

GOVERNMENT REVENUES AND EXPENDITURES IN ARIZONA

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TABLE OF CONTENTS

Summary	1
Introduction	7
Description of Data	9
Standardization of Data	14
Revenues	18
Expenditures	28
Funding for Elementary and Secondary Education Per Student	52
Funding for Higher Education Per Student	58
Funding for Corrections Per Inmate	64
Funding for Social Services Per Recipient	65

LIST OF TABLES

1. Example of Various Data Standardizations	17
2. Arizona State Government General Fund Ongoing Revenue	19
3. Arizona State and Local Government Revenue	24
4. Arizona State Government Budget for Major Agencies, Fiscal Year 2016	30
5. Percent Change in Arizona State Government Budget for Major Agencies Per \$1,000 of Personal Income	31
6. Arizona State and Local Government Expenditures	43
7. Arizona State and Local Government Capital and Noncapital Expenditures	44
8. Public Elementary–Secondary Education Current Operations Funding in Arizona	53
9. Public Elementary–Secondary Education Revenue in Arizona	54
10. Public Elementary–Secondary Education Expenditures in Arizona	56
11. Public Higher Education Finance in Arizona	60

LIST OF CHARTS

1. Arizona State Government General Fund Ongoing Revenues and Expenditures Per \$1,000 of Personal Income	20
2. Arizona State Government Revenues Per \$1,000 of Personal Income	21
3. Estimate of Annual Change in Arizona State Government General Fund Ongoing Tax Revenue Due to Statutory Changes, in Millions of Unadjusted Dollars	22
4. Arizona State Government General Fund Ongoing Revenue Per \$1,000 of Personal Income	22
5. Changes in Arizona State Government Ongoing Tax Revenue in Millions of Adjusted Dollars	23
6. State and Local Government Revenue Per \$1,000 of Personal Income, Arizona as a Percentage of the National Average	26
7. State and Local Government Own-Source Revenue Per \$1,000 of Personal Income, Arizona as a Percentage of the National Average	26
8. State and Local Government Taxes Per \$1,000 Of Personal Income, Arizona as a Percentage of the National Average	27
9. Appropriations Limit, Arizona State Government	29
10. Arizona State Government Expenditures Per \$1,000 of Personal Income	33
11. Close-Up of Arizona State Government Expenditures Per \$1,000 of Personal Income	34
12. Arizona State Government Expenditures Per \$1,000 of Personal Income, Department of Education	35
13. Arizona State Government Expenditures Per \$1,000 of Personal Income, Universities and Board of Regents	36
14. Arizona State Government Expenditures Per \$1,000 of Personal Income, Arizona Health Care Cost Containment System	37
15. Arizona State Government Expenditures Per \$1,000 of Personal Income, Departments of Economic Security and Child Safety	38
16. Arizona State Government Expenditures Per \$1,000 of Personal Income, Department of Health Services	39
17. Arizona State Government Expenditures Per \$1,000 of Personal Income, Departments of Corrections and Juvenile Corrections	40
18. Arizona State Government Expenditures Per \$1,000 of Personal Income, Department of Transportation	41
19. Arizona State Government Expenditures Per \$1,000 of Personal Income, Other Than 12 Largest Agencies	42
20. State and Local Government Expenditures Per \$1,000 of Personal Income, Arizona as a Percentage of the National Average	45
21. State and Local Government Expenditures Per \$1,000 of Personal Income by Category, Arizona as a Percentage of The National Average	46
22. Number of Students at Public Elementary and Secondary Schools Per 1,000 Residents	52
23. Public Elementary and Secondary Education Noncapital Expenditures, Arizona as a Percentage of the National Average	57
24. Number of Full-Time-Equivalent Students at Public Institutions of Higher Education Per 1,000 Residents	59
25. Noncapital Funding for Public Institutions of Higher Education Per Full-Time-Equivalent Student, Arizona as a Percentage of the National Average	61
26. Number of Inmates Per 1,000 Residents in Arizona	64
27. Expenditures Per Inmate Per \$1,000 of Per Capita Personal Income in Arizona	65
28. Number of AHCCCS Recipients Per 1,000 Residents in Arizona	66
29. Expenditures Per AHCCCS Recipient Per \$1,000 of Per Capita Personal Income in Arizona	67
30. Number of Recipients of Family Assistance Programs Per 1,000 Residents in Arizona	68
31. Payments Per Family Assistance Program Recipient Per \$1,000 of Per Capita Personal Income in Arizona	69

SUMMARY

Government spending in Arizona per \$1,000 of personal income has dropped since fiscal year 1992 regardless of whether spending is measured by the state government general fund, total state appropriations, total state authorized spending, or the combination of all state and local governments. The decline has been necessary because of the loss of government revenue that has resulted from a series of legislatively passed tax reductions that began to be implemented in fiscal year (FY) 1993 — the period from July 1, 1992 through June 30, 1993.

Before the late 1960s, government revenues and expenditures in Arizona relative to personal income were above the national average. Through the 1970s and 1980s, the level was similar to the U.S. average. Since the early 1990s, the level has fallen to well below the national average.

Background

Analyses of government finances — revenues and expenditures — by state may have any of several motivations. One may be to make an extensive comparison of states on the amounts of public revenue and public expenditures. State and local government finance must be combined since the responsibility to raise revenue and provide services for a particular public function may be assigned to state government in one state and to local governments in another state. Revenues collected by state and local governments from all sources — including taxes, user fees, and federal funds — are included in a comprehensive analysis. If possible, capital outlays — construction costs and purchases of land, buildings, and major equipment — are separated from other expenditures. Comprehensive state and local government revenue and expenditure data are available from the U.S. Census Bureau, but the latest figures are for fiscal year 2012.

A more narrow study may have the goal of assessing “public support” for a particular government function. In this context, “public support” generally means the use of tax revenue to fund a particular program, such as elementary and secondary (K-12) education. An analysis of public support generally combines state and local government support, though there may be reasons to undertake an analysis of only state government support. The Census Bureau’s government finance data are not useful for a study of public support, since no distinction is made regarding the source of funding (tax revenue, user fees, federal funds, other) used to provide for the expenditures by government function.

In Arizona, the Joint Legislative Budget Committee (JLBC) provides a considerable amount of data related to state government finance, including revenues collected through FY 2014 and appropriations and estimates of other authorized spending through FY 2016. Studies of state government finance usually focus on the general fund, but limiting analyses to the general fund results in an incomplete and perhaps misleading assessment. Yet if the purpose of a study is to assess public support, broadening the analysis to include appropriations from other funds can produce an even more misleading portrayal. While the general fund overwhelmingly consists of tax revenues, other funds include user fees and some federal monies. Moreover, some tax revenue is not appropriated, instead being placed in a “not appropriated” category along with funds from the federal government and other sources.

Thus, without collecting more detailed data, it is not possible to fairly assess public support for most programs. The exceptions are for K-12 education, using a detailed report from the Census

Bureau, and for higher education, using a report produced by the State Higher Education Executive Officers Association.

In any analysis of government finance, data used to examine changes over time must be adjusted for inflation and for changes in the size of the state. Data that compare states must be adjusted for differences in size and in the cost of living. Population and personal income are the most commonly used measures of size. In states in which per capita personal income is considerably different from the national norm, such as Arizona, the choice of the measure of size significantly impacts the analysis of public finance. Generally, personal income is the preferred measure to adjust revenues since it considers the ability of a state's residents to pay taxes and user fees.

To adjust expenditure data for a given year that are compared across states, personal income has a significant limitation. If policymakers in a state with below-average per capita personal income, such as Arizona, limit certain types of expenditures due to the below-average ability of its taxpayers to pay taxes, the result may be to perpetuate the state's low prosperity. The two most important economic development factors — the quality/availability of the labor force (of which education is a key) and the quality/availability of the physical infrastructure — are heavily dependent on public-sector spending.

Government Finance

State Government General Fund Revenues and Expenditures

Due to a series of legislatively passed tax reductions that began to be implemented in FY 1993, revenue for the state government general fund has fallen substantially, by an estimated \$3.7 billion in FY 2015. This figure will become larger, as tax reductions already passed will continue to phase in through FY 2019. Relative to personal income, ongoing general fund revenue in FY 2014 was 32 percent less than the historical average from before FY 1993.

Between FYs 1992 and 2014, ongoing general fund revenue fell 34 percent relative to personal income. More than 90 percent of the decline in revenue resulted from tax reductions implemented since FY 1993; the remainder is due to the incomplete economic recovery from the last recession. Decreases of more than 20 percent relative to personal income occurred in each of the major tax and nontax sources of revenue except for the insurance premium tax; its revenue increased 12 percent. The state-levied property tax was eliminated and reductions in the motor vehicle license tax resulted in none of its revenue going to the general fund.

Given the requirement for a balanced state government budget, any decrease in revenue must be matched by a similar drop in expenditures. Between FYs 1992 and 2016, ongoing general fund appropriations fell 34 percent relative to personal income. The decrease in appropriations effectively is larger than this for programs that were part of the general fund in FY 1992. Since then, additions to general fund spending obligations, such as capital funding for school construction, were made without an increase in general fund revenue.

The percent change between FYs 1992 and 2016 in general fund appropriations varies substantially by state agency. Among the larger agencies, the only increase relative to personal income was 4 percent for the Department of Corrections. Reductions were between 15-and-38 percent to AHCCCS (the Arizona Health Care Cost Containment System, the state's alternative

to the federal Medicaid program) and the Departments of Economic Security/Child Safety, Education, Health Services, and Public Safety. The reduction to the university system was much larger at 68 percent. The aggregate of agencies other than the 12 largest were cut 70 percent.

Other State Government Revenues and Expenditures

The general fund accounts for only 29 percent of the state's total authorized spending in FY 2016. Appropriations from other funds account for 11 percent, and unappropriated spending is 60 percent of the total. Since appropriations from other funds and other authorized spending have not declined, the magnitude of the decreases in revenues and expenditures shrinks as the analysis is broadened beyond the general fund.

The legislatively passed tax reductions have not had much effect on other funds, while voter-approved increases to the tobacco tax and the general sales tax between 1994 and 2006 raised nearly \$900 million in FY 2014. Some of this tax revenue is used for appropriations from other than the general fund while some is spent without being appropriated. Even considering these tax increases, the net effect on state government revenue from tax changes implemented since FY 1993 was a decline of approximately \$2.8 billion in FY 2015. Moreover, revenue from the tax increases is dedicated to certain purposes and therefore cannot serve as a substitute for many of the spending reductions.

Increases in user fees and federal funding also have boosted the revenue to some state government funds. For example, appropriations for universities from other than the general fund jumped 95 percent relative to personal income between FYs 1992 and 2016, but almost all of this funding gain was due to substantial increases in university tuition rates. Overall, a 69 percent rise in appropriations from state funds other than the general fund offset some of the drop in general fund appropriations — total state government appropriations fell 22 percent relative to personal income between FYs 1992 and 2016.

Much of the unappropriated monies also are dedicated and are not substitutable for reduced appropriations from the general fund. Unappropriated spending rose 11 percent relative to personal income between FYs 1992 and 2016. Some of the agencies providing social services — the Department of Health Services and AHCCCS — experienced increases of more than 100 percent in unappropriated funding; small increases were realized by the Departments of Education and Public Safety. In contrast, most agencies experienced a decrease in unappropriated funding on top of a decrease in total appropriations. The Department of Transportation suffered a decrease of 85 percent in unappropriated funding and a decline of 49 percent in total appropriations.

Total authorized spending by state government fell 5 percent relative to personal income between FYs 1992 and 2016, but most agencies experienced a larger drop. The decreases were between 13 and 26 percent for the universities, the state lottery, and the Departments of Economic Security/Child Safety, Education, and Public Safety. The decrease was 71 percent to the Department of Transportation and 51 percent to the aggregate of state agencies other than the 12 largest. In contrast, funding increased by more than 75 percent for AHCCCS and the Department of Health Services. The Department of Corrections had a gain of 8 percent.

State and Local Government Revenues

Total revenue available to state and local governments in Arizona FY 2012 (the latest data) was only 4 percent below the national average. The amount decreased 1 percent relative to personal income between FY 1992 and FY 2012, compared to an increase of 3 percent nationally. The federal government was a significant source of revenue to Arizona governments, with the amount relative to personal income 12 percent above average in FY 2012, following a 40 percent rise between fiscal years 1992 and 2012. In contrast, Arizona's own-source revenue relative to personal income was 8 percent below average and ranked 40th in FY 2012. Own-source revenue dropped 12 percent in Arizona between FYs 1992 and 2012, compared to a 2 percent decline nationally. Only three states had a larger decrease.

Tax revenue in Arizona relative to personal income also was 8 percent below average in FY 2012, having dropped 16 percent over 20 years compared to a national decline of 4 percent. Nontax revenue was 9 percent less than average, dropping slightly over time compared to a marginal increase nationally.

Revenue from most taxes was much lower than the national average relative to personal income in FY 2012. Among the major taxes, the individual income tax was 42 percent below average and ranked 41st; the corporate income tax was 24 percent below average and ranked 32nd; and the property tax was 8 percent below average and ranked 36th. Arizona was further below average on some of the less significant sources of tax revenue, including the tax on alcoholic beverages and the motor vehicle license tax. In contrast, revenue from the general sales tax was 58 percent higher than average and ranked sixth.

Arizona experienced a decrease in the amount of revenue received from most tax sources relative to personal income between fiscal years 1992 and 2012. Among the major taxes, the declines included 30 percent for the individual income tax, 17 percent for the corporate income tax, and 22 percent for the property tax. Larger decreases occurred for the motor vehicle license tax and alcoholic beverages tax, but tobacco tax revenue jumped 87 percent.

State and Local Government Expenditures

In FY 2012, Arizona's state and local government expenditures relative to personal income were 8 percent below the national average and ranked 39th. Total expenditures fell 10 percent relative to personal income between FY 1992 and FY 2012, compared to a 3 percent rise nationally. Only four states had a larger decrease. Total expenditures include capital outlays and noncapital spending. Capital outlays in FY 2012 relative to personal income were 4 percent less than the U.S. average, having dropped 30 percent between FYs 1993 and 2012. Noncapital spending in FY 2012 relative to personal income was 8 percent less than the U.S. average, ranking 39th. The decline in noncapital spending was 4 percent between FYs 1993 and 2012; only seven states had a greater decrease.

Spending in Arizona relative to personal income in fiscal year 2012 ranged from considerably above average in some categories to substantially below average in others. Spending was 20 percent below the national average for K-12 education, 15 percent below average for highways, and more than 10 percent below average for administrative costs. In contrast, Arizona's spending

was more than 20 percent higher than average for programs related to public safety, including fire protection, police protection, corrections, and judicial and legal.

Percent changes in spending between FYs 1992 and 2012 varied widely by category in Arizona. Relative to personal income, expenditures fell substantially for highways, K-12 education, administrative costs, natural resources, and interest payments on debt. In each of these categories, the decreases were among the largest in the country; the percent change for higher education also ranked near the bottom. In contrast, large increases in spending occurred in other categories, particularly in the public welfare, health, and hospitals categories.

Spending Relative to Caseloads

For programs that serve only a portion of the population, such as public school students, the actual number of people served — the program's caseload — is a far better measure of size than total population. The percent changes in funding relative to personal income discussed above do not reflect changes in caseloads relative to the overall population.

The number of inmates in state correctional facilities soared between 1980 and 2010 as a share of the total population. However, costs per inmate dropped considerably relative to per capita personal income. These offsetting trends left correctional expenditures relative to personal income relatively steady.

Large increases have occurred in the number enrolled in AHCCCS as a percentage of the population since its inception in the 1980s, but expenditures per recipient have dropped relative to per capita personal income. State government appropriations for AHCCCS relative to personal income have been relatively steady, though funding from the federal government relative to personal income has increased substantially.

Unlike AHCCCS and corrections, the number of students — K-12 and higher education — has not increased relative to the overall population since the 1980s. However, funding per student has dropped and is considerably below the national average.

Higher Education

Higher education includes community colleges and universities. Local funding of higher education — primarily from property taxes levied by community colleges — per student adjusted for the cost of living is the highest in the country in Arizona, but state government funding is among the lowest of the states. Thus, to assess public support across states, state and local government funding must be combined.

Per full-time-equivalent student adjusted for the cost of living, state and local government appropriations to higher education for educational purposes — excluding monies collected from tuition — were 17 percent less than the national average in FY 2014 in Arizona and ranked 39th among the 50 states. Between FYs 2008 and 2014, the percent change in educational appropriations per FTE student in Arizona ranked among the bottom five states.

K-12 Education

Public support for K-12 education also is low and falling. Using data reported by the JLBC, public support can be defined as state and local government funding for maintenance and operations. The majority of this funding comes from state government, primarily from the general fund. Public support per student dropped 10 percent between FYs 2008 and 2013. Per student, state support fell 20 percent but local government support — primarily from the school district property tax — rose 20 percent.

Using data reported by the Census Bureau, Arizona's state and local government per student revenue was third lowest in the country at 35 percent below the national average in FY 2013. Inflation-adjusted revenue per student fell 18 percent between FYs 2008 and 2013; only three states had a larger decline. Between FYs 1992 and 2013, only one state had a lesser percent change.

Per student current operations expenditures adjusted for the cost of living also ranked 49th in Arizona in FY 2013, at 32 percent below the national average. Per student current operations expenditures fell an inflation-adjusted 12 percent between FYs 2008 and 2013; only three states had a larger decline. Between FYs 1992 and 2013, only one state had a lesser percent change.

The Census Bureau reports lower overall spending on K-12 education than the JLBC, in part because charter schools operated by nongovernmental entities are excluded from the Census Bureau's data. The lower figures reported by the Census Bureau have caused critics to dismiss the Census Bureau's report that shows K-12 funding per student in Arizona to be near the bottom of the states. This criticism is misguided in that the Census Bureau also reports a significantly lesser number of students than the JLBC. Despite the *lower overall* spending figures reported by the Census Bureau, spending for *current operations* reported by the Census Bureau has been *higher* in each year than reported by the JLBC. The Census Bureau reports *higher per student current operations* funding than the JLBC. Since funding for current operations is the focus of analyses of public support, the conclusions from the Census Bureau's study should not be dismissed.

Arizona is near the bottom of the states on per pupil K-12 funding — without considering that the state needs to spend *more* per student than the average state just to realize average student performance, as measured by achievement (such as test scores) and attainment (such as the percentage graduating from high school). Children living in poverty and children whose parents have limited educational attainment require more resources than the average child. Similarly, children whose first language is not English are more costly to educate. Arizona compares unfavorably on each of these demographics.

INTRODUCTION

Analyses of government finances (revenues and expenditures) by state may have any of several motivations. Depending on the purpose, the data and methodology employed in the study may vary.

At one extreme is a comprehensive study of government finance that compares states. State and local government finance needs to be combined when comparing states since the responsibility to raise revenue and provide services for a particular program may be assigned to state government in one state and to local governments in another state. Total expenditures and total revenues from all sources — taxes, user fees, federal funds, etc. — are included in such a comprehensive study.

A more narrow study may have the goal of assessing “public support” for government functions. In this context, “public support” generally means the use of state and local government tax revenue to fund government. Though user fees and federal monies may help fund public programs, they do not represent “public support” and are differentiated, if possible, from tax revenue.

In this paper, two primary sources of government finance data are used. State and local government finance data collected by the U.S. Census Bureau are employed to do a comprehensive study, comparing Arizona to the nation and to other states over time. The Census Bureau reports revenues in a number of categories, with state and local government tax revenues, user fees, and funding received from the federal government differentiated. However, the Census Bureau’s expenditure data are not tabulated by source of funding, so it is not possible to determine public support at the state and local government level for the various public functions.

The other primary source of data is the Arizona Joint Legislative Budget Committee (JLBC). While the JLBC’s focus is state government finance, federal funds are included in some of the data it reports. Local government finances generally are not included. Since the JLBC’s accounting system is different from that of each of the other states, comparisons cannot be made to other states.

In Arizona, state government uses many funds, though the general fund accounts for nearly three-fourths of total appropriations.¹ The JLBC provides considerable detail for the general fund, providing a time series of revenue by source and a time series of appropriations by state agency. A time series of the aggregate of appropriations from other funds by agency also is available. The annual Appropriations Report provides more detail, including an estimate of unappropriated funding by state agency. Total authorized spending — the sum of total appropriations from all funds and unappropriated funding — also is available by agency. Appropriations account for only 40 percent of total authorized spending.

Revenue generated from state taxes, particularly the sales tax and the income tax, overwhelmingly provide the money used for general fund appropriations. The tax revenues used

¹ An appropriation is the granting of money by the legislature for a specific purpose. Generally, the amount appropriated is equivalent to the amount spent, though revisions sometimes occur to the original amount appropriated before the beginning of a fiscal year.

for appropriations from other funds generally are raised from more specific taxes, such as the gasoline tax. Nontax sources, such as user fees, also provide revenue to be appropriated. Unappropriated funding typically comes from other sources, particularly the federal government.

However, a clear distinction cannot be made between appropriated and unappropriated funding. Some federal funds are included in appropriations and some of the revenues generated from state taxes are not appropriated. Because of the inclusion of user fees and some federal funds, but not all tax revenue, in appropriations, an assessment of public support by the state government cannot be made without getting into very considerable detail on the sources of revenue available to each fund.

Education funding provides examples of the difficulty in determining public support from the JLBC's data.² For elementary and secondary (K-12) education, little of the revenue raised from the 0.6 percent increase in the general sales tax passed by voters in 2000 — Proposition 301, that dedicated the revenue to education — is appropriated. To evaluate whether the requirement in the Arizona Constitution that “the legislature shall make such appropriations, to be met by taxation, as shall insure the proper maintenance of all state educational institutions, and shall make such special appropriations as shall provide for their development and improvement” is being met, the Proposition 301 monies, but not the remainder of the unappropriated funding, should be considered.

Appropriations from the general fund for universities have dropped substantially, including a large reduction in fiscal year (FY) 2016.³ Taking a broader look at funding indicates that the universities have not experienced nearly as large a reduction as from the general fund. However, nearly all of the funding for universities that comes from appropriations from other funds originates in student tuition (user fees). Much of the funding that is not appropriated (such as federal research grants) can be used only for specific purposes and therefore is not a direct substitute for reductions in appropriations from the general fund. To determine whether the constitutional requirement is being met, very little of the monies coming from other funds or from unappropriated sources would be included in the accounting for higher education.

Analyses of state government finance usually focus on the general fund for several reasons:

- It is by far the largest of the many state government funds, accounting for nearly three-fourths of state government's total appropriations.
- The Arizona Legislature has the greatest discretion over the general fund. The purposes of most of the other funds are specific in nature, with narrowly defined revenue sources.
- Nearly all of the tax reductions passed since the early 1990s have reduced general fund revenue.
- Budget shortfalls have been specific to the general fund, with monies transferred from other funds in order to balance the general fund.

² Public support for elementary and secondary education and for higher education can be analyzed using specialized studies of public education finance. These data sources are described in the next section and the findings from these studies are discussed later in this paper.

³ The fiscal year runs from July 1 through June 30. FY 2016 covers the period from July 1, 2015 through June 30, 2016.

Limiting analyses to the general fund results in an incomplete and perhaps misleading assessment of state government finance. Yet broadening an analysis to include appropriations from other funds and unappropriated funds produces an even more misleading portrayal of public support. Comprehensive studies of government finance rarely include other state funds and unappropriated monies without also including local government finance.

DESCRIPTION OF DATA

For an analysis of Arizona's state government revenues and expenditures over time, data from the state's Joint Legislative Budget Committee are used. To compare Arizona's revenue and expenditure figures to other states, the primary source is the U.S. Department of Commerce's Census Bureau. The Census Bureau and the JLBC also provide a more detailed look at funding for K-12 education. The State Higher Education Executive Officers Association (SHEEO) provides a detailed look at funding for higher education.

Government Revenues and Expenditures

Within a particular state, government accounting may vary by agency and jurisdiction (e.g. state government, county government, city government). Accounting systems also vary widely across states. In Arizona, the JLBC provides data for all of state government. The Census Bureau collects state and local government data for each state (and the District of Columbia), standardizing the accounting systems.

Joint Legislative Budget Committee, Arizona State Government

The JLBC provides annual data on revenues collected for the general fund by source. This time series starts in fiscal year 1971. Revenues collected for other funds are included in the annual "Tax Handbook" (<http://www.azleg.gov/jlbc/economicanalysis.htm>), but a separate time series of the complete accounting of these revenues is not available. Annual appropriations from the general fund are available by budget unit (state agency) back to FY 1979 (<http://www.azleg.gov/jlbc/fiscal.htm>). The aggregate of annual appropriations from other funds is available back to FY 1989. While the JLBC does not provide a time series of unappropriated funds, such a time series has been created for this paper, using the figures from the annual "Appropriations Report" (<http://www.azleg.gov/jlbc/budgetupdates.htm>).⁴

In addition to the complexities of state government accounting discussed in the introduction, the treatment of capital outlays — expenditures for purchases of land and buildings and for construction — also is an issue. Generally, analyses keep capital and noncapital spending separate; to assess public support, only noncapital spending is included. However, capital outlays for K-12 education that are provided through the School Facilities Board are included in the general fund.

