic Analysis (personal income).

percent below average per \$1,000 of personal income, ranking 49th. Relative to personal income, revenue increased between FYs 1993 and 2007 but fell between FYs 2007 and 2015.

Representative Revenues

According to the Urban Institute, the revenue capacity in Arizona varied by source in FY 2012, though for most sources the capacity was below the national average. The revenue effort varied widely by source (see Table 10). Among the major revenue sources, the effort was quite high on the general sales tax but very low on the individual income tax.

**TABLE 10
REPRESENTATIVE REVENUES IN ARIZONA, FISCAL YEAR 2012**

	Per Capita Actual Revenue	Percentage of the National Per Capita Average		Revenue Effort**	Rank, Revenue Capacity*		Rank, Actual Revenue*		Rank, Revenue Effort*	
		Revenue Capacity	Actual Revenue		U.S.	West	U.S.	West	U.S.	West
Total Revenue	\$4,920	82.4%	75.9%	92.1%	46	9	49	9	39t	8
General Sales Tax	1,309	91.7	130.9	142.7	37	7	10	4	9	4
Property Tax	1,044	76.7	73.4	95.7	39	9	33	6	23	3
Individual Income Tax	472	79.7	48.3	60.6	45	9	42	7	41	7
Corporate Income Tax	99	75.6	63.5	83.9	40	7	36	5	31	5
Motor Fuel Tax	137	93.9	103.8	110.5	38	5t	24	5t	16t	5
Tobacco Tax	49	55.9	83.1	148.5	47	6t	33	4	17	2
Alcoholic Beverages Tax	10	102.1	21.3	20.8	31	6	45	8	44	8
Insurance Tax	65	75.0	116.1	154.8	42	4t	19	2	10	3
Severance Tax	6	110.9	10.9	9.8	16	6	23	7	30	9
Estate, Inheritance, and Gift Taxes	0	68.8	0.0	0.0	27	5	33	3t	41t	8
Lottery	31	49.3	43.7	88.6	40	6	37	5	34	6
Corporate Licenses	2	75.0	5.6	6.1	27	7	43	7	40	6
Hunting and Fishing Licenses	4	60.0	80.0	133.3	38	7t	30	7t	19t	9t
Motor Vehicle Registration	26	97.4	33.3	34.2	38	6	50	10	50	10
Motor Vehicle Operators Licenses	5	112.5	62.5	55.6	19	2t	36	7t	35t	9
All Other Taxes	149	83.2	40.3	48.4	42	7	45	9	44	9
Charges (User Fees)	1,065	83.1	78.4	94.4	42	7	43	10	31	8
Other Revenue	447	83.1	70.4	84.7	42	7	45	9t	40	8

* Rank among the 50 states and the District of Columbia and rank among 10 western states. A rank of 1 indicates the highest revenue.

** Actual revenue as a percentage of revenue capacity.

t: tie

Source: Calculated from Urban Institute, *Assessing Fiscal Capacities of States: A Representative Revenue System-Representative Expenditure System Approach, Fiscal Year 2012*.

STATE GOVERNMENT GENERAL FUND

According to the JLBC, ongoing revenue in Arizona state government's general fund in fiscal year 2017 was \$10.02 billion, or \$35.06 per \$1,000 of personal income.²⁶ This figure represents the total amount collected. After subtracting the amount for urban revenue sharing (URS), ongoing general fund revenue was \$9.36 billion, or \$32.74 per \$1,000 of personal income.²⁷ Most of the revenue came from taxes; before subtracting urban revenue sharing, tax revenue was \$9.60 billion, or \$33.59 per \$1,000 of personal income. Ongoing general fund expenditures totaled \$9.46 billion, or \$33.08 per \$1,000 of personal income.²⁸

The history of ongoing general fund revenues and expenditures per \$1,000 of personal income is shown in Chart 10. While fluctuating from year to year, no trend can be discerned in the figures through FY 1992. Since then, ongoing general fund revenues and expenditures have fallen substantially. The FY 2017 revenue figure of \$32.74 after subtracting for URS compares to an average of \$49.22 from FYs 1979 through 1992 — a drop of 33.5 percent. Similarly, the FY 2017 expenditure figure of \$33.08 compares to an average of \$48.26 from FYs 1979 through 1992 — a drop of 31.5 percent. The budgeted expenditure figure for FY 2018 is down to \$32.70.

In contrast to the decline in general fund spending per \$1,000 of personal income, expenditures from other funds have held steady relative to personal income following an increase in the 1990s (see Chart 11). Total appropriations from all funds have declined over time relative to personal income.

Not-appropriated spending is authorized but not appropriated by the Legislature. It consists largely of monies received from the federal government. The federal funds are distributed to the states in pieces, each restricted to a specific purpose. For example, 43 percent of the not-appropriated funding in FY 2018 is for AHCCCS — these funds cannot be used for another purpose.

Funding that is not appropriated has been volatile from year to year, but has experienced an upward trend since the early 2000s. Overall, the gains in not-appropriated funding have offset the declines in appropriations, such that no trend has been present since the early 2000s in total state government spending relative to personal income. However, given the restrictions in the use of federal funds, an increase in total not-appropriated spending cannot be assumed to offset a decrease in appropriations for a specific program. This is illustrated later in this section when expenditures by state agencies are examined.

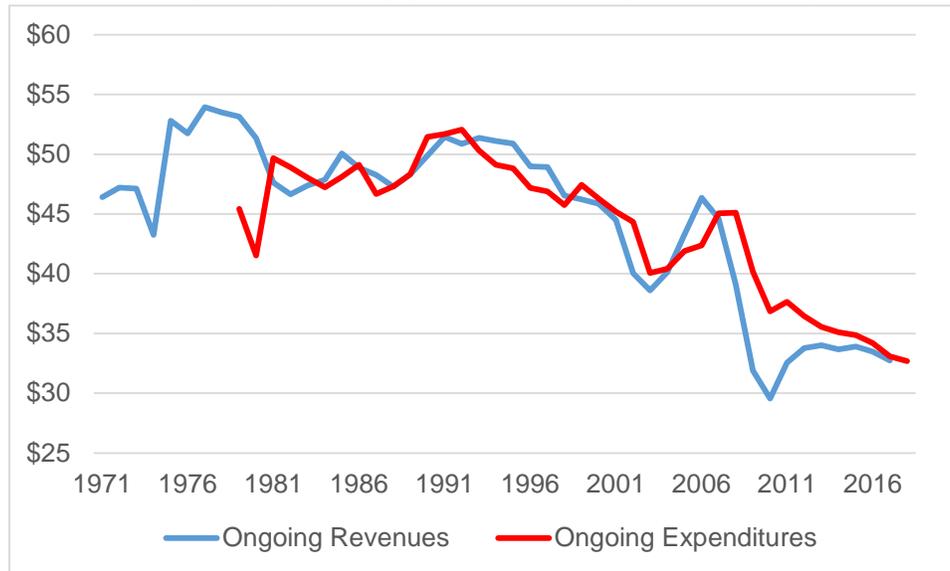
The decreases in general fund revenue relative to personal income since the early 1990s result predominantly from a series of tax reductions that have reduced revenue to the general fund. The most significant changes were reductions to tax rates, but the addition of tax credits and tax

²⁶ Ongoing revenue excludes any carry-forward amount from the prior year and any transfers from other funds.

²⁷ Urban revenue sharing, passed by Arizona voters in 1972, specifies that a portion of income tax revenue (currently, 15 percent of the amount collected two years earlier) be shared with incorporated cities and towns. All of the income taxes collected are deposited in the general fund, with the amount allocated for URS shown as negative revenue by the JLBC, not as an expenditure.

²⁸ Ongoing expenditures exclude any one-time spending.

**CHART 10
ONGOING REVENUES AND EXPENDITURES PER \$1,000 OF PERSONAL INCOME,
ARIZONA STATE GOVERNMENT GENERAL FUND**



Notes:

Revenues are expressed after subtracting urban revenue sharing; the latest data are for fiscal year 2017. Expenditures extend through FY 2018; the FY 2018 figures are from the “FY 2018 Appropriations Report” (June 2017) and are based on a projection of personal income.

Source: Calculated from Arizona Joint Legislative Budget Committee (revenues and expenditures) and U.S. Department of Commerce, Bureau of Economic Analysis (quarterly personal income).

exemptions also contributed to a loss of revenue. The JLBC has estimated the effect on revenue of every tax law change that has occurred since FY 1989.²⁹

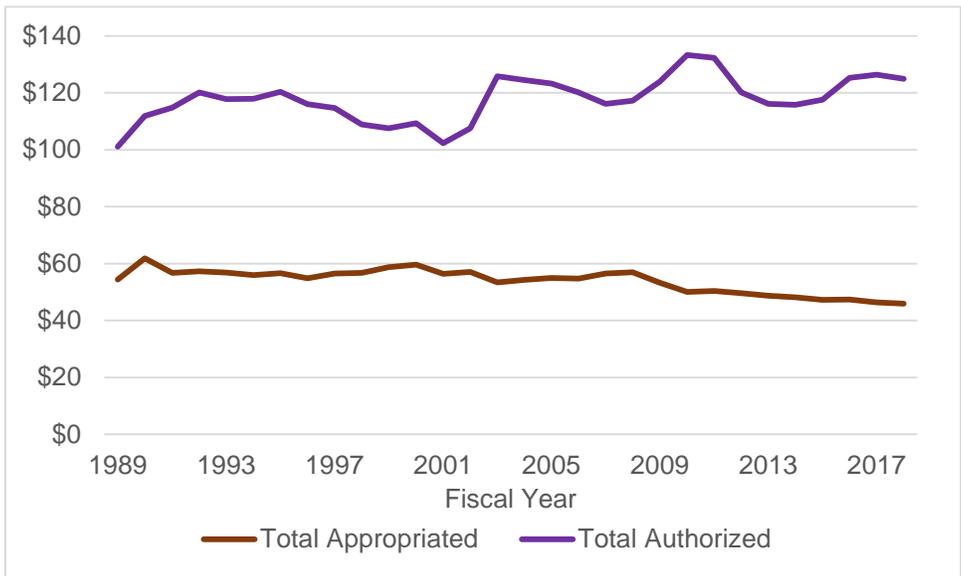
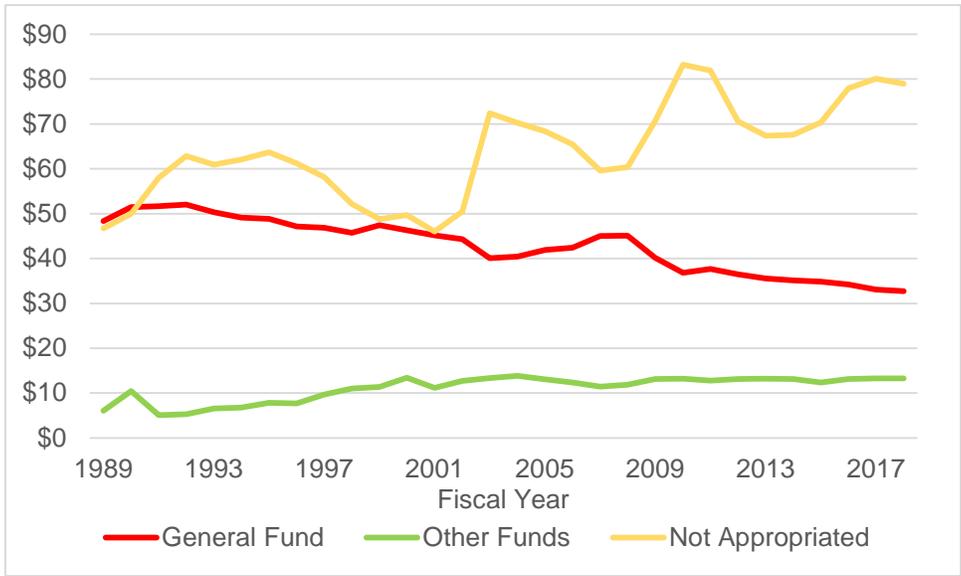
The annual record of the effects on general fund revenue from the tax law changes is shown in Chart 12. The unadjusted figures are from the JLBC; the adjusted figures bring the JLBC estimates of the tax changes forward to conditions in FY 2017.

Expressed per \$1,000 of personal income, the cumulative effect on general fund tax revenue of the tax law changes is shown in Chart 13. Had no tax law changes occurred after FY 1992, general fund tax revenue in FY 2017 would have been \$49.03, slightly higher than the historical average of \$48.63 and much higher than the actual figure of \$33.59.

General fund revenue varies significantly with the economic cycle, which is responsible for the fluctuations in the line for revenue without tax changes in Chart 13. An economic expansion has been present over the last several years, but the amount of revenue per \$1,000 of personal income even without any tax changes has been lower during this period than in the economic expansions of the 1990s and mid-2000s and even during the recession of the early 2000s.

²⁹ The estimates are available from the appendix to the annual “Tax Handbook” (available from <https://www.azleg.gov/jlbc/economicanalysis.htm>).

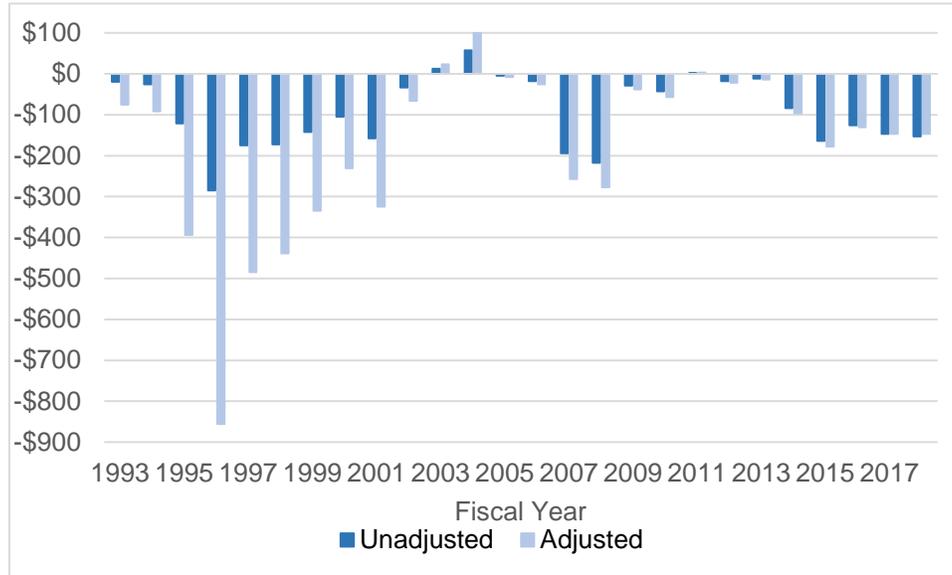
**CHART 11
EXPENDITURES PER \$1,000 OF PERSONAL INCOME,
ARIZONA STATE GOVERNMENT**



Note: The FY 2018 figures are from the “FY 2018 Appropriations Report” (June 2017) and are based on a projection of personal income.

Source: Calculated from Arizona Joint Legislative Budget Committee (expenditures) and U.S. Department of Commerce, Bureau of Economic Analysis (quarterly personal income).

CHART 12
ESTIMATE OF ANNUAL CHANGE IN TAX REVENUE IN MILLIONS OF DOLLARS,
ARIZONA STATE GOVERNMENT GENERAL FUND



Note: The adjusted figures are expressed in terms of FY 2017 conditions.

Source: Calculated from Arizona Joint Legislative Budget Committee (revenue and estimated initial effects of tax changes) and U.S. Department of Commerce, Bureau of Economic Analysis (quarterly personal income).

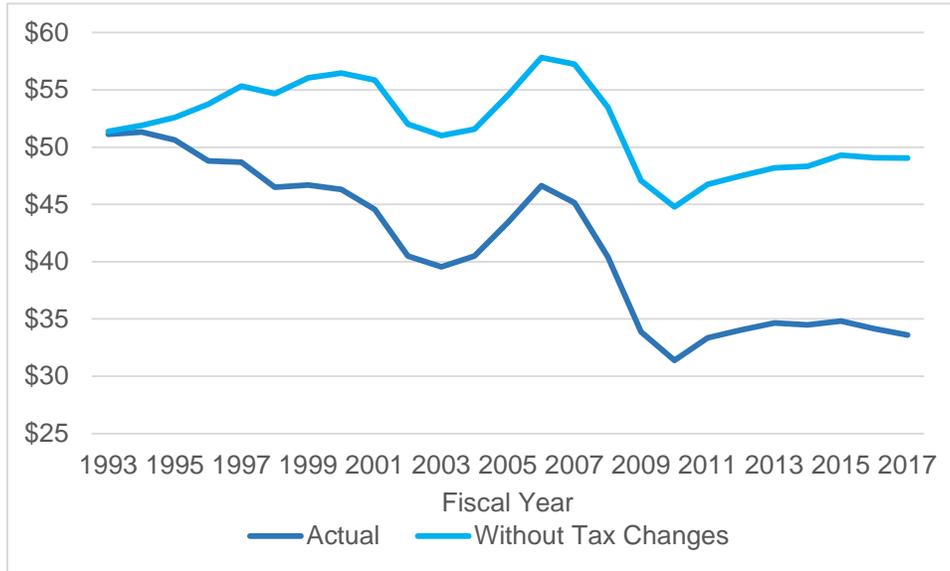
Two factors can be identified for the relatively weak performance in general fund revenue in recent years:

- Growth of the Arizona economy was relatively stronger from the early 1990s through the mid-2000s than it has been since then.
- Due to the narrow tax base of the sales tax, which excludes most services and some purchases made online, sales tax revenue does not keep pace with economic growth.

Taking all of the tax law changes since FY 1992 into account and adjusting the nominal estimates of the effects of tax law changes to reflect conditions in FY 2017, general fund revenue was approximately \$4.41 billion less in FY 2017 than it would have been had no tax changes been implemented. The projected loss in FY 2018 is \$4.75 billion.

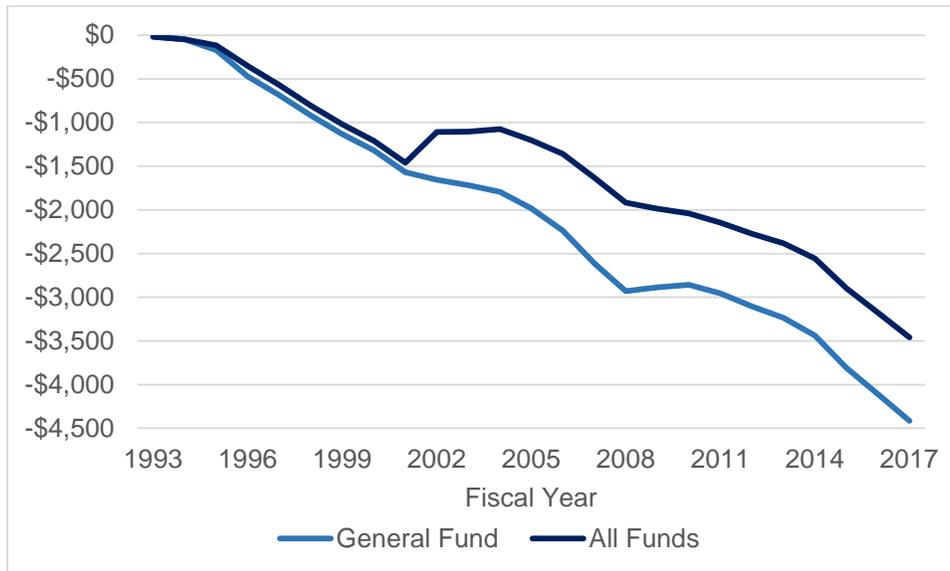
Various voter-approved tax increases since the early 1990s have increased state government revenues, but none of these increases resulted in additional revenue for the general fund. Four measures passed between 1994 and 2006 increased revenue from the tobacco tax; the amount of tobacco tax revenue due to these ballot measures was \$282 million in FY 2017. Proposition 301, passed by voters in 2000 to benefit education, raised the sales tax rate by 0.6 percentage points; it realized \$671 million in revenue in FY 2017. Chart 14 shows the effects of the tax changes to the general fund and the net of these tax changes and the voter-approved tax increases benefitting other funds. The net effect of all tax changes to all funds was nearly \$3.5 billion in FY 2017.

CHART 13
TAX REVENUE PER \$1,000 OF PERSONAL INCOME,
ARIZONA STATE GOVERNMENT GENERAL FUND



Source: Calculated from Arizona Joint Legislative Budget Committee (revenue and estimated initial effects of tax changes) and U.S. Department of Commerce, Bureau of Economic Analysis (quarterly personal income).

CHART 14
CHANGES IN TAX REVENUE IN MILLIONS OF DOLLARS,
ARIZONA STATE GOVERNMENT GENERAL FUND



Source: Calculated from Arizona Joint Legislative Budget Committee (revenue and estimated initial effects of tax changes) and U.S. Department of Commerce, Bureau of Economic Analysis (quarterly personal income).

Expenditures by Type

The budget for fiscal year 2018 is displayed in Table 11 for each of the larger state government agencies, with total authorized spending divided into the three categories of general fund, other funds, and not appropriated. The share of the total coming from each of the three categories varies widely across state agencies.

Two agencies — the Arizona Health Care Cost Containment System and the Department of Education (K-12 education) — account for half of the total funding and nearly 62 percent of the expenditures from the general fund. Two other programs — the universities and the Department of Economic Security — account for another 28 percent of the total, but only 13 percent of the general fund.

In Table 12, the percent change in funding relative to personal income is shown for two time periods. Overall funding per \$1,000 of personal income has not changed much over time, but significant declines have occurred in the general fund. The magnitude of the decrease in the general fund over the last 11 years is twice that of the preceding 15 years.

All of the major agencies have experienced a decrease in support from the general fund, but the magnitude of the decline varies widely. The change in total funding varies more by agency, with very large decreases for the Department of Transportation but large increases for AHCCCS and Health Services.

General Fund Revenue by Source

General fund revenues collected in fiscal year 2017 are shown in Table 13 by source. Taxes accounted for 95.8 percent of the total, with the sales tax and the income tax (individual and corporate combined) each responsible for nearly 45 percent.

The percent change per \$1,000 of personal income also is displayed in Table 13. Total revenue dropped 12 percent between FYs 1992 and 2007 and 26 percent further between FYs 2007 and 2017. Declines occurred in each tax source in at least one of the two time periods, with declines in both periods for some sources, including the sales tax and the individual income tax. The decreases largely reflect tax reductions due to changes in the rate and/or base, but other factors also may play a role. For example, sales tax collections are not keeping pace with economic growth due to the narrow base of the sales tax — consumer purchasing is shifting to services and goods purchased on the Internet, much of which are not taxed.

On a percentage basis, the decline in nontax revenues has been greater than from tax revenues. The largest category of nontax revenues is licenses, fees, and permits — collections dropped substantially relative to personal income between FYs 1992 and 2007, with further declines since then.

The shift over time in the sources of general fund revenue is shown in Table 14. The shares contributed by the sales tax and the individual income tax have increased over time while the shares from most of the other tax sources have fallen, particularly from the property tax. The increase in the individual income tax share has occurred despite significant reductions in the tax rate and the increased availability of deductions, as detailed in the next subsection.

**TABLE 11
BUDGET BY AGENCY, FISCAL YEAR 2018, ARIZONA STATE GOVERNMENT**

	TOTAL		General Fund		Other Funds		Not Appropriated	
	Dollars in Thousands	Share of Total						
ONGOING TOTAL	\$37,229,571		\$9,743,444		\$3,950,729		\$23,535,398	
AHCCCS	12,282,431	32.99%	1,775,264	18.22%	361,527	9.15%	10,145,639	43.11%
Dept. of Education	6,333,824	17.01	4,226,958	43.38	254,459	6.44	1,852,407	7.87
Universities	6,137,337	16.49	704,820	7.23	1,292,270	32.71	4,140,247	17.59
Dept. of Economic Security	4,214,181	11.32	586,110	6.02	294,108	7.44	3,333,963	14.17
Dept. of Administration	1,400,729	3.76	22,665	0.23	243,280	6.16	1,134,784	4.82
Dept. of Corrections	1,177,027	3.16	1,067,625	10.96	51,553	1.30	57,849	0.25
Dept. of Child Safety	975,942	2.62	379,791	3.90	180,610	4.57	415,541	1.77
Lottery	770,876	2.07	0	0.00	114,421	2.90	656,455	2.79
Dept. of Health Services	464,629	1.25	87,669	0.90	52,607	1.33	324,353	1.38
Dept. of Transportation	461,114	1.24	51	0.00	390,626	9.89	70,438	0.30
Dept. of Public Safety	390,668	1.05	109,614	1.13	174,649	4.42	106,405	0.45
School Facilities Board	382,881	1.03	292,287	3.00	0	0.00	90,594	0.38
Other	2,237,932	6.01	490,590	5.04	540,619	13.68	1,206,723	5.13
Largest Agencies in "Other":								
Office Economic Opportunity	209,810	0.56	484	0.00	0	0.00	209,326	0.89
Judiciary	179,722	0.48	110,719	1.14	42,517	1.08	26,486	0.11
Dept. Environmental Quality	157,299	0.42	2,824	0.03	80,222	2.03	74,253	0.32
Early Childhood Developmt	152,949	0.41	0	0.00	0	0.00	152,949	0.65
Attorney General	128,232	0.34	26,344	0.27	46,214	1.17	55,673	0.24
Game and Fish	121,693	0.33	0	0.00	44,309	1.12	77,384	0.33
Dept. of Housing	111,942	0.30	830	0.01	323	0.01	110,789	0.47
Retirement System	105,830	0.28	0	0.00	25,168	0.64	80,662	0.34
Dept. of Revenue	78,322	0.21	31,291	0.32	46,442	1.18	588	0.00
Community Colleges	74,078	0.20	55,087	0.57	0	0.00	18,992	0.08
Dept. of Emergency Affairs	68,296	0.18	11,238	0.12	1,438	0.04	55,619	0.24
Dept. of Forestry & Fire Mgt	55,539	0.15	11,923	0.12	0	0.00	43,617	0.19
Legislature	54,609	0.15	52,448	0.54	200	0.01	1,960	0.01
Schools for Deaf & Blind	51,749	0.14	21,932	0.23	11,879	0.30	17,938	0.08

Source: Arizona Joint Legislative Budget Committee, "FY 2018 Appropriations Report."