Census Bureau, State and Local Governments

The Census Bureau has annually produced the report "State and Local Government Finances" for decades. Data since FY 1992 are available online (<http://www.census.gov/govs/local/>), but

⁴ The legislature typically passes the budget for the upcoming fiscal year in the spring; the Appropriations Report is prepared a few weeks later. Each Appropriations Report includes data for the current fiscal year as a comparison. The estimate of the unappropriated funding was taken from the current year's data (except for FY 2016).

the latest data are for FY 2012.⁵ In years ending in 2 and 7, the data come from the Census of Governments. In other years, data are collected from state governments and from a sample of local governments. Thus, sampling error is present in most years. Other errors result from misreporting by state and local governments and miscategorization by the Census Bureau.

The accounting system used by the Census Bureau is very different from that of the JLBC. No distinction is made between the general fund and other funds, and no distinction is made between appropriations and unappropriated funds. Utilities, state-run liquor stores, and insurance trusts are separated by the Census Bureau from all other revenues and expenditures.

For each state, revenue and expenditure figures are shown separately for the state government, for the aggregation of all local governments — subdivided into counties, municipalities, school districts, and special districts — and for all state and local governments combined. The combined data are focus in this paper. Since a particular government function may be performed by the state government in some states and by a local government in other states, comparisons across states of state government figures or local government figures are not recommended.

Revenues from own sources are shown separately from intergovernmental revenues (for combined state and local governments this is equivalent to funding from the federal government) by the Census Bureau. Revenues from each of the major types of taxes are provided; charges (user fees) are presented by type. Other revenues include interest earnings and proceeds from sale of property. The expenditure figures do not differentiate whether the revenue came from own sources or from the federal government. Expenditures are shown for a number of categories. In categories that have a significant amount of capital outlays, the capital outlay amount is shown separately.⁶ Thus, while overall expenditures and expenditures in some categories are divided into capital and noncapital components, this split is not published for all categories.

Expenditures for Education

Since public education is the largest single responsibility of state and local governments across the nation, a number of reports are produced by various groups that focus on public education finance. Three are analyzed in this paper.⁷

Joint Legislative Budget Committee, K-12

The JLBC annually produces data on K-12 public education funding in Arizona, with one tally specific to “maintenance and operations” (also known as “current operations”) and another tally

⁵ Data for FYs 2001 and 2003 were not released by state. Certain other data, such as the detailed split between capital outlays and noncapital spending, are missing for other years. In charts in this report, the values for missing years were interpolated.

⁶ Categorical detail was gradually added to the Census Bureau’s report over time through FY 1993. Thus, data for some capital-noncapital expenditure categories and for some revenue categories are not available for FY 1992, the starting point for many of the analyses in this paper.

⁷ The National Education Association also produces a report on K-12 education finance http://www.nea.org/assets/docs/NEA_Rankings_And_Estimates-2015-03-11a.pdf. The NEA’s report is not reviewed in this paper since so much of its data are estimated (close to one-half of the states for FY 2013 and more than half for FY 2014). Arizona is one of the states estimated. The NEA’s estimates of expenditures for Arizona are similar to those of the JLBC and Census Bureau, but its estimates of revenues are far out of line.

of total funding, including capital outlays and funding for other purposes (such as debt service). Funding is reported by level of government: federal, state, and local. State funding is subdivided by source, including the general fund, the permanent fund, and Proposition 301. K-12 education is the primary beneficiary of the permanent endowment trust fund, which was established at statehood in the Arizona Constitution. Monies deposited in the trust fund come from proceeds of renting and selling state trust land. Proposition 301 was a legislatively referred ballot proposition passed by voters in November 2000 that for 20 years increases the general sales tax rate by 0.6 percentage points, with the proceeds dedicated to public education.

The JLBC calculates funding per pupil based on average daily membership (ADM) and an inflation factor. In Arizona, ADM is defined as average daily enrollment over the first 100 days of the school year, with enrollment expressed on a full-time-equivalent (FTE) basis. ADM is used by the JLBC instead of the more common enrollment figure — which is based on the head count, not on a FTE basis — because funding for schools is based on the ADM.

Census Bureau, K-12

The U.S. Census Bureau produces an annual report on K-12 public education finance by state. Data for fiscal years 1992 through 2013 are available online at <http://www.census.gov/govs/school/>. Total K-12 expenditures from this report are similar to, but not exactly the same as, those published in the state and local government finance report. Considerably more detail is available in the public education finance report.

Revenues raised to support K-12 education are divided by the Census Bureau into three government sources: federal, state, and local. Since the local/state government responsibilities for funding K-12 education vary across the states, comparisons of states on either state government revenues or local government revenues are misleading. Combining state and local government revenue provides a more accurate comparison.

The Census Bureau separates capital outlays for K-12 education from other expenditures, splitting the latter into current operations and other expenditures (consisting largely of interest payments for debt). Capital outlays are subdivided into construction, land and existing structures, instructional equipment, and other equipment. In FY 2013 in Arizona, 90 percent of the expenditures were for current operations, 7.4 percent were for capital outlays, and 2.6 percent were for other purposes. These shares were close to the national average.

For purposes of assessing public support for education, the only category used is current operations, which is split into three subcategories. The instruction subcategory is the largest, accounting for 56 percent of current operations in Arizona in FY 2013. It includes wages and salaries, employee benefits, and purchases of supplies directly related to instruction. The support services subcategory accounted for 39 percent of current operations. It is split into seven parts: pupil support, instructional staff support, “general” administration (school districts), school administration, plant operations and maintenance, pupil transportation, and other (business support, such as printing, and central support, such as planning). The third subcategory accounts for the other 5 percent and includes such functions as food services and adult education.

Comparison of JLBC and Census Bureau, K-12

Though conceptually similar, the Arizona data for K-12 education from the Census Bureau differ considerably from the figures reported by the JLBC in their annual report on K-12 finance. Total funding reported by the JLBC has been consistently higher than reported by the Census Bureau in each year of the available time series (FYs 2000 through 2013); in FY 2013, the difference exceeded \$1 billion. One cause of the lower total funding reported by the Census Bureau is that charter schools operated by nongovernmental entities are excluded from the Census Bureau's data.⁸ Despite the lower overall figures reported by the Census Bureau, spending for current operations reported by the Census Bureau has been higher in each year than reported by the JLBC. The difference in FY 2013 was more than \$300 million. In contrast, the JLBC's figures for capital outlays/other expenditures are considerably higher than those of the Census Bureau. Relative to the Census Bureau, the JLBC reports greater funding from state government in each year, while its local government and federal government figures are higher in some years but lower in other years than reported by the Census Bureau.

The lower figures reported by the Census Bureau have caused critics to dismiss the Census Bureau's report that shows K-12 funding per student in Arizona to be near the bottom of the states. This criticism is misguided in that the Census Bureau also reports a significantly lesser number of students than the JLBC; the difference exceeded 100,000 in FY 2013. Considering the Census Bureau's higher figures for current operations and lower figures for the number of students, the Census Bureau reports *higher* per student current operations funding than the JLBC. Since current operations is the focus of analyses of public support, the conclusions from the Census Bureau's study should not be dismissed.

SHEEO, Public Higher Education Finance

The State Higher Education Executive Officers Association released the latest of their annual reports on "State Higher Education Finance" in April 2015 (<http://www.sheeo.org/projects/shef-%E2%80%94state-higher-education-finance>). The time series runs from fiscal years 2000 through 2014. The data reported by SHEEO are not as comprehensive as the Census Bureau's data. Federal funding is not included, except for monies distributed through the American Recovery and Reinvestment Act of 2009 (ARRA) for fiscal years 2009 through 2012. Expenditures are limited to current operations — capital outlays and debt payments are not included. Funds for research, agricultural extension, and medical education are accounted for separately.

SHEEO collects their data from contacts in each state. While instructions are provided to state sources that report the data to SHEEO, inconsistencies in reporting are a concern. Appropriations, not actual expenditures, are reported. Funding from local governments as well as from the state government is collected. All higher education institutions are combined; data are not available specific to community colleges or to universities.

⁸ A charter school is a school that receives public funding for operations but is independent of the established public school system in which it is located. Some charter schools are operated by school districts or other governments, but others are organized as not-for-profit or for-profit entities by nongovernmental groups. The finances of the charter schools run by nongovernmental organizations are excluded by the Census Bureau from its report on K-12 finance.

Unlike the Census Bureau, SHEEO reports the amount of funding by source. Five categories are addressed in this paper:

- “State Support for Public Higher Education”: state government appropriations and ARRA.
- “Local Support for Higher Education”: local government funding.
- “Educational Appropriations”: the part of state and local support available for operating expenses, calculated by subtracting appropriations for special purposes, research, and medical programs.
- “Net Tuition”: tuition and fees less financial aid from state and institutional sources, student waivers and discounts, and medical student tuition and fees.
- “Total Educational Revenue”: educational appropriations plus net tuition, less tuition revenue used for capital outlays or debt service.

Because of the inclusion of tuition, total educational revenue is considered to be less meaningful than educational appropriations in evaluating public support for public higher education.

SHEEO creates its own measure of inflation, which is based 25 percent on the gross domestic product implicit price deflator and 75 percent on the employment cost index for management and professional occupations.⁹ Typically, the inflation rate from this measure is between the lower rates measured by the consumer price index and the higher rates measured by the higher education price index, but little difference in the rates has been measured in recent years.¹⁰

For comparisons across states, SHEEO provides two other adjustments:

- A measure of the cost of living is provided, but the cost-of-living index by state comes from a 2003 study and values are held constant across the FY 2000-to-2014 time period. A more timely and accurate measure is now available (described in the Standardization of Data section of this paper).
- A measure of the enrollment mix is included to reflect differences by state in the share of enrollment at different types of institutions of higher education. The measure was calculated using fiscal year 2011 data. Like the cost of living, the value is held constant across the FY 2000-to-2014 time period.

While each of these adjustments is conceptually desirable, SHEEO’s adjusted funding data are de-emphasized in this paper due to SHEEO’s holding each adjustment factor constant over the FY 2000-to-2014 period and its use of the inferior and dated cost-of-living measure.

⁹ The GDP implicit price deflator is produced by the U.S. Department of Commerce’s Bureau of Economic Analysis, <http://bea.gov/national/index.htm#gdp>. The employment cost index, which measures the change in the cost of labor, free from the influence of employment shifts among occupations and industries, is produced by the U.S. Department of Labor’s Bureau of Labor Statistics, <http://www.bls.gov/ncs/ect/>.

¹⁰ The CPI also is produced by the Bureau of Labor Statistics, <http://www.bls.gov/cpi/>. The HEPI, an inflation index designed specifically to track the main cost drivers in higher education, is produced by the Commonfund Institute, <https://www.commonfund.org/CommonfundInstitute/HEPI/Pages/default.aspx>.

Time Period Analyzed

Though a longer historical period is occasionally presented, this paper focuses on the period since FY 1992. This year was selected since the first of the many tax reductions passed by the Arizona Legislature was implemented in FY 1993. In addition, FY 1992 is the first year that the Census Bureau's data are available electronically, and is only three years later than the JLBC's earliest data for other funds and unappropriated funds.

The most recent year of data varies by source. The JLBC's data on revenue runs through FY 2014; its expenditure data include appropriations and estimated unappropriated spending for FY 2016, the year that began on July 1, 2015. The Census Bureau's data run through FY 2012 for the state and local government series and through FY 2013 for the K-12 series. The SHEEO's data go through FY 2014.

The period since FY 1992 has been subdivided in some analyses in this paper. The FY 1992-to-2002 and 2002-to-2011 periods compare similar points of successive economic cycles. The period since FY 2008 looks at the changes since the high point of the prior economic cycle.

Geographic Areas Compared

The data from the Census Bureau and SHEEO can be used to compare states. In this paper, Arizona's revenues and expenditures are compared to the national average and Arizona's rank among the states is reported. The District of Columbia is included as a 'state' in the Census Bureau's data but not in SHEEO's data. In addition, ranks have been computed for Arizona among 10 western states. The other western states are California, Colorado, Idaho, Nevada, New Mexico, Oregon, Texas, Utah, and Washington.

STANDARDIZATION OF DATA

Any analysis of government finance must standardize the data. Data used to examine changes over time must be adjusted for inflation and for changes in the size of the geographic area. Data used to compare states must be adjusted for differences in size and in the cost of living.

Size

Various measures of size have been used to adjust government finance data; the most common are population and personal income. For programs that serve only a portion of the population, such as elementary and secondary education, the actual number of people served — the caseload — is a far better measure of size than total population. Depending on the measure of size used, conclusions regarding government finance may differ considerably.

Population

Population is one measure used to adjust for changes in the size of a state over time and to compare states in a given year. The U.S. Census Bureau's annual estimates, which are expressed as of July 1, are the most common measure of population. In order to better approximate the fiscal year, the population estimates on the first day of the fiscal year and on the first day of the following fiscal year are averaged in this paper to calculate per capita revenues and expenditures.

Since 2000, an alternative time series of population estimates for Arizona is available from the Arizona Department of Administration's Office of Employment and Population Statistics

(OEPS). Its annual time series is believed to more accurately reflect changes in Arizona's population from 2000 through 2010 than the Census Bureau's time series. In this paper, the estimates from the OEPS, also converted to fiscal year averages, are used to adjust time series analyses of the JLBC's data.

Caseload Measures

Use of the overall population to adjust for size is reasonable for some purposes, such as evaluating expenditures across states for public programs that benefit the entire population. However, if a program serves only a portion of the population and if a measure of the number of people served, such as the number of K-12 students, is available, then adjusting by the caseload is far superior to adjusting for the entire population. Caseloads as a share of the population vary over time.

Towards the end of this paper, expenditure data for certain programs are adjusted by caseload instead of total population. For education programs, the caseload is the number of students, but multiple measures of the number of students are available. For higher education, full-time-equivalent (FTE) enrollment generally is used instead of the headcount since so many students, particularly at community colleges, are enrolled part time. SHEEO uses a version of FTE enrollment that excludes medical school students.

The number of K-12 students may be expressed in any of three ways:

- Enrollment: as of a particular date (typically October 1).
- Average daily membership (ADM): an average of enrollment taken on different dates during the year.
- Average daily attendance (ADA): an average of the actual number of students present in school on different dates during the year.

Even within one category of counting the number of K-12 students, such as enrollment on October 1, multiple time series may be available. For example, the October 1 enrollment figures provided by the Arizona Department of Education do not match those reported by the U.S. Department of Education's National Center for Education Statistics (NCES) in most years. Similarly, the ADM figures used by the JLBC in their report on K-12 finance do not match the membership figures reported by the NCES. The membership series used by the Census Bureau in their report on K-12 education finance consists of lower numbers than either of the other membership series due to the exclusion of students attending privately operated charter schools.

Average daily membership is conceptually a stronger measure than enrollment on one date. However, states use varying formulas to calculate membership — for example, the time period may be the entire school year or may be a shorter period, such as the first 100 days. Because of this, the National Education Association states that “fall enrollment has replaced average daily attendance and average daily membership as the preferred measure of student participation” when making interstate comparisons. However, since an enrollment measure that excludes privately run charter school students is not available, the membership figures included in the Census Bureau's K-12 finance report are used to standardize the Census Bureau's K-12 finance data in this paper.

Personal Income

The U.S. Department of Commerce's Bureau of Economic Analysis (BEA) produces quarterly estimates of personal income by state. An average for the fiscal year is used in this paper. The personal income of an area represents the income that is received by, or on behalf of, all the persons who live in that area. It is the sum of wages and salaries, supplements to wages and salaries (employee benefits), proprietors' income, rental income of persons, personal dividend income, personal interest income, and personal current transfer receipts, less contributions for government social insurance.

When adjusting government finance data by personal income, the revenue or expenditure data typically are expressed per \$1,000 of personal income. Alternatively, the finance data could be expressed as a percentage of personal income. For example, an expenditure of \$50 per \$1,000 of personal income is equivalent to 5 percent of personal income.

The personal income measure inherently incorporates inflation, population, and cost of living. In addition, it is a measure of prosperity. As such, it incorporates the ability of taxpayers to pay taxes that is not present in the per capita measure. It is also possible to incorporate the concept of ability to pay when using caseload data, by expressing spending per recipient per \$1,000 of per capita personal income (PCPI).¹¹

Choice of Population or Personal Income

The difference between using personal income or population adjusted for inflation or the cost of living to adjust government finance data is the prosperity component of personal income. For revenue data that are compared across states, personal income generally is regarded as the superior adjustment because it incorporates the concept of ability to pay. Similarly, changes over time in the ability to pay generally should be included in the adjustment of changes in revenue over time.

For a time series of expenditure data, personal income again is the preferred adjustment. However, for expenditure data for a given year that are compared across states, it is less clear that personal income is the preferred measure. If policymakers in a state with below-average prosperity, such as Arizona, limit certain types of expenditures due to the below-average ability of its taxpayers to pay taxes, the result may be to perpetuate the state's low prosperity. States compete with each other (and with other countries) for economic development. The two most important business location factors are the availability and quality of the workforce and the availability and quality of the physical infrastructure.¹² A state that does not adequately prepare its residents for the workforce through K-12 education, higher education, and job training and that provides an inferior physical infrastructure is placing itself at a significant disadvantage in economic development, particularly in terms of competing for high-quality jobs.

¹¹ PCPI is calculated by the BEA, using the Census Bureau's population estimates. For analyses of JLBC's data over time, the population estimates produced by the OEPS since 2000 have been used to calculate an alternative measure of PCPI.

¹² For more information, see the November 2014 paper "Overview of Economic Competitiveness: Business and Individual Location Factors, With a Focus on Arizona" at <https://wpcarey.asu.edu/sites/default/files/uploads/center-competitiveness-and-prosperity-research/competitiveness11-14.pdf>.

The per capita and per \$1,000 of personal income measures are compared in Table 1, using the latest data for own-source revenue from the Census Bureau. Since Arizona's cost of living in FY 2012 was only 2.2 percent less than the national average, the adjustment of the per capita measure to reflect living costs has only a modest effect on the Arizona's ratio to the nation or its rank among the states.

Arizona's per capita personal income in FY 2012 was much lower (16.6 percent) than the national average, so Arizona's shortfall in own-source revenue relative to the nation was not nearly as large using the per \$1,000 of personal income measure (8.3 percent) as the per capita measure (21.8 percent adjusted for the RPP). Regardless of the revenue or expenditure category examined, the proportional difference between the per capita and per \$1,000 of personal income measures is the same. In contrast, the difference in the state's rank across the standardization measures varies by revenue and expenditure category. While there is an 11-spot difference in the own-source revenue category, there is no difference in some categories.

As seen in Table 1, the percent change over time is much higher using the inflation-adjusted per capita measure than the per \$1,000 of personal income measure. The latter reflects the significant increases in real per capita economic growth over time.

Both of the adjustments for size — population and personal income — are presented in this paper. For the sake of brevity, the per \$1,000 of personal income measure generally is emphasized.

**TABLE 1
EXAMPLE OF VARIOUS DATA STANDARDIZATIONS**

Fiscal Year 2012	United States	Arizona	Arizona Percentage of Nation	Arizona Rank*
Own-Source (O-S) Revenue in Millions	\$2,013,544	\$32,063		
Population	312,728,125	6,509,973		
Personal Income in Millions	\$13,501,582	\$234,445		
Per Capita Personal Income	\$43,174	\$36,013	83.4%	42
Regional Price Parity	100.0	97.8		
Own-Source Revenue Per Capita	\$6,439	\$4,925	76.5%	48
O-S Revenue Per Capita, Adjusted by RPP	\$6,439	\$5,036	78.2%	51
O-S Revenue Per \$1,000 of Personal Income	\$149.13	\$136.76	91.7%	40
Percent Change Between FYs 1992 and 2012				
O-S Revenue Per Capita, Inflation Adjusted	38.0%	19.0%		50
O-S Revenue Per \$1,000 of Personal Income	-2.2%	-12.2%		48

* Among 51 states, where 1 equals the highest value.

Sources: U.S. Department of Commerce: Census Bureau, State and Local Government Finance, <http://www.census.gov/govs/local/> (revenue and population), and Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income and regional price parity).

Inflation

When the per capita measure is used in analyses over time, the time series must be adjusted for inflation: the change in prices over time. Most commonly in analyses of government finance, the adjustment for inflation is made with the national gross domestic product implicit price deflator (GDP deflator) produced by the BEA. Since the GDP deflator is released quarterly, a fiscal year average can be calculated, which is used in this paper.

Other measures of inflation, such as the consumer price index, sometimes are used. A narrower indicator, such as the higher education price index, may be used in a more specific analysis.

Cost of Living

When the per capita measure is used in analyses across states, the data must be adjusted for the cost of living: differences in the level of prices across geographic areas. Historically, the cost of living was not estimated on an ongoing basis. Wide differences were seen in estimates made by various organizations that used different methodologies and data. However, the BEA recently began to release estimates of living costs by state and metropolitan area, referred to as the regional price parity (RPP). Currently, estimates are available only for calendar years 2008 through 2013, so time series analyses of per capita government finance in this paper do not incorporate the cost of living. However, the RPP figures — averaged over calendar years to estimate a fiscal year figure — are used to adjust the latest year of government finance data.¹³

REVENUES

As of early July 2016, the latest data available on state government revenues are for FY 2014.¹⁴ The latest state and local government data from the Census Bureau are for FY 2012.

Joint Legislative Budget Committee

Ongoing revenue excludes one-time adjustments, such as transfers from other funds. Revenue from the temporary sales tax increase also is not included in fiscal years 2011 through 2013.¹⁵ General fund ongoing revenue in FY 2014 is summarized in Table 2. The sales tax and the income tax accounted for 90 percent of the total ongoing revenue.

Percent changes over various time periods in general fund revenue per \$1,000 of personal income also are shown in Table 2. Significant declines occurred overall and in most categories in each of the time periods shown. Revenue per \$1,000 of personal income dropped between FYs 1992 and 2014 in every category except the insurance premium tax, but declines in revenue were particularly significant among miscellaneous taxes and nontax sources. Among the

¹³ For more information on the RPP, see the August 2014 paper “Measures of Prosperity and Productivity Adjusted for the Cost of Living” at <https://wpcarey.asu.edu/sites/default/files/uploads/center-competitiveness-and-prosperity-research/prosperitycol8-14.pdf>. The RPP for each state changes over time, but not by a significant amount in any one year. The index for Arizona gradually fell from 100.6 in 2008 to 97.1 in 2013.

¹⁴ A preliminary estimate of overall revenue collected by state government in FY 2015 will be released by the JLBC in late July 2015, but detailed data will not be available for several more weeks.

¹⁵ In May 2010, voters approved a one percentage point increase in the state sales tax rate from June 2010 through May 2013. The revenue from the temporary increase — \$865 million in FY 2011, \$916 million in FY 2012, and \$962 million in FY 2013 — was dedicated to certain purposes and was not shared with county and city governments.

TABLE 2
ARIZONA STATE GOVERNMENT GENERAL FUND ONGOING REVENUE

	Fiscal Year 2014		Fiscal Year Percent Change, Per \$1,000 of Personal Income			
	Millions	Share of Total	1992- 2014	1992- 2002	2002- 2011*	2008- 2014
TOTAL ONGOING REVENUE	\$8,270.8	100.0%	-34%	-23%	-17%	-15%
Total Taxes	7,959.1	96.2	-33	-22	-17	-15
Sales	3,985.9	48.2	-27	-6	-25	-18
Income	3,476.6	42.0	-25	-26	-5	-12
Individual	3,462.3	41.9	-23	-21	-11	-9
Corporate	575.2	7.0	-25	-23	5	-36
Urban Revenue Sharing*	-561.0	-6.8				
Insurance Premium	411.8	5.0	12	-9	38	-9
Other	84.8	1.0	-94	-77	-72	-8
Total Nontax	311.7	3.8	-51	-30	-22	-22
Lottery	80.3	1.0	-37	-59	71	49
Other	231.4	2.8	-54	-23	-35	-33

* Revenue from the temporary sales tax increase is not included.

** Urban Revenue Sharing, approved by voters in a ballot initiative in 1972, distributes 15 percent of individual and corporate income tax revenues collected two years earlier to incorporated cities and towns.

Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (revenue); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

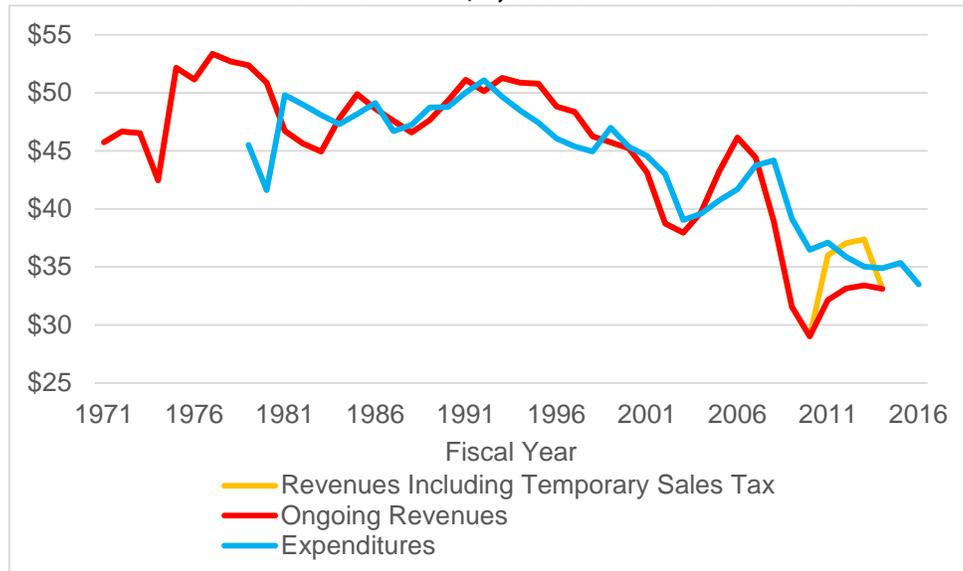
miscellaneous taxes are the statewide property tax and the portion of the vehicle license tax going to the general fund, each of which were eliminated in the late 1990s.

The decreases in revenue from taxes largely result from reductions in tax rates and other statutory changes, such as expanded tax credits. However, other factors, such as economic cycles, also contribute. The effects of changing economic conditions are partially controlled for by comparing similar points of two economic cycles in the FY 1992-to-2002 and 2002-to-2011 time periods.

Ongoing general fund revenue per \$1,000 of personal income going back to the earliest data in FY 1971 is shown in Chart 1 by the red line. The up-and-down fluctuations in the time series result from variations in the economic cycle and/or changes in the tax code. The downtrend in the value since the mid-1990s is largely due to the many tax reductions passed since the early 1990s. The FY 2014 figure was 32 percent less than the average of the FY 1971-through-1992 period.

Other than for the general fund, a complete accounting of state government revenue is not available. An estimate of own-source revenue, divided into the general fund and other state funds, was created using the JLBC's annual "Tax Handbook," but the general fund total calculated by this method in recent years has been 3-to-5 percent less than the ongoing general

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



Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (revenues and expenditures); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

fund revenue reported elsewhere by the JLBC.¹⁶ The distribution of revenue by fund is not fully available in earlier years, so Chart 2 begins in FY 1999. As seen in the chart, revenue per \$1,000 of personal income for funds other than the general fund has essentially been flat — the higher figures from fiscal years 2011 through 2013 reflect the temporary sales tax. Thus, total revenue per \$1,000 of personal income has trended down similarly to general fund revenue, with up-and-down fluctuations reflecting the economic cycle.

Fiscal Impact of Statutory Tax Changes

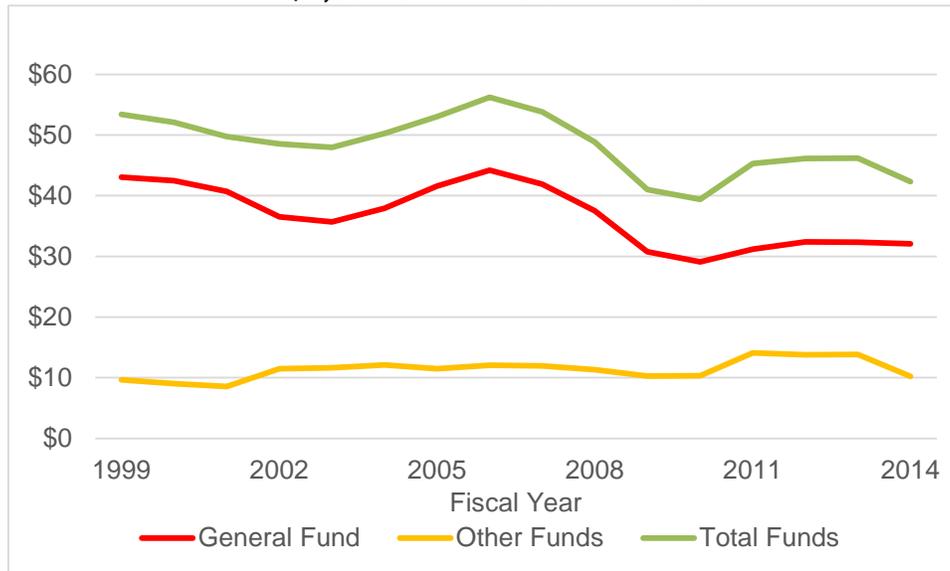
Beginning in FY 1993, a series of tax reductions that have reduced revenue to the general fund have been implemented. The JLBC annually estimates the effect of the tax law changes that affect the general fund.¹⁷ In the 23 years through FY 2015, taxes were reduced in 20 years. Additional tax reductions are scheduled to be implemented in each year through FY 2019.

To bring the original unadjusted estimates of the impacts of the tax law changes shown in Chart 3 forward to the current time, the estimates need to be adjusted for inflation, population growth, and real per capita economic growth. To accomplish this, the tax changes in each year are expressed per \$1,000 of personal income. These figures are then cumulated over time. The cumulative change in each year then is multiplied by the personal income in that year to determine the effect of the tax changes on general fund revenue. In FY 2014, general fund

¹⁶ The “Tax Handbook” is available at <http://www.azleg.gov/jlbc/economicanalysis.htm>.

¹⁷ Published in the appendix to the “Tax Handbook” at <http://www.azleg.gov/jlbc/economicanalysis.htm>.

**CHART 2
ARIZONA STATE GOVERNMENT REVENUES
PER \$1,000 OF PERSONAL INCOME**



Note: Revenue from the temporary sales tax increase is included in the other funds and total funds lines. More generally, general fund revenue is calculated differently in Charts 1 and 2 — see text.

Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (revenues); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

revenue was nearly \$3.5 billion less than it would have been had no tax changes been implemented since FY 1992. The estimated effect in FY 2015 is \$3.7 billion. Without any further tax changes, this figure will continue to grow with the size of the Arizona economy and with the continued phase-in of tax reductions already passed.

Estimated revenue per \$1,000 of personal income in FY 2015 was 35 percent lower than the historical norm. The tax changes reduced general fund revenue in FY 2015 by more than \$14 per \$1,000 of personal income, or 31 percent. Had no tax changes occurred since the early 1990s, revenue per \$1,000 of personal income in FY 2015 would have been only 5 percent lower than the historical norm (FYs 1971 through 1992). The below-average figures of the last several years are due to the severity of the last recession and the incomplete economic recovery that has occurred since then. In Chart 4, actual general fund revenue per \$1,000 of personal income is compared to the revenue that would have been received had no tax changes been implemented since FY 1992.

The JLBC estimates the effects of tax law changes only for the general fund. Since the early 1990s, there have been several voter-approved tax increases that have not affected the general fund, including four increases in tobacco taxes between 1994 and 2006. The additional revenue from these tobacco tax increases primarily is directed to health programs and to early childhood development. In addition, voters passed a 20-year increase in the general sales tax rate in 2000.

CHART 3
ESTIMATE OF ANNUAL CHANGE IN ARIZONA STATE GOVERNMENT
GENERAL FUND ONGOING TAX REVENUE DUE TO STATUTORY CHANGES,
IN MILLIONS OF UNADJUSTED DOLLARS

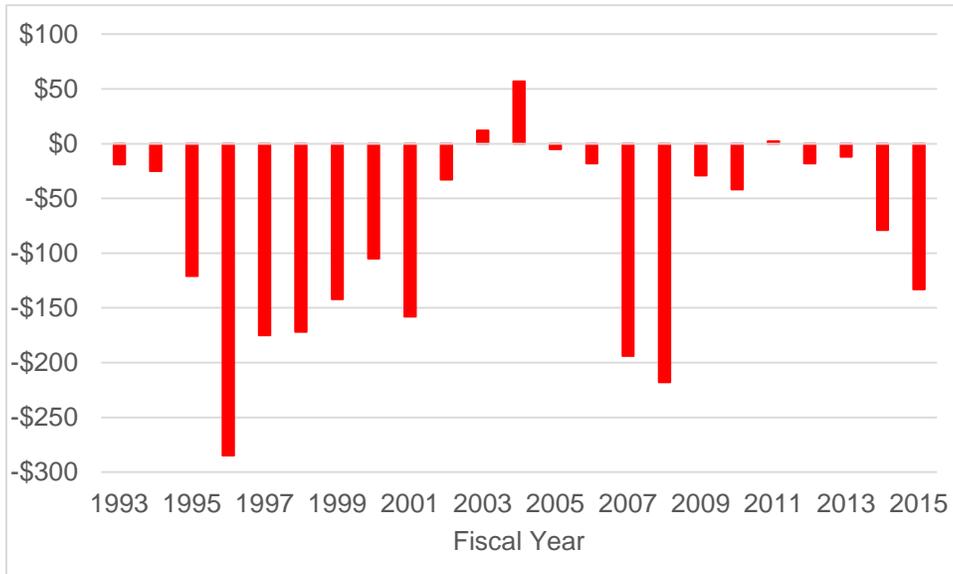
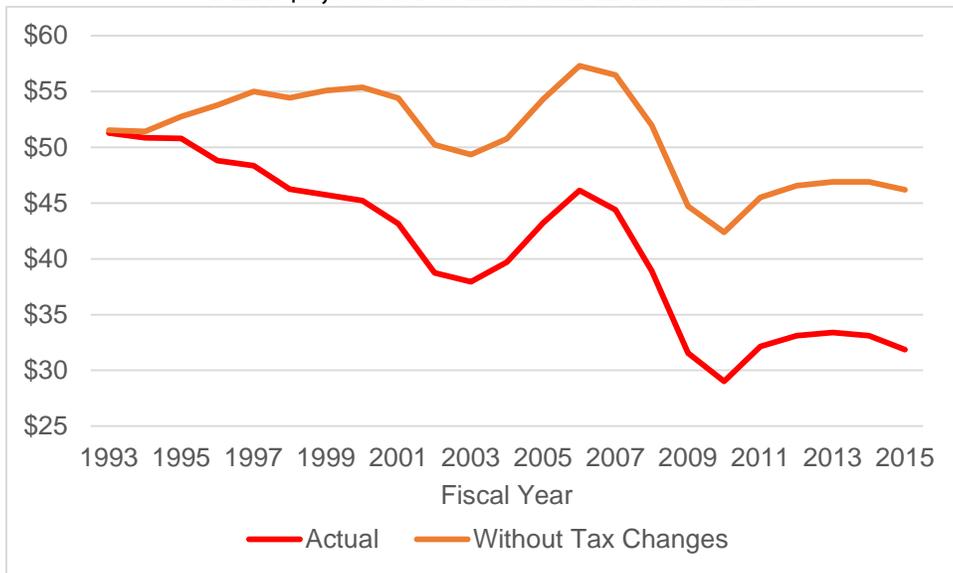


CHART 4
ARIZONA STATE GOVERNMENT GENERAL FUND ONGOING REVENUE
PER \$1,000 OF PERSONAL INCOME



Note (Charts 3 and 4): Revenue from the temporary sales tax increase in FYs 2011 through 2013 is not included.

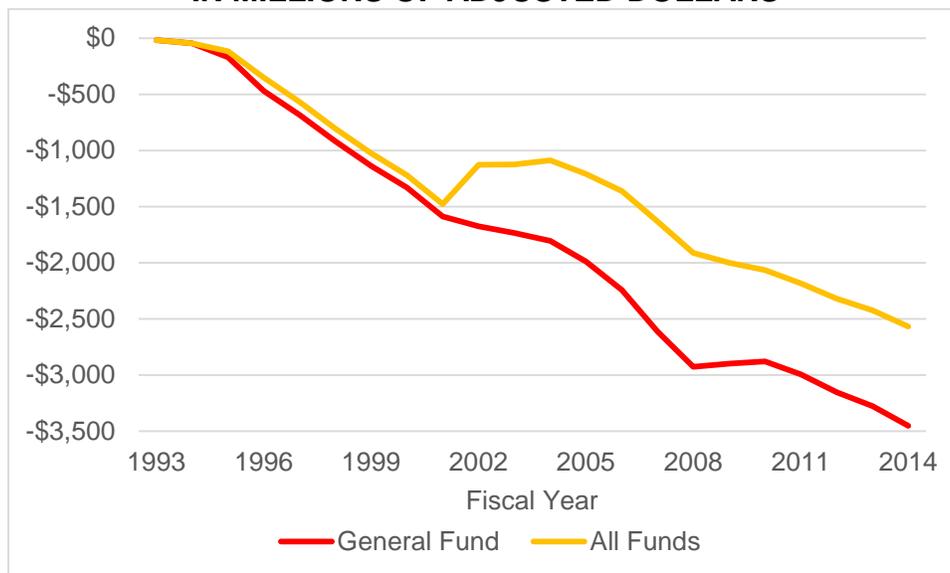
Sources (Charts 3 and 4): Arizona Joint Legislative Budget Committee, "Tax Handbook," <http://www.azleg.gov/jlbc/14taxbook/14taxbk.pdf> (revenue and change in revenue due to tax changes); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

Most of this revenue goes to K-12 education, with lesser amounts directed to the School Facilities Board and higher education. Actual revenue from these tax increases are reported by the JLBC. In FY 2014, the total approached \$900 million, two-thirds of which came from the general sales tax increase. The net effect of these tax increases and the reductions to general fund revenues caused by changes in the tax code is a loss of state government revenue of nearly \$2.6 billion in FY 2014 (see Chart 5). The net effect in FY 2015 likely was a reduction of \$2.8 billion.

Census Bureau

A summary of the Census Bureau’s estimate of combined state and local government revenue is provided in Table 3. Total revenue in FY 2012 was \$43.4 billion in Arizona. Per \$1,000 of personal income, Arizona’s revenue was 3.7 percent less than the national average, ranking 34th nationally and sixth among 10 western states. Per capita adjusted for the cost of living, Arizona ranked 49th (ninth in the West) at 18 percent below average. Revenue per \$1,000 of personal

**CHART 5
CHANGES IN ARIZONA STATE GOVERNMENT ONGOING TAX REVENUE,
IN MILLIONS OF ADJUSTED DOLLARS**



Note: The initial impacts of general fund tax code changes were estimated by the JLBC. To bring these estimates forward — to reflect inflation, population growth, and real per capita economic growth — the JLBC’s estimates were adjusted using personal income. Actual data were used for voter-approved tax increases benefiting other funds.

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

Sources: Arizona Joint Legislative Budget Committee, “Tax Handbook,” <http://www.azleg.gov/jlbc/14taxbook/14taxbk.pdf> (general fund change in revenue and actual collections from voter-approved tax increases); and U.S. Department of Commerce, Bureau of Economic Analysis <http://bea.gov/regional/index.htm> (personal income).

**TABLE 3
ARIZONA STATE AND LOCAL GOVERNMENT REVENUE**

	Millions	Share of Total	Fiscal Year 2012 Per Capita, Adjusted by RPP		Per \$1,000 of Personal Income		Percent Change Over Time, Per \$1,000 of Personal Income [^]				
			Ratio to U.S. Average	Rank	Ratio to U.S. Average	Rank	FY 1993- 2012	Rank			
								FY 1993- 2012	FY 1993- 2002	FY 2002- 2011	FY 2008- 2012
TOTAL REVENUE	\$43,423	100.0%	82.1%	49	96.3%	34	-2%	37	45	17	22
From Federal Government	11,360	26.2	95.5	35	111.9	26	40	11	28	2	28
Own Source	32,063	73.8	78.2	51	91.7	40	-11	45	46	35	28
Taxes	22,193	51.1	78.5	45	92.1	36	-17	50	46	40	26
Property	6,848	15.8	75.4	36	88.4	29	-22	47	47	36	35
General Sales*	8,614	19.8	134.4	13	157.6	6	-1	15	7	29	15
Selective Sales	2,148	4.9	65.3	49	76.5	42	-21	39	46	28	34
Motor Fuels	897	2.1	106.3	24	124.6	13	-27	14	25	20	4
Alcoholic Beverages	68	0.2	51.7	38	60.6	32	-47	38	39	43	21
Tobacco Products	319	0.7	89.1	31	104.5	28	87	11	5	31	51
Public Utilities	203	0.5	34.8	39	40.8	38	-65	48	49	41	36
Other	660	1.5	48.1	46	56.4	46	13	31	41	12	43
Individual Income**	3,094	7.1	49.4	42	58.0	41	-30	44	44	34	29
Corporate Income*	648	1.5	64.9	35	76.1	32	-17	28	22	31	28
Motor Vehicle License	184	0.4	37.0	50	43.4	48	-73	50	51	24	48
Other Taxes	657	1.5	38.1	48	44.6	45	3	22	10	40	28
Nontax	9,870	22.7	77.5	46	93.8	38	6	21	41	14	25
Current Charges	6,979	16.1	80.3	40	94.2	32	36	10	41	5	1
Higher Education	1,933	4.4	95.7	34	112.2	27	3	37	48	8	9
Hospitals	1,939	4.5	77.1	33	90.4	30	270	1	35	6	2
Other Charges	3,107	7.2	74.8	42	87.7	26	14	27	38	10	24
Other Nontax	2,891	6.7	71.5	47	83.8	40	-31	43	35	34	50

Note: The ranks are among the 50 states plus the District of Columbia, with a rank of 1 given to the highest ratio/greatest percent change.

[^] Since data for FY 1992 are not available for some of the categories, this analysis begins in FY 1993.

* 47 states levy this tax.

** 44 states levy this tax.

Sources: U.S. Department of Commerce: Census Bureau, State and Local Government Finance, <http://www.census.gov/govs/local/> (revenue and population), and Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income and regional price parity).

income fell 2 percent between fiscal years 1993 and 2012, a below-average change ranking 37th among the states.¹⁸

The federal government provided 26 percent of Arizona's state and local government revenue in FY 2012. Though the amount per \$1,000 of personal income exceeded the national average, Arizona ranked among the middle of the states nationally and in the West. Per capita adjusted by the RPP, the figure was below average and ranked 35th. The increase relative to personal income was among the highest in the nation between FYs 2002 and 2011, and was above average for the FY 1993-to-2012 period at 40 percent.

Own-source revenue, which consists of state and local government tax and nontax revenue, totaled \$32.1 billion in Arizona in FY 2012. The amount per \$1,000 of personal income was 8 percent below the national average and ranked 40th nationally and ninth among 10 western states. Own-source revenue per capita adjusted for the cost of living was 22 percent less in Arizona than the U.S. average — the lowest in the nation. The change over the FY 1993-to-2012 period in own-source revenue per \$1,000 of personal income was among the lowest in the country, with a decline of 11 percent.

A longer time series of Arizona's state and local government revenue per \$1,000 of personal income relative to the national average is shown in Chart 6. Historically, Arizona's own-source revenue was higher than the national average. In the late 1960s and early 1970s, Arizona's figure slipped to about equal to the national average and stayed at this proportion into the 1990s. Since then, Arizona's own-source revenues have been below the national average. Revenues from the federal government were considerably above average during the 1960s, but dropped to more than 20 percent below average during the 1980s. The ratio has climbed since then, rising to above the national average in FY 2003.

Tax Revenue

Taxes accounted for nearly 70 percent of own-source revenue, and a little more than one-half of total revenue, in Arizona in FY 2012. Per \$1,000 of personal income, taxes were 8 percent below the national average and ranked 36th nationally and sixth among the 10 western states. Taxes per capita adjusted for the cost of living were 21 percent below average and ranked 45th. Between FYs 1993 and 2012, taxes per \$1,000 of personal income dropped 17 percent; only one state had a larger decrease.

Based on the longer time series displayed in Chart 7, tax revenue per \$1,000 of personal income was as much as 20 percent above the national average during the 1960s. During the 1970s and 1980s, Arizona's tax burden generally was above the U.S. average. In FY 1990, the figure was 8 percent above the national average, but the ratio dropped below average in FY 1997 and was as much as 11 percent below average in FY 2010.

Arizona's collections per \$1,000 of personal income in FY 2012 were significantly below the national average among most of the sources of tax revenue. Three taxes accounted for more than 80 percent of the collections in FY 2012:

¹⁸ Since several of the revenue categories were not published by the Census Bureau until FY 1993, this year rather than FY 1992 is used as the start of the time series.

CHART 6
STATE AND LOCAL GOVERNMENT REVENUE PER \$1,000 OF PERSONAL
INCOME, ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE

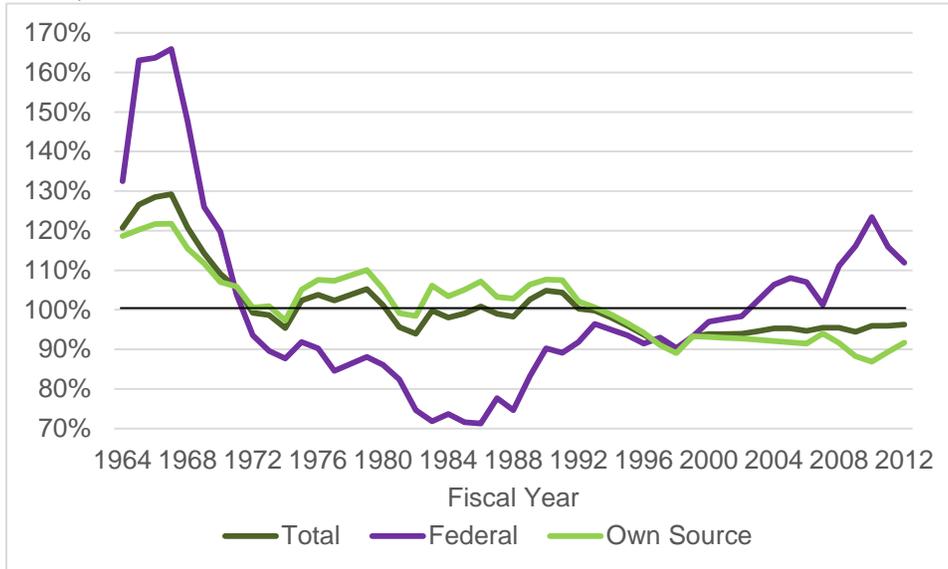


CHART 7
STATE AND LOCAL GOVERNMENT OWN-SOURCE REVENUE
PER \$1,000 OF PERSONAL INCOME,
ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



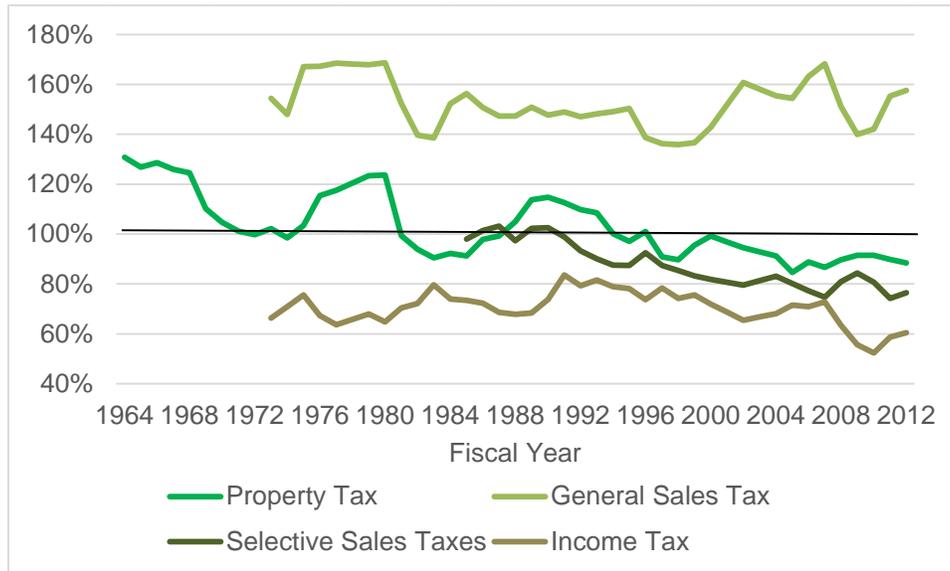
Sources (Charts 6 and 7): U.S. Department of Commerce: Census Bureau, State and Local Government Finance, <http://www.census.gov/govs/local/> (revenue), and Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

- The individual income tax burden per \$1,000 of personal income was 42 percent below average and among the lowest of the states that levy this tax. The decrease of 30 percent per \$1,000 of personal income between FYs 1993 and 2012 was the largest in the country.
- The property tax per \$1,000 of personal income was 12 percent below average in FY 2012. The 22 percent decline per \$1,000 of personal income between FYs 1993 and 2012 was among the greatest in the nation.
- The general sales tax differs from most taxes in having a high burden that is not falling. Per \$1,000 of personal income, Arizona had the sixth-highest figure in the nation (third among the western states) in FY 2012 and an above-average percent change between FYs 1993 and 2012. However, the slight loss of 1 percent per \$1,000 of personal income is misleading since the temporary sales tax was in place in FY 2012. The decrease will be larger when FY 2014 data become available.