TABLE 12
BUDGET BY AGENCY, PERCENT CHANGE PER \$1,000 OF PERSONAL INCOME, ARIZONA STATE GOVERNMENT

	TOTAL		General Fund		Other Funds		Not Appropriated	
	FYs 1992 to 2007	FYs 2007 to 2018						
ONGOING TOTAL	-3%	8%	-13%	-27%	117%	16%	-5%	32%
AHCCCS & Health Services	51	30	-10	-23	*	-5	83	50
Dept. of Education	1	-16	-3	-24	*	227	10	-4
Universities	-33	40	-41	-47	*	116	-43	69
Economic Security & Child Safety	-19	49	-35	-5	*	-25	-33	106
Dept. of Administration	-13	12	-65	-43	*	4	-25	17
Dept. of Corrections	9	-9	3	-7	*	-15	12	-32
Lottery	-51	48	-	-	-45	15	-52	55
Dept. of Transportation	-67	-35	-	-	-26	-36	-92	-27
Dept. of Public Safety	-3	-9	15	-52	-54	111	81	-5
School Facilities Board	*	-54	*	-49	-	-	*	-65
Other	-8	-48	-39	-55	68	-6	3	-54

-: the value in both periods was zero or near zero.

*: the value in the first period was zero or near zero and the value in the second period was larger.

Note: Caution is urged in interpreting these percent changes for a number of reasons:

- The percent changes have not been adjusted for changes in caseloads.
- The dollar values on which the percent changes are calculated may be small. The values for FY 2018 are shown in Table 11.
- Some shifts in functions between agencies may have occurred. AHCCCS and the Department of Health Services are combined due to the magnitude of such a shift; the Departments of Economic Security and Child Safety have been combined for the same reason.
- A large or small change in one of the three categories may be the result of an opposite change in another category.
- The change in the other funds category for universities reflects a large increase in tuition, which consists of both an increase in tuition charged per student and a rise in the number of students. Changes in the not-appropriated category may reflect large changes in federal funding.

Source: Calculated from Arizona Joint Legislative Budget Committee (expenditures) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

**TABLE 13
ONGOING REVENUE BY SOURCE,
ARIZONA STATE GOVERNMENT GENERAL FUND**

	Fiscal Year 2017		Percent Change Per \$1,000 of Personal Income	
	Dollars in Thousands	Share of Total	FYs 1992 to 2007	FYs 2007 to 2017
ONGOING TOTAL*	\$10,020,985	100.00%	-12%	-26%
Taxes	9,602,453	95.82	-10	-26
Sales and Use	4,506,161	44.97	-5	-25
Income	4,499,035	44.90	4	-28
Individual	4,130,899	41.22	-4	-17
Corporate	368,136	3.67	48	-72
Property	32,539	0.32	-96	0
Luxury	57,638	0.58	-71	-34
Insurance Premium	504,339	5.03	26	-5
Other	2,741	0.03	-100	166
Nontax Revenue	418,532	4.18	-39	-28
Lottery	78,690	0.79	-52	12
Licenses, Fees, Permits	164,389	1.64	-43	-16
Interest Earned	17,001	0.17	112	-88
Transfers and Reimbursements	64,130	0.64	-88	148
Disproportionate Share	94,322	0.94	-13	-37
Urban Revenue Sharing	-663,582			
ONGOING TOTAL**	9,357,403		-12	-27

* Before subtracting urban revenue sharing.

** After subtracting urban revenue sharing.

Source: Calculated from Arizona Joint Legislative Budget Committee (revenue) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

Chart 15 displays the time series of general fund revenue collections per \$1,000 of personal income for the major revenue sources. Sales tax revenue relative to personal income has dropped significantly since FY 1985, shortly after the rate was increased to 5 percent. Collections from the individual income tax have been highly volatile. On net relative to personal income, revenue from the individual income tax rose throughout the 1970s and 1980s, but has dropped since FY 1991. Declines in revenue relative to personal income also have occurred from the corporate income tax, property tax, and luxury tax. Only from the insurance premium tax and nontax sources have revenues remained relatively steady per \$1,000 of personal income.

Tax Changes by Source

The share of general fund revenue contributed by the individual income tax has increased since FY 1992 even though the individual income tax accounted for more than half of the dollar value of the cumulative tax reductions between FY 1992 and FY 2017 (see Table 15). Had no tax changes occurred after FY 1992, revenue from the individual income tax would have increased per \$1,000 of personal income, largely due to cyclical factors: FY 1992 was at the end of a recession while FY 2017 was in the midst of an economic expansion. Corporate income tax

TABLE 14
ONGOING REVENUE BY SOURCE, SHARE OF TOTAL,
ARIZONA STATE GOVERNMENT GENERAL FUND

	Fiscal Year 1971	Fiscal Year 2017	Change			
			1971- 2017	1971- 1992	1992- 2007	2007- 2017
Taxes	95.59%	95.82%	0.23	-1.81	1.91	0.13
Sales and Use	36.69	44.97	8.28	4.33	3.33	0.62
Income	28.32	44.90	16.58	11.21	6.99	-1.62
Individual	20.85	41.22	20.37	12.91	3.07	4.39
Corporate	7.47	3.67	-3.80	-1.70	3.92	-6.02
Property	13.71	0.32	-13.39	-8.80	-4.67	0.08
Luxury	8.40	0.58	-7.82	-6.43	-1.32	-0.07
Insurance Premium	2.63	5.03	2.40	0.11	1.19	1.10
Other	5.84	0.03	-5.81	-2.24	-3.60	0.03
Nontax Revenue	4.41	4.18	-0.23	1.81	-1.91	-0.13
Lottery	-	0.79	0.79	0.96	-0.44	0.27
Licenses, Fees, Permits	1.03	1.64	0.61	1.22	-0.79	0.18
Interest Earned	1.91	0.17	-1.74	-1.48	0.60	-0.86
Transfers & Reimbursements	1.47	0.64	-0.83	-0.01	-1.27	0.45
Disproportionate Share	-	0.94	0.94	1.12	-0.01	-0.17

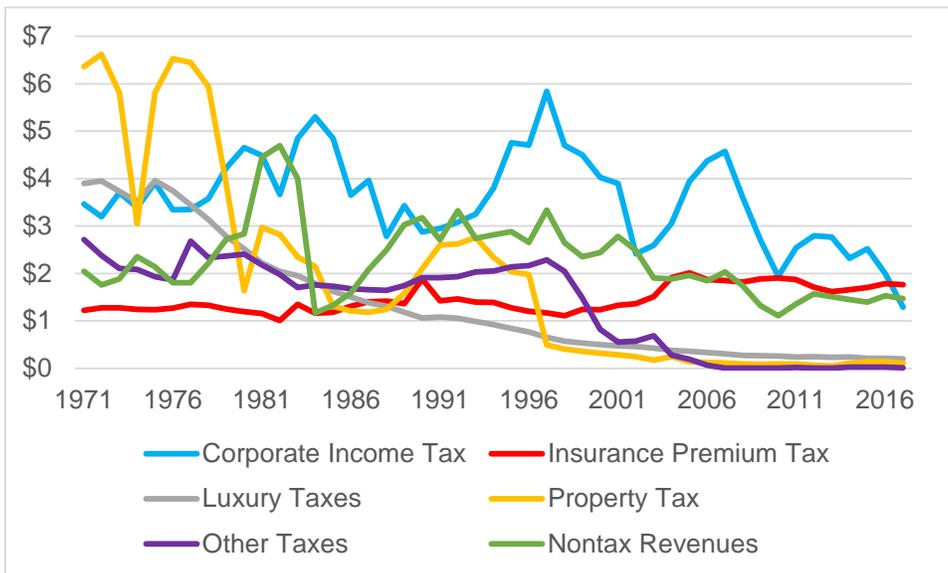
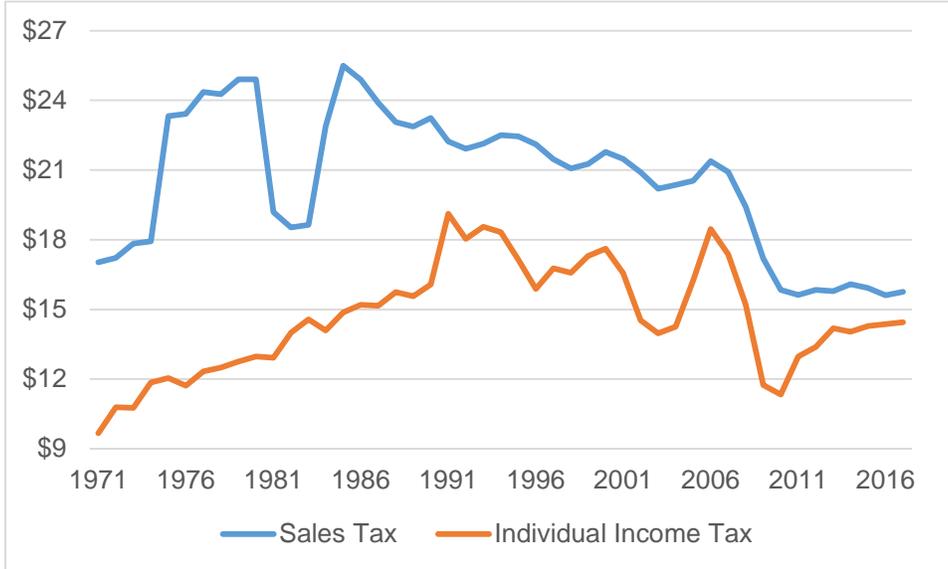
Note: Shares calculated before subtracting urban revenue sharing.

Source: Calculated from Arizona Joint Legislative Budget Committee.

revenue also would have been higher without any tax law changes, while revenue from the other tax sources would have been lower.

In the current fiscal year (2018), additional tax reductions become effective. These tax cuts particularly affect the corporate income tax. Estimates of the cumulative effect through FY 2018 of tax changes passed since FY 1992 are \$4.75 billion overall, with \$2.41 billion to the individual income tax, \$893 million to the corporate income tax, \$618 million to the sales tax, \$511 million to the property tax, and \$322 million to other taxes. The general fund historically received monies from the pari-mutuel, estate, and motor vehicle license taxes, but no longer receives any funding from these sources.

CHART 15
ONGOING TAX REVENUE PER \$1,000 OF PERSONAL INCOME FROM MAJOR
SOURCES, ARIZONA STATE GOVERNMENT GENERAL FUND



Note: Revenue from the temporary sales tax increase in FYs 2011 through 2013 is not included.

Source: Calculated from Arizona Joint Legislative Budget Committee (revenue) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

TABLE 15
EFFECT ON REVENUE IN FISCAL YEAR 2017 FROM TAX CHANGES IMPLEMENTED SINCE FISCAL YEAR 1992,
ARIZONA STATE GOVERNMENT GENERAL FUND

	Tax Change In Millions	Share of Total	Tax Collections Per \$1,000 of Personal Income					
			Actual FY 1992	Actual FY 2017	* FY 2017	Change Between FY 1992 and FY 2017 Actual	*	**
TOTAL	\$-4,414		\$50.12	\$33.59	\$49.03	\$-16.53	\$-1.09	\$-15.44
Sales Tax	-579	13.1%	21.92	15.77	17.79	-6.15	-4.13	-2.02
Individual Income Tax	-2,283	51.7	18.04	14.45	22.44	-3.59	4.40	-7.99
Corporate Income Tax	-757	17.1	3.08	1.29	3.94	-1.79	0.86	-2.65
Property Tax	-490	11.1	2.62	0.11	1.83	-2.51	-0.79	-1.72
Other Taxes	-305	6.9	4.45	1.98	3.04	-2.47	-1.41	-1.07

* Had no tax changes occurred since FY 1992

** Due to tax changes

Source: Calculated from Arizona Joint Legislative Budget Committee (revenue and estimated initial effects of tax changes) and U.S. Department of Commerce, Bureau of Economic Analysis (quarterly personal income).

FISCAL SYSTEM GUIDING PRINCIPLES

The guiding principles listed below were developed based on multiple inputs, including a literature review, the principles identified by “Fiscal 2000” (a study of Arizona’s fiscal system conducted in 1989), and guiding principles identified by the Citizens Finance Review Commission (CFRC) in 2003.

While agreement exists nationally regarding the guiding principles, the list of principles can be organized and grouped in a number of ways, and the terminology and definitions of terms can vary. Thus, the 10 revenue system principles listed below, which are ordered from the broadest considerations to more micro concepts, differ in terminology and number from the principles identified by other groups.

1. **Stability:** The revenue system should minimize year-to-year fluctuations in revenue over the economic cycle.

- Multiple revenue sources should be employed, including taxes, user fees, and the federal government. Income, wealth, consumption, and transactions all should be taxed.
- An adequately funded budget stabilization fund should be used to offset the inevitable cyclical fluctuations in revenue.

2. **Responsiveness:** The revenue system should produce revenue that keeps pace with long-term growth in the state’s economy.

- The growth of government generally should be targeted to keep pace with economic growth: population plus inflation plus real per capita economic gains.³⁰
- The system should be designed to collect revenue from expanding activities.
- Over time, the system should be updated as necessary to keep pace with changing technology, economic mix, and societal structure.

3. **Predictability:** A stable and responsive revenue system produces a predictable stream of revenue, benefiting taxpayers and policymakers.

- The revenue system should be designed based on these guiding principles, then changed only as necessary. Frequent ad hoc changes negatively affect predictability as well as other guiding principles.
- An adequately funded budget stabilization fund greatly enhances predictability.

4. **Efficiency:** Revenue policy should have minimal impacts on economic behavior.

- Revenue sources should be broad based with low marginal tax rates.
- Revenue collections should be matched to public benefits. That is, the direct beneficiaries of government services should pay for the cost of their provision to the extent possible.

5. **Competitiveness:** Revenue policies should promote economic vitality and prosperity.

- The division of the revenue burden between businesses and individuals should be equitable.

³⁰ A system that is responsive to population and inflation only, as suggested in some proposals for an alternative tax and expenditure limit to that currently in the Arizona Constitution, would result in a gradual reduction over time in government services and an inability of the state government to respond to new technologies and emergencies.

- The revenue system should be consistent with that of other states to minimize disincentives for investment. Particular attention should be paid to policies affecting basic (export) industries.

6. **Exportability:** The revenue system should be designed to tax nonresidents as well as residents.

- Taxes paid by tourists, seasonal residents, and other nonresidents as well as by residents should be utilized.
- Taxes and user fees that particularly target visitors also should be employed.

7. **Neutrality:** Differential treatment of similar economic activities should be minimized.

- The use of tax credits and exemptions should be limited.
- Tax credits and exemptions should be periodically evaluated to determine if they contribute to economic development and the common good.

8. **Horizontal Equity:** Revenue policies should treat people of equal means similarly.

- The definition of “equal means” may vary by revenue source, such that the evaluation of horizontal equity needs to be made by source.

9. **Vertical Equity:** The overall tax structure should minimize regressivity.

- Tax payments as a proportion of income should not be higher for those with lower incomes than for other taxpayers.
- Some fiscal experts contend that the overall tax structure (including federal taxes) should be progressive, with tax payments as a proportion of income rising with income.

10. **Simplicity:** The revenue system should be designed to minimize costs of compliance and administration.

- The revenue system should be easily understood by affected businesses and individuals and should minimize compliance costs.
- Revenue rules should be easy to administer by government agencies and should minimize administrative costs.

Each of these 10 guiding principles is specific to the revenue system. However, revenue cannot be examined independently from the rest of the fiscal system — expenditures and debt.

Additional guiding principles apply to a fiscal system. In particular, revenues and expenditures should be linked; this principle is sometimes labeled as **Accountability:**

- Determine the desired level of expenditures per program, then raise sufficient revenue to meet the targeted spending levels on an ongoing basis.
- Changes to the revenue system (such as reductions in tax rates and elimination of revenue sources) should be matched by a commensurate change in expenditures.
- Funding of new programs and changes in the funding level of existing programs should be matched by a change in revenue of a corresponding magnitude.
- Capital expenditures generally should not be paid out of the operating (general) fund.

A key component of accountability is transparency. Detailed reports of revenue sources and amounts and of revenue uses and amounts should be readily available.

Another guiding principle of a fiscal system is **intergovernmental complementarity**. State government revenues, expenditures, and debt do not comprise the fiscal system because of the interactions between state government and local governments on one hand, and between the federal government and state government on the other. In particular, state government needs to consider the impact on local governments from changes to the state's revenue system. Adherence to this principle does not require that state government be given more control over federal funding.

Evaluation of Arizona's Revenue System Relative to the Guiding Principles

The February 2003 issue of *Governing* magazine rated the states' revenue systems in three categories:

- Adequacy of revenue. Revenue should be reliable, come from balanced and multiple sources, be responsive to structural changes in the economy, be competitive in comparison to other states, and be adequate in both the short term and long term.
- Fairness to taxpayers. The revenue system should consist of broad revenue bases with low rates and few exemptions, be progressive, and treat similar taxpayers equitably.
- Management of system. The revenue system should feature a simple and visible tax code that facilitates taxpayer compliance, be fairly and efficiently administered, provide data and analytical capabilities; and be subject to accurate revenue projections.

On each measure, Arizona received a rating of 2 on a four-point scale (where 4 is best). *Governing* described this rating as "The state could continue to function as it currently does into the foreseeable future. But there are clear elements to the tax system that would benefit from change."

The 2008 version of "Grading the States" published in *Governing* evaluated state governments in four categories: information, people, infrastructure, and money. Arizona received a C+ grade in the money category, which consisted of five subcategories. Arizona received a mid-level grade on four: long-term outlook; budget process; contracting and purchasing; and financial analysis and reporting. Its structural balance was rated as a weakness.

Vertical Equity: Regressivity

The guiding principle of vertical equity receives considerable attention. A report by the Institute on Taxation and Economic Policy (ITEP) particularly looked at this issue.³¹ According to the ITEP study, sales and excise taxes are highly regressive. Property taxes across the states ranged from roughly proportional to regressive. Income taxes are not regressive in any state. Every state had a regressive overall state and local government system, though a few states, including California, approached proportionality.

According to the ITEP report, based on all state and local government taxes, Arizona had the eighth-most regressive tax system in the country, largely due to its high dependence on the sales tax, though its maximum income tax rate also is relatively low. The lowest 20 percent of nonelderly taxpayers paid 12.5 percent of their income in taxes, compared to a national average of 10.9 percent. Arizona's percentage was one of the highest in the nation. In contrast, the top 1

³¹ "Who Pays? A Distributional Analysis of the Tax Systems in All 50 States," January 2015, <https://itep.org/whopays/>.

percent of nonelderly income earners in Arizona paid taxes equal to only 4.6 percent of their income, compared to a national average of 5.4 percent.

Most of the states with the most regressive systems have either a high dependence on the sales tax, do not levy an individual income tax, or apply a single income tax rate. States with the least regressive systems either rely little on sales taxes or have a high maximum income tax rate.

Neutrality: Tax Credits and Exemptions

The guiding principle of neutrality is negatively affected by tax credits and exemptions, the use of which expanded greatly in Arizona after the early 1990s. The broader term of “tax expenditures” incorporates tax credits and exemptions, as well as exclusions, deductions, subtractions, and preferential rates. These tax expenditures also have a negative effect on the guiding principles of horizontal equity and simplicity.

The Arizona Department of Revenue (DOR) annually releases a report detailing its estimates of the revenue impacts of tax expenditures.³² The estimated value of tax expenditures was \$13.5 billion in FY 2017. The vast majority of this amount was in the form of transaction privilege and use tax expenditures. Of the \$12.0 billion due to the sales tax, \$11.5 billion was due to exemptions. Most of the rest was due to a preferential tax rate of zero percent on commercial leases, valued at \$450 million.

Not taxing services accounted for \$5.2 billion of the \$11.5 billion in exemptions. DOR divides services into seven categories, the largest of which was health care at \$2.1 billion. Of the \$6.3 billion in exemptions other than services, not taxing wholesale trade accounted for \$3.5 billion. Wholesale trade is not taxed to avoid double taxation of a good that will be taxed at the retail level. The other \$2.8 billion results from a variety of exemptions, including \$642 million for prescription drugs, \$359 million for food for home consumption, and \$151 million for a 35 percent reduction in prime contracting.

The \$1.5 billion in tax expenditures other than related to the sales tax resulted from a much lesser amount from each of a number of other taxes. The largest amount was \$420 million in the property tax. All of this is due to “additional state aid to education,” which is in the form of a “homeowner’s rebate.” The state pays 47.19 percent of the portion of a homeowner’s property tax bill that is assessed by a school district, up to a maximum of \$600.

The Arizona Department of Revenue estimates that the amount of revenue not collected due to individual income tax expenditures in the form of credits totaled \$395 million in FY 2017. Tax credits amounting to more than \$10 million follow:

- \$149.7 million for taxes paid to other states or countries
- \$97.6 million in credits related to private schools
- \$45.9 million for the credit for public school extracurricular activities
- \$30.8 million for the low-income tax credit related to increases in excise taxes
- \$36.8 million for charitable organizations

³² “The Revenue Impact of Arizona’s Tax Expenditures,” <https://www.azdor.gov/ReportsResearch/TaxExpenditures.aspx>. The latest report, for FY 2017, was released in November 2017. The tax expenditures reported for the income taxes are for tax year 2015.

- \$12.2 million for the research and development credit (aimed at small businesses that report on the individual tax form)

The corporate income tax had tax expenditures of \$127 million, all in the form of credits. Credits related to research and development totaled \$91 million. Another \$24 million was for private schools.

Tax expenditures from the insurance premium tax totaled \$253 million. Exemptions accounted for \$115 million and were mostly health related, such as exempting Medicare Advantage plans. Of \$37 million in credits, \$27 million was for private schools. Subtractions of \$92 million were related to annuity contracts.

Qualitative Assessment

Based on the literature review and data analysis, a qualitative assessment was made of how well each of Arizona's larger tax sources currently compare to each of the guiding principles. A weighted sum (based on the share of total revenue contributed by each source) of these evaluations resulted in the qualitative assessment of the overall system shown in Table 16. Arizona's current revenue system receives a poor evaluation relative to a system of best practices on most of the guiding principles: stability, predictability, responsiveness, efficiency, neutrality, horizontal equity, vertical equity, and simplicity. In addition, the fiscal system receives a very poor rating on accountability, given the structural deficit, lack of linkage between changes in revenues and changes in expenditures, and inclusion of capital expenditures in the operating fund.³³

The evaluation of the revenue system used in Arizona in the early 1990s would not have been nearly as negative as the current assessment. Of the numerous piecemeal changes made to the revenue system since that time, many have been contrary to the guiding principles. These changes can be grouped into two categories:

- Narrowing of the revenue base. The revenue base used for the state government general fund in particular has been narrowed by the elimination of the state property tax, the removal of proceeds from the vehicle license tax being deposited into the general fund, and by reductions in/elimination of various lesser revenue sources. This narrowing of the revenue base has had significant negative effects on the guiding principles of stability, predictability, responsiveness, efficiency, and vertical equity.
- Expansion of the number of tax credits and exemptions. The use of tax credits and exemptions exploded in the 1990s, resulting in negative effects on neutrality, horizontal equity, and simplicity.

In addition, the revenue system in Arizona continues to be limited by the following factors:

- An out-of-date tax code. This is particularly a problem with the sales tax. Responsiveness is particularly hindered by this condition.
- Over-reliance on business taxes. This has become less of an issue due to reductions in business property taxes and the corporate income tax. However, the tax burden remains

³³ While the general fund in recent years has been balanced, this is the result of cyclically high revenue during the expansionary portion of the economic cycle. When the time horizon is the entire economic cycle, a structural deficit remains.

TABLE 16
A QUALITATIVE ASSESSMENT OF THE OVERALL STATE AND LOCAL
GOVERNMENT FISCAL SYSTEM AS CURRENTLY STRUCTURED IN ARIZONA

Guiding Principle	Evaluation*	Comments
Stability and Predictability	Very Poor	Highly cyclical revenue, multiple changes to tax code, poor use of rainy day fund, overemphasis on sales tax, little use of more stable revenue sources
Responsiveness	Poor	Overemphasis on the sales tax, whose narrow base causes collections to lag behind economic growth
Efficiency	Poor	Heavy reliance on certain taxes, some with high tax rates
Competitiveness	OK	Recent corporate income tax reductions have improved this evaluation
Exportability	Good	Some of the tax burden is borne by nonresidents
Neutrality	Very Poor	Multiple tax credits and exemptions
Horizontal Equity	Poor	Due to tax credits and exemptions, similar individuals and businesses may have differing tax burdens
Vertical Equity	Poor	The declining use of the progressive income tax shifts the tax burden to the regressive sales tax — those with low incomes pay a higher share than those with high incomes
Simplicity	Very Poor	Considerable complexity in the tax code of each of the major taxes
Accountability	Very Poor	Repeated violations of the link between revenues and expenditures
Intergovernmental Complementarity	Poor	Limited cooperation between state and local governments, and between the state and federal governments

* Relative to a system of best practices.

Source: Authors' evaluation.

higher on businesses than individuals and relatively high compared to businesses in other states, resulting in a negative impact on competitiveness.

- Complexity of the tax code. While complexity is present in each of the major taxes, it is especially a problem with property taxes.

No revenue system can be designed to excel in all criteria since some of the guiding principles partially conflict with others. However, a much-improved system could be created by applying generally accepted best principles of revenue policy to Arizona's system. A system that achieves an OK-to-good evaluation against each of the guiding principles is feasible to create.

Tables 17 through 19 provide a qualitative assessment of each of the three major tax sources and evaluate each as potentially improved. The general sales tax currently compares least favorably and has the greatest potential for improvement. In contrast, there is not much room for improvement in the individual income tax.

Modifications to the current mix of revenue sources would put the state's revenue system more in line with a best-practices revenue system. Some tax bases would be broadened. Some tax rates would be increased but other tax rates would be decreased. In making such changes, experts agree that the revenue system as a whole, not as a set of unrelated components, be examined. The ideal system would look essentially the same regardless of the desired amount of revenue to be collected. Total revenue could be raised or lowered by adjusting tax rates and user fees.

In addition, strengthening the budget stabilization fund by increasing the amount that can be placed into the fund and by making transfers to and from the fund strictly formula driven, not subject to appropriation, would greatly enhance stability and predictability of revenue flows. Cyclical deficits could be eliminated except in the most severe recessions.

Citizens Finance Review Commission

The CFRC utilized the guiding principles in preparing a set of recommendations regarding Arizona’s fiscal system. The commission, which consisted of 21 leaders from businesses, academia, and social service organizations (none elected officials), was tasked to “develop a series of recommendations that will advise the Governor on a course to stimulate Arizona’s economy for the long term. In particular, the Commission will develop recommendations that address fiscal and tax policies that are simple, low and fair and support Arizona’s growing economy.” The commission was assisted by volunteers from the state’s universities and the private sector. The CFRC did its work during 2003, presenting its final report in January 2004.