As seen in Chart 8, collections per \$1,000 of personal income have trended down over time in Arizona relative to the national average for the property tax and for selective sales taxes. The income tax — the combination of the individual and corporate taxes — has been substantially below the national average and has trended down since the early 1990s. In contrast, the general sales tax has fluctuated at a level much above the national average.

Among the lesser sources of tax revenue, collections in Arizona per \$1,000 of personal income in FY 2012 were considerably below average in most. The percent change between FYs 1993

CHART 8
STATE AND LOCAL GOVERNMENT TAXES PER \$1,000 OF PERSONAL INCOME,
ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



Sources: U.S. Department of Commerce: Census Bureau, State and Local Government Finance, <http://www.census.gov/govs/local/> (revenue), and Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

and 2012 varied widely, from an 87 percent increase in tobacco taxes to a decrease of 73 percent in the motor vehicle license tax.

Other Revenue

State and local government revenues other than from taxes accounted for 23 percent of Arizona's total revenue in FY 2012. The figure per \$1,000 of personal income was 6 percent less than the U.S. average and ranked 38th nationally and eighth among the 10 western states. Per capita adjusted by the RPP, nontax revenue was 22 percent below average and ranked 46th (ninth in the West). The change over time relative to personal income of 6 percent was similar to the national average.

As seen in Chart 7, own-source nontax revenue per \$1,000 of personal income fell considerably relative to the national average from the mid-1980s through early 1990s. The figure has been below the national average since FY 1992. Among nontax sources of revenue, Arizona's figure per \$1,000 of personal income was below the national average in FY 2012 for both current charges (user fees) and miscellaneous other revenues. Arizona ranked eighth among the 10 western states in each subcategory. Between FYs 1993 and 2002, the percent change in each of the nontax sources was below average, but after that, current charges for higher education and hospitals increased by among the most in the nation.

EXPENDITURES

Spending by state government is available from the JLBC through FY 2016, with the latest data based on appropriations and estimates of unappropriated spending. The latest state and local government data from the Census Bureau are for FY 2012.

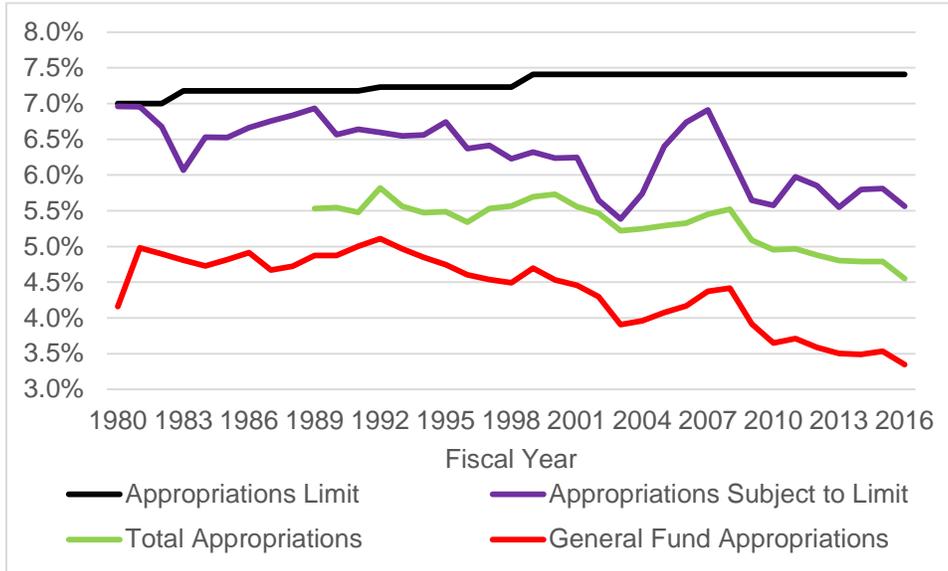
Joint Legislative Budget Committee

According to the JLBC, "The Arizona Constitution restricts the appropriation of certain state revenues to no more than 7.41 percent of Arizona personal income. ... In general, the revenues subject to the appropriations limit consist of (1) taxes, (2) university collections, and (3) licenses, fees and permits. These revenues may be either general or earmarked for special purposes. The appropriation of certain other state revenues is not subject to the limit. These revenues include (1) interest and dividends, (2) receipts from sales, rentals and consideration for services, (3) federal grants, (4) donations and gifts, and (5) amounts received by the state in the capacity of trustee, custodian or agent." The historical record of the limit and appropriations subject to the limit is shown in Chart 9; general fund appropriations and total appropriations are displayed for comparison. Appropriations in recent years have been far below the limit.

The state government budget for FY 2016 is summarized in Table 4, with the 12 largest agencies identified, based on total authorized spending. The 12 largest agencies in FY 2016 account for 95 percent of general fund appropriations, 84 percent of other fund appropriations, and 94 percent of unappropriated monies.

The total general fund budget is a little more than \$9 billion, but this is only 29 percent of total authorized spending. Other funds account for only 11 percent of total spending. Unappropriated monies account for 60 percent.

**CHART 9
APPROPRIATIONS LIMIT, ARIZONA STATE GOVERNMENT**



Source: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc/legislativereports.htm>.

The Department of Education (K-12 education) is the dominant recipient of appropriations from the general fund, with 43 percent of the total. AHCCCS and the Department of Corrections receive the next largest amounts of funding.

Relative to general fund appropriations, appropriations from other funds vary widely by agency. Several agencies, including the Departments of Corrections, Education, and Health Services, receive only small amounts in appropriations from other funds. In contrast, several agencies, including the Departments of Administration and Transportation, receive little or no appropriations from the general fund, but substantial amounts from other funds. The universities/Board of Regents receive the largest amount of appropriations from other funds, but this consists almost entirely of tuition revenues.

Total appropriations are greatest to the Department of Education, followed by the universities/Board of Regents. The relationship between total appropriations and unappropriated funds varies widely by agency. Some agencies, such as the Department of Corrections, receive little funding that is not appropriated. In contrast, the Arizona Health Care Cost Containment System (AHCCCS) receives a very substantial amount of unappropriated monies. AHCCCS has the greatest total authorized spending, followed by the Department of Education and the universities/Board of Regents.

In Table 5, the percent change in funding per \$1,000 of personal income is summarized for two time periods: FYs 1992 through 2016 and FYs 2008 through 2016. Overall, the general fund budget has fallen considerably over both time periods. In contrast, appropriations from other funds have increased, in large part due to the series of hikes in university tuition implemented over the last several years. Despite these increases in other funds, total appropriations fell by a

TABLE 4
ARIZONA STATE GOVERNMENT BUDGET FOR MAJOR AGENCIES,
FISCAL YEAR 2016

	Total Authorized Spending	Not Appro- priated	Total Appro- priations	General Fund	Other Funds
Dollars in Millions					
TOTAL EXPENDITURES	\$31,115	\$18,807	\$12,308	\$9,055	\$3,253
AHCCCS*	8,611	7,262	1,349	1,205	143
Department of Education	5,624	1,677	3,947	3,890	57
Universities and Board of Regents	4,834	3,106	1,728	661	1,067
Department of Economic Security	2,464	1,661	803	496	307
Department of Health Services	2,362	1,671	691	603	88
Department of Administration	1,261	1,034	227	18	208
Department of Corrections	1,137	60	1,077	1,030	47
Department of Child Safety	849	332	517	356	161
Lottery Commission	712	603	109	0	109
Department of Transportation	539	172	367	0	367
School Facilities Board	330	89	241	217	24
Department of Public Safety	325	68	257	93	164
All Other	2,069	1,073	996	486	510
Share of Total Expenditures					
AHCCCS*	28%	39%	11%	13%	4%
Department of Education	18	9	32	43	2
Universities and Board of Regents	16	16	14	7	33
Department of Economic Security	8	9	7	6	9
Department of Health Services	8	9	6	7	3
Department of Administration	4	6	2	0	6
Department of Corrections	4	0	9	11	1
Department of Child Safety	3	2	4	4	5
Lottery Commission	2	3	1	0	3
Department of Transportation	2	1	3	0	11
School Facilities Board	1	1	2	2	1
Department of Public Safety	1	0	2	1	5
All Other	7	6	8	5	16
Share of Agency Total					
TOTAL EXPENDITURES	100%	60%	40%	29%	11%
AHCCCS*	100	84	16	14	2
Department of Education	100	30	70	69	1
Universities and Board of Regents	100	64	36	14	22
Department of Economic Security	100	67	33	20	13
Department of Health Services	100	71	29	25	4
Department of Administration	100	82	18	1	17
Department of Corrections	100	5	95	91	4
Department of Child Safety	100	39	61	42	19
Lottery Commission	100	85	15	0	15
Department of Transportation	100	32	68	0	68
School Facilities Board	100	27	73	66	7
Department of Public Safety	100	21	79	29	50
All Other	100	52	48	23	25

* Arizona Health Care Cost Containment System.

Source: Arizona Joint Legislative Budget Committee, Appropriations Report,
<http://www.azleg.gov/jlbc/budgetupdates.htm>.

TABLE 5
PERCENT CHANGE IN ARIZONA STATE GOVERNMENT BUDGET
FOR MAJOR AGENCIES PER \$1,000 OF PERSONAL INCOME

	Total Authorized Spending	Not Appro- priated	Total Appro- priations	General Fund	Other Funds
Fiscal Years 1992 to 2016					
TOTAL EXPENDITURES	-5%	11%	-22%	-34%	69%
AHCCCS*	77	127	-19	-27	-
Department of Education	-17	5	-24	-25	-
Universities and Board of Regents	-26	-20	-34	-68	95
Department of Economic Security^	-13	-19	-3	-37	x
Department of Health Services	137	517	-5	-15	x
Department of Administration	-3	-12	91	-82	x
Department of Corrections	8	-10	9	4	x
Lottery Commission	-24	-24	-21	-	-21
Department of Transportation	-71	-85	-49	-80	-49
School Facilities Board	-	-	-	-	-
Department of Public Safety	-16	20	-22	-38	-8
All Other	-51	-54	-48	-70	70
Fiscal Years 2008 to 2016					
TOTAL EXPENDITURES	0	15	-18	-24	9
AHCCCS*	26	43	-23	-19	-48
Department of Education	-16	-10	-18	-18	-13
Universities and Board of Regents	17	38	-8	-50	89
Department of Economic Security^	4	15	-8	-6	-12
Department of Health Services	16	31	-11	-13	7
Department of Administration	9	10	3	-52	14
Department of Corrections	-7	-35	-4	-3	-22
Lottery Commission	56	61	36	-	36
Department of Transportation	-16	84	-33	-45	-33
School Facilities Board	-58	-55	-59	-63	-
Department of Public Safety	-19	-40	-10	-42	31
All Other	-44	-53	-30	-49	7

* Arizona Health Care Cost Containment System.

^ Includes the Department of Child Safety, which was split off from DES in FY 2014.

- No funding in the earlier period.

x Funding near zero in the earlier period.

Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (spending); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

sizable magnitude in each time period. In contrast to the decreases in total appropriations, unappropriated monies have increased, largely due to the big gains in federal funding. Since the not-appropriated category accounts for 60 percent of all spending, its gains have mostly offset the larger percent losses in total appropriations; total authorized spending has been flat since FY 2008 and down only 5 percent since FY 1992.

Relative to personal income, declines in total appropriations and in appropriations from the general fund occurred between FYs 1992 through 2016 in most of the major agencies, but the magnitudes of the decreases varied substantially. While the overall amount of unappropriated monies increased, several of the agencies experienced decreases in these monies. Thus, changes in total authorized spending ranged from large increases in some agencies to substantial declines in others.

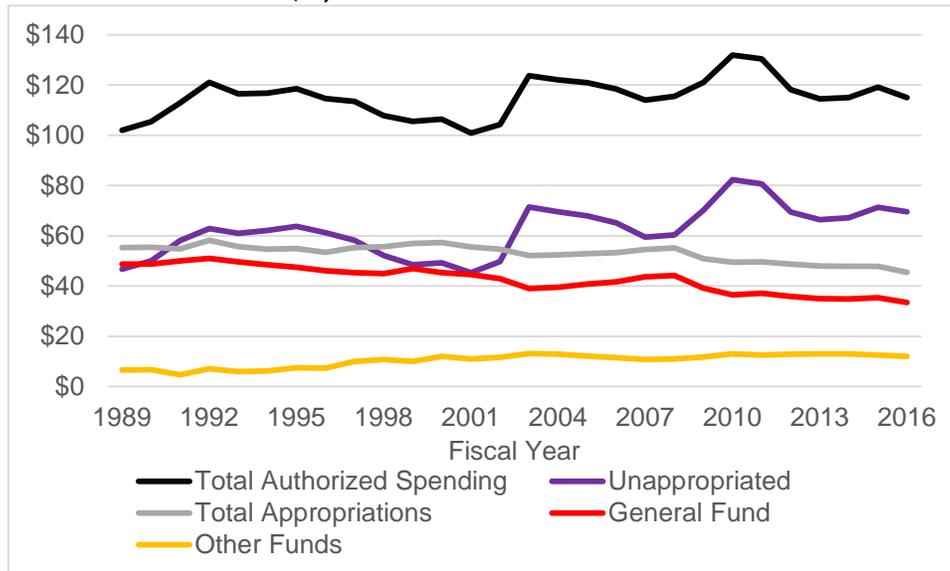
Several of the percent changes in funding relative to personal income between FYs 1992 through 2016 stand out:

- The Department of Health Services and AHCCCS received huge increases in the not-appropriated category and relatively small decreases in total appropriations. These agencies experienced large increases in caseloads.
- The Department of Transportation and the sum of the agencies other than the 12 largest each experienced significant decreases in both total appropriations and unappropriated monies.
- The university system received a very large decrease from the general fund and also had a decline in unappropriated monies. Despite a very large increase in appropriations from other funds — consisting almost entirely of tuition increases — total authorized spending dropped 26 percent.
- Though its decreases were not especially large, the Department of Education experienced a decrease of 24 percent in total appropriations and 17 percent in total authorized spending.
- The Department of Corrections received the only increase from the general fund, and also had an increase in total appropriations and total authorized spending.

A year-by-year review of funding per \$1,000 of personal income back to the earliest data from FY 1989, overall and for selected agencies, is shown through a series of charts. Chart 10 displays the combined figures for all agencies. Total authorized spending per \$1,000 of personal income has fluctuated between \$100 and \$132 since FY 1989. Since FY 2003, the value generally has been at least equal to the values from FYs 1989 through 2002. The highest figures in FYs 2010 and 2011 were due to an increase in federal funding due to the ARRA program. The fluctuations and somewhat higher figures in recent years are due to unappropriated monies, the magnitude of which is volatile from year to year.

Because of the broad scale in Chart 10 (\$0-to-140) needed to accommodate the total authorized spending line, the magnitude of the changes in appropriations appears to be relatively small. To more easily see the values for the categories other than total authorized spending, the scale is reduced in Chart 11. The top graph demonstrates that since FY 2000, a decline in total appropriations per \$1,000 of personal income has occurred. As seen in the bottom graph, this is the net result of a large decrease in the general fund category that goes back to FY 1992, only

**CHART 10
ARIZONA STATE GOVERNMENT EXPENDITURES
PER \$1,000 OF PERSONAL INCOME**



Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (spending); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

partially offset by an increase in the other funds category. General fund expenditures have necessarily declined over time with the declining revenues, as seen in Chart 1. In that chart, a budget deficit occurred in years in which the revenue line is below the expenditure line.

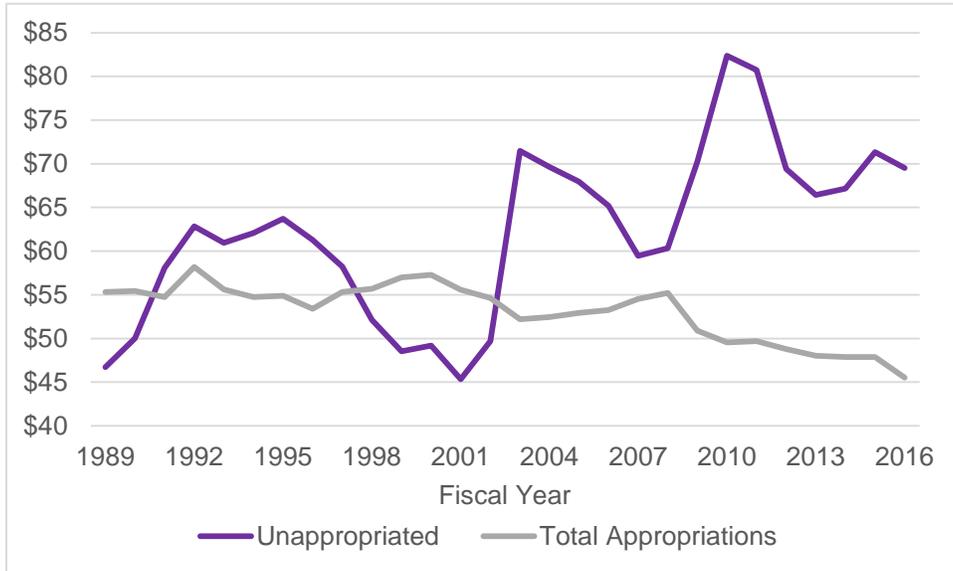
Charts 12 through 19 display the time series of appropriations from the general fund and from all funds, along with total authorized spending, for selected state agencies. All of these figures are expressed per \$1,000 of personal income. More comprehensive figures, including local government funding and a longer time period, are discussed in the Census Bureau subsection, but these expenditure figures are reported by function rather than state government agency. Later in the paper, some of the functions are re-examined using caseload data.

Department of Education and School Facilities Board

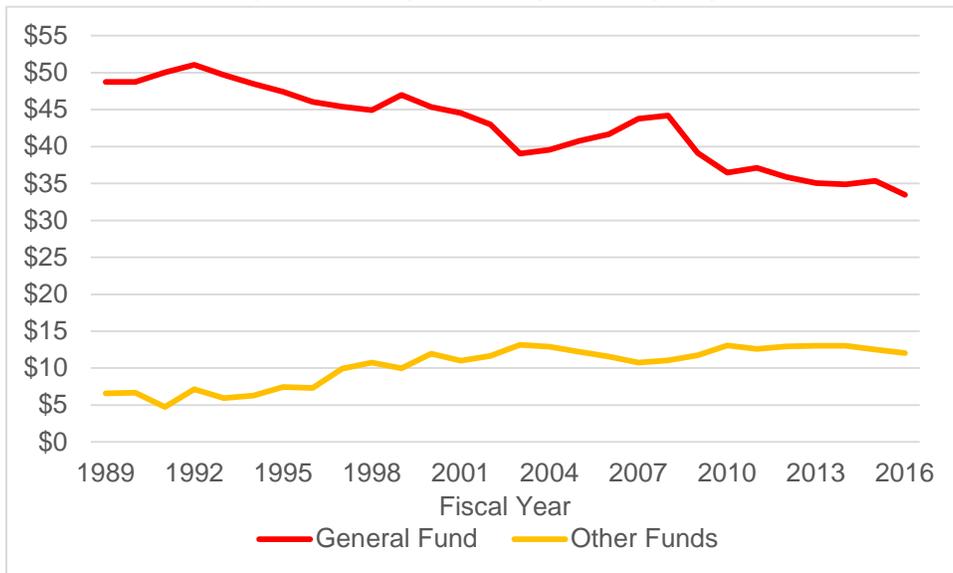
As seen in Chart 12, general fund and total appropriations for K-12 education relative to personal income have declined since the late 1990s, with a sharp drop between FYs 2007 and 2010. Nearly 99 percent of the appropriations to the Department of Education are made through the general fund. The permanent trust fund accounts for most of the balance, along with a small amount generated from Proposition 301 that is appropriated. Total authorized spending, which includes federal funding and most of the tax revenues from Proposition 301, also has decreased substantially since FY 2007.

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

TOTAL APPROPRIATIONS AND UNAPPROPRIATED

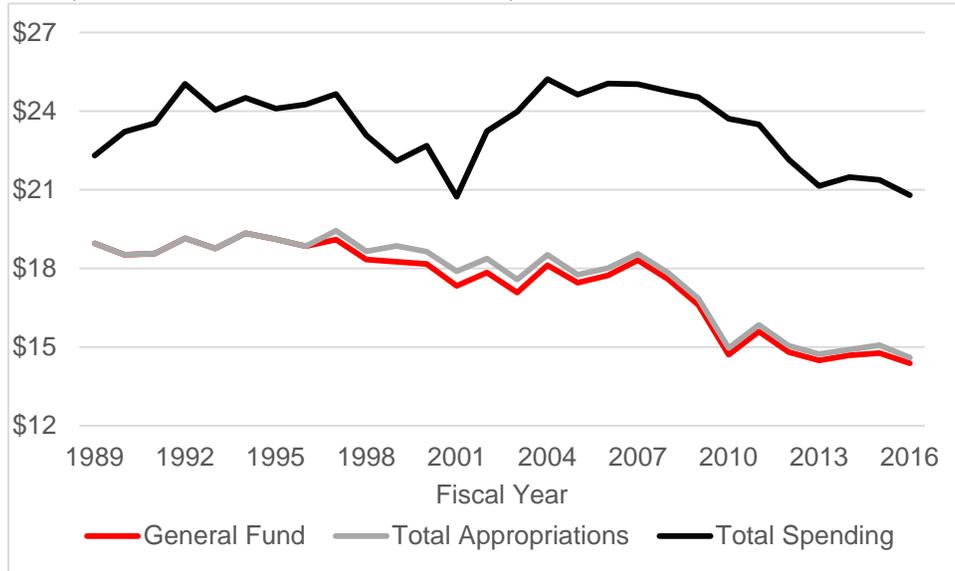


GENERAL FUND AND OTHER FUNDS



Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (spending); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

**CHART 12
ARIZONA STATE GOVERNMENT EXPENDITURES
PER \$1,000 OF PERSONAL INCOME, DEPARTMENT OF EDUCATION***



* Including the Board of Education

Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (spending); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

Most of the funding received by the Department of Education is passed to schools through formula programs. The operating budget for the agency accounts for only 0.2 percent of total appropriations.

According to the JLBC, the School Facilities Board “administers the New School Facilities Fund, the Building Renewal Grant Fund, and the Emergency Deficiencies Correction Fund to provide capital funding for K-12 school districts.”¹⁹ In FY 2016, most of its appropriations go to debt payments for the construction of new facilities. Less than 1 percent of the appropriations are for the agency’s operating budget.

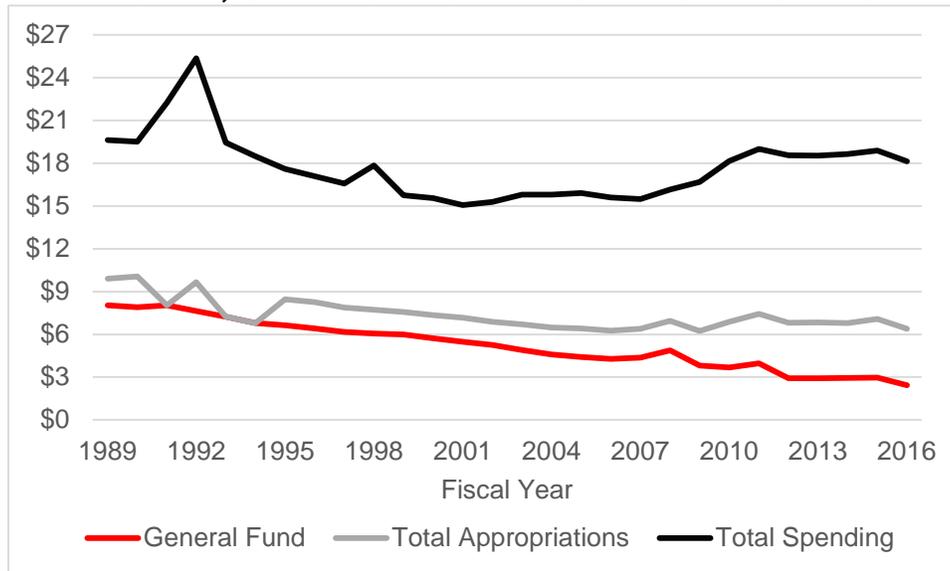
The School Facilities Board became operational in FY 1998. Since then, both total appropriations (primarily from the general fund) and total authorized spending have varied widely by year. These fluctuations reflect both variations in need and reductions in appropriations in some years to help balance the general fund.