**TABLE 17
A QUALITATIVE ASSESSMENT OF THE STATE AND LOCAL GOVERNMENT
GENERAL SALES TAX IN ARIZONA**

Guiding Principle	Evaluation*	Comments
As Currently Structured		
Stability and Predictability	Poor	Limited to nonfood goods
Responsiveness	Poor	Services and Internet not taxed
Efficiency	Poor	High tax rate on narrow base; across jurisdictions, lack of standardization causes distortions
Competitiveness	Poor	High tax rate
Exportability	Good	
Neutrality	Poor	Large number of exemptions
Horizontal Equity	Poor	Exemptions reduce equity
Vertical Equity	Poor	Highly regressive
Simplicity	Poor	Differing rates, bases, and exemptions/credits across state and local governments
As Potentially Improved		
Stability and Predictability	OK	Broaden base to include Internet sales, food, and some services
Responsiveness	OK	Broaden base
Efficiency	Good	Lower tax rate on broader base; streamline code
Competitiveness	OK	Lower tax rate
Exportability	Good	
Neutrality	Good	Reduce exemptions
Horizontal Equity	Good	Reduce exemptions
Vertical Equity	OK	Broaden base
Simplicity	OK	Simplify tax code

* Relative to a system of best practices.

Source: Authors’ evaluation.

TABLE 18
A QUALITATIVE ASSESSMENT OF THE PROPERTY TAX IN ARIZONA

Guiding Principle	Evaluation*	Comments
As Currently Structured		
Stability and Predictability	Usually Good	Generally not very cyclical, but exaggerated real estate cycles have occurred in recent years
Responsiveness	Good	Property values rise with real economic growth
Efficiency	Poor	Property taxes on businesses are above average
Competitiveness	Poor	Above-average business taxes
Exportability	OK	Out-of-state property owners are taxed
Neutrality	Poor	Different rates by category of property
Horizontal Equity	OK	
Vertical Equity	OK	A mix of progressive and regressive elements
Simplicity	Very Poor	Multiple rates, assessments; varies by jurisdiction
As Potentially Improved		
Stability and Predictability	Good	Reinstate the property tax for the state general fund
Responsiveness	Good	
Efficiency	Good	Lower the tax burden on businesses
Competitiveness	OK	Reduce commercial/industrial assessment rates
Exportability	OK	
Neutrality	Good	Standardize assessment rates
Horizontal Equity	Good	Standardize assessment rates
Vertical Equity	OK	
Simplicity	OK	Many simplifications possible

* Relative to a system of best practices.

Source: Authors' evaluation.

Many of its 36 recommendations, listed in Table 20, still remain timely. The recommendations most relevant to this paper are reviewed in this subsection.

Several recommendations were related to the sales tax base and exemptions to the sales tax. The CFRC recommended broadening the base to include personal/consumer services and to include some transactions that were exempt. In conjunction with this broadening, a reduction to the tax rate was recommended.

Numerous recommendations were related to the property tax. In particular, the group recommended re-enacting the state property tax, phasing out the homeowner's rebate, and eliminating the 1 percent cap on residential property taxes. The CFRC also recommended using the property tax for school construction. Recommendations regarding the lowering of business property taxes have been implemented, at least to some extent. While the differences in the assessment ratio between residential and other classes of property have been narrowed, the assessment ratios remain far from uniform.

Fewer recommendations were related to the income tax. One was to minimize the number of individual and corporate credits. Another specifically sought to determine the effectiveness of the credits related to schools.

TABLE 19
A QUALITATIVE ASSESSMENT OF THE INDIVIDUAL INCOME TAX IN ARIZONA

Guiding Principle	Evaluation*	Comments
As Currently Structured		
Stability and Predictability	Poor	Cyclical
Responsiveness	Good	
Efficiency	Good	
Competitiveness	Good	Low tax burden
Exportability	Poor	Applies only to those earning income in Arizona
Neutrality	Poor	Many credits
Horizontal Equity	OK	
Vertical Equity	Good	But not as progressive as in many states
Simplicity	Poor	Mostly resulting from the complex federal code
As Potentially Improved		
Stability and Predictability	Poor	
Responsiveness	Good	
Efficiency	Good	
Competitiveness	Good	
Exportability	Poor	
Neutrality	OK	Reduce use of exemptions and credits
Horizontal Equity	OK	
Vertical Equity	Good	Modify tax rates and brackets to raise progressivity
Simplicity	OK	

* Relative to a system of best practices.

Source: Authors' evaluation.

TABLE 20
SUMMARY OF RECOMMENDATIONS
OF THE CITIZENS FINANCE REVIEW COMMISSION

- 1 Move toward reducing overall business property tax burdens.
- 2 Reduce the business personal property tax on locally assessed business personal property.
- 3 Apply a uniform assessment ratio on all future voter-approved property tax funded bonds and overrides.
- 4 Align the TPT to more appropriately mirror the state's economy by expanding the tax base.
- 5 Carefully examine the effectiveness of the possessory interest tax to determine if it is functioning the way it was intended, i.e. an in-lieu property tax.
- 6 Assign the specific responsibility for long-term planning to a particular agency or committee.
- 7 In addition to the current practice of cost accounting, utilize accrual accounting on a selective basis to provide the state's financial policymakers with long-term planning budget data.
- 8 Centralize information about federal funds in an effort to increase the federal grant dollars received.
- 9 Increase the current limit on the budget stabilization fund to its original 15 percent cap and take measures to make "raids" on the fund more difficult.
- 10 Utilize capital financing tools (bonding) for long-term capital assets with debt service tied to specific revenue streams.
- 11 Establish high-level tax policy guidelines to be used to test the soundness of future proposed transaction privilege tax exemptions.
- 12 Do not depend on general fund revenues to finance new school construction, but instead implement a process for new school construction using local school district, county, or state property taxes.
- 13 Where possible, phase in major changes—or phase out changes—to the tax structure over time.
- 14 Remove the constitutional requirement that raising tax rates requires two-thirds affirmative vote, reverting to a simple majority requirement.
- 15 Hire a consultant to examine the fairness and extent of miscellaneous taxes and fees imposed by the state for services.
- 16 Decrease revenue loss by increasing spending on revenue enforcement until cost-benefit equilibrium is reached, and implement a system that makes tax avoidance more difficult.
- 17 Replace unit-based fees and taxes with percentage-based fees and taxes.
- 18 Maximize the "time value" of money by increasing interest earnings through the use of frequent deposits, longer-term, higher-interest accounts, and other fiscal measures.
- 19 Have as few corporate and personal income tax credits as possible.
- 20 Follow the federal income tax returns as much as possible.
- 21 The cities and state should pursue greater transaction privilege tax uniformity.
- 22 Include a sunset provision to each transaction privilege tax exemption to periodically compare the public policy supporting the tax exemption against the evolving state of the state.
- 23 Do not adopt a gross receipts or expanded franchise tax as a replacement for corporate income tax.
- 24 Phase out the homeowner's rebate.
- 25 Do not reinstate the "throwback rule" in the corporate income tax calculation.
- 26 Continue to impose the estate tax on the amount that is equal to the state tax credit provided for in the federal tax code even though the credit is scheduled to be phased out.
- 27 Do not adopt a real estate transfer tax.
- 28 Re-enact the option of a state property tax, applied on a uniform assessment ratio.
- 29 Broaden the transaction privilege tax base by including "personal" services or "consumer" services.
- 30 Broaden the TPT tax base by including certain transactions that currently are tax exempt.
- 31 Withhold income tax from nonresidents.
- 32 Retain certain low-income tax credits.
- 33 In conjunction with eliminating certain exemptions and broadening the transaction privilege tax base, lower the rate accordingly.
- 34 Eliminate the 1 percent constitutional cap on residential property tax.
- 35 Review the effectiveness of private-school tuition tax credits and the extracurricular public-school tax credit.
- 36 Do not adopt a single flat rate for personal income tax purposes.

Source: Citizens Finance Review Commission, *A Fiscal Tool Box* (January 2004).

ECONOMIC IMPACT OF INCREASES IN GOVERNMENT REVENUES AND EXPENDITURES

Changes in the levels of government revenues and expenditures have economic impacts, but the effects generally are quite small. In order to estimate the effects, the economic forecasting/economic-impact estimating model of Regional Economic Models, Inc. (REMI) was used.

An increase in taxes has a small negative effect on the economy. For example, an increase amounting to \$1.5 billion would lower employment in Arizona by 17,300, a reduction of less than 0.5 percent. In contrast, an increase in government expenditures has a small positive effect on the economy. For example, an increase amounting to \$1.5 billion would raise employment by 37,000, or 1.0 percent. The net effect of an increase in taxes accompanied by an increase in expenditures is a gain of 19,600 jobs, or 0.5 percent. GDP also rises 0.5 percent.

The positive effect from the spending increase more than offsets the negative effect from the tax increase. Several reasons account for this net positive effect:

- While a tax increase will cause consumer expenditures to drop among those with lower incomes, it will not cause a decline in spending among those with higher incomes. The latter will pay for the tax increase out of savings.
- Some of the tax increase will be exported. For example, an increase in the property tax will affect residents of other states who own second homes in Arizona.
- A high proportion of the increased government spending will be spent in the form of government employee salaries or payments for services to companies located in Arizona. In contrast, a higher share of consumer spending immediately leaves the state — when Arizona residents go on vacation, purchase goods over the Internet from companies not based in Arizona, etc.

The net positive effect of a tax and spending increase depends on the relative tax burden. Arizona's tax burden currently is considerably below the national average; it would remain well below average even with a \$1.5 billion increase. In contrast, if Arizona's tax burden already was high relative to the rest of the nation, or if a tax increase would push the burden to above average, the initial net positive effects specified above likely would be offset over time by a decrease in economic competitiveness due to the comparatively high tax rates. This is demonstrated by the "Laffer Curve."

The REMI results cited above are generic, as the nature of the tax increases and spending increases cannot be specified in the base REMI model. However, a more detailed version of the REMI model that was used in 2014 found that the differential impacts of the various options to raise government revenue are relatively small. In 2014, the negative impact of a \$50 million tax increase was a loss of 884 jobs associated with a sales tax increase, 914 jobs associated with an individual income tax increase, and 884 jobs associated with a property tax increase. The impact ranged from a loss of 622 jobs for an increase in taxes on alcoholic beverages to a loss of 1,065 jobs for an increase in the corporate income tax. Conceptually, the negative effects should be greatest for a tax increase on businesses that primarily sell to buyers from outside the state.

The differential effects of the various options to spend government revenue are relatively larger. The effect of a \$50 million change in spending varied from just less than 1,000 jobs for AHCCCS to a little more than 2,000 jobs for K-12 education.

The October 2016 Office of the University Economist report “Tax Reductions in Arizona: Effects on Economic Growth and Government Revenue” provides a broader analysis of the economic effect of the changes in the tax code that have occurred in Arizona.³⁴ That report found no discernible effect on the economy of the \$4 billion in tax reductions passed by the Legislature between the early 1990s and 2016. Since Arizona’s tax burden was not above average even when the first tax reductions took effect in the early 1990s, an economic benefit should not have been expected, based on the Laffer Curve.

³⁴ <https://wpcarey.asu.edu/sites/default/files/taxreductions10-16.pdf>.

OPTIONS FOR RAISING STATE GOVERNMENT REVENUE

This discussion of possible sources of additional state government revenue considers Arizona's comparison to the nation and other states, changes over time relative to itself and to the rest of the nation, the guiding principles, and CFRC's recommendations.

Based on the Census Bureau's data for FY 2015, Arizona's state and local government own-source revenues were \$5.89 billion less than if they had been equal to the national average per \$1,000 of personal income. Tax revenues were \$3.35 billion less. Similarly, Arizona's state and local government expenditures were \$4.11 billion less, with noncapital expenditures \$2.96 billion less. The shortfalls in Arizona were much greater based on per capita figures adjusted for the cost of living, as seen in Table 21.

A similar analysis can be undertaken for Arizona state government's general fund revenues and expenditures, using the personal income measure to compare FY 2017 to the general fund's historical average (based on FYs 1979 through 1992) instead of to the national average. State

**TABLE 21
DIFFERENCE FROM NATIONAL AVERAGE IN FISCAL YEAR 2015,
STATE AND LOCAL GOVERNMENTS IN ARIZONA**

	Millions	
	Per Capita*	Personal Income**
Total Own-Source Revenues	\$-14,080	\$-5,885
Taxes	-9,055	-3,352
Property	-3,132	-1,368
General Sales	1,428	2,909
Selective Sales:	-1,606	-986
Motor Fuel	-167	-5
Alcoholic Beverage	-75	-51
Tobacco	-68	0
Public Utilities	-368	-274
Other	-927	-657
Individual Income	-3,874	-2,604
Corporate Income	-500	-299
Motor Vehicle License	-336	-247
Other Taxes	-1,036	-757
Current Charges	-3,468	-1,752
Miscellaneous Other	-1,278	-724
Total Expenditures	-14,516	-4,112
Noncapital Expenditures	-12,369	-2,963

* Calculated as the difference in the per capita amount between the U.S. average and Arizona multiplied by Arizona's population multiplied by Arizona's cost-of-living index.

** Calculated as the difference in the amount per \$1,000 of personal income between the U.S. average and Arizona multiplied by Arizona's personal income.