Universities/Board of Regents

As seen in Chart 13, general fund appropriations per \$1,000 of personal income have fallen considerably for the university system — by 70 percent between FYs 1989 and 2016. Total appropriations per \$1,000 of personal income fell by almost as much for a number of years. In

¹⁹ When the responsibility for capital outlays was added to the general fund in FY 1998, no additional revenue was provided to meet this additional spending obligation.

CHART 13
ARIZONA STATE GOVERNMENT EXPENDITURES PER \$1,000 OF PERSONAL INCOME, UNIVERSITIES AND BOARD OF REGENTS



Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (spending); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

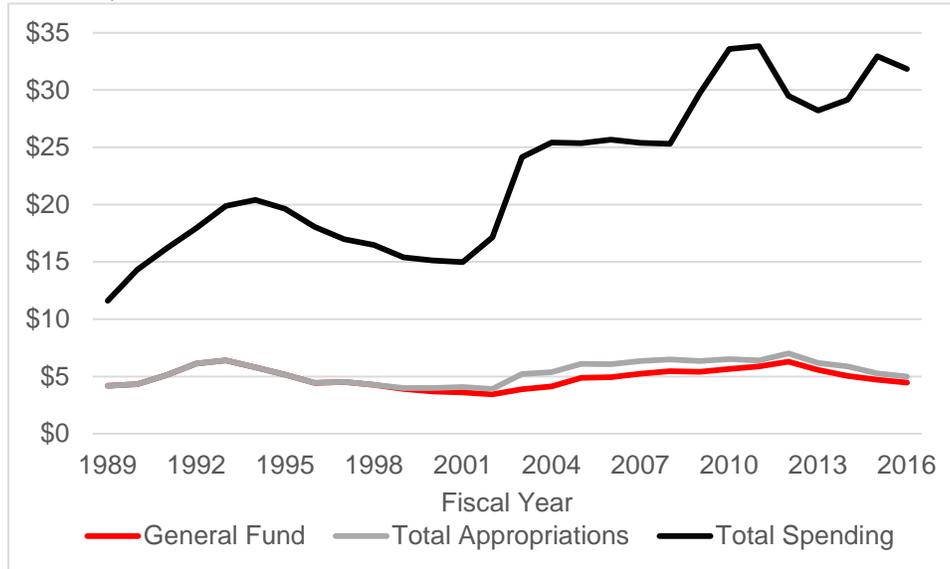
recent years, increases in tuition have held total appropriations nearly steady, while general fund appropriations have continued to fall substantially. Nearly all of the appropriations for universities from funds other than the general fund come from the collections fund, which consists of tuition revenue. In contrast to appropriations, total authorized spending per \$1,000 of personal income has not trended down for universities. Unappropriated funding per \$1,000 of personal income has been higher since FY 2009 than in most of the earlier years. Much of the unappropriated monies, however, can be used only for specific purposes and therefore do not act as a substitute for the loss of appropriations.

The bulk of the appropriated funds are used for the operating budget of the universities. A number of specialized programs also receive appropriations.

AHCCCS

Only 16 percent of the total authorized spending for AHCCCS in FY 2016 comes from appropriations (mostly from the general fund). The unappropriated funding comes from a number of varied sources, but the federal Medicaid program provides about 85 percent. As seen in Chart 14, the amount appropriated relative to personal income has not varied widely by year, but shows some relationship to the economic cycle, rising during periods of economic decline and falling during economic recoveries. (The AHCCCS caseload is highest during recessions and shortly thereafter as a result of people losing their jobs or otherwise suffering a loss of income.) In contrast, total authorized spending for AHCCCS has varied considerably over time and shows an upward trend.

CHART 14
ARIZONA STATE GOVERNMENT EXPENDITURES PER \$1,000 OF PERSONAL INCOME, ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM



Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (spending); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

A portion of the unappropriated monies are specified as “expenditure authority funds.”²⁰ About 94 percent of the AHCCCS funding that comes from appropriations or from expenditure authority funds is used for medical services. The agency’s operating budget and other administrative costs account for 2 percent, and 2 percent of the funds are used for payments to hospitals.

Department of Economic Security and Department of Child Safety

In FY 2016, 42 percent of the Department of Child Safety’s total authorized spending comes from the general fund, with 19 percent from other funds, and 39 percent from unappropriated sources. Federal block grants account for nearly all of the monies in the other funds. Of the total of appropriated funds and expenditure authority funds, about 43 percent goes to out-of-home placements, 27 percent to support services, and 30 percent for the operating budget plus additional operating resources.

The funding split for the Department of Economic Security is somewhat different: 20 percent from the general fund, 13 percent from other funds, and 67 percent from unappropriated sources. Federal monies account for large shares of both the other funds and unappropriated categories. Of the total of appropriated funds and expenditure authority funds, nearly 75 percent support programs for developmental disabilities. The next-largest function is employment and

²⁰ In the JLBC’s Appropriations Report, the operating budget for most agencies is equal to total appropriations. For agencies that receive expenditure authority funds, the operating budget is equal to the sum of these funds plus total appropriations. Sources of expenditure authority funds include the federal Medicaid program, the tobacco litigation settlement, the hospital assessment, local governments, etc.

rehabilitation services, with 10 percent of the total. Other DES programs include aging and adult services, child support, and benefits and medical eligibility.

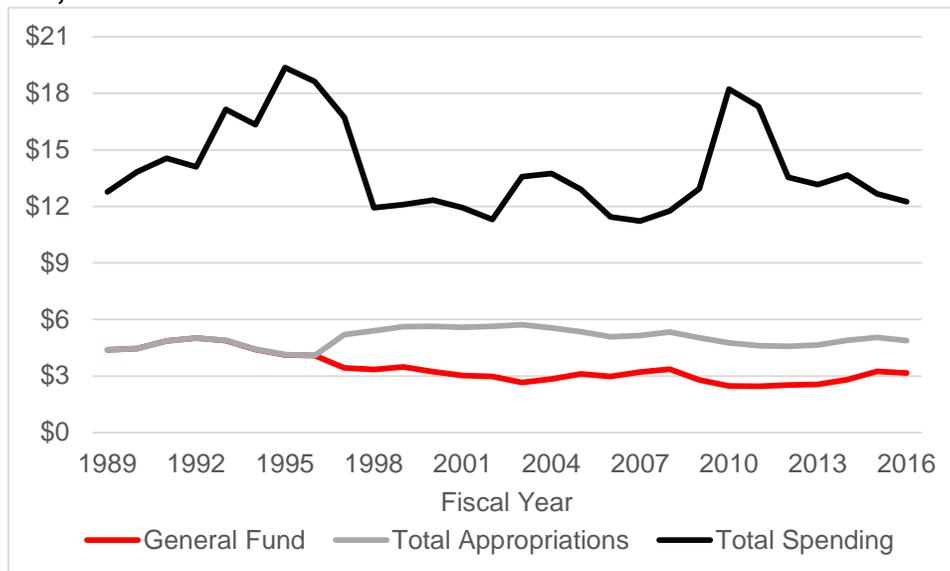
Since the functions performed by the Department of Child Safety were part of the Department of Economic Security until FY 2014, the historical data shown in Chart 15 combine the two agencies. Appropriations from the general fund relative to personal income dropped in the 1990s, but were offset by appropriations from other funds. Though fluctuating somewhat, no trend is seen in total appropriations. Total authorized spending, which is much higher than appropriations, has varied widely over time, but also does not show a trend.

Department of Health Services

One-fourth of the total authorized spending for the Department of Health Services in FY 2016 originates from the general fund. Other funds provide only 4 percent, with the bulk of the agency’s funding coming from unappropriated sources. The federal Medicaid program is the primary source of the latter.

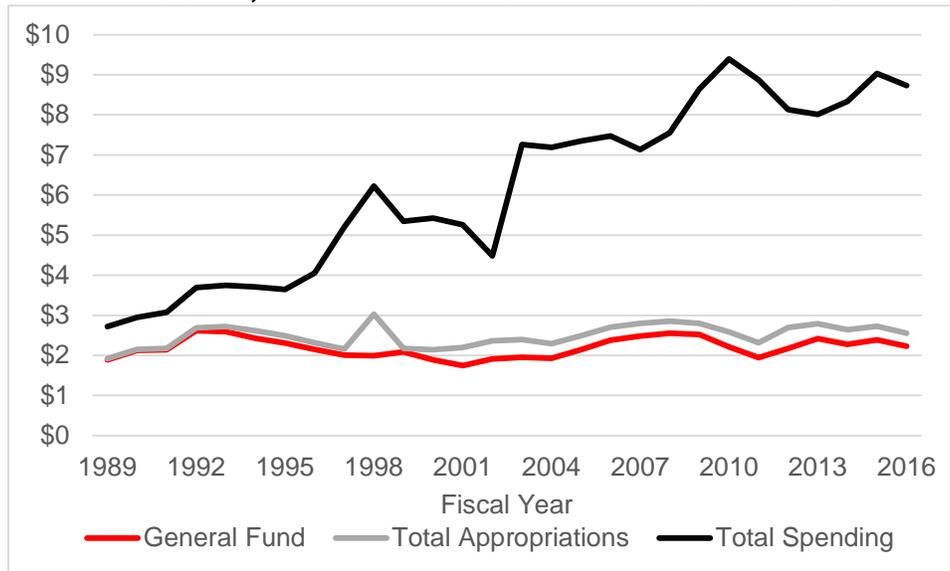
Appropriations per \$1,000 of personal income have fluctuated without a trend, as seen in Chart 16. In contrast, total authorized spending has increased substantially since FY 1989, though declines have been experienced in some years.

**CHART 15
ARIZONA STATE GOVERNMENT EXPENDITURES PER \$1,000 OF PERSONAL
INCOME, DEPARTMENTS OF ECONOMIC SECURITY AND CHILD SAFETY**



Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (spending); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

CHART 16
ARIZONA STATE GOVERNMENT EXPENDITURES PER \$1,000 OF PERSONAL
INCOME, DEPARTMENT OF HEALTH SERVICES



Sources (Charts 13 and 14): Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (spending); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

Behavioral health programs receive 92 percent of the sum of appropriations and expenditure authority funds in FY 2016. The Arizona State Hospital and the operating budget each account for about 3.5 percent of the total.

Department of Corrections and Department of Juvenile Corrections

More than 90 percent of the total authorized spending (\$1,137 million) of the Department of Corrections in FY 2016 comes from the general fund. The remainder is split between other funds and unappropriated monies. Of the total appropriated, about 73 percent goes into the operating budget. Most of the remainder is split between inmate health care contracted services and private prison per diem payments.

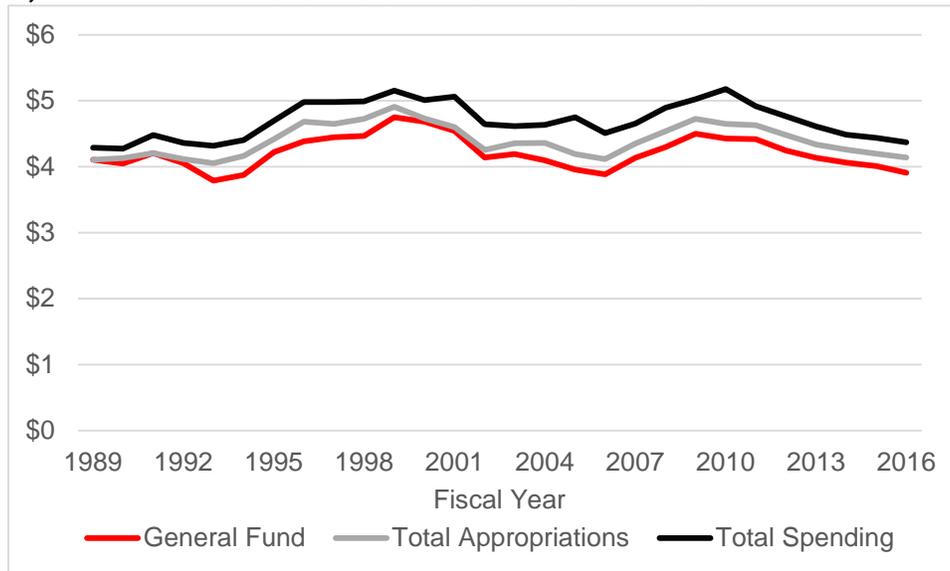
The much smaller Department of Juvenile Corrections receives 60 percent of its total authorized spending of \$45 million from the general fund, 36 percent from other funds, and only 4 percent from unappropriated sources. All of the funding goes to the operating budget.

The functions performed by the Department of Juvenile Corrections were part of the Department of Corrections until FY 1990. Combined funding for the two agencies is shown in Chart 17. Though ups and downs are seen, no trend in funding relative to personal income is present in the general fund, total appropriations, or total authorized spending.

Department of Transportation

Hardly any of the total authorized spending of the Department of Transportation in FY 2016 comes from the general fund; 68 percent comes from other funds (mostly the state highway fund)

CHART 17
ARIZONA STATE GOVERNMENT EXPENDITURES PER \$1,000 OF PERSONAL
INCOME, DEPARTMENTS OF CORRECTIONS AND JUVENILE CORRECTIONS



Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (spending); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

and 32 percent is unappropriated. Of the total appropriated, more than half goes into the operating budget. Most of the remainder is used for highway maintenance.

As seen in Chart 18, appropriated funding relative to personal income has declined gradually over time. In contrast, total spending did not show a trend through FY 2005, but fell sharply over the next two years and has dropped a bit more since then.

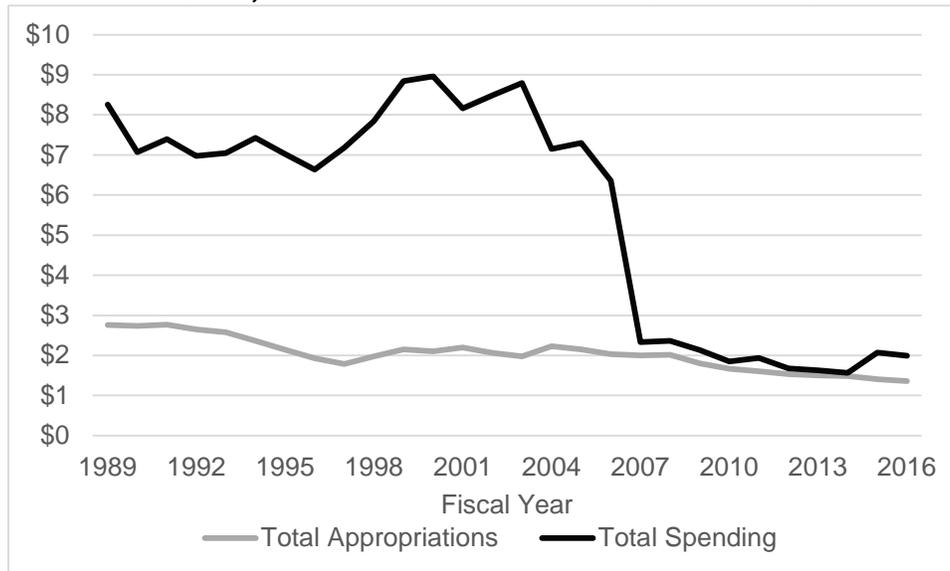
Other Top 12 Agencies

Only 1 percent of the total authorized spending in FY 2016 for the Department of Administration comes from the general fund; other funds account for 17 percent. Of the total appropriated, 47 percent is spent on the operating budget and 43 percent on risk management. Between FYs 1989 and 2016, general fund appropriations and total appropriations trended down, while total authorized spending increased, relative to personal income.

The lottery commission does not receive any funding from the general fund and other funds account for only 15 percent of total authorized spending. Of the appropriated amount, half goes to retailer commissions; 8 percent goes to the operating budget. Total spending relative to personal income dropped significantly between FYs 1989 and 2001, but has since increased.

Half of the funding for the Department of Public Safety in FY 2016 comes from other funds, with 29 percent from the general fund and 21 percent from unappropriated sources. The highway user revenue fund provides 59 percent of the funding from other funds. Of the total amount appropriated, 87 percent is used for the operating budget. Appropriations from the general fund

**CHART 18
ARIZONA STATE GOVERNMENT EXPENDITURES PER \$1,000 OF PERSONAL
INCOME, DEPARTMENT OF TRANSPORTATION**



Note: Appropriations from the general fund are near zero.

Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (spending); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

have fluctuated substantially over time, but have been offset by appropriations from other funds. Total appropriations per \$1,000 of personal income fell during the early 1990s but have been relatively stable since then. The pattern of total spending is similar to that of total appropriations, but is more volatile.

Remainder of State Government

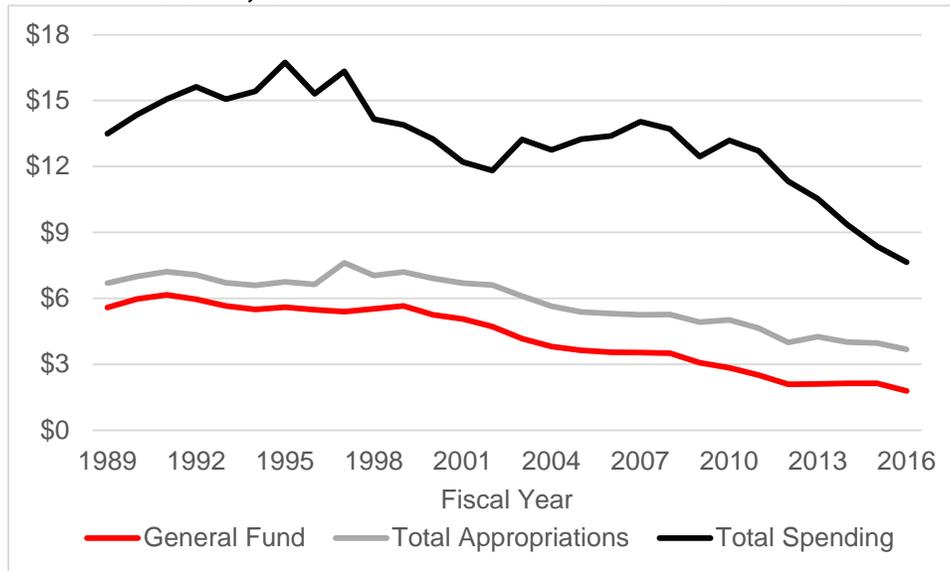
Excluding the 12 largest agencies, the remainder of state government, consisting of more than 100 budget units, accounts for only 8 percent of total appropriations and 7 percent of total authorized spending in FY 2016. Taken together, these functions receive 23 percent of their funding from the general fund, 25 percent from other funds, and 52 percent from unappropriated sources.

Funding for these other state government activities has dropped significantly since FY 1989 relative to personal income, as seen in Chart 19. Appropriations from the general fund and from all funds have dropped in nearly every year since the late 1990s. Total authorized spending fell considerably between FYs 1997 and 2002 and again since FY 2010.

Census Bureau

A summary of combined state and local government expenditures as reported by the Census Bureau is provided in Table 6. Expenditures — including capital and noncapital spending — totaled \$41.6 billion in FY 2012 in Arizona. Per \$1,000 of personal income, Arizona’s total

CHART 19
ARIZONA STATE GOVERNMENT EXPENDITURES PER \$1,000 OF PERSONAL INCOME, OTHER THAN 12 LARGEST AGENCIES



Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (spending); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

expenditures were 7.5 percent less than the national average, ranking 39th nationally and eighth among 10 western states. The percent change between fiscal years 1992 and 2012 in expenditures per \$1,000 of personal income ranked 47th among the states. On a per capita basis adjusted for the cost of living, Arizona had the lowest expenditures in the country in FY 2012 at 21 percent below the national average.

Total capital outlays and noncapital spending by category are shown in Table 7.²¹ Noncapital spending accounted for 89 percent of total spending in FY 2012. Arizona ranked 39th nationally and seventh among the 10 western states on noncapital spending per \$1,000 of personal income, at 8 percent less than average. On a per capita basis adjusted for the cost of living, Arizona had the second-lowest noncapital expenditures in the country at 21 percent below the national average. Capital outlays relative to personal income also were less than the national average in FY 2012, with a differential of 4 percent; Arizona ranked 32nd nationally and eighth among the western states. The percent change in spending relative to personal income between FYs 1993 and 2012 was among the lowest in the nation in Arizona in the noncapital and capital outlays categories.

The percent change in spending per \$1,000 of personal income between FYs 1992 and 2012 varied widely by category. Large gains occurred in the health-related categories of public welfare, hospitals, and health, and in such categories as sewerage and fire protection. In contrast, large decreases occurred in such categories as debt payments, natural resources, financial

²¹ The Census Bureau provides capital and noncapital detail only for selected spending categories.

**TABLE 6
ARIZONA STATE AND LOCAL GOVERNMENT EXPENDITURES**

	Millions	Share of Total	Fiscal Year 2012		Per \$1,000 of		Percent Change Over Time, Per \$1,000 of Personal Income				
			Per Capita, Adjusted by RPP		Personal Income		FY 1992- 2012	Rank			
			Ratio to U.S. Average	Rank	Ratio to U.S. Average	Rank		FY 1992- 2012	FY 1992- 2012	FY 1992- 2002	FY 2002- 2011
TOTAL	\$41,567	100.0%	78.9%	51	92.5%	39	-10%	47	49	11	46
K-12 Education	7,897	19.0	68.6	50	80.4	48	-28	50	50	43	49
Higher Education	4,765	11.5	90.1	36	105.7	28	-6	46	49	25	20
Other Educ & Libraries	1,015	2.4	89.8	38	105.3	24	37	15	28	18	14
Public Welfare	8,132	19.6	82.3	41	96.4	31	26	28	45	4	31
Hospitals	1,472	3.5	46.4	39	54.4	34	40	8	36	12	13
Health	2,160	5.2	125.7	11	147.4	6	46	10	26	8	5
Highways	2,340	5.6	72.5	47	85.0	41	-35	49	31	38	47
Other Transportation	585	1.4	99.9	16	117.1	11	18	19	17	34	24
Police Protection	2,072	5.0	105.0	16	123.1	6	1	42	33	17	45
Fire Protection	1,022	2.5	118.4	11	138.8	6	45	1	20	2	23
Corrections	1,545	3.7	104.6	17	122.6	9	-7	36	29	41	35
Natural Resources	510	1.2	86.4	28	101.3	26	-51	49	42	42	40
Parks & Recreation	610	1.5	80.2	34	94.0	27	-22	40	12	43	50
Housing & Community Development	573	1.4	53.0	45	62.1	41	13	34	39	20	38
Sewerage	939	2.3	89.2	30	104.6	20	49	5	9	40	49
Solid Waste	369	0.9	74.7	37	87.6	29	-9	23	7	34	34
Financial Administration	577	1.4	72.8	46	85.3	38	-46	50	49	29	41
Judicial and Legal	963	2.3	109.6	14	128.5	8	-12	43	37	31	34
Other Administrative	638	1.5	75.0	45	87.9	37	-24	46	28	38	48
Interest Payments	1,666	4.0	75.0	35	87.9	28	-51	41	45	4	32
Other Expenditures*	1,716	4.1	50.8	47	64.6	42	-3	31	27	27	43

Note: The ranks are among the 50 states plus the District of Columbia, with a rank of 1 given to the highest ratio/greatest percent change.

* The initial year is FY 1993.

Sources: U.S. Department of Commerce: Census Bureau, State and Local Government Finance, <http://www.census.gov/govs/local/> (expenditures and population), and Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income and regional price parities).

TABLE 7
ARIZONA STATE AND LOCAL GOVERNMENT CAPITAL AND NONCAPITAL EXPENDITURES

	Millions	Share of Total	Fiscal Year 2012		Per \$1,000 of		Percent Change Over Time, Per \$1,000 of Personal Income [^]				
			Per Capita, Adjusted by RPP		Personal Income		FY 1993- 2012	Rank			
			Ratio to U.S. Average	Rank	Ratio to U.S. Average	Rank		FY 1993- 2012	FY 1993- 2012	FY 1993- 2002	FY 2002- 2011
TOTAL CAPITAL OUTLAYS	\$4,751	100.0%	81.8%	42	96.0%	32	-30%	46	46	34	49
TOTAL NONCAPITAL	36,816	100.0	78.6	50	92.1	39	-4	44	49	10	37
Education*	12,102	32.9	82.4	48	88.8	44	-10	44	48	30	29
K-12 Education	7,199	19.6	68.8	50	80.6	48	-16	42	42	30	37
Higher Education	4,055	11.0	87.7	38	102.8	29	-7	48	49	35	20
Hospitals	1,375	3.7	46.0	41	54.0	35	40	9	34	17	22
Highways	939	2.6	67.9	49	79.6	44	-30	48	20	46	50
Corrections	1,469	4.0	104.0	19	121.9	9	-1	40	45	28	42
Natural Resources	417	1.1	86.9	29	101.9	25	-42	44	44	39	33
Parks & Recreation	515	1.4	86.8	31	101.7	21	-16	43	11	48	44
Sewerage	535	1.5	83.9	32	98.4	23	36	6	5	25	22
Solid Waste	338	0.9	74.4	39	87.2	28	-9	20	3	45	35
All Else	19,127	52.0	83.4	44	97.7	24	0	41	46	5	34

Note: The ranks are among the 50 states plus the District of Columbia, with a rank of 1 given to the highest ratio/greatest percent change.