Source: Calculated from U.S. Department of Commerce, Census Bureau, State and Local Government Finance (revenues, expenditures and population) and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

government general fund revenue in FY 2017 was \$4.69 billion lower than if the average revenue per \$1,000 of personal income from FYs 1979 through 1992 had prevailed (see Table 22). Expenditures were \$4.34 billion lower and tax revenues were \$4.30 billion lower. Table 22 also displays the impact of the tax law changes since FY 1992. The overall loss of tax revenue was \$4.41 billion in FY 2017.

The Arizona Constitution restricts the appropriation of certain state revenues to no more than 7.41 percent of Arizona’s personal income. The applicable revenues are primarily tax and fee collections that may be deposited to the general fund or to dedicated funds, but the applicable revenues are not equal to the sum of all state government funds. According to the JLBC, appropriations subject to the limit could have been \$4.89 billion higher in FY 2017 without violating the constitutional limit.

A number of figures have been presented in the preceding paragraphs. All indicate that public revenue and spending in Arizona in recent years was substantially below both the national average and the state’s historical norm. In order to clarify the shortfalls, the Census Bureau’s figures for FY 2015 were projected to FY 2017. Here are the key figures based on the personal income calculation, expressed as of FY 2017:

- Tax revenue. State government tax revenue could have been \$3.5 billion higher without exceeding the historical norm (calculated as the difference between general fund tax cuts

TABLE 22
DIFFERENCE FROM HISTORICAL AVERAGE IN FISCAL YEAR 2017 PER \$1,000
OF PERSONAL INCOME, ARIZONA STATE GOVERNMENT GENERAL FUND

	Millions	
	Historical Average*	Tax Changes Since FY 1992
Total Ongoing Revenues	\$-4,688	
Taxes	-4,299	\$-4,414
Sales and Use	-1,959	-578
Individual Income	-180	-2,283
Corporate Income	-750	-757
Property	-573	-490
Other	-837	-304
Tobacco and Alcoholic Beverages	-422	
Insurance Premium	125	
Motor Vehicle License	-333	
Other Taxes	-207	
Licenses, Fees, Permits	-45	
Total Ongoing Expenditures	-4,339	

* Calculated as the difference in the amount per \$1,000 of personal income between the historical average (FYs 1979 through 1992) and FY 2017 multiplied by Arizona’s personal income in FY 2017.

Source: Calculated from Arizona Joint Legislative Budget Committee (revenues and expenditures), Arizona Office of Employment and Population Estimates (population), and U.S. Department of Commerce, Bureau of Economic Analysis (personal income).

of \$4.42 billion and tax increases in other funds of \$0.95 billion). Even if all of this additional revenue had been deposited to the general fund, revenue in the general fund still would have been close to \$1 billion below the historical norm. Local government tax revenue was close to the national average.

- Nontax revenue. State and local government nontax revenue was about \$2.7 billion below the national average. Only about \$0.4 billion of this revenue could have been deposited in the state's general fund without exceeding the historical average.

Thus, approximately \$4 billion in additional general fund revenue could be raised without exceeding any of the norms.

Sales Tax

Changes in tax laws since FY 1992 lowered general fund revenue from the sales tax by \$578 million in FY 2017. General fund sales tax revenue was further below the historical norm — by \$1,959 million based on the personal income calculation — because the narrow base of the sales tax combined with changing consumer expenditure patterns cause revenue from the sales tax to not keep up with economic growth. Despite these revenue losses, state and local government sales tax collections are far above the national average, making the sales tax a less-desirable source of additional revenue. Further, the sales tax as currently structured compares poorly on each of the guiding principles except exportability.

It would be possible to improve the assessment of the sales tax if each of three actions were taken: broaden the base, reduce the number of exemptions, and reduce the tax rate. The CFRC recommended that each of these actions be taken without realizing a net increase in revenue.

The sales tax rate in any Arizona locality is the sum of the state's tax rate of 5.0 percent, the additional 0.6 percent dedicated to education that is in effect between 2001 and 2021, and relevant local government taxes. The state's tax rate has gradually increased over time from its initial rate of 1.5 percent in 1933. The current permanent rate of 5.0 percent was adopted in 1984, following a significant reduction in the tax base in 1981 by exempting food to be consumed at home. Local government tax rates also have increased over time. The current state tax rate of 5.6 percent is a bit lower than the average of the states, but the average combined state and local government tax rate is 11th highest in the nation.

In FY 2015 in Arizona, combined state and local government revenue from the general sales tax as reported by the Census Bureau was \$2.9 billion greater than if the state's revenue per \$1,000 of personal income had been equal to the national average. The sales tax burden in Arizona in FY 2015 was far above average and eighth highest in the nation according to the Census Bureau. According to the District of Columbia's study, the sales tax paid in Phoenix ranked in the top 10 of 51 large cities at each income level in 2015. According to the Urban Institute's analysis of FY 2012 data (which included the temporary increase in the tax rate), Arizona's capacity to pay sales taxes was 8 percent below average while actual collections were 31 percent above average (10th highest), resulting in a tax effort 43 percent above average (ranked ninth).

A number of statutory changes to Arizona's sales tax have been made since the early 1990s. The greatest impact on revenue was the phasing out of the commercial lease tax between FYs 1994 and 1998; the estimated effect was \$96.3 million in FY 1998. A number of exemptions also have

been added, such as an exemption applied to the prime contracting sales tax in FY 1998. A loss of revenue of \$618 million in FY 2018 is estimated from all of these tax changes. Per \$1,000 of personal income, sales tax revenue was \$21.92 in FY 1992. Due to the tax law changes, the figure would have dropped to \$17.79 in FY 2017, a decline of 18.8 percent. Actual revenue in FY 2017 was only \$15.77. The lower actual figure is due to the tax's narrow base causing sales tax collections to decline relative to the size of the economy.

The Arizona Department of Revenue estimates the amount of revenue not collected due to sales tax expenditures, most of which are in the form of exemptions. While the total amount was \$12.0 billion in FY 2017, most analysts agree that the vast majority of the exemptions should remain in place, including exemptions for wholesale trade, health care, and prescription drugs. A tax on selected services has been discussed over the years, as have other possible sources of additional revenue from the sales tax:

- A tax on personal services and auto repair would have resulted in additional revenue of \$187 million in FY 2017.
- Taxing commercial leases at the standard sales tax rate would have raised \$450 million in FY 2017.
- Reinstating the sales tax on food to be consumed at home (which was removed in FY 1981) would have produced revenue of \$359 million in FY 2017.
- Removing the deduction for prime contacting would have boosted revenue by \$151 million in FY 2017.

The total effect of these potential actions would have been an increase in revenue of around \$1.15 billion in FY 2017 according to the Department of Revenue.

These potential actions would broaden the sales tax base, which would improve the cyclical stability of tax collections, in part since food to be consumed at home is less cyclical than most other types of taxed goods. Adding services would improve the responsiveness of the revenue to economic growth. The CFRC recommended broadening the transaction privilege tax base by including "personal" services or "consumer" services and by including certain transactions that currently are tax exempt.

Broadening the tax base to include some services has met stiff resistance in the past. Further, there would be upfront administrative costs in identifying businesses that provide the newly taxed services. While taxing some services and removing some exemptions would improve the rating of the sales tax relative to the guiding principles, this tax source still would not compare that favorably. Moreover, raising additional monies from the sales tax would make the general fund even more disproportionately dependent on the sales tax. Thus, the CFRC also recommended that in conjunction with eliminating certain exemptions and broadening the transaction privilege tax base, the rate should be lowered accordingly.

A particularly important issue regarding the sales tax is its regressivity. Taxing food to be consumed at home would be highly regressive. Taxing consumer services would be regressive. A partial solution would be to increase the existing income tax credit that was put in place to mitigate the increase in sales taxes paid due to the increase in the tax rate to benefit education. This credit is available only for those with low incomes. Of course, expanding this credit would lower the net revenue gain realized from broadening the sales tax base.

As an alternative to raising additional sales tax revenue by broadening the base, an increase in the general sales tax rate has frequently been proposed. The sales tax is perceived as having the least public resistance to a tax increase and thus has been the preferred source of additional revenue — it was used for Proposition 301 in 2000, for the temporary increase in revenue passed by voters in 2010, and for failed initiatives. Currently, about \$112 million is raised by a 0.1 percent tax rate. However, an increase in the sales tax rate would increase the already high dependence of the general fund on a tax source that compares poorly relative to the guiding principles.

Another issue related to the sales tax is the upcoming expiration (in June 2021) of the 0.6 percent sales tax dedicated to education, which raised about \$670 million in FY 2017. Based on a business share of the sales tax paid of 41.9 percent, as derived from the amount in the Ernst & Young study and the total amount reported by the Census Bureau in FY 2015, the 0.6 percent tax cost individuals \$364 million. In FY 2015, this amounted to \$54 per person, or \$146 per household. The size of the impact of course varies with household income and household size.

Individual Income Tax

Changes in tax laws since FY 1992 lowered general fund revenue from the individual income tax by \$2,283 million in FY 2017. Individual income tax revenue was not nearly this far below the general fund's historical norm since FY 2017 was in the midst of an economic expansion, greatly boosting revenue. State and local government individual income tax collections are far below the national average (by \$2,604 million in FY 2015 based on the personal income calculation), making the individual income tax a possible source of additional revenue. Moreover, the individual income tax as currently structured compares fairly well overall on the guiding principles.

The assessment of the individual income tax could be improved if two primary actions were taken: reduce the number of credits and adjust the tax rates to be more progressive. With these changes, the primary drawback to the individual income tax would be its cyclicity.

A significant change to Arizona's individual income tax was implemented in 1990, when the number of tax brackets were consolidated to five and the dollar limits of the brackets were substantially increased. In 1990, the tax rates in the five brackets ranged from 3.8-to-7.0 percent. Between 1990 and 2007, tax rates were lowered several times, reaching the current rates of 2.59-to-4.54 percent. The cumulative effect of the tax rate reductions was a 32 percent decrease in the rate for the lowest income bracket and reductions of 35-to-36 percent in the other brackets. Arizona's tax rates are among the lowest in the nation among the 42 states that broadly tax individual income; seven states do not levy an individual income tax and two apply the tax only to dividend and interest income.

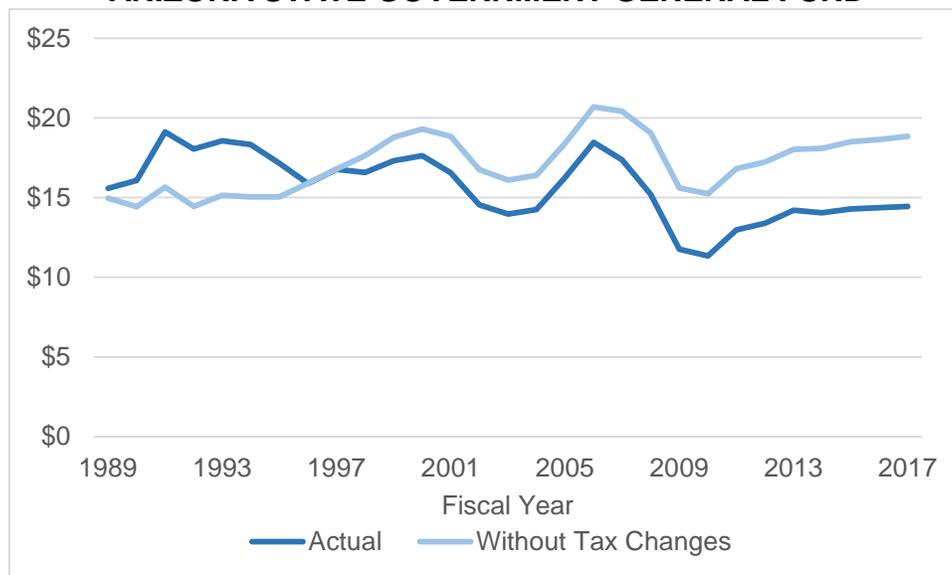
Using data from the Census Bureau, revenue from the individual income tax was \$2.6 billion (41 percent) less in FY 2015 in Arizona than if the state's revenue per \$1,000 of personal income had been equal to the national average. For those earning at least \$50,000, the amount paid in Phoenix was less than half the national average according to the District of Columbia's study. According to the Minnesota study, the amount paid in Arizona was between 30-and-40 percent

less than the national average for those earning at least \$50,000. In each study, the tax burden in Arizona was near the bottom of the states that apply the tax. According to the Urban Institute’s analysis of FY 2012 data, the capacity of Arizonans to pay the individual income tax was 20 percent below average while actual collections were 52 percent below average (ranked 42nd), resulting in a tax effort 39 percent below average (ranked 41st).

A number of statutory changes to Arizona’s individual income tax have been made since the late 1980s. In the late 1980s, the changes had the net effect of raising revenue from the individual income tax. Beginning in the early 1990s, tax rates have been lowered and a number of tax credits have been adopted. Relative to FY 1992, a loss of revenue of \$2.41 billion in FY 2018 is estimated from the tax changes. The net decrease since FY 1988 is a loss of revenue of \$1.34 billion in FY 2018.

Actual individual income tax collections per \$1,000 of personal income are compared to what collections would have been had no tax law changes occurred since the late 1980s in Chart 16. Initially, actual revenues were higher, but since FY 1996, actual revenues have been increasingly lower than if no tax changes had been made. As seen in Chart 16, collections from the individual income tax are cyclical.

CHART 16
INDIVIDUAL INCOME TAX REVENUE PER \$1,000 OF PERSONAL INCOME,
ARIZONA STATE GOVERNMENT GENERAL FUND



Source: Calculated from Arizona Joint Legislative Budget Committee (revenue and estimated initial effects of tax changes) and U.S. Department of Commerce, Bureau of Economic Analysis (quarterly personal income).

The credits available to individual income tax payers include \$97.6 million in credits related to private schools, \$45.9 million for the credit for public school extracurricular activities, and \$36.8 million for charitable organizations that primarily serve low-income Arizonans. (These figures are for tax year 2015.) These credits were created during the 1990s and the value associated with these credits has increased substantially. The CFRC recommended as few tax credits as possible and specifically questioned the use of the tax credits related to schools.

Eliminating the tax credits for private and public schools and for charitable organizations would have increased revenue by \$180 million in 2015. The elimination of the tax credits likely would have a lesser effect on the out-of-pocket expenses of taxpayers, since some individuals probably would no longer make these donations.

Given the low tax burden and the generally favorable evaluation of the individual income tax relative to the guiding principles, another option to raise revenue from this source would be to increase the tax rates. Using an abstract of actual tax data from the 2015 tax year from the Arizona Department of Revenue, an estimate was made of the amount of additional individual income tax revenue that would have been realized in FY 2015 in each of three scenarios; many other scenarios could be considered. Since the income brackets in the abstract do not match those of the tax law, some imprecision is inevitable in this analysis.

Each of the scenarios is generally based on the reversal of the last of the tax rate reductions that was implemented in FYs 2007 and 2008 and that amounted to 10 percent. Considerably larger increases in tax rates could be considered without tax rates returning to the level present in 1990.

In the first scenario, the tax rate in each income bracket is raised by 10 percent. This would have raised \$372 million in FY 2015.

An alternative is to implement a graduated increase in tax rates, with the least percentage increase in the lowest income bracket and the greatest percentage increase in the highest income bracket. This would improve the progressivity of the individual income tax and decrease the regressivity of the overall tax system. Moreover, this alternative would raise more revenue than an equal percentage increase in each bracket.

In this second scenario, tax rates would not change in the lowest income bracket but would rise in the other brackets: by 4 percent in the second bracket, 8 percent in the middle bracket, 12 percent in the fourth bracket, and 16 percent in the fifth bracket. In 2015, about 21 percent of taxpayers would not have experienced an increase in their taxes due and 30 percent would have had an increase of 4 percent. Only 4 percent of taxpayers would have experienced a 16 percent increase, but these taxpayers paid about 35 percent of the total individual income tax revenue in 2015. The estimated additional revenue in FY 2015 in the second scenario would have been \$457 million.

A third possibility is to increase tax rates only for those with high incomes. In this scenario, tax rates would not change in the three lowest income brackets, would rise 10 percent in the fourth bracket and would increase 20 percent in the highest bracket. The estimated additional revenue in FY 2015 would have been \$351 million.

Even if individual income tax collections had been \$637 million higher in FY 2015 due to a graduated increase in tax rates (\$457 million) and elimination of the specified tax credits (\$180 million), the individual income tax burden in Arizona would have remained substantially below the national average. Tax rates in the second scenario would have remained below those in place before the last tax cut for the three lower tax brackets. In the two highest tax brackets, tax rates would have been considerably below those present in 1990.

Using the actual 2015 data, the increase in tax rates in the second scenario would have resulted in an additional average tax payment of \$173 per tax return filed. However, those with federal adjusted gross income (FAGI) of less than \$25,000 would have paid less than \$10 in additional tax. The 85 percent of tax returns reporting FAGI of less than \$100,000 would have paid less than the overall average of \$173.

The state government general fund would not realize all of the revenue gain from increasing tax rates and/or reducing tax credits. Due to urban revenue sharing, local governments would receive a portion of the additional revenue. The URS amount is 15 percent of income tax revenue from two years prior.

Corporate Income Tax

Changes in tax laws since FY 1992 lowered general fund revenue from the corporate income tax by \$757 million in FY 2017. General fund corporate income tax revenue was similarly far below the historical norm. In addition, corporate income tax collections are below the national state and local government average (by \$299 million in FY 2015 based on the personal income calculation; this amount likely is considerably larger currently due to the recent reductions in the tax rate), making the corporate income tax a possible source of additional revenue.

Following recent reductions, Arizona's corporate income tax rate is 4.9 percent. The state's tax rate historically was much higher. In 1990, when a single tax rate was adopted, the rate was 9.3 percent. By 2001, it had declined to 6.968 percent. It remained at this level until 2014, when it started to phase down to 4.9 percent in 2017. The tax rate (using the maximum rate for those states with a graduated rate structure) is 10th lowest in the nation.

In FY 2015 in Arizona, revenue from the corporate income tax as reported by the Census Bureau was \$299 million less than if the state's revenue per \$1,000 of personal income had been equal to the national average. The corporate income tax burden in Arizona in FY 2015 was 30 percent below the U.S. average based on the personal income measure. According to Ernst & Young's study, the amount paid in Arizona ranked 33rd in FY 2016 at 41 percent below average. According to the Urban Institute's analysis of FY 2012 data — before the latest round of tax rate reductions began — Arizona's capacity to pay the corporate income tax was 24 percent below average while actual collections were 36 percent below average (ranked 36th), resulting in a tax effort 16 percent below average (ranked 31st).

A number of statutory changes to Arizona's corporate income tax have been made since the late 1980s. Revenue from the corporate income tax was increased in the late 1980s. Between 1996 and 2002 and between 2006 and 2014, a number of changes, including the lowering of tax rates

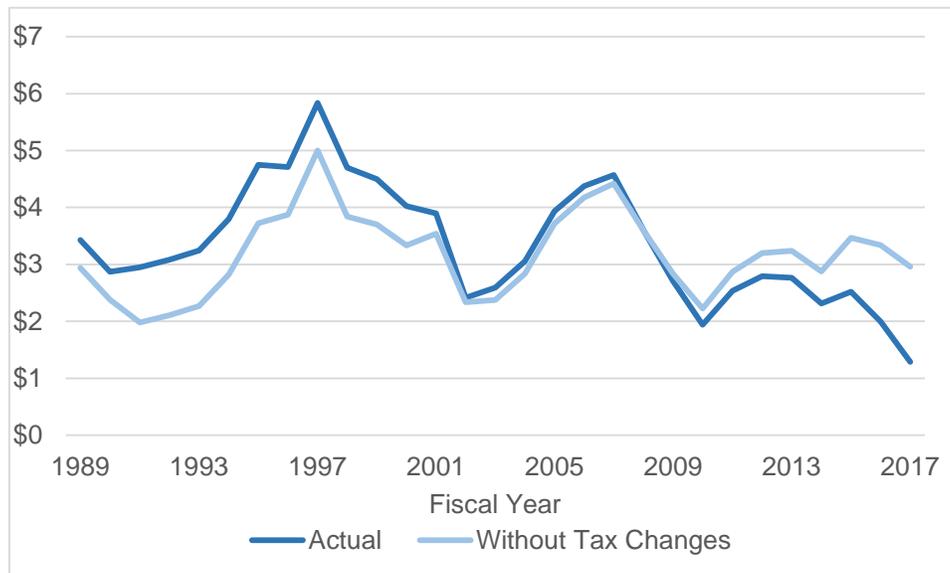
and implementation of tax credits, gradually reduced revenues. Since 2014, the impact of the tax law changes has been greater. Relative to FY 1993, a loss of revenue of \$893 million in FY 2018 is estimated from the tax changes since the early 1990s, with most of this coming in the last four years. The net decrease since FY 1989 is a loss of revenue of \$602 million in FY 2018.

Actual corporate income tax collections per \$1,000 of personal income are compared to what collections would have been had no tax law changes occurred since the late 1980s in Chart 17. A net increase in revenue from the tax changes lasted until FY 2009. Since then, actual revenue has been increasingly lower than if no tax changes had been made. As seen in Chart 17, collections from the corporate income tax are highly variable.

The primary income tax credit used by corporations in 2015 was the credit for research and development, valued at \$87 million. Tax credits related to schools totaled \$24 million and the tax credit for renewable energy production was \$9 million.

Due to the existing low tax burden, it would be possible to raise additional revenue from the corporate income tax without creating a competitive disadvantage. However, collections from this tax are both highly cyclical and unpredictable from year to year. Since nearly three-fourths of the corporations pay the minimum corporate income tax of \$50 per year, any increase in the

CHART 17
CORPORATE INCOME TAX REVENUE PER \$1,000 OF PERSONAL INCOME,
ARIZONA STATE GOVERNMENT GENERAL FUND



Source: Calculated from Arizona Joint Legislative Budget Committee (revenue and estimated initial effects of tax changes) and U.S. Department of Commerce, Bureau of Economic Analysis (quarterly personal income).

corporate tax rate disproportionately affects relatively few corporations.³⁵ Further, the overall tax burden on businesses remains relatively higher than the tax burden on individuals.

Insurance Premium Tax

Changes in tax laws have hardly affected general fund revenue from the insurance premium tax. Revenue is now higher than from the entire corporate income tax. Further, collections relative to personal income are considerably higher than the national average. Thus, the insurance premium tax is a less-desirable source of additional revenue.

According to the JLBC, this tax is imposed on net insurance premiums received by insurance companies for risks that exist within the state. Included are premiums for life insurance, accident and health insurance, AHCCCS contracted coverage, fire insurance, vehicle insurance, prepaid dental and legal insurance, and other property and casualty premiums such as homeowners and commercial insurance, medical malpractice, and fidelity and surety insurance. The tax applies to insurance companies formed under the laws of this state and insurance companies formed under the laws of another state within the United States or another country.

The Census Bureau includes the revenue from the insurance premium tax in the “other selective sales taxes” category. However, the Census Bureau provides a more detailed file of data. Based on this file, every state government levies an insurance premium tax; in only a few states is the tax levied by local governments. Relative to personal income, the amount collected by state government in Arizona was 41 percent above the national average of state governments in FY 2015. Arizona ranked 14th nationally and second among the western states (Nevada was higher). According to the Urban Institute’s analysis of FY 2012 data, Arizona’s capacity to pay the insurance premium tax was 25 percent below average while actual collections were 16 percent above average (19th highest), resulting in a tax effort 55 percent above average (ranked 10th).

According to the JLBC, the insurance premium tax raised a total of \$542 million in FY 2017, of which \$504 million was deposited in the general fund. This is more revenue than was received from the corporate income tax. Few changes were made to the insurance premium tax until recently; the tax rate currently is being reduced from 2.0 percent in 2015 to 1.7 percent in 2021.

Property Tax

Changes in tax laws since FY 1992 lowered general fund revenue from the property tax by \$490 million in FY 2017. General fund property tax revenue was similarly far below the historical norm. In addition, collections are considerably below the national state and local government average (by \$1,368 million in FY 2015 based on the personal income calculation), making the property tax a possible source of additional revenue.

The assessment of the property tax as currently structured in Arizona ranges from poor to good across the guiding principles. The major improvements would be to standardize the assessment ratios across property classifications and to simplify the tax. Of particular significance, property tax revenues typically are relatively stable across an economic cycle, better matching the need for stable government revenue than either of the other two primary taxes (sales and income).

³⁵ Some have proposed raising the minimum tax, to say \$500, but this would not be a major source of additional revenue.

A statewide property tax predated statehood. Starting in 1913, the tax rate was set at whatever was necessary to balance the budget. This was clarified in 1945. The rate was to be set each year at a level that would produce sufficient revenue to cover all state expenses that could not be covered by the balance forward and by revenue from sources other than the property tax. The rate varied by year, but typically was around \$1.60 per \$100 of assessed value from 1960 through 1980. Revenue was deposited into the general fund. A change was made in 1980, with the statewide property tax becoming dedicated to education in all but one of the succeeding years. Between 1981 and 1996, the tax rate was much lower at between \$0.38-and-0.47 per \$100. In 1996, the statewide property tax was repealed.

In addition to the changes in the tax rate, a number of other changes were made to the property tax beginning in 1967. One major change was to assign properties to property classifications that had differing assessment ratios. Many changes to the classifications and assessment ratios were made in subsequent years, but the constant was that the assessment ratios were lower for residential properties than for commercial properties. Currently, most commercial properties are assessed at 18 percent, compared to 10 percent for residential properties.

Another significant change was to reduce the property tax of homeowners through a separate mechanism. This began in 1973, with a change to the program in 1980. Since then, the state has paid a portion of the school district primary tax levy for owner-occupied residential properties. This subsidy is known as the “homeowner’s rebate.” The portion paid by the state has varied over time. It exceeded 50 percent during the 1980s, capped at a maximum state payment of \$500 per parcel. In 1990, a law was passed to phase out the rebate over 10 years, but this was suspended in 1994 when the state’s share was 35 percent. Since 2006, the share paid by the state has increased to the current 47.19 percent, up to a maximum of \$600 per parcel.

In addition to the homeowner’s rebate, a provision in the 1980 law limited the combined property tax levy from all governments to 1 percent of the property value for residential properties. The state pays any tax above this amount, though beginning in FY 2016, the total amount paid by the state in each county was capped. Numerous other modifications to property tax laws have resulted in a very complex system.

Arizona’s state government currently receives little revenue from the property tax — only \$32.5 million in FY 2017. The monies deposited into the state general fund are from taxes levied on property not located within any school district, and on property in certain school districts ineligible for state aid. In contrast, the property tax is a significant revenue source for local governments.