[^] Since data for FY 1992 are not available for some of the categories, this analysis begins in FY 1993.

* Includes other education not shown separately.

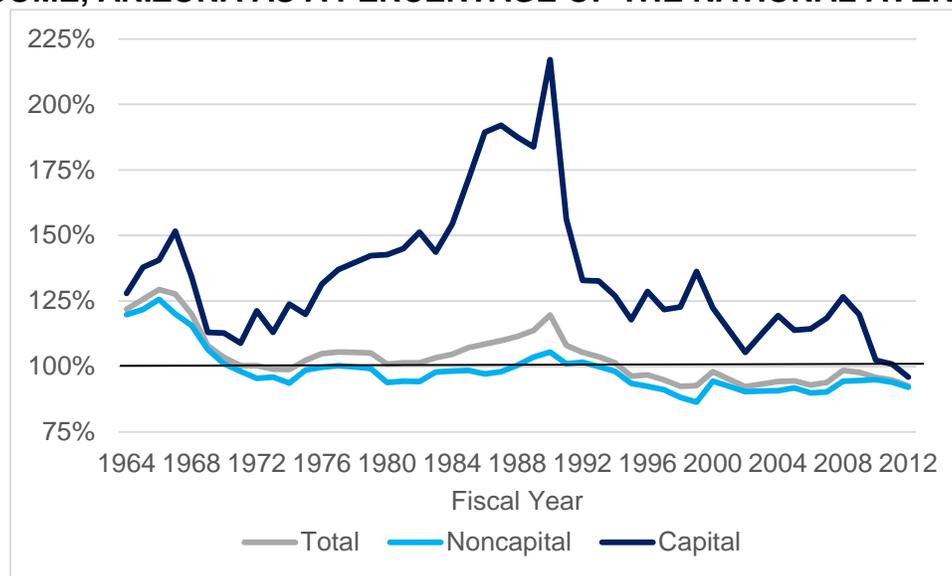
Sources: U.S. Department of Commerce: Census Bureau, State and Local Government Finance, <http://www.census.gov/govs/local/> (expenditures), and Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

administration, and highways. Other than public welfare, the two largest categories are K-12 education and higher education. Each experienced decreases in funding. The decline for K-12 was not as large for current operations as for total expenditures.

A longer time series of Arizona’s state and local government expenditures per \$1,000 of personal income as a percentage of the national average is shown in Chart 20. Historically relative to personal income, spending for capital outlays and for noncapital purposes was higher than the national average. In the late 1960s, Arizona’s noncapital figure slipped to about equal to the national average and stayed at this proportion into the 1990s. Since FY 1993, Arizona’s noncapital expenditures have been below the national average. Capital outlays generally were considerably above average until FY 2010.

In the series of graphs included in Chart 21, a time series of total spending in each of the Census Bureau’s categories is shown for Arizona per \$1,000 of personal income as a percentage of the national average.²² While data are available for some categories back to FY 1964, the data for other categories begin at a later date.

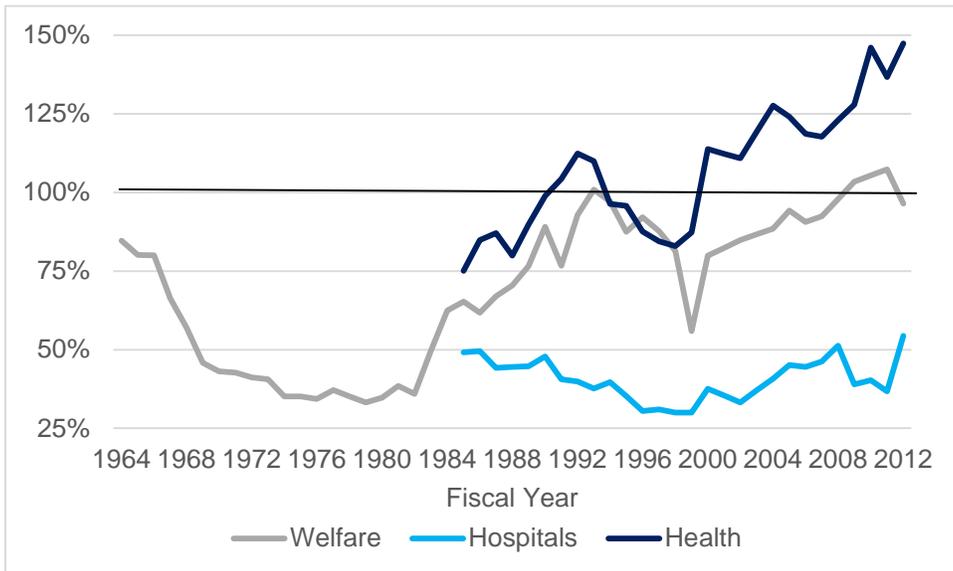
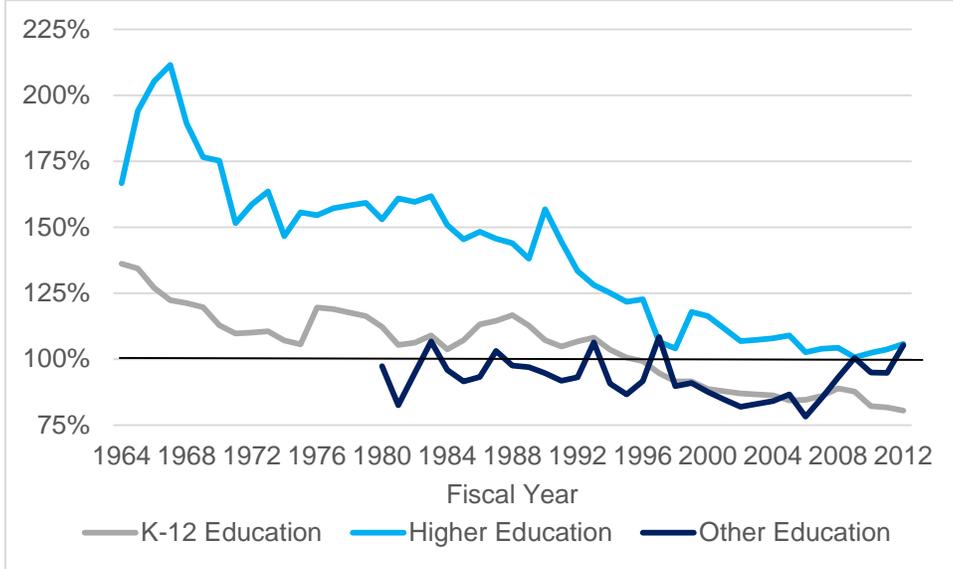
CHART 20
STATE AND LOCAL GOVERNMENT EXPENDITURES PER \$1,000 OF PERSONAL
INCOME, ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



Sources: U.S. Department of Commerce: Census Bureau, State and Local Government Finance, <http://www.census.gov/govs/local/> (expenditures), and Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

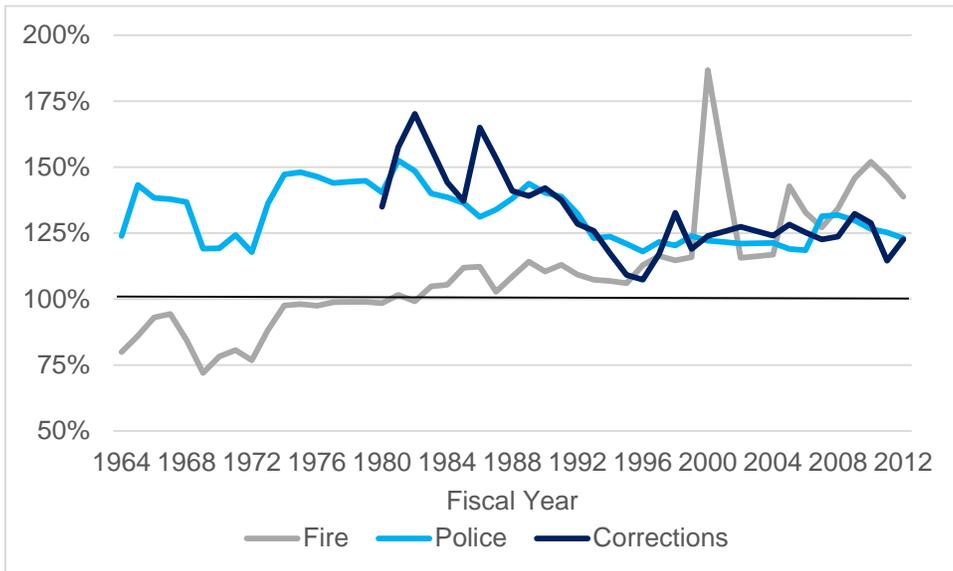
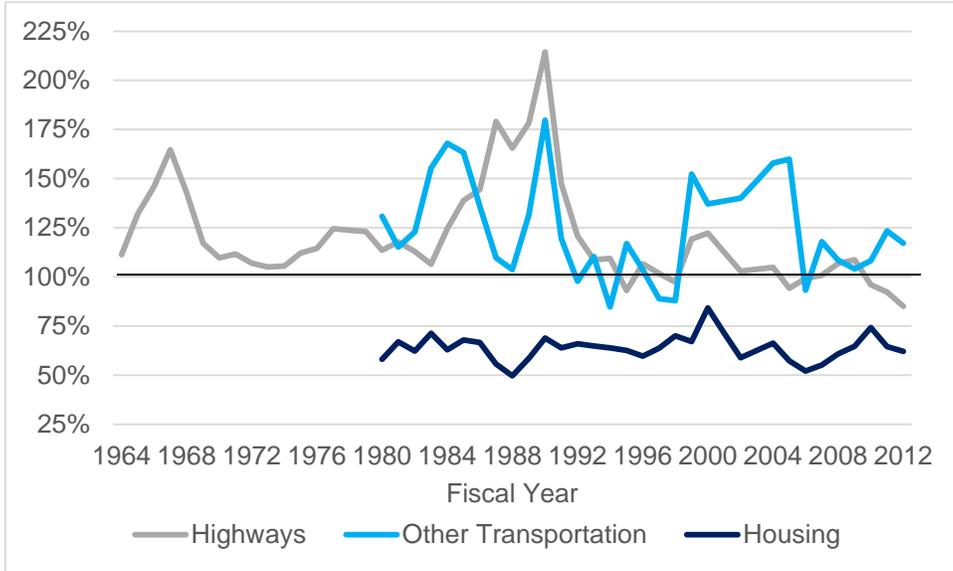
²² Since noncapital spending is such a large portion of total expenditures in most of the expenditure categories, and since capital outlays and current operations spending in Arizona relative to the national average generally have been falling, the figures for noncapital spending generally are similar to the total spending portrayed in these charts.

CHART 21
STATE AND LOCAL GOVERNMENT EXPENDITURES
PER \$1,000 OF PERSONAL INCOME BY CATEGORY,
ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



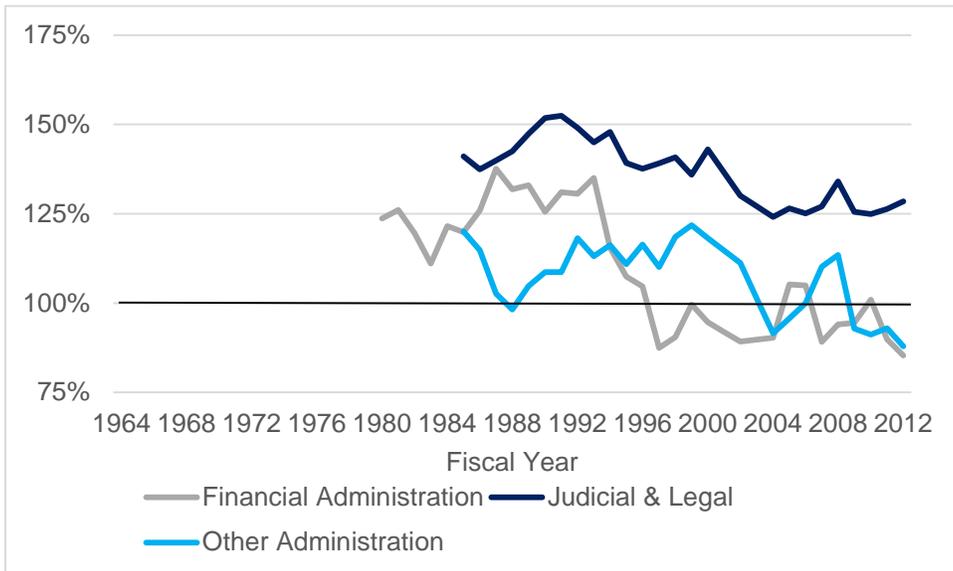
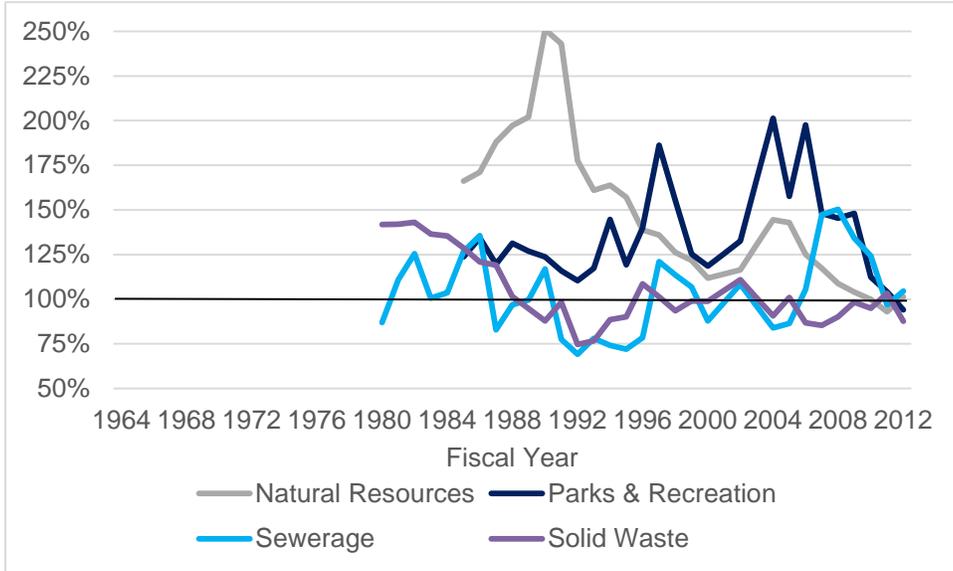
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CHART 21 (continued)
STATE AND LOCAL GOVERNMENT EXPENDITURES BY TYPE
PER \$1,000 OF PERSONAL INCOME,
ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



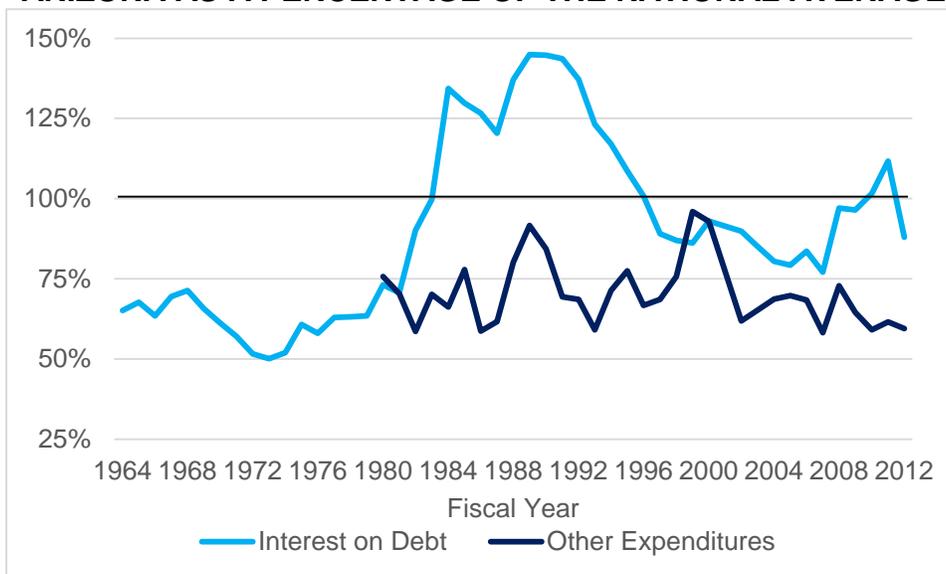
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CHART 21 (continued)
STATE AND LOCAL GOVERNMENT EXPENDITURES BY TYPE
PER \$1,000 OF PERSONAL INCOME,
ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



(continued)

CHART 21 (continued)
STATE AND LOCAL GOVERNMENT EXPENDITURES BY TYPE
PER \$1,000 OF PERSONAL INCOME,
ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



Sources: U.S. Department of Commerce: Census Bureau, State and Local Government Finance, <http://www.census.gov/govs/local/> (expenditures), and Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

Education

The \$7.9 billion spent on K-12 education in FY 2012 in Arizona was second highest among the spending categories, behind public welfare, and accounted for 19 percent of the total. The amount per \$1,000 of personal income was 20 percent less than the U.S. average, ranking 48th nationally and lowest among 10 western states. Per capita adjusted for the cost of living, expenditures were 31 percent below average, second lowest in the nation. Noncapital expenditures totaled \$7.2 billion. Ranks and ratios to the U.S. average were similar to those of total spending.

The percent change in total expenditures over the FY 1992-to-2012 period was the second lowest in the country. As seen in Chart 21, spending relative to personal income was considerably above the national average in the 1960s, but declined significantly throughout the FY 1964-to-2012 period.

Higher education received the third-highest amount of funding among the Census Bureau's spending categories, with nearly \$4.8 billion in FY 2012 in Arizona, close to 12 percent of the total. Per \$1,000 of personal income, Arizona ranked 28th nationally and seventh among the western states, with an amount above the national average. This is an example of how a broad standardization that does not incorporate the caseload can present a misleading picture — later in this report, it is shown that higher education spending per student adjusted for per capita personal income is below average in Arizona. Per capita adjusted for RPP, expenditures were 10 percent below average, ranking 36th nationally and eighth in the West. The percent change relative to

personal income over the FY 1992-to-2012 period was among the lowest in the country. In the 1960s, higher education spending relative to personal income was far above the national average in Arizona. After FY 1967, the percentage of the national average fell sharply.

Arizona's spending on other educational programs and on libraries relative to personal income ranked in the middle of the states nationally and in the West in FY 2012. The percent change between FYs 1992 and 2012 was above average. Since FY 1980, the spending relative to personal income generally was below the U.S. average, but exceeded the average in some years.

Public Welfare

With expenditures of \$8.1 billion, welfare programs accounted for nearly 20 percent of all government spending in FY 2012 in Arizona. Welfare spending per \$1,000 of personal income was a little below the national average, with Arizona ranking 31st nationally and fifth among the western states. Per capita adjusted for the RPP, expenditures were 18 percent below average, ranking 41st nationally and fifth in the West. The percent change in welfare spending was less than average in the FY 1992-to-2012 period. Historically, welfare spending in Arizona relative to personal income was far below the national average. Since the early 1990s, the ratio to the U.S. average has fluctuated from well below to a little above average.

In FY 2012, Arizona spent \$2.2 billion on health programs and \$1.5 billion on public hospitals. Relative to personal income, spending in the health category was far above the national average, the highest among the western states and sixth highest nationally. In contrast, spending on public hospitals was considerably below average, lowest among the western states and ranking 34th nationally. In both categories, the percent change in spending between FYs 1992 and 2012 was among the highest in the nation. This large increase pushed the health category's spending from below to well above average.

Transportation

Arizona spent \$2.3 billion on highways in FY 2012. Per \$1,000 of personal income, the amount was the lowest among the western states and ranked 41st nationally at 15 percent below average. Per capita adjusted for the RPP, expenditures were 27.5 percent below average, ranking 47th nationally and last in the West. The percent change between FYs 1992 and 2012 was one of the lowest in the nation.

Unlike most spending categories, capital outlays account for the majority of the total spending on highways. In FY 2012, Arizona was below average on capital outlays and on noncapital spending. Over time, percent changes in spending for both capital and noncapital purposes have been below the national average. Historically, spending on highways relative to personal income was above the national average in Arizona, as expected in a rapidly growing state. Since the early 1990s, however, the figure has varied from below to a little above average. The amount varies by year as construction projects begin and end.

Arizona's spending on other transportation — nearly all of which is related to air travel — was above the national average in FY 2012 per \$1,000 of personal income, ranking 11th, though the state ranked only fifth among 10 western states. The percent change in spending between FYs

1992 and 2012 ranked above the middle of the states. Other transportation spending fluctuates considerably from year to year, but generally has been above the national average in Arizona.

Protection

Unlike most categories, Arizona's spending in each of the protection categories was substantially above the national average in FY 2012 relative to personal income. Arizona spent over \$2 billion on police protection, \$1.5 billion on corrections, and \$1 billion on fire protection. Per \$1,000 of personal income, Arizona was more than 20 percent above the national average and ranked in the top 10 nationally in each category. Per capita adjusted for the cost of living, Arizona was not as far above the national average and did not rank as high. Among the western states, Arizona had the second-highest figures for police and fire protection relative to personal income, but ranked fifth on corrections.

Between FYs 1992 and 2012, the percent change in spending relative to personal income was below average for police protection and corrections, but was the highest among the states for fire protection. Relative to the nation, spending per \$1,000 of personal income for fire protection increased from below average in the 1960s. In contrast, spending on corrections and police protection consistently has been above average.

Environment

The Census Bureau provides data for several categories that can be considered to be related to the environment. Spending in FY 2012 in the categories of sewerage, parks and recreation, natural resources, and solid waste ranged from less than \$400 million to more than \$900 million. Relative to personal income, spending was close to the national average except for being below average in the solid waste category. Arizona ranked between fifth and eighth among the western states on each of the categories. The percent change in spending between FYs 1992 and 2012 was among the lowest in the country in the natural resources and parks and recreation categories, but ranked above the middle of the states in the sewerage and solid waste categories. Spending in each category varies from year to year.

Administrative

Consistent with the above-average spending for police protection and corrections, Arizona's judicial and legal spending per \$1,000 of personal income was considerably above the national average in FY 2012. The state ranked eighth nationally and fourth among the western states. Historically, spending had been even further above the national average. However, the percent change in spending between FYs 1992 and 2012 was below average.

In the other two administrative categories, Arizona's spending was below the national average in FY 2012 relative to personal income. Historically, spending for financial administration and for other administration had been above the national average. The percent change in spending in each category between FYs 1992 and 2012 was among the lowest in the country.

Other

In FY 2012, interest payments on debt in Arizona totaled close to \$1.7 billion, while spending on miscellaneous programs was a little more than \$1.7 billion. Arizona's spending relative to personal income was below the national average on each category, with a below-average percent

change since the early 1990s. Among the western states, Arizona ranked seventh on interest payments and ninth on miscellaneous expenditures. Debt payments were far below the national average in the 1960s and 1970s but far above average during the 1980s.

FUNDING FOR ELEMENTARY AND SECONDARY EDUCATION PER STUDENT

Enrollment at public elementary and secondary schools — including charter schools — is affected by the number of births and by immigration. Competition from private schools also can affect the figures.

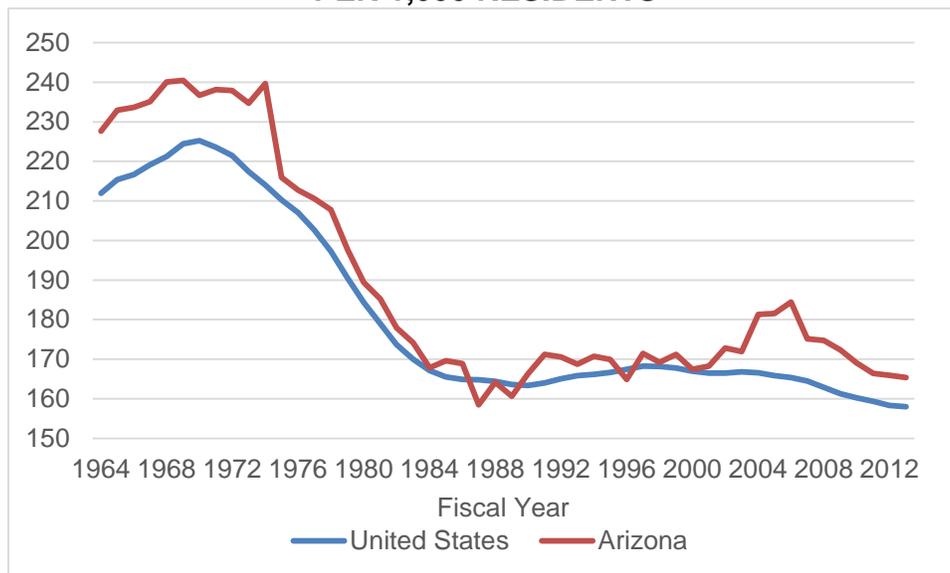
Fall enrollment at public schools per 1,000 residents, shown in Chart 22, declined sharply from the late 1960s through the mid-1980s nationally and in Arizona, corresponding to the decrease in the number of births during the baby-bust generation (1965 into the 1980s). This significant change in the K-12 caseload relative to the size of the entire population illustrates why adjusting expenditure figures by the caseload is much more accurate than measuring expenditures per capita.

In most years, Arizona’s number of students relative to population size has been higher than the national average. This results from Arizona’s above-average fertility rates.

Joint Legislative Budget Committee

The JLBC’s annual report on K-12 funding for current operations is summarized in Table 8. According to the JLBC, state government was responsible for more than 60 percent of the total

**CHART 22
NUMBER OF STUDENTS AT PUBLIC ELEMENTARY AND SECONDARY SCHOOLS
PER 1,000 RESIDENTS**



Sources: U.S. Department of Education, National Center for Education Statistics, “Digest of Education Statistics,” <http://nces.ed.gov/programs/digest/> (enrollment); and U.S. Department of Commerce, Census Bureau (population, accessed from Bureau of Economic Analysis, <http://bea.gov/regional/index.htm>).

**TABLE 8
PUBLIC ELEMENTARY–SECONDARY EDUCATION CURRENT OPERATIONS
FUNDING IN ARIZONA**

	Fiscal Year 2013		Inflation-Adjusted Percent Change Per Student		
	Millions	Share of Total	2000-2013	2002-2011	2008-2013
TOTAL	\$6,505.0	100.0%	7.7%	-1.2%	-11.2%
Federal	94.5	1.5	-55.8	-38.0	-56.1
Local	2,409.3	37.0	34.4	10.6	20.2
State	4,001.2	61.5	-0.4	-4.7	-21.6
General Fund	3,501.8	53.8	-10.6	-7.6	-19.6
Permanent Fund	46.5	0.7	-54.1	-75.5	-5.8
Proposition 301	474.8	7.3	-	4.8	-27.1

Note: These figures reflect the JLBC’s membership measure of the number of students; the GDP deflator is used as the inflation measure.

Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc/fiscal.htm> (funding and number of students); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/national/index.htm#gdp> (GDP deflator).

in FY 2013, with the state’s funding coming primarily from the general fund, which accounted for more than half of the overall total. The permanent fund provides less than 1 percent of the total.

Between FY 2000, the earliest data, and FY 2013, inflation-adjusted per student funding increased overall, despite a significant decrease between FYs 2008 and 2013. State government funding declined in each of these time periods, but local government funding increased. The change in funding from proposition 301 strictly reflects the changes in collections from the general sales tax, while various other factors affect funding from other sources.

Between FY 2000, the earliest data, and FY 2013, inflation-adjusted per student funding increased overall, despite a significant decrease between FYs 2008 and 2013. State government funding declined in each of these time periods, but local government funding increased. The change in funding from proposition 301 strictly reflects the changes in collections from the general sales tax, while various other factors affect funding from other sources.

Compared to the percent changes in real per student funding shown in Table 8, the percent changes in per student funding per \$1,000 of PCPI are smaller in the FY 2000-to-2013 and 2002-to-2011 periods, but larger in the FY 2008-to-2013 period.

Census Bureau

Arizona is near the bottom of the states on per pupil K-12 funding — without considering that the state needs to spend *more* per student than other states just to realize average student performance, as measured by achievement (such as test scores) and attainment (such as the percentage graduating from high school). Children living in poverty and children whose parents have limited educational attainment require more resources than the average child. Similarly, children whose first language is not English are more costly to educate.

Arizona has the sixth-highest percentage of adults 18-to-44 years old with an educational attainment of less than a high school diploma among the 50 states and District of Columbia. In contrast, the two states with lower per student revenue for elementary and secondary schools compare more favorably: Idaho and Utah each have a below-average share with limited educational attainment. The poverty rate among those less than 18 years old is ninth highest in Arizona, while Idaho and especially Utah have rates less than the national average. Arizona has the 14th-highest share of foreign-born children; the share is below average in Idaho and Utah.

Revenues

In FY 2013, Arizona ranked near the bottom of the states in the total amount of revenue collected per student for public K-12 education. Arizona ranked 49th per student adjusted for the cost of living, with only Idaho and Utah lower. Per student adjusted by per capita personal income, Arizona ranked 42nd. Arizona was above average on the receipt of federal monies, as seen in Table 9, but the federal government provided less than 15 percent of the total funding. In contrast, Arizona ranked third lowest (Idaho and Utah lower) on state and local government revenue per student adjusted by the RPP, at more than 33 percent below the national average. Arizona was 21 percent below average per student adjusted by per capita personal income and ranked 43rd.

Revenue raised for public K-12 education in Arizona has fallen substantially relative to other states since FY 1992. As seen in Table 9, Arizona ranks near the bottom of the states in the percent changes over time — overall and for state and local government revenue — in each of

**TABLE 9
PUBLIC ELEMENTARY–SECONDARY EDUCATION REVENUE IN ARIZONA**

	Total	Federal	State & Local
FY 2013 Dollars in Millions, Unadjusted	\$8,098	\$1,178	\$6,920
FY 2013 Per Student Adjusted by Regional Price Parity			
Percentage of U.S. Average	70.8	113.3	66.6
Rank Among 51 'States'	49	18	49
FY 2013 Per Student Per \$1,000 of Per Capita Personal Income			
Percentage of U.S. Average	84.0	134.5	79.0
Rank Among 51 'States'	42	10	43
Percent Change Over Time, Per Student, Rank			
FY 1992-2013	50	45	50
FY 1992-2002	44	50	44
FY 2002-2011	49	46	49
FY 2008-2013	44	8	48
Percent Change Over Time, Per Student Per \$1,000 of PCPI, Rank			
FY 1992-2013	49	36	50
FY 1992-2002	45	48	44
FY 2002-2011	47	39	47
FY 2008-2013	38	4	43

Sources: U.S. Department of Commerce: Census Bureau, Public Elementary–Secondary Education Finance, <http://www.census.gov/govs/school/> (revenue and number of students), and Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (regional price parity and per capita personal income).

the four selected time periods, both per student and per student relative to PCPI. Between FYs 1992 and 2013, state and local government revenue per student per \$1,000 of per capita personal income dropped 21 percent in Arizona, compared to only 2 percent nationally.

Expenditures

As with revenue, Arizona ranks very low on public K-12 expenditures, both on level and on the percent change over time (see Table 10). Per student adjusted for living costs, Arizona spent the second lowest overall (to Idaho) in FY 2013, at 33 percent below the national average. On current operations, which accounted for 90 percent of total spending, Arizona's spending was 32 percent below the national average; Idaho and Utah spent less. Arizona's rank on capital outlays was a little higher at 44th, but spending was 37 percent less than the national average. In the category of other expenditures, Arizona ranked 32nd, but was 44 percent below the national average.

Another way of looking at the size of the differential in K-12 spending in FY 2013 between Arizona and the national average is to simulate an increase in Arizona's current operations spending by varying amounts to see the effect on Arizona's percentage of the national average and its rank among the states. An increase of \$1 billion raises Arizona's ratio to the national average — measured per student adjusted for the cost of living — by nearly 10 percentage points, but improves Arizona's rank by only one spot. In order for Arizona's spending per student per \$1,000 of PCPI to approximate the national average and to rank in the middle of the states, spending in FY 2013 needed to be \$2 billion higher. Per pupil adjusted for living costs, \$3.4 billion more would have had to have been spent to bring Arizona up to the national average on spending. While this may seem like an enormous amount to increase spending, as of FY 2013 the tax reductions passed since the early 1990s had reduced general fund revenues by more than \$3.25 billion.

Between FYs 1992 and 2013, the percent change in K-12 spending per pupil in Arizona was the lowest in the country; the state was second lowest on the change in current operations spending. Looking at the FY 2008-to-2013 period, Arizona ranked among the bottom few states overall and on current operations.²³

On the per student per \$1,000 of PCPI measure, Arizona was not as far below the national average — 21 percent lower on total expenditures — as the per student relative to living costs measure, but was only two spots higher on rank at 48th. The ranks of the percent change over time were hardly different than for the per student measure; Arizona still ranked last in the FY 1992-to-2013 period.

Total expenditures per student adjusted for per capita personal income fell 25 percent in Arizona between FYs 1992 and 2013. The decrease was 12 percent for current operations, 69 percent for capital outlays, and 60 percent for other expenditures.

²³ An October 2014 report from the Center on Budget and Policy Priorities, <http://www.cbpp.org/research/most-states-still-funding-schools-less-than-before-the-recession>, indicates that inflation-adjusted spending per student for K-12 education fell 17.5 percent in Arizona between FYs 2008 and 2015, the third-largest decrease in the nation.

**TABLE 10
PUBLIC ELEMENTARY–SECONDARY EDUCATION EXPENDITURES IN ARIZONA**

	Millions	Share of Total	Fiscal Year 2013 Per Student, Adjusted for RPP		Per Student, Adjusted for PCPI		Rank, Percent Change Over Time, Per Student [^]			
			Ratio to U.S. Average	Rank [^]	Ratio to U.S. Average	Rank [^]	FY 1992- 2013	FY 1992- 2002	FY 2002- 2011	FY 2008- 2013
TOTAL EXPENDITURES	\$7,595	100.0%	67.1%	50	79.0%	48	51	47	36	49
Current Operations	6,837	90.0	67.9	49	79.9	44	50	45	31	48
Capital Outlays	558	7.4	62.6	44	73.7	38	47	47	45	48
Other Expenditures	200	2.6	56.2	32	66.2	26	46	44	7	47
Current Operations Detail:										
Instruction	3,824	50.3	62.7	51	73.8	49	51	49	35	49
Support Services	2,644	34.8	76.6	48	90.3	36	45	41	24	46
Pupil Support	534	7.0	96.9	25	114.2	21	20	19	1	32
Instructional Staff Support	386	5.1	83.9	38	98.9	24	20	49	48	2
General Administration	81	1.1	43.3	47	51.0	46	51	48	48	47
School Administration	318	4.2	59.2	51	69.8	50	50	40	51	51
Operations & Maintenance	771	10.2	83.2	42	98.1	31	46	16	48	49
Pupil Transportation	332	4.4	74.7	40	88.0	34	30	24	36	43
Other Support Services	222	2.9	64.3	40	75.7	33	35	12	43	50
Other Current Operations	369	4.9	70.5	48	83.1	42	38	29	48	49

[^] The rank is among the 50 states plus the District of Columbia, with a rank of 1 given to the highest ratio/greatest percent change.

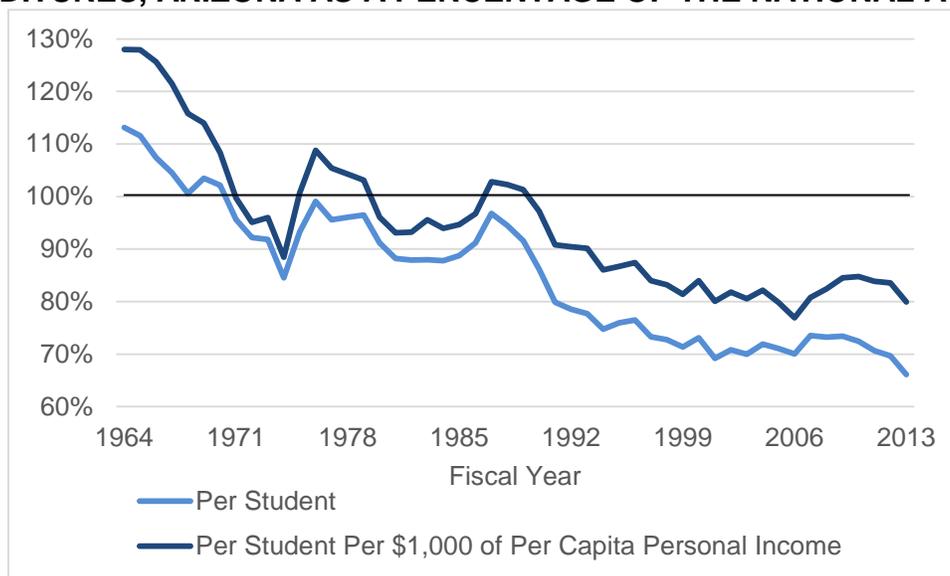
Sources: U.S. Department of Commerce: Census Bureau, Public Elementary–Secondary Education Finance, <http://www.census.gov/govs/school/> (expenditures and number of students), and Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (regional price parities).

In order to create a longer time series on K-12 noncapital expenditures, back to FY 1964, the expenditure data from the Census Bureau’s state and local government finance series is used through FY 1991. It is divided by October 1 enrollment. This series is linked to the K-12 finance series, divided by membership.²⁴ Based on the per student measure and the per student per \$1,000 of per capita personal income measure, Arizona’s K-12 spending has gone from above the national average in the 1960s to considerably below average in FY 2013 (see Chart 23).

During the late 1960s and early 1970s, the percentage of the national average was similar using the per student and per student per \$1,000 of per capita personal income measures. Per capita personal income in Arizona was nearly as high as the national average during this period. Since then, PCPI in Arizona as a percentage of the U.S. average has fallen, causing the differential in the two lines in Chart 23 to widen.

Following a significant decline in K-12 noncapital spending relative to the U.S. average during the 1960s and early 1970s on both measures, the percentage of the national average fluctuated but did not display a trend through the mid-1980s. During this period, Arizona’s spending per

CHART 23
PUBLIC ELEMENTARY AND SECONDARY EDUCATION NONCAPITAL EXPENDITURES, ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE



Sources: U.S. Department of Commerce, Census Bureau, State and Local Government Finance, <http://www.census.gov/govs/local/> (expenditures and number of students); U.S. Department of Education, National Center for Education Statistics, “Digest of Education Statistics,” <http://nces.ed.gov/programs/digest/> (enrollment); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (per capita personal income).

²⁴ A break in the time series of per student noncapital spending in Arizona as a percentage of the national average occurs in FY 1992 due to the switch from using enrollment to membership, but the break is small in magnitude. The Census Bureau’s treatment of privately run charter schools was not an issue at this time. The nation’s first charter school did not open until the following year; charter schools in Arizona were not authorized until 1994.

student was below average. Since the mid-1980s, Arizona's per student spending relative to the nation has fallen substantially.

Expenditures by category for public K-12 education are summarized in Table 10. Among the current operations categories in FY 2013, Arizona ranked last per student relative to living costs on instruction (37 percent less than the U.S. average), fourth lowest on support services (23 percent below average), and fourth lowest on other current operations (29 percent below average). Among the seven support services subcategories, Arizona ranked among the bottom 14 states in six, including last on school administration (41 percent below the U.S. average) and fifth lowest on general (school district) administration (57 percent below average).

Contentions that Arizona spends too much on K-12 administration are years out of date. Arizona has ranked among the bottom 10 states on both general administration and school administration since FY 1999 on the per pupil measure. Even going back to FY 1992, school administration costs were 20 percent below average, though general administration costs were above average.

More recently, Arizona's percentage of K-12 current operations expenditures going to instruction has become an issue. It is true that Arizona's percentage ranks among the lowest in the nation. But as seen in Table 10, Arizona's expenditures are below average in every category of current operations. Further, fixed costs limit the amount that expenditures can be reduced in some of the categories. For example, if a school is to provide transportation to students, it cannot eliminate drivers or double the number of students being transported on a single bus. Similarly, schools generally only have one school nurse. Thus, to reduce spending further in some categories in order to raise the share of current operations expenditures going to instruction, some services likely would need to be eliminated.

On most of the spending categories shown in Table 10, Arizona's per pupil percent change ranked from below average to the bottom among the states in each of the selected time periods. The percent change between FYs 1992 and 2013 was lowest or next to lowest overall, in current operations, for instruction, and for both categories of administration. Per student adjusted for per capita personal income, decreases between FYs 1992 and 2013 in current operations spending included 16 percent for instruction, 5 percent for support services, and 16 percent for other.

As in the revenue table, using the per student per \$1,000 of per capita personal income measure instead of the per student adjusted for living costs measure significantly raises Arizona's percentage of the national average in FY 2013. However, Arizona's spending still was below average on every category shown in Table 10 except pupil support. The rank among the states is not much different between the two measures in some categories, including overall.

FUNDING FOR HIGHER EDUCATION PER STUDENT

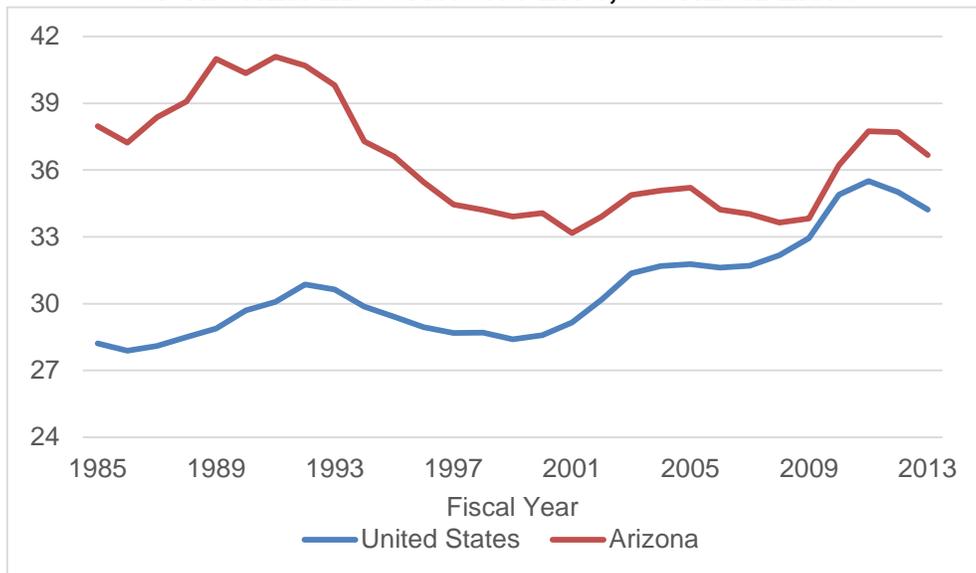
Enrollment at public institutions of higher education — universities and community colleges — is affected by several factors:

- The number of births roughly 18-to-22 years earlier. The number of births nationally was considerably less during the baby-bust generation (1965 into the 1980s) than in either the earlier baby-boom generation or the subsequent generation.

- The percentage of those of college-going age who attend college. This share generally has been rising.
- Competition from private institutions (and at the state level from public institutions in other states).
- The economic cycle. Enrollment goes up (especially at community colleges) during recessions when jobs are scarce and drops back during economic expansions.

Full-time-equivalent enrollment at public institutions of higher education per 1,000 residents, shown in Chart 24, is affected by each of these factors. Historically, Arizona’s figure was much higher than the national average, in large part due to Arizona’s extensive system of community colleges compared to many states, but the differential has narrowed significantly. The pattern in Arizona is similar to the nation, with increases in enrollment relative to the size of the population during the 1980s and early 1990s, followed by several years of declines. The increases between FYs 2008 and 2011 and the subsequent declines are closely related to the severe recession and subsequent economic recovery.

CHART 24
NUMBER OF FULL-TIME-EQUIVALENT STUDENTS AT PUBLIC INSTITUTIONS
OF HIGHER EDUCATION PER 1,000 RESIDENTS



Note: The enrollment figures include community colleges and universities.

Sources: U.S. Department of Education, National Center for Education Statistics, “Digest of Education Statistics,” <http://nces.ed.gov/programs/digest/> (enrollment); and U.S. Department of Commerce, Census Bureau (population, accessed from Bureau of Economic Analysis, <http://bea.gov/regional/index.htm>).

State Higher Education Executive Officers Association

The public higher education finance data from SHEEO, which include universities and community colleges, are summarized in Table 11.

State Support

State support for public higher education consists of state government appropriations plus ARRA monies. Per FTE student adjusted for the cost of living, Arizona ranked second to last in FY 2014 with spending just half of the national average. Only New Hampshire spent less. Between FYs 2000 and 2014, state support for higher education per FTE student fell 49 percent after adjusting for inflation, compared to a 23 percent decline nationally. Only one state (Pennsylvania) had a larger decrease. Between FYs 2008 and 2014, Arizona's percent change ranked last, with nearly all of the decrease between FYs 2000 and 2014 occurring after FY 2008.

The time series of state support per FTE student expressed as a percentage of the national average is shown in the lower graph in Chart 25. From FYs 2000 through 2009, Arizona's figure was about 30 percent less than the norm. A sharp decline between FYs 2009 and 2012 put the percentage down to 50 percent of the U.S. average.

**TABLE 11
PUBLIC HIGHER EDUCATION FINANCE IN ARIZONA**

	State Support	Local Support	Education Appro- priations	Net Tuition	Total Education Revenue
FY 2014 Dollars in Millions	\$876	\$780	\$1,439	\$1,814	\$3,155
FY 2014 Per FTE Student Adjusted by Regional Price Parity					
Percentage of U.S. Average	50.1	352.7	83.5	119.4	97.9
Rank Among 50 States	49	1	39	22	36
FY 2014 Per FTE Student Per \$1,000 of Per Capita Personal Income					
Percentage of U.S. Average	59.1	416.7	98.7	141.1	115.6
Rank Among 50 States	46	1	24	14	14
Percent Change Over Time, Per FTE Student, Rank					
FY 2000-2014	49	5	31	9	27
FY 2008-2014	50	21	46	8	36
Percent Change Over Time, Per FTE Student Per \$1,000 of PCPI, Rank					
FY 2000-2014	49	3	26	6	14
FY 2008-2014	50	16	44	6	14

Notes:

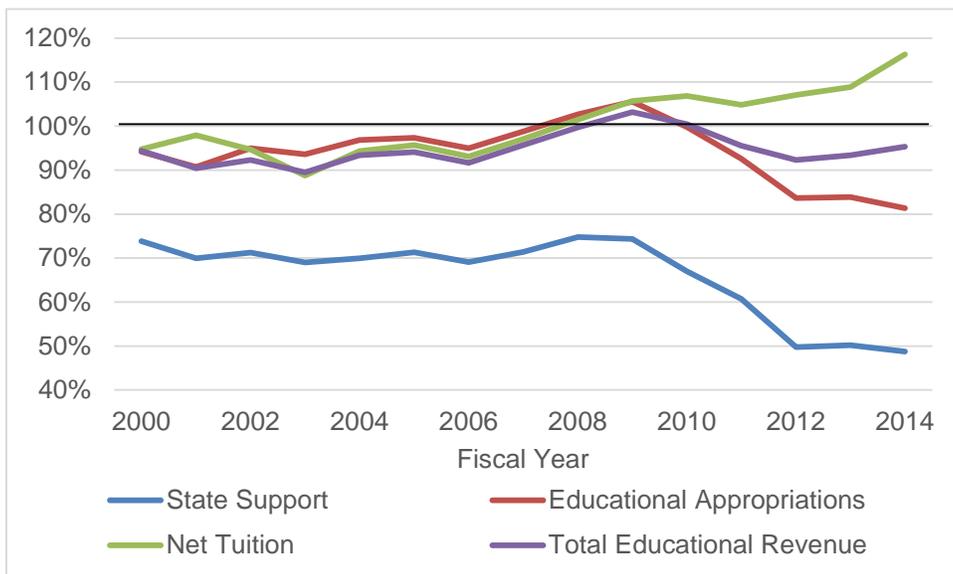
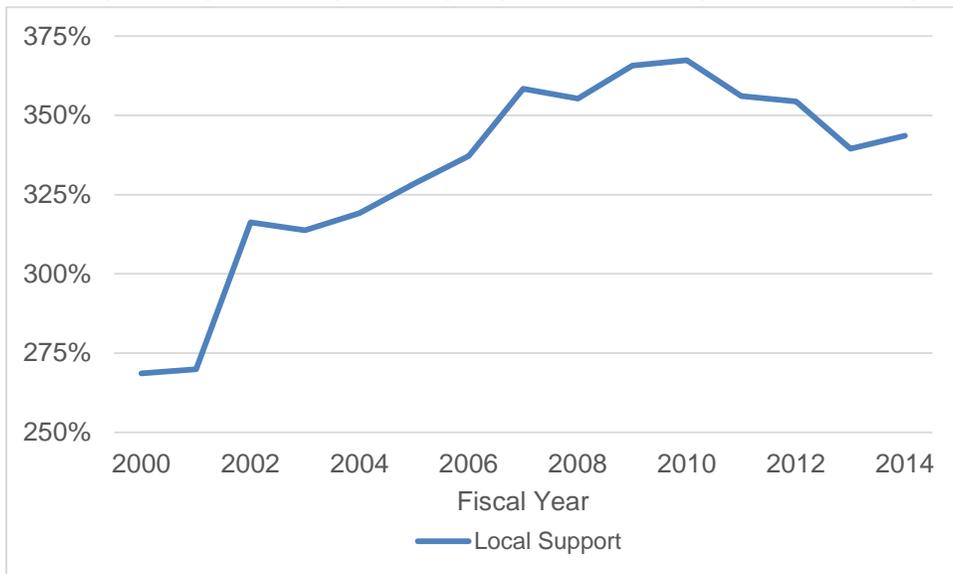
The figures include community colleges and universities.