The overall property tax burden in Arizona in FY 2015 was 16 percent less than the national average and ranked 34th, according to the Census Bureau.³⁶ According to the Urban Institute’s analysis of FY 2012 data, Arizona’s capacity to pay property taxes was 23 percent below average while actual collections were 27 percent below average (33rd highest), resulting in a tax effort 4 percent below average (ranked 23rd).

³⁶ Taxes on business and residential real property are included in this category, as are taxes based on the value of other property, such as automobiles.

More detailed comparisons of property tax burdens are challenging because the amount of tax paid varies geographically within a state and even within a city. Several sources of data on the residential property tax generally place the tax burden in Arizona or Phoenix as moderately below the national average. However, according to the District of Columbia's study, the amount paid in Phoenix was close to the norm in 2015 at income levels of \$50,000 and higher.

The business property tax burden in Arizona relative to the nation is unclear. Ernst & Young's study reports a tax burden well above the national average, but data from ATRA suggest that Ernst & Young's estimate of business property taxes paid in Arizona is considerably too high. The Minnesota/Lincoln study indicates that the relative tax burden varies by type of business property and by value, ranging from below average to considerably above average.

The elimination of the statewide property tax, effective in FY 1997, resulted in a loss of general fund revenue of \$150 million at that time. The effect on general fund revenue from this elimination and various other modifications since the early 1990s is estimated at \$511 million in FY 2018. Per \$1,000 of personal income, general fund property tax revenue was \$2.62 in FY 1992 but only \$0.11 in FY 2017.

The Arizona Department of Revenue lists just one property tax expenditure. The homeowner's rebate cost the general fund \$420 million in FY 2017. The effect of the 1 percent cap is not known. Elimination of both the 1 percent cap and the homeowner's rebate was recommended by the CFRC. Rather than being accounted for as a revenue increase, reducing or eliminating the homeowner's rebate and 1 percent cap would allow general fund spending on K-12 education to decrease without the loss of any revenue to the schools. Alternatively, general fund spending on K-12 education or another program could increase.

The CFRC also recommended re-enacting a statewide property tax. The revenue yield would depend on the tax rate and the assessment ratios. Based on the existing assessment ratios, the primary net assessed value is \$59.4 billion in 2017. Applying a tax rate of 47 cents per \$100 of net assessed value — the rate that was applied in the last several years before the statewide property tax was repealed — would have raised \$279 million in FY 2017. However, the CFRC recommended that for a statewide tax, all properties should have the same assessment ratio.

Using data from ATRA, a statewide tax rate of 47 cents per \$100 of net assessed value would have increased the overall effective tax rate only from 1.18 percent to 1.23 percent. Based on the median home value in 2016 of \$205,900, as reported in the American Community Survey (ACS), the additional tax due to the implementation of a statewide property tax would have been \$79.

The removal of the homeowner's rebate would have averaged \$259 per homeowner, based on the \$404 million tax expenditure in FY 2016 and 1.559 million homeowners (the average of 2015 and 2016 from the ACS). The cost to the homeowner of removing the homeowner's rebate would vary with value of the property and by school district.

Even with an increase of \$700 million in property taxes paid — the total of the homeowner’s rebate and a 47-cent statewide property tax in FY 2017, the overall property tax burden in Arizona would remain below the national average. According to the Census Bureau, an additional \$1.4 billion could have been raised in FY 2015 without putting Arizona above average.

If there are concerns that a property tax increase — the sum of a statewide property tax and the elimination of the homeowner’s rebate — of this magnitude would be too great a burden for low-income homeowners or small businesses to bear, an option would be to exempt the first \$xx,000 of property value from the tax. This would mean that a higher rate than 47 cents per \$100 would need to be levied on the statewide property tax in order to raise the same amount of additional revenue, but this alternative would have the effect of reducing the regressivity of the property tax.

Alcoholic Beverages Tax

Arizona’s tax rates on beer and on distilled spirits are below the national average; Arizona is in the middle of the states on the tax rate for wine. The tax rates, which have not changed since 1984, are applied per volume rather than as a percentage of the retail price.

Collections from the alcoholic beverages tax in Arizona in FY 2015 per \$1,000 of personal income were 41 percent less than the national average, ranking 33rd in the nation, according to the Census Bureau. Collections fell sharply relative to personal income between FYs 1993 and 2007 and dropped further between FYs 2007 and 2015. An additional \$51 million could have been raised in FY 2015 without the amount per \$1,000 of personal income exceeding the national average.

According to the Urban Institute, per capita revenue in FY 2012 from the tax on alcoholic beverages in Arizona was 79 percent below average while revenue capacity was 2 percent above average, putting revenue effort at 79 percent below average. Arizona ranked 45th on revenue collected and 44th on tax effort.

The JLBC reports that \$74 million was collected from the tax on alcoholic beverages in FY 2017, of which \$35 million was deposited in the general fund. No estimate of tax expenditures is available.

The CFRC recommended that unit-based fees and taxes be replaced with percentage-based fees and taxes. Switching the alcoholic beverage tax rates to a percentage of the retail price rather than a fixed amount per ounce or gallon would improve the responsiveness of this tax and allow it to rate favorably versus the guiding principles, except for its regressivity. While tax rates for alcoholic beverages are relatively low in Arizona, increasing the tax rates would not produce substantial revenue.

Tobacco Tax

Arizona has one of the nation’s higher tax rates on cigarettes, following a series of voter-approved increases between 1994 and 2006. The tobacco tax has a mediocre rating versus the guiding principles. Its regressivity and poor responsiveness are important considerations.

Collections from the tobacco tax in Arizona in FY 2015 per \$1,000 of personal income were at the national average, 30th in the nation, according to the Census Bureau. Collections more than doubled relative to personal income between FYs 1993 and 2007, but dropped between FYs 2007 and 2015. The tax base is shrinking as the percentage of Arizonans who smoke continues to decline.

According to the Urban Institute, per capita revenue in FY 2012 from the tax on tobacco in Arizona was 17 percent below average while revenue capacity was 46 percent below average, putting revenue effort at 49 percent above average. Arizona ranked 33rd on revenue collected and 17th on tax effort.

The JLBC reports that \$311 million was collected from the tax on tobacco in FY 2017, of which only \$23 million was deposited in the general fund. According to the DOR, tax expenditures in the form of discounts totaled \$14 million in FY 2016.

Motor Vehicle License Tax

Arizona's "motor vehicle license tax" really is a property tax since it is assessed per \$100 of value. A portion of motor vehicle license tax revenues were deposited in the general fund through FY 1998, but a tax cut phased in over three years largely eliminated the general fund revenue. Generally, taxes related to motor vehicles are dedicated to transportation funds.

On a new vehicle, a tax rate of \$2.80 per \$100 is levied on 60 percent of the assessed value. The value of older vehicles is depreciated 16.25 percent per year; the tax rate is \$2.89 per \$100.

The JLBC reports that \$940 million was collected from the motor vehicle license tax in FY 2017. The monies were distributed in five ways, including \$721 million to local governments, \$177 million to the state highway fund, and \$8 million to the general fund. No estimate of tax expenditures is available.

Using the Census Bureau's definition of motor vehicle license taxes, which does not include Arizona's motor vehicle license tax but includes other licenses and fees related to motor vehicles, collections in Arizona in FY 2015 per \$1,000 of personal income were 54 percent less than the national average, fourth-lowest in the nation and lowest in the West. Collections dropped sharply relative to personal income between FYs 1993 and 2007 and dropped further between FYs 2007 and 2015. An additional \$247 million could have been raised in FY 2015 without the amount per \$1,000 of personal income exceeding the national average.

According to the Urban Institute, which uses the Census Bureau's definition of motor vehicle license taxes, per capita revenue in FY 2012 in Arizona was 67 percent below average while revenue capacity was 3 percent below average, putting revenue effort at 66 percent below average. Arizona ranked second lowest on revenue collected and on tax effort.

Motor Fuel Tax

There are three taxes levied per gallon of motor fuel in Arizona. The excise tax on gasoline of 18 cents per gallon is referred to as the "motor vehicle fuel" tax. The tax rate has not changed since

1990. According to the JLBC, revenue totaled \$527 million in FY 2017, with \$504 million deposited in the state's highway user revenue fund. According to the DOR, tax expenditures in FY 2017 totaled \$12 million, primarily for fuel for export.

The second tax is the "use fuel" excise tax levied on diesel fuels of 26 cents per gallon. Light vehicles pay a lower rate of 18 cents per gallon. Revenue from the excise tax also is deposited in the highway user revenue fund and totaled \$202 million in FY 2017. The DOR reports tax expenditures of \$48 million in FY 2017, largely in the form of exemptions. The preferential rate of 18 cents for lighter vehicles accounted for \$16 million of the total tax expenditure.

The third tax of 1 cent per gallon applied to both gasoline and diesel fuels is dedicated to maintaining underground fuel storage tanks. It raised \$30 million in FY 2017. None of the revenue from any of the motor fuel taxes was deposited in the general fund.

The combined 19-cent tax rate on gasoline in Arizona is among the 10 lowest in the nation at 34 percent less than the median of the states. However, revenue per \$1,000 of personal income was nearly equal to the national average in FY 2015, according to the Census Bureau. Revenue decreased considerably relative to personal income between FYs 1993 and 2015.

According to the Urban Institute, per capita revenue in FY 2012 from Arizona's motor fuel taxes was 4 percent above average while revenue capacity was 6 percent below average, putting revenue effort at 10 percent above average. Arizona ranked in the middle of the states on revenue collected but above average on tax effort.

The District of Columbia study combines four automobile-related taxes — gasoline tax, motor vehicle registration fees, excise taxes, and personal property taxes levied on autos — into one category. As seen in Table 5, these taxes in Phoenix were below average in 2015 at the \$25,000 income level, near average at incomes of \$50,000 to \$100,000, and above average at the \$150,000 income level.

Switching the motor fuel tax rates to a percentage of the retail price rather than a fixed amount per gallon would improve the responsiveness of this tax and allow it to rate favorably versus the guiding principles, except for its regressivity.

Other Taxes

In addition to the tobacco, alcoholic beverages, and motor fuel taxes discussed above, the Census Bureau separately reports public utility taxes as a category of selective sales taxes. Arizona underutilizes this tax relative to other states, with revenue per \$1,000 of personal income 56 percent below average in FY 2015, ranked 38th. Collections have fallen significantly relative to personal income. The state could have raised \$274 million more in FY 2015 without exceeding the national average.

Some states have recently considered adopting a gross receipts tax; in 2015, Nevada joined four other states in levying this tax — only one of which also utilizes a corporate income tax. A gross receipts tax is applied to all business transactions. Unlike sales taxes, which apply only to final sales, a gross receipts tax is levied on business-to-business purchases of intermediate goods,

including supplies, raw materials, and equipment. Thus, it is criticized for “tax pyramiding.” The CFRC recommended not to use this tax.

A number of other taxes are applied in some states, including various license taxes and severance taxes. None of these sources individually provide substantial amounts of revenue, but combined, they can generate a considerable amount. According to the Census Bureau, tax collections in the “other” category were 53 percent below average in Arizona per \$1,000 of personal income in FY 2015. Arizona ranked third lowest among the states. Additional revenue of \$757 million could have been realized without exceeding the national average relative to personal income. One reason that Arizona is so low in this category is that a real estate transfer tax is used in many states but was banned by voters in Arizona.

The Urban Institute split some of these taxes out separately, as well as leaving an “all other” category (see Table 8). In each of these categories, per capita revenue in Arizona was less than the national average in FY 2012. Revenue effort was far below average in most of the categories.

Nontax Revenue Sources

Federal Funding

According to the Census Bureau, intergovernmental transfers from the federal government make up the largest category of state and local government revenues other than taxes. In FY 2015, federal funds per \$1,000 of personal income were 17 percent greater in Arizona than the national average, with the state ranking 18th (and third among the western states). Federal funding to Arizona rose more than personal income between FYs 1993 and 2015. The CFRC recommended that the state centralize information about federal funds in an effort to increase the federal grant dollars received.

Current Charges

Most of the own-source nontax revenue received by state and local governments is in the form of “current charges” (user fees), according to the Census Bureau. Overall, current charges were underutilized in Arizona in FY 2015 at 21 percent below the national average per \$1,000 of personal income (rank of 41st nationally and last in the West). Revenue from current charges could have been \$1.75 billion higher without exceeding the national average. According to the Urban Institute, per capita revenue from user fees was 22 percent below average in FY 2012 (43rd) while revenue capacity was 17 percent below average. Revenue effort was 6 percent below average (31st).

The Census Bureau splits user fees into a number of categories. The amount raised in Arizona per \$1,000 of personal income ranged across these categories from far below average to above average (see Table 4). The CFRC recommended that the state “hire a consultant to examine the fairness and extent of miscellaneous taxes and fees imposed by the state for services.”

Other

Numerous other nontax sources provide revenue to state and local governments. Relative to personal income, these other revenues were 21 percent below average in Arizona and ranked

44th in FY 2015 according to the Census Bureau. Another \$724 million could have been collected without exceeding the national average.

In the Urban Institute's category of "other revenue," Arizona was 30 percent below the per capita average in FY 2012. Capacity was 17 percent below average. This put revenue effort at 15 percent below average (a rank of 40th). The lottery was not included in the other revenue category. Lottery revenue per capita was 56 percent below average in Arizona in FY 2012 (37th), while revenue capacity was 51 percent below average; revenue effort was 11 percent below average (34th). According to the JLBC, \$78.7 million in lottery proceeds was deposited in the general fund in FY 2017.