FTE is full time equivalent.

Since the local support figure is zero in many states, only 28 states are ranked on the FY 2000-to-2014 percent change; 30 are ranked on the FY 2008-to-2014 percent change.

Sources: State Higher Education Executive Officers Association, <http://www.sheeo.org/projects/shef-%E2%80%94state-higher-education-finance> (finance data); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (regional price parity and per capita personal income).

**CHART 25
NONCAPITAL FUNDING PER FULL-TIME-EQUIVALENT STUDENT
FOR PUBLIC INSTITUTIONS OF HIGHER EDUCATION,
ARIZONA AS A PERCENTAGE OF THE NATIONAL AVERAGE**



Note: The figures include community colleges and universities.

Source: State Higher Education Executive Officers Association, <http://www.sheeo.org/projects/shef-%E2%80%94state-higher-education-finance>.

Arizona's state support in FY 2014 was not quite as low measured per FTE student per \$1,000 of per capita personal income, but the state still was 41 percent below average and ranked 46th (Vermont, Pennsylvania, Colorado, and New Hampshire were lower). The state's ranks on the percent changes over time were the same as for the per FTE student measure: next-to-last over the FY 2000-to-2014 period and last between FYs 2008 and 2014.²⁵

Local Support

A number of states do not utilize local funding for higher education.²⁶ Arizona had the highest local funding in the country in FY 2014 per FTE student adjusted for the cost of living, with spending far higher than the national average. The local support is only for community colleges.

Between FYs 2000 and 2014, local support for higher education per FTE student rose 38 percent in Arizona after adjusting for inflation, compared to an 8 percent increase nationally. Arizona ranked fifth among the 28 states with funding in FY 2000 and second among the seven western states with funding. Between FYs 2008 and 2014, Arizona's percent change ranked 21st among the 30 states with funding in FY 2008 and last among the seven western states. Funding dropped 5 percent, compared to a 2 percent decline nationally.

Chart 25 shows the contrast in the per FTE student spending pattern between state support and local support. Local support rose significantly as a percentage of the national average between FYs 2000 and 2007. However, local support dropped back between FYs 2010 and 2013.

Educational Appropriations

Combined state and local government appropriations for higher education — excluding appropriations for special purposes, research, and medical programs and appropriations derived from tuition and fees — provide a more accurate comparison across states of the overall public support for higher education. Arizona ranked 39th nationally and eighth among 10 western states in FY 2014 in educational appropriations per FTE student adjusted for the cost of living, with spending 16 percent below the national average. Between FYs 2000 and 2014, educational appropriations for higher education per FTE student in Arizona fell 29 percent after adjusting for inflation, compared to an 18 percent decline nationally. Arizona's percent change ranked 31st nationally and seventh among the western states. Between FYs 2008 and 2014, Arizona's percent change was fifth lowest nationally and last among the western states. The decrease over the FY 2008-to-2014 period was larger than between FYs 2000 and 2014.

As seen in Chart 25, educational appropriations per FTE student rose in Arizona relative to the national average, from 9 percent below average in FY 2001 to 6 percent above average in FY 2009 because of the increases in local support. However, declines in both state support and local support dropped educational appropriations to 19 percent below average in FY 2014.

²⁵ A May 2015 report from the Center on Budget and Policy Priorities (CBPP), <http://www.cbpp.org/research/state-budget-and-tax/years-of-cuts-threaten-to-put-college-out-of-reach-for-more-students>, which provides estimates of selected higher education data through FY 2015, is in line with the SHEEO report. The CBPP report indicates that inflation-adjusted state spending per student for higher education fell 47 percent in Arizona between FYs 2008 and 2015, the most in the nation. Tuition adjusted for inflation rose more than 80 percent, the most in the nation.

²⁶ From FY 2000 through FY 2014, the number of states not using local funding ranged from 19 to 22. Among the 10 western states, Nevada, Utah, and Washington did not use local funding in any year.

Arizona's educational appropriations per FTE student per \$1,000 of per capita personal income was barely less than the national average in FY 2014 and ranked among the middle of the states. While the percentage decrease between FYs 2000 and 2014 also was among the middle of the states, Arizona's percent change between FYs 2008 and 2014 ranked 44th nationally and ninth among the western states.

Net Tuition

Arizona ranked 22nd nationally and third among the 10 western states on net tuition per FTE student adjusted for the cost of living in FY 2014, with a figure 19 percent higher than the national average. The tuition per student comparisons are affected by the differing shares across states of enrollment at different types of institutions of higher education. Each of Arizona's universities is classified as a research institution, the most costly category. In contrast, Arizona has a large number of students enrolled at community colleges, the least costly category.

Between FYs 2000 and 2014, net tuition per FTE student rose 114 percent in Arizona after adjusting for inflation, compared to a 74 percent increase nationally. The increase was the ninth highest in the country and ranked third among the western states. Between FYs 2008 and 2014, net tuition in Arizona rose 50 percent, sixth highest in the nation but only fourth highest among the western states.

As seen in Chart 25, net tuition per FTE student in Arizona ranged from 2-to-11 percent below the national average between FYs 2000 and 2007. Since then, Arizona's figure has climbed relative to the nation, reaching 16 percent above average in FY 2014.

Total Educational Revenue

The sum of educational appropriations and net tuition — minus tuition revenue used for capital outlays or debt servicing — equals SHEEO's total educational revenue measure. Arizona ranked 36th nationally — but third among 10 western states — in FY 2014 in total educational revenue per FTE student adjusted for the cost of living, with spending 2 percent below the national average. Between FYs 2000 and 2014, total educational revenue for higher education per FTE student increased 9 percent after adjusting for inflation, compared to an 8 percent increase nationally. The percent change ranked 27th nationally and fifth among the western states. Between FYs 2008 and 2014, Arizona's percent change ranked 36th nationally and sixth among the western states. The figure dropped 5 percent in Arizona compared to a marginal decrease nationally.

Total educational revenue per FTE student in Arizona was between 6-and-10 percent less than the national average from FYs 2000 through 2006, then briefly rose to slightly above the U.S. average (see Chart 25). However, the figure was back down to 5-to-8 percent below average in FYs 2012 through 2014.

Arizona's total educational revenue per FTE student per \$1,000 of per capita personal income was 16 percent higher than the national average in FY 2014, ranking 14th nationally and highest among the western states. The percent change between FYs 2000 and 2014 and FYs 2008 and 2014 also ranked 14th nationally. The rank among the western states was fourth.

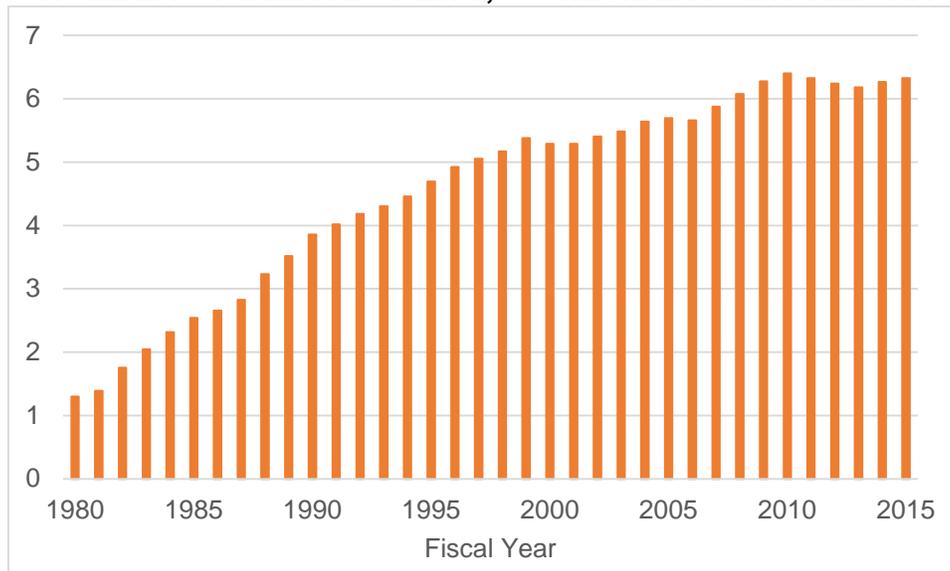
FUNDING FOR CORRECTIONS PER INMATE

The combined number of inmates and the combined funding for the Departments of Corrections and Juvenile Corrections are examined in this section — the correctional systems of local governments are not included. The funding figures come from the JLBC and do not include capital outlays.

In Chart 26, the time series of the number of inmates at state correctional facilities per 1,000 state residents is presented. This ratio increased substantially between FYs 1980 and 2010 in large part due to the mandatory sentencing provisions that first took effect in Arizona in 1979. After dropping back slightly from FYs 2010 through 2013, the number of inmates per 1,000 state residents has again begun to climb.

The upward pressure on costs from the disproportionate increase in the number of prisoners has been offset by substantial reductions in expenditures per inmate, adjusted by per capita personal income (see Chart 27). Between FYs 1989 and 2015, general fund appropriations per inmate per \$1,000 of PCPI dropped 46 percent. The decreases were nearly as large for total appropriations (44 percent) and total authorized spending (43 percent). As a result, correctional expenditures per \$1,000 of personal income, as was shown in Chart 17, have essentially been flat.

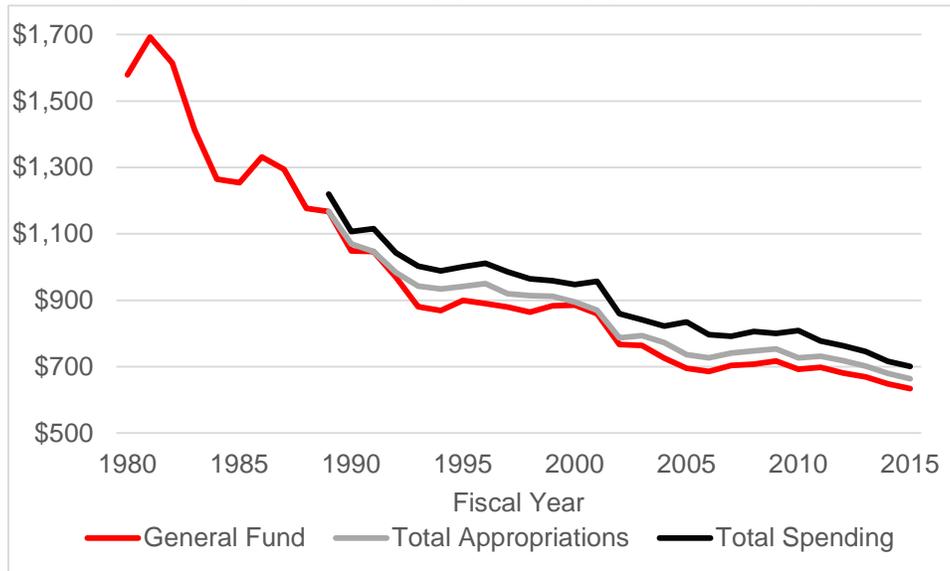
CHART 26
NUMBER OF INMATES PER 1,000 RESIDENTS IN ARIZONA



Note: The number of inmates is the sum of those housed by the Departments of Corrections and Juvenile Corrections.

Sources: Arizona Department of Corrections, "Corrections at a Glance," <https://corrections.az.gov/node/452> (number of inmates); Arizona Department of Juvenile Corrections, "Just the Facts," <http://www.azdjic.gov/JustFacts/JustFacts.asp> (number of inmates); U.S. Department of Commerce, Census Bureau (population through 2000, accessed from Bureau of Economic Analysis, <http://bea.gov/regional/index.htm>); and Arizona Department of Administration, Office of Employment and Population Statistics, <https://population.az.gov/> (population since 2001).

**CHART 27
EXPENDITURES PER INMATE PER \$1,000
OF PER CAPITA PERSONAL INCOME IN ARIZONA**



Note: The figures for the Departments of Corrections and Juvenile Corrections are combined.

Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (expenditures); Arizona Department of Corrections, “Corrections at a Glance,” <https://corrections.az.gov/node/452> (number of inmates); Arizona Department of Juvenile Corrections, “Just the Facts,” <http://www.azdjic.gov/JustFacts/JustFacts.asp> (number of inmates); U.S. Department of Commerce, Census Bureau (population through 2000, accessed from Bureau of Economic Analysis, <http://bea.gov/regional/index.htm>); Arizona Department of Administration, Office of Employment and Population Statistics, <https://population.az.gov/> (population since 2001); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).

FUNDING FOR SOCIAL SERVICES PER RECIPIENT

The Arizona Health Care Cost Containment System reports the AHCCCS “population” (enrollment) monthly. The fiscal year annual average is compared to the state’s total fiscal year population in Chart 28. The number of enrollees relative to the total population has increased greatly, with nearly one-in-four Arizonans receiving service through an AHCCCS program in FY 2015. The annual rate of increase varies with the economic cycle, with the number of recipients rising rapidly during recessions and declining during economic recoveries. Statutory changes regarding eligibility also affect the number enrolled.

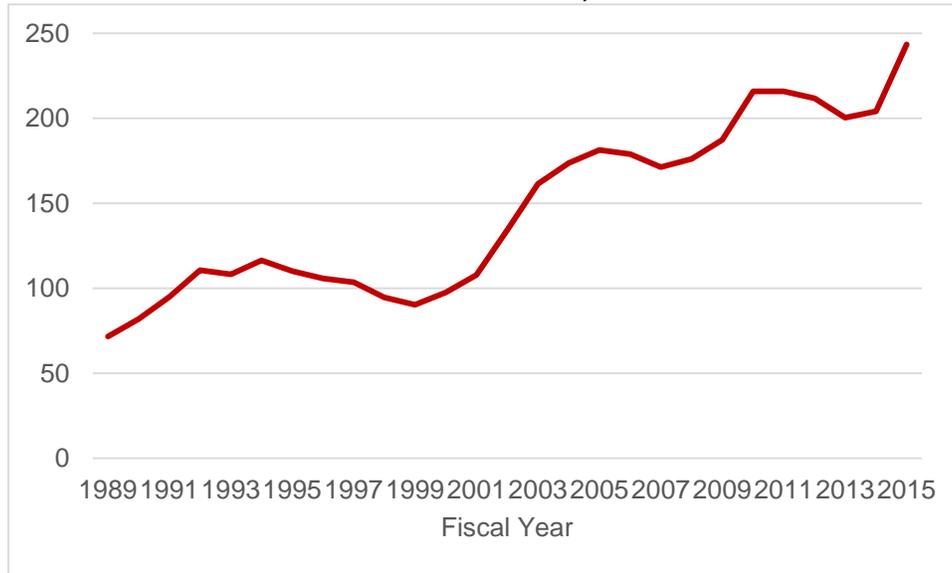
AHCCCS expenditures per enrollee per \$1,000 of per capita personal income are displayed in Chart 29. A gradual downward trend is present in each category of expenditures.

The number enrolled in the supplemental nutrition assistance program (SNAP — previously known as food stamps) and in the temporary assistance to needy families (TANF) program are reported monthly by the Arizona Department of Economic Security. DES also reports total payments through these programs and the average payment per recipient. The fiscal year annual average number of recipients in each of these programs is compared to the state’s total fiscal year

population in Chart 30. The percentage of the population qualifying for food stamps is highly cyclical. A very large increase occurred between fiscal years 2008 and 2012. The TANF program serves far fewer individuals, with the number declining over time due to changes in eligibility.

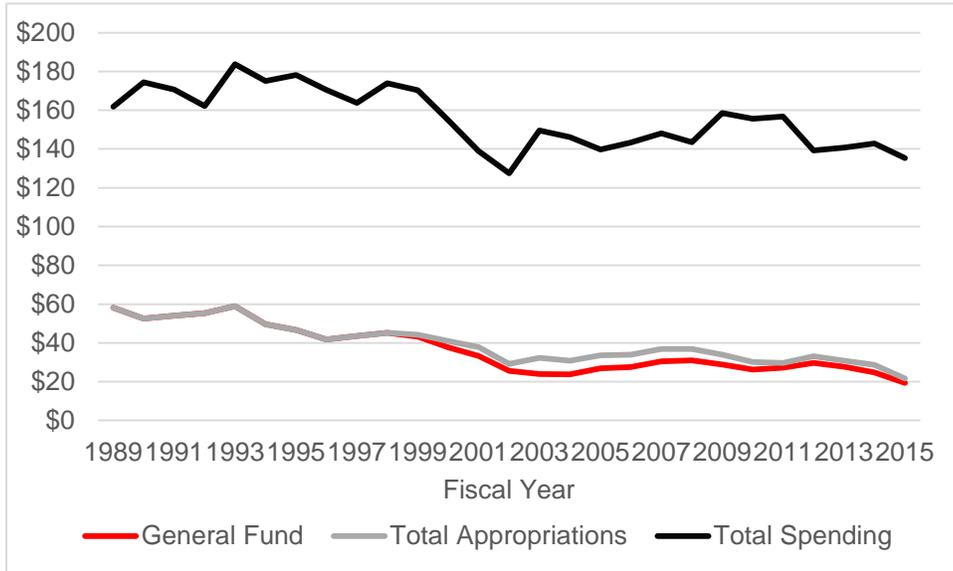
SNAP payments per recipient adjusted for per capita personal income gradually dropped between fiscal years 1992 and 2008 since the payments are not regularly adjusted for inflation. A cost-of-living increase was implemented in FYs 2009 and 2010, but the average payment has dropped since then (see Chart 31). TANF payments per recipient adjusted for PCPI are very low. The amount fell 38 percent between FYs 2002 and 2015.

CHART 28
NUMBER OF AHCCCS RECIPIENTS PER 1,000 RESIDENTS IN ARIZONA



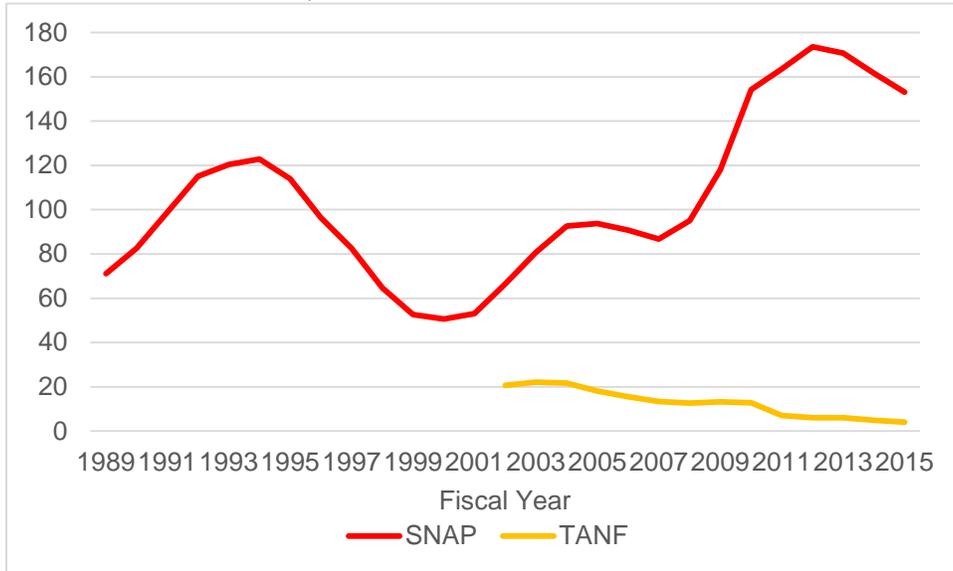
Sources: Arizona Health Care Cost Containment System, "Population Highlights," <http://www.azahcccs.gov/reporting/enrollment/population.aspx> (enrollment); U.S. Department of Commerce, Census Bureau (population through 2000, accessed from Bureau of Economic Analysis, <http://bea.gov/regional/index.htm>); and Arizona Department of Administration, Office of Employment and Population Statistics, <https://population.az.gov/> (population since 2001).

**CHART 29
EXPENDITURES PER AHCCCS RECIPIENT PER \$1,000
OF PER CAPITA PERSONAL INCOME IN ARIZONA**



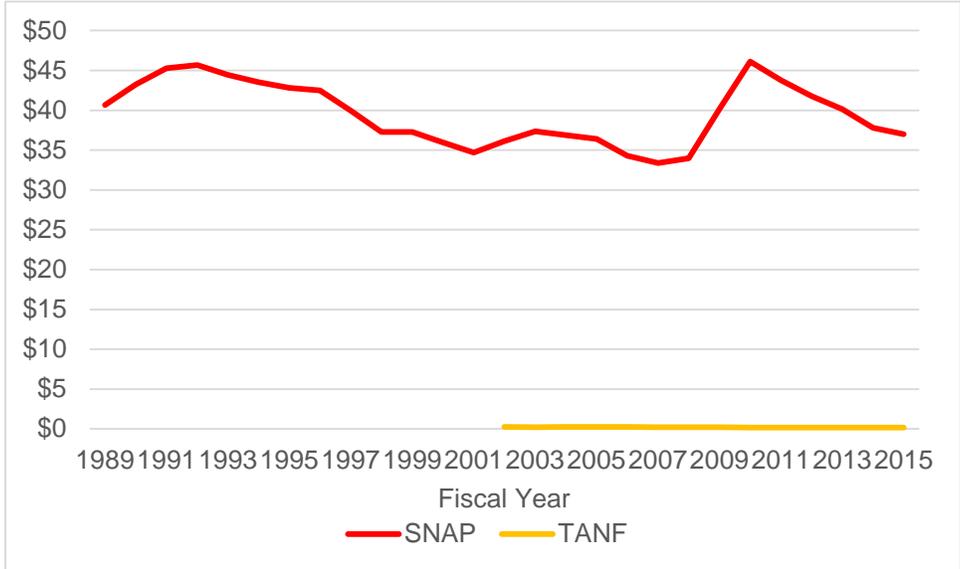
Sources: Arizona Joint Legislative Budget Committee, <http://www.azleg.gov/jlbc.htm> (expenditures); Arizona Health Care Cost Containment System, "Population Highlights," <http://www.azahcccs.gov/reporting/enrollment/population.aspx> (enrollment); U.S. Department of Commerce, Census Bureau (population through 2000, accessed from Bureau of Economic Analysis, <http://bea.gov/regional/index.htm>); Arizona Department of Administration, Office of Employment and Population Statistics, <https://population.az.gov/> (population since 2001); and U.S. Department of Commerce, Bureau of Economic Analysis <http://bea.gov/regional/index.htm> (personal income).

**CHART 30
NUMBER OF RECIPIENTS OF FAMILY ASSISTANCE PROGRAMS
PER 1,000 RESIDENTS IN ARIZONA**



Sources: Arizona Department of Economic Security, "Family Assistance Administration Statistical Bulletin," <https://www.azdes.gov/appreports.aspx?type=3&category=124> (enrollment); U.S. Department of Commerce, Census Bureau (population through 2000, accessed from Bureau of Economic Analysis, <http://bea.gov/regional/index.htm>); and Arizona Department of Administration, Office of Employment and Population Statistics, <https://population.az.gov/> (population since 2001).

CHART 31
PAYMENTS PER FAMILY ASSISTANCE PROGRAM RECIPIENT
PER \$1,000 OF PER CAPITA PERSONAL INCOME IN ARIZONA



Sources: Arizona Department of Economic Security, "Family Assistance Administration Statistical Bulletin," <https://www.azdes.gov/appreports.aspx?type=3&category=124> (enrollment); U.S. Department of Commerce, Census Bureau (population through 2000, accessed from Bureau of Economic Analysis, <http://bea.gov/regional/index.htm>); Arizona Department of Administration, Office of Employment and Population Statistics, <https://population.az.gov/> (population since 2001); and U.S. Department of Commerce, Bureau of Economic Analysis, <http://bea.gov/regional/index.htm> (personal income